### 3.5 CONTENT CLARIFICATION NOTES WITH TEACHING GUIDELINES

| Week 1 Orientation | GRADE R TERM 1 |  |  |
| :---: | :---: | :---: | :---: |
|  | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $\begin{gathered} 4.1 \\ \text { Time } \end{gathered}$ | Sequencing recurring events in own daily life <br> - Introduce the Daily Programme <br> - Develop the sequencing of events within one day. <br> - Pictures are displayed from left to right. <br> - The leader of the day moves a movable arrow from left to right as the activities on the daily programme progress. <br> - Learners experience the sequencing of events during a day. | Daily programme represented in picture format | Daily |


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| Refreshment time | Free play outside and Tidy-up | Toilet routine | Teacher-guided class activity and Story | Rest | Departure |

## Notes:

- Presentation of content is determined by the timeslot on the Daily Programme.
- The Daily Programme is flexible, for example, Toilet Routine could be moved to a different timeslot depending on the contextual factors of a school.
- Display all routine charts only after they have been introduced.
- The clarification notes column is not written in consecutive order per day, but according to content area. Therefore you need to decide which day a specific activity should be done.
- In some weeks there are more than five activities. This was merely to ensure that you have sufficient activities to choose from and it does not mean you should do all the activities included
1.4

Describe, compare and order numbers

- Introduce Toilet Routine (use ordinal numbers to show order, place or position)
- Develop an awareness of sequence/order of toilet routine e.g. ordinal numbers (first use toilet ,then wash hands, close the tap and then dry your hands etc).
- Develop an awareness of ordinal numbers e.g. Liam is first, Jude is second etc.
Soap, facecloths
Toilets
Running water

Running water

## After the toile routine has been introduced, this activity takes

 place every day$\begin{array}{cl}\text { Week } 1 & \text { Suggested Contact Time : } \\ \text { Orientation } & \text { One teacher-guided planned class activity (ring) of } \pm 30 \text { minutes per day ( } \pm 5 \text { Mathematics activities per week) }\end{array}$
Topic Clarification Notes

Recommended Resources
Tidy up Chart

- Establish smaller working groups.
- Promote ordering and sorting of apparatus.

Divide number of learners in your class into the eight tidy-up areas. Each group must take responsibility to tidy up an area on a rotational basis, weekly.
Describe, sort and compare 3-D objects in terms of:

- Size
- Colour
- Objects that roll
- Objects that slide

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| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.1$ <br> Count objects | - Introduce the Helpers' Chart and the sequence in which refreshments are served <br> Estimate and count objects to develop number concept by: <br> - Using the Helper's Chart to identify the helper of the day attending to a table during refreshment time. <br> - The 5 circles on the Helpers' chart represent the five groups you divided your learners into, for example, the red group, the blue group, the yellow group, the green group and the orange group. You can also make use of different fruits / animals / transport, etc. <br> - Each learner's symbol is placed inside the circle of the group he/she belongs to. <br> - Turning the arrow attached in the middle of each circle identifies the leader of the group. The group leader rotates every day to ensure that each learner gets an opportunity to act as a leader. <br> - The group leader counts the number of learners and plates according to the number of learners present in his/her group for that day (one-to-one correspondence). | Helper's Chart | After the Helpers' chart has been introduced, refreshments are served this way every day. |
| $\begin{gathered} 3.3 \\ \text { 2-D shapes } \end{gathered}$ | Recognise, identifies and names two-dimensional shapes and/or pictures in the classroom <br> - Learner's symbol <br> - Allow each learner to choose their own symbol card <br> - Prepare the creative art display block with each learner's symbol (picture or photograph). <br> - Paste a symbol on each learner's locker. <br> - Allow learner to identify own locker linked to own symbol. <br> - Pin symbol with name on learner's clothes. <br> - Learners identify own and friend's symbols by playing games to encourage learners to identify the different symbol cards, e.g. learners sit in circle with teacher displaying all the symbols and ask learners to identify their symbol. <br> - Small photographs of learners can also be used as symbol cards, if available. <br> - Class name <br> - Promote the concept that learners belong in one big group by introducing the class name e.g. by using a picture - the "Teddy Bear" class. <br> Learners must also know their teachers' name. | Cards with learner's individual symbol. <br> Make snap cards out of symbol pictures. <br> Lockers, boxes or hooks against a wall marked with symbols. <br> Grade R label <br> Picture of class name for door <br> Label with teacher's name and surname | As learners arrive the first day |


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| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| Notes: <br> - Display only the learner's symbol/photo the first 3 months of the year. <br> - Display the learner's symbol/photo and learner's name the next 3 months. <br> - Display only the learner's name on a label the last 6 months of the year <br> - Keep on door for the entire year. <br> - Label with teachers name <br> - Label indicating Grade R class |  |  |  |
| Week 2 Suggested Contact Time : <br> Orientation One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.1$ <br> Count objects | Estimate and count everyday objects reliably <br> Daily counting <br> - Rote /rhythmic counting from 1-5 <br> - Sing Number songs and rhymes <br> Although learners do not have a concept of number when they enter Grade R, they should be encouraged to sing number rhymes and songs and do rote counting on a daily basis. | Number songs and rhymes | Daily |


| Week 2 <br> Orientation | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
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| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 1.4 <br> Describe, compare and order numbers | Compares which of two given collection of objects is big and small <br> Introduce the concept of "big" and "small" <br> Kinaesthetic <br> - Learners experience the concept big and small by curling their bodies to make themselves as small as possible and then stretching out as big as possible. <br> - Let learners match their hands on a friends hands to see who's hands are big or small. <br> - Compare teacher's hand against that of a learner. <br> - Compare teacher's arm against that of a learner. <br> Describe, sort and compare 3-D objects and 2-D shapes according to size <br> Concrete using 3-D objects <br> - Make big and small balls with play-dough. <br> - Find big and small objects in the classroom. Mark the big objects with red stickers and the small objects with yellow stickers. Talk about the different objects sizes. <br> - Sort big and small objects according to size. <br> Semi - concrete using 2-D shapes or pictures <br> Apply the concept big and small during art activities by: <br> - Looking for pictures of "big" and "small" objects and cutting them out. <br> - Let the learners trace their hands and cut it out. Put it on top of one another. See who's hands are big and who's are small. <br> - Divide a paper into 2. <br> - Paste all the small objects on one side of the paper and all the big objects on the other side of the paper. | Learners <br> Play-dough <br> Big and small objects <br> Magazines, Newspapers, Advertisements, Scissors <br> A3 Paper, Crayons | 1 day |


| Week 2 Orientation | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
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|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 3.1 <br> Position, orientation and views | Describe the position of two or more 3-D objects in relation to the learner: in and out <br> Kinaesthetic <br> - Give each child a "hoop". (Teacher demonstrates to the learners by doing the activity with them and saying the words: "in and out"). They must jump in and out the hoops acting on the instructions of the teacher. <br> - Stand with one leg in the hoop and the other leg out of the hoop. <br> - Take a box and let the learners jump in and out and let the learners discuss if the learner is in/out <br> - Jump in and out the tyres as part of the physical development activity <br> - Jump in and out the hoop with eyes closed. <br> Concrete using 3-D objects <br> Let the learners: <br> - Put the doll (baby) in and take the doll out of the cot /bed <br> - Throw a ball/beanbag into a hoop/tyre <br> - Use clay and roll it into a ball then press it flat (birds nest); roll more than one small ball (eggs) and put them in/out the nest on instruction of the teacher. <br> Semi - concrete using 2-D shapes or pictures <br> Let the learners: <br> - Look at a picture and see if they can find objects that demonstrate the concepts in and out. <br> - Draw themselves in and out a hoop/bath/ etc. | Hoops | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $3.2$ <br> 3-D objects | Build 3-D objects using concrete material <br> - Explore the many possibilities of block building during free play indoors <br> - The teacher's role is to mediate this play. <br> - Explore the many possibilities of building block by guiding learners to build horizontally (flat), vertically (towers), high and low constructions <br> - Sort and order the different blocks by matching the same shapes. <br> - Sort and order the different shapes by matching according to same size. <br> - Sort blocks according to big and small. <br> - Each learner gets a 3 rectangular blocks and arrange them in as many ways as possible e.g. line them up, stack them in various ways. Learners can compare and copy each other as well as share blocks in pairs to make them more aware of positioning. <br> - Promote the packing away of building blocks according to the outline provided at the back of the shelf by matching according to the same outline. | Blocks should be packed on shelves, with the outlines of the different blocks at the back of the shelf. <br> Extra equipment such as small figures (pictures/faces pasted on clothes pegs) toy cars, farm animals, traffic signs etc. should be made available. | 1day and repeat during free play time on a daily basis |


| Week 2 <br> Orientation | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
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|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 3.2 3-D objects | Describe, sort and compare 3-D objects and 2-D shapes according to the primary colours, blue, red and yellow <br> Show only one colour at a time. Do not link one colour to one shape <br> Divide learners into 5 groups. <br> Give each group a pile of coloured 3-D objects and 2-D shapes. <br> - Teacher introduces each colour by holding up a card with the colour she wants learners to know e.g. blue. Repeat with each colour. <br> - Let learners sort 3-D objects and 2-D shapes according to the different card shown. <br> Kinaesthetic <br> - Pin different coloured circles (red, yellow, blue) cut out from cardboard on each learner's chest. <br> - Let learners arrange themselves according to the different colours. <br> Concrete using 3-D objects <br> - The teacher calls five learners to the front and gives each one a different 3-D object to hold in his/her hand. <br> - The rest of the class remains seated in their groups with a heap of 3-D objects in the middle of their tables. <br> - The first learner in front holds up his/her 3-D object e.g. a blue unifix block or a yellow circle Logi shape or puzzles, etc. <br> - The learners at the tables sorts the different 3-D objects according what the learner is holding up. <br> Semi - concrete using 2-D shapes or pictures <br> - Teacher prepares finger-paint- beforehand. <br> - Learners draw shapes in the paint using their fingers. <br> - Trace 2-D shapes and colour it in. | A variety of 3-D objects and 2-D shapes/ pictures in the classroom e.g. bottle tops, Lego blocks, Logi coloured shapes etc. <br> Colour Cards of blue, red, yellow <br> A variety of 2-D shapes and 3-D objects <br> Red, yellow and blue circles cut out of cardboard prepared by the teacher. <br> A variety of 3-D objects collected beforehand and placed in the middle of each group. <br> Finger paint recipe: <br> 1 cup flour <br> 1 cup sugar <br> 3 drops of food colouring/ powder paint <br> 5 cups of boiling water (stir water in gradually) | 1 day |



Week 3
Orientation

## Topic

1.1

## Count objects

One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)
Clarification Notes

| Recommended Resources | Approximate <br> Duration |
| :--- | :--- |
| Number songs and rhymes | Daily |
|  |  |
| Action song/rhyme | 1 day |

Week 3
Orientation

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $3.4$ <br> Symmetry | Recognise the line of symmetry in self <br> Develop the awareness that one's body has two sides <br> Kinaesthetic <br> Emphasize the concepts of "one side/the other side" <br> The teacher talks to the learners about the front of the body and the back of the body as well as the top and the bottom of the body. <br> Let the learners: <br> - Look at themselves in a mirror in which they can see their whole body. <br> - Identify which of their body parts on the one side are also on the other side of their body. <br> - Touch parts of their bodies as required e.g. "Touch your toes, touch your feet, touch your legs" .Learners can also do this exercise with their eyes closed. <br> - Touch one part of his/her body with another part e.g. "Touch your knee with your nose etc" (also an activity for mid-line crossing) | Learners <br> Long length mirror <br> The teacher can make the split pin figure/ mannequin from hard cardboard | 1 day |
| $\begin{gathered} 3.2 \\ \text { 3-D objects } \end{gathered}$ | Recognise, identify and name balls <br> - Learners play with balls and demonstrate and name all the things they can do with a ball. Teacher leads the discussion through questions. <br> - Identify all the objects that can roll e.g. show the blocks and ask the question: "Do you think the block can roll? Let's see". <br> - Roll all the objects and observe how they roll e.g. tins only roll on one side. <br> - Use clay/dough to mould balls that can roll during creative activities (free play inside). <br> - During movement the learners can try to let their bodies roll by rolling while lying or making their bodies like balls and roll. | Objects that are round for example oranges, apples, balls, empty round tins. (Make balls from anti-waste e.g. newspaper balls stuffed into an old pantyhose) <br> Objects that are square e.g. blocks. <br> Play dough recipe: <br> 1 cup of flour $1 / 2$ cup of salt <br> 1 cup water <br> 2 teaspoons cooking oil ingredients <br> A few drops food colouring | 1 day |


| N | Week 3 | Suggested Contact Time : |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Orientation | One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 0 0 0 0 0 0 0 $\vdots$ 2 2 0 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 | $3.3$ <br> 2-D shapes | Recognise, identify and name two-dimensional shapes in the classroom and in pictures <br> - circle <br> - Introduce a circle <br> When introducing a circle for the first time the objects used should be exactly alike in every way (same size, same colour, same texture) <br> Kinaesthetic <br> The teacher draws a circle on the floor/ground. Let the learners walk along the outline of the circle while saying, "I am walking along the circle....round and round". <br> Let the learners: <br> - Hold hands and form a circle. <br> - Form a circle with their bodies. <br> - Walk around in the circle while singing the "Mulberry bush" song. <br> - Sit down in the circle and pass an object from one to the other while singing "hot potato pass it on". The learner still having the object when the song stops must go and sit in the centre of the circle. | Song, "Here we go round the Mulberry bush". <br> Game, 'hot potato, pass it on". | 1 day |
| $\frac{8}{7}$ $\frac{2}{2}$ $\frac{1}{2}$ -1 8 0 0 |  | Concrete using 3-D objects <br> The teacher shows the learner a hoop and explains to them that this shape is called a circle. A circle has no corners. <br> Let the learners: <br> - Handle the 3-D hoop while running their fingers around the circle. <br> - Find 3-D objects in the classroom that are the same shape as a circle. <br> Sort and compare 3-D objects according to size and colour <br> The teacher provides learners with a variety of 3-D objects and 2-D shapes in different sizes (big and small) and colours (red, yellow and blue) such as tennis balls, marbles, balloons, etc. <br> Let the learners: <br> - Sort objects into big and small. <br> - Group objects into different colours. | Hoop <br> A variety of round 3-D objects such as tennis balls, marbles, and balloons, etc. <br> 2-D shapes such as cut out plastic circles | 1 day |


| Week 3 Orientation | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $\begin{gathered} 4.1 \\ \text { Time } \end{gathered}$ | - Introduce the Weather Chart and Calender <br> a) Time <br> b) Days of the week <br> c) Sequence of events <br> d) Counting <br> - The weather represents a week ( 5 days) using symbol cards. e.g. 5 days of the week ordered from left to right using weather symbols.(See example below) <br> - The weather should be dealt with every day. <br> - The teacher guides learners to determine the name of the day, date and month with flash cards as in diagram (later the learners can identify and display flash cards themselves). <br> - The leader of the day observes the weather outside and shares findings with the rest of the group e.g. rainy-, cloudy-, sunny day <br> - The teacher displays findings with a flash card as in diagram (later the learners can display cards themselves). <br> - By doing this the learners learn about the weekdays and weekends. <br> - They learn about today, yesterday, tomorrow, etc. incidentally. <br> - The learners are given many opportunities to count up to 5 . Counting sunny days, cold days, windy days, etc. <br> - Display learner's symbol if there are any birthdays during that week. <br> - Display any activities taking place during that week e.g. going to the zoo (represented by a picture of an animal) | The Weather Chart should represent a week e.g. days of the week ordered from left to right for the first 6 months and dealt with every day. <br> Flash cards of: <br> - Seven days of week <br> - Numbers 1-31 <br> - Names of the 12 months <br> - Year e.g. 2012 <br> - Cards with the weather conditions e.g. <br> windy <br> sunny <br> rainy <br> cloudy | After the weather chart is introduced this activity takes place every day. <br> Teach learners a song to memorise the days of the week |



| Week 4 <br> Start with introduction to numbers | One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.1$ <br> Counting objects | Identify and describe whole numbers <br> Introduce the meaning of the number 1 <br> Oral daily rote counting from 1-5 <br> Kinaesthetic <br> Let the learners: <br> - Identify body parts e.g. one nose. <br> - Nod head once, tap on floor once, jump once etc. <br> - Hold up 1 finger, 1 hand, 1 foot etc. <br> - Form the number 1 with their body. <br> - Write number 1 in the air/on the ground. <br> - Clap hands only once | Number songs and rhymes <br> Learners | 1 day |
|  | Concrete using 3-D objects <br> Let the learners: <br> - Identify any single object in the class. e.g. one building block. <br> - Form the number 1 with clay/ play dough | Objects in class and environment |  |
|  | Semi-concrete using 2-D shapes or pictures <br> Let the learners: <br> - Identify the picture with one object on different flash cards. <br> - Match the picture cards with one object on them to the cards with one dot on them. <br> - Always link the picture cards and dot cards to the same number of counters e.g. pack the same number of counters on each dot. <br> - After introducing the number 1 the teacher displays the flash cards against the wall for learners to view every day. | Picture of 1 object <br> 1 Counter for each learner <br> A variety of picture flash cards Dot flash cards |  |


| Week 4 <br> Start with introduction to numbers | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
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| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $2.1$ <br> Geometric patterns | - Identify patterns in the environment and in learners clothing <br> Let learners : <br> - Talk about the patterns they observe in the environment and their clothing: <br> - Which patterns have lines, blocks? <br> - Are the patterns all the same, what are the differences and what are the similarities? <br> - What makes a pattern? <br> - A pattern is repetitive - lines / blocks / shapes <br> Copy and extend a pattern <br> Kinaesthetic <br> The teacher ties a red ribbon and a blue ribbon on four learner's arms. She creates a pattern by placing a learner with a red ribbon in front of the classroom, then a learner with a blue ribbon, then a learner with a red ribbon. Let the learners complete the pattern. | Red and blue ribbons | 1 day |
|  | Concrete using 3-D objects <br> - The teacher designs a pattern with 3 blue and 3 red bottle tops. <br> - Let the learners copy the teachers' pattern. | Red and blue bottle tops for each learner |  |


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|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $3.2$ <br> 3-D objects and $3.3$ <br> 2-D shapes | Recognise, identify and name 3-D objects and 2-D shapes in the classroom and pictures <br> Develop the ability to distinguish between objects in the "foreground and background" <br> Concrete using 3-D objects <br> The teacher places different objects in the classroom and outside on the playground. <br> Let the learners: <br> - Indicate different objects in the classroom e.g. wooden objects, red objects, plastic objects etc. <br> - Look for specific objects in the classroom on instruction of the teacher e.g. the ball in the Lego blocks container, the toy car in the cupboard, a pencil in the tin etc. <br> - Look for identical objects e.g. round buttons among square ones, a red marble amongst coloured ones etc. <br> - Sort object according to their kind e.g. size, colour, texture or shape. <br> - Play the game, "I spy with my little eyes, something that is round....." <br> - Look for specific objects in the environment on instruction of the teacher e.g. the bird in the tree, the ribbon in the tree, the pretty flower, the ant walking on the leaf etc. <br> - At home the learner should be encouraged to fetch all the spoons, or knifes, or forks out of the drawer. | A variety of objects in the classroom and the environment | 1 day |
|  | Semi-concrete using 2-D shapes or pictures <br> Show the learners a picture and ask questions related to the picture. <br> Examples: <br> - "What is the little girl holding in her hand?" <br> - "How many people are in the boat?" etc. <br> - Building of PUZZLES and playing picture dominoes are ideal to develop learners figure-ground perception | Any large picture to discuss (poster) <br> Puzzles |  |


| Week 4 <br> Start with introduction to numbers | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathe | ics activities per week) |  |
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| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $3.2$ <br> 3-D objects | Recognise, identify and name 3-D objects by exploring the shapes and sizes of boxes <br> Kinaesthetic <br> Let the learners: <br> - Climb into and out of a big cardboard box. <br> - Explore the inside of the box by communicating what they see inside the box e.g. the box has a floor / bottom, four sides / walls and a lid. <br> - Fold the box open to observe the shape <br> Concrete using 3-D objects <br> - Use boxes to build structures e.g. a house, a garage (apply during Visual Arts to build a constructions with different size boxes) <br> - Provide learners with different objects such as buttons, unifix blocks, bottle tops, plastic bread clips. <br> Let the learners: <br> - Sort the objects into groups of the same types <br> - Explore what are the differences between the objects <br> - Explore which objects are square and which are round <br> - Sort objects according to the same colour | A variety of big and small boxes (empty refrigerator and stove boxes) <br> Unifix blocks, bottle tops, plastic bread clips (learners can bring from home) | 1 day |


| Week 4 <br> Start with introduction to numbers | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
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| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 3.3 <br> 2-D shapes | Recognise, identify and name 2-D shapes in the classroom and in pictures <br> - a triangle <br> Introduce a triangle <br> When introducing a triangle for the first time the objects used should be exactly alike in every way (same size, same colour, and same texture). A triangle consists of three straight sides. This is called a triangle. <br> Kinaesthetic <br> Let the learners: <br> - Make/form shapes with their bodies e.g. 3 learners form a triangle with their bodies. <br> - Form a triangle using their fingers. <br> - Make/form a triangle with pieces of wool or play dough. <br> - Walk on the outline of a triangular shape. While walking say, 'I am walking along the triangle, one, two, three sides or one, two, three corners (angles). <br> - Feel the shapes. Use giant size shapes or place different shapes in a "feely bag" The learner "feels" the shape in the bag and matches it with a set of matching cards (cards with shapes drawn on them). <br> - Draw the triangle shape in the air, on the ground/floor (chalk) and eventually on paper. <br> Describe, sort and compare 3-D objects and 2-D shapes <br> Concrete using 3-D objects <br> Let the learners: <br> - Sort Logi shapes according to shape (circle and triangles), size (big and small) and colour (red, yellow, blue) <br> - Look for triangular shapes in the classroom and environment. | Card games that develop the recognition of shapes. <br> Wool or play dough. <br> "Feely bag" (A cloth bag with elastic at the top) with different geometric shapes. <br> Matching set of cards with shapes drawn on them. <br> A4 paper and colouring pens/wax <br> Logi shapes <br> Objects in the classroom and environment | 1 day |

Week 5
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)


Week 5 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $3.4$ <br> Symmetry | Reinforce the awareness that one's body has two sides e.g. "the one side" and "the other side" leading to "left and right" <br> Kinaesthetic <br> The teacher explains the two sides of one's body. <br> Let the learners: <br> - Stand on one leg and then stand on the other leg. <br> - Move rhythmically to the beat of the shaker to the one side of the classroom. When the shaker stops, the learners move to the other side of the classroom. <br> Concrete using 3-D objects <br> Each learner is given a beanbag. <br> Let the learners: <br> - Put the beanbag on the floor next to them. <br> - Move the beanbag to the other side of their bodies using <br> - their toes, hand etc. <br> - Put the beanbag on the floor on the one side of their bodies and then move it to the other side. <br> - Reinforce this concept by integrating it with visual arts by letting the learners make butterfly pictures <br> (Fold paper in half; drop different colour of paint blobs on folded line; fold in middle and spread paint by rubbing picture; open and observe a butterfly; cut out on border line - the butterfly has two sides that are the same) | Shaker can be homemade - a container with a lid, filled with small stones. <br> A beanbag for each learner | 1 day |
| $3.2$ <br> 3-D objects | Recognise, identify and names 3-D objects <br> Introduce and explore objects that roll <br> - Discuss the "roundness" of objects. Put several round objects with in a "feely bag" (a cloth bag). Learners take an object from it and describe it’s roundness. <br> - Learners demonstrate how various objects roll down a slope raising the table with two bricks. | "Feely bag" (A cloth bag with elastic at the top) <br> Inside the bag are: <br> Different sizes of balls, marbles, cylinders, empty cold drink tins, round plastic shapes or bottle tops. plastic shape | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.1 <br> Position, orientation and view | The position of two or more objects in relation to the learner <br> - In front / behind <br> Kinaesthetic: <br> The teacher chooses two learners with a counting rhyme: <br> - Place two chairs in front of the classroom. <br> - The two learners demonstrates the concepts in front and behind on the teachers instructions. e.g. <br> o Sipho stand in front of the chair <br> - Carl stand behind the chair <br> - Once achieved the teacher holds up a flash card and the learners demonstrate the action using their own chairs. <br> - "This can also be demonstrated by using three learners. <br> o Amy is standing behind Sipho, but Carl is standing in front of Amy. <br> - The teacher provides learners with a big dice with different pictures showing "in front of and behind" written on the sides e.g. stand in front of someone with long hair; stand behind someone wearing a pants; sit behind each other, etc <br> - Let the learners play a game in their groups by throwing the dice and performing the action it falls on. | Chairs <br> Learners <br> Flash cards with the action in front of and behind | 1 day |

Week 5
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 3.2 \\ \text { 3-D objects } \end{gathered}$ | Compare which of two given objects are: <br> bigger and smaller <br> - Reinforce the concept of bigger and smaller <br> Kinaesthetic <br> Let the learners: <br> - Make their bodies big by stretching their arms above their head. <br> - Make bodies small by bending down and curling up. <br> - Determine whether a dog is bigger than a mouse <br> Concrete using 3-D objects <br> Always present at least two objects for comparison. <br> - Compare different sizes of the same type of block, balls, plates, buttons, table, chair etc. and determine which objects are "big/small, bigger/smaller" and" biggest/smallest". <br> - Build constructions with the building blocks and learners compare whose construction is the biggest and whose is the smallest. <br> Semi-concrete using 2-D shapes or pictures <br> - Compare pictures illustrating the concepts of big/small and bigger/smaller. <br> - Apply the concept of "big/small" during creative art. | Picture of a mouse and a dog (ensure that the picture of the dog is bigger than the picture of the mouse) <br> Objects in the classroom such as blocks, balls, plates, buttons, beads, sticks, pegs, matchboxes, tins, pebbles, corks, shells, bottle tops, etc. <br> Pictures illustrating big/small | 1 day |

Week 5 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Week 5 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $\begin{gathered} 3.2 \\ \text { 3-D objects } \end{gathered}$ | Compare which of two given objects are: <br> - Big and small <br> - Bigger and smaller <br> - Biggest and smallest <br> Kinaesthetic <br> The teacher draws a small circle in the sand, on the ground/floor. <br> - The learners walk on the outline of the small circle <br> The teacher draws a bigger circle on the outside of the circle <br> - The learners walk on the outline of the bigger circle <br> - The teacher asks: <br> o Which circle is the smallest?" <br> - "Which circle is biggest" <br> o "Walk on the small circle" <br> o Walk on the big circle <br> The teacher draws an even bigger circle on the outside of the circle. <br> - The learners walk on the outline of the biggest circle as well <br> - The teacher asks questions such as: <br> - Which the circles are the biggest?" <br> o "Which the circles are the smallest? | Big and small circles drawn in the sand/ on the floor/ground | 1 day |

Clarification Notes

## Recommended Resources

Building blocks and balls of different sizes Buttons, spoons, medicine boxes, shoe boxes, empty milk cartons, empty medicine containers, etc


Approximate Duration

## Concrete using 3-D objects

Learners sort and compare different objects according to size.(bigger , smaller) e.g.

- Big buttons from small ones
- Big spoons from small ones
- Big boxes from small boxes

This activity can be extended to outdoor play (sand play and water play) where learners can compare objects and talk about which one is smaller/bigger, biggest and smallest.
It could also be integrated with visual arts - make a collage using big/small objects.

## Semi-concrete using 2-D shapes and pictures

Let the learners:

- Play card games and identify the small/big/biggest from pictures.
- Ask questions such as: "Which fish is first or which fish is last?" "Which fish is in the middle?"

- Progress to letters so that learners realise that pictures represents words. Learners do not have to read the letters.

Week 6 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | Estimate and count everyday objects reliably Daily counting <br> - Oral: Rote /rhythmic counting from 1-5 <br> - Sing Number songs and rhymes | Number songs and rhymes | Daily |
| $2.1$ <br> Geometric patterns | Copy and extend a pattern using body percussion <br> Kinaesthetic: <br> - Teacher demonstrates a body percussion pattern and learners must copy the pattern e.g. clap clap, stomp; clap, clap, stomp;....click, snap snap, click etc,... <br> Concrete using 3-D objects: <br> Copy pattern with objects e.g.: <br> - Using different types of leaves <br> - Using shapes e.g. circle, circle, triangle, circle,....... <br> - Using objects e.g. red peg, blue peg, yellow peg, red peg, | Logi shapes Peg board pegs | 1 day |
|  | Semi-concrete using 2-D shapes or pictures <br> Let the learners: <br> - Create their own patterns with the picture cards e.g. flower, leaf, leaf, flower.... <br> - Create their own patterns with colour cards e.g. red, blue, red, blue, red...... <br> - During creative art let learners print patterns using sponge shape cut outs | Provide the learners with picture cards <br> Colour cards <br> Teacher can cut out shapes from sponges |  |




Week 6
Suggested Contact Time
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $4.1$ <br> Time | Describe the time of day in terms of day and night/ light and dark <br> - Introduce both the concepts "day /night" and "light /dark" <br> Integrate these concepts with Beginning Knowledge topics in Life Skills <br> Kinaesthetic <br> - Experience darkness by sitting under the table and chairs which has been covered with a blanket. <br> - Darken classroom by closing curtains and switching off the light. <br> - Learners talk about their experiences when the classroom was dark and when it was light. <br> - Provide a torch for light under the blanket. <br> - Talk about activities which take place during the day and at night. <br> Semi-concrete using 2-D shapes or pictures <br> - The teacher prepares a poster of the sun and the moon and provides pictures showing what happened during the day and night time. <br> - Learners must place their pictures under the sun and/or the moon. | Chairs and blankets <br> Torch <br> Poster of day and night <br> Pictures of day-time and night -time activities | 1 day |


| $\bigcirc$ | Week 7 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $3.3$ <br> 2-D shapes | Recognise, identify and name 2-D shapes in the classroom <br> - Introduce puzzles and give guidance on how to build them <br> - Discuss the puzzle picture with special attention to detail such as colour, people/ animals, objects, position of people/animals and objects <br> - Identify, recognise and match the different types of puzzle pieces, e.g. <br> o corner pieces. <br> o pieces with one straight side. <br> - pieces with no straight sides. <br> o counting the puzzle pieces. <br> How to build a puzzle: <br> - Pack all puzzle pieces 'face up'. <br> - Identify the corner pieces and match the colours, objects, etc. on them with the corners of the puzzle. <br> - Build the four sides (frame) using all the pieces with one straight side. <br> - If learner struggles, they can build the puzzle on top of the given picture. <br> - All puzzles should be completed before stored. | A variety of puzzles - minimum 6 pieces. | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.1 <br> Position, orientation and view | Describe one 3-D object in relation to the learner <br> - The position of two or more objects in relation to the learner <br> - In /out <br> Kinaesthetic <br> - The teacher uses masking tape or skipping rope to make two lines on the floor. <br> - The learners all stand on the one side and the teacher calls, "in the river (All the learners must jump between the two lines, then she shouts 'out of the river'. The learners must all jump out on either side of the two lines. <br> - Learners who do not follow the instruction correctly are out and may not continue playing. <br> Concrete using 3-D objects: <br> Let the learners: <br> - Stand a few steps away from a basket/bucket <br> - Throw beanbags in a basket <br> Semi-concrete using 2-D shapes or pictures <br> - Learners draw a picture illustrating in and out concepts. | Game: In the river (between the two lines), out of the river (on the outside of the two lines) <br> 2 Skipping ropes <br> Bucket or Basket <br> Paper and Colouring pens/wax | 1 day |


| $\stackrel{\ominus}{\sim}$ | Week 7 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources |  |  |  | Approximate Duration |
|  | $3.1$ <br> Position, orientation and view | - The position of two or more 3-D objects in relation to the learner: Top/under/below Kinaesthetic <br> Let the learners follow instructions such as: <br> - Put the red block on top of your friends head <br> - Put the yellow block under/below your table <br> - Put the block on your head and climb on your table <br> - Crawl under the table with your eyes closed. <br> Concrete using 3-D objects: <br> Let the learners: <br> - Pack the triangles on top of each other. <br> - Pack the blue squares on top of each other. <br> - Put the red circle under the yellow square. <br> - Put the yellow circle and the red triangle under/below the blue square. <br> Semi-concrete using 2-D shapes or pictures <br> - Teacher prepares individual cards with pictures on them as well as cards with shapes on them. <br> - Learners must place the shapes on top/under/below the picture as the teacher requests e.g. Place the blue square on top of the fruit basket. | Building blo <br> Logi shape <br> Different pic <br> Shape Card | ctures <br> ds | blocks |  | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.4 <br> Symmetry | - Reinforce the awareness of symmetry in self (own body) <br> Kinaesthetic <br> Let the learners: <br> - Name their body parts. <br> - Sing any action song about the body. <br> The teacher demonstrates to the learners the concept of symmetry by hanging a rope in front of a learner. <br> - Learners should imagine that their bodies are divided into two sides. <br> The teacher explains how the body is divided in two parts called the mid-line. <br> - Everything a person has two of are found on both sided of the body e.g. eyes, ears, arms, legs etc. <br> - Everything a person has one of is situated on the mid-line e.g. nose, mouth, navel. <br> For symmetrical control, let the learners: <br> - March, lifting the knees high. <br> - March like stiff 'tin soldiers' <br> - Cross arms, cross legs while marching. <br> Integrate these actions with Performing Arts in Life skills <br> Semi-concrete using 2-D shapes or pictures <br> - Draw incomplete pictures on a piece of paper and ask the learners to complete the picture. | Song: "Head and shoulders, knees and toes" <br> A single rope to demonstrate learner`s own bodies <br> Incomplete pictures | 1 day |

| Week 8 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 3.4 <br> Symmetry | - Crossing the midline incorporated with counting <br> Kinaesthetic <br> Let the learners: <br> - Twist and jump in rhythm while counting. <br> - Stand facing each other and do criss-cross clapping (the left hand to the opposite learners left hand) singing a number song/rhyme. <br> Concrete using 3-D objects <br> Let the learners: <br> - Throw the ball to a friend while counting. <br> - Walk on a curved rope singing a song e.g. "One little elephant balancing" <br> - Kick a ball to each other. <br> The above activity can be integrated with Life Skills | Learners <br> Number songs and rhymes <br> Ball, rope | 1 day |
| $2.1$ <br> Geometric patterns | - Create own patterns <br> Kinaesthetic <br> Let the learners create a pattern using: <br> - Their bodies e.g. one girl with dress, two boys with trousers <br> Concrete using 3-D objects <br> - Using red and blue shapes. e.g. 2 blue squares, 2 red triangles, 2 blue squares ... <br> - Apply a pattern during art activities by using red and blue paint with bottle tops. <br> Semi -concrete using 2-D shapes using secondary colours <br> Let the learners: <br> - Use their thumbs to print a colour border with paint e.g. green, orange, green ... along the top edge of their papers.(activity can be done during Visual Arts) | Red and Blue plastic shapes <br> A4 Paper <br> Green and orange paint or any other colours you have available. | 1 day |
| © | Week 8 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $\begin{gathered} 3.2 \\ \text { 3-D objects } \end{gathered}$ | Recognise, identify and name 3-D objects <br> - Reinforce objects that roll <br> Concrete using 3-D objects: <br> Let the learners: <br> - play with plastic bottles, tins, balls, an orange, etc. and explore the possibilities that they can roll. <br> The teacher asks: <br> - Which blocks in the block corner can roll? <br> - Blocks cannot roll because they only have straight sides. <br> - Roll different objects and see which can roll and which can't. <br> - Learners should then realise that objects that are round can roll. | Plastic bottles <br> Blocks. Lego blocks <br> Tins, plastic cups, toilet paper rolls, candles, an orange, balls etc | 1 day |
|  | $3.1$ <br> Position, orientation and views | - Develop a sense of direction by introducing both the concepts "at the front/at the back" and "forward/backward" <br> Kinaesthetic <br> Let the learners: <br> Follow directions of the teacher (alone and/or as a member of a group) and move or position themselves within the classroom <br> e.g. <br> - Stand "at the front "of the classroom. (consider the front of the classroom to be where the door is) <br> - Stand "at the back" of the classroom. <br> - Walk forward and back. <br> - Crawl forward and back. <br> - Jump forward and back. | Learners | 1 day |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.1 <br> Position, orientation and views | The teacher draws a pattern on the floor with chalk or on the ground e.g. <br> or <br> Let the learners: <br> - Walk and/or crawl on the lines of the pattern. <br> - Put a piece of red paper on the corners to represent a traffic light. When learners get to the corners they have to turn their whole body in order to get the sensation of direction. | Drawn on the ground. <br> Red paper. | 1 day |
|  | Concrete using 3-D objects <br> Let the learners: <br> - Make a road with the building blocks. <br> - Push a toy car forwards and backwards on the "road" of building blocks. <br> - Push a toy car by turning to the one side and turning to the other side on the "road" of building blocks | Building blocks |  |

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 3.2 \\ \text { 3-D objects } \end{gathered}$ | - Recognise and explore objects that slide and roll <br> The teacher holds a ball and bounces it on the floor. She lets it roll on the floor. <br> The teacher then takes a box and does the same. <br> The teacher asks learners: <br> - Which object could roll? <br> - Why could the box not roll? <br> - Which object could slide? <br> Teacher shows learners that a box has four sides (corners) and therefore cannot roll, but the ball has no corners and can roll. <br> - Encourage learners to find objects in the class that can roll and slide. <br> - Ask learners whether they can find an object(s) that can roll and slide. | Ball <br> Box | 1 day |
| 8 | Week 9 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $\begin{gathered} 3.3 \\ \text { 2-D shapes } \end{gathered}$ | Recognise, identify and name <br> 2-D shapes in the classroom and in pictures <br> - a circle <br> Kinaesthetic <br> Let the learners: <br> - Make a circle using their fingers. <br> - Make a circle using both hands. <br> - Sit on a carpet, forming a circle while holding hands. <br> - Walk on a big circle, made with string, on the carpet. <br> - Play game where learners sit in a circle and sing a song. <br> o One learner stands outside the circle and runs around it holding a ball in his/her hands. <br> o The learner chooses to place the ball behind any of the learners seated in the circle. <br> o The chosen learner must pick up the ball and try and throw the other learner with the ball, while he/she is running around the circle again to go and sit in the empty space. <br> o If the ball touches the learner running away, he/she must go and sit in the middle of the circle and the game continues. <br> Concrete using 3-D objects <br> Let the learners: <br> - Find round objects in the classroom. <br> - Find shapes that represent a circle. <br> Semi-concrete using 2-D shapes or pictures <br> - Teacher names objects and learners must identify which objects are round e.g. orange, apple, table, ball, marble, book, box, etc. | Learners <br> String <br> Soccer ball, Tennis ball, Golf ball, Apple, Orange, Hoops, etc <br> Orange, apple, table, ball, marble, book, box, | 1 day |

Week 9 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.1 <br> Position, orientation and views | The position of one or two objects in relation to each other <br> - Concepts next to/ between- incorporated with colour <br> Kinaesthetic <br> Teacher calls up three learners <br> She illustrates the concepts next to and between by arranging the learners in different order saying: <br> - Craig is standing next to Steve. <br> - Mel is standing between Craig and Steve. <br> Activity can be repeated with other learners. <br> The teacher provides learners with building blocks of different colours and gives them instructions such as: <br> - Put the red block next to the yellow block <br> - Put the blue block between the red and the yellow block <br> Concrete using 3-D objects <br> Using beanbags in different colours (red, blue, yellow, green), give learners the instruction to: <br> - Put the blue bean bag next to the yellow bean bag. <br> - Put the red bean bag between the blue and the yellow bean bag. <br> This activity can be incorporated into Life Skills. | Coloured blocks <br> Coloured bean bags | 1 day |


| へ- | Week 9 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | 3.2 <br> 3-D objects | - Orders more than two given collections of objects from smallest to biggest <br> Kinaesthetic: <br> Provide learners with dough and let them make balls with the dough. <br> - In the groups they then have to arrange the dough balls from smallest to biggest and biggest to smallest. <br> Concrete using 3-D objects: <br> - Each group member must find an object in the classroom. <br> - Let the learners arrange objects they find from smallest to biggest in their respective groups. <br> Teacher provides each group with old telephone directories. <br> Let the learners: <br> - Tear paper from the directory and crumple up the paper shaping them into a ball in their groups. <br> - Learners must compare which ball is the biggest and which ball is the smallest. <br> Semi-concrete using 2-D shapes or pictures <br> - Give learners a sheet with pictures of big and small items. <br> - Learners can colour the big items and circle the small items. | Play dough <br> Any objects in the classroom <br> Old telephone directories <br> A4 sheet with pictures | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 4.2 \\ \text { Length } \end{gathered}$ | Concretely compare and order objects using appropriate vocabulary to describe height <br> - Tallest/shortest <br> - longest/ shortest <br> Kinaesthetic <br> - The teacher calls up 4 learners and asks the class to help her to arrange them from tall to short. <br> - Let learners arrange themselves in their groups from tallest to shortest. <br> - One learner stands with his/her back against the wall while the other members of his/ her group measure his/her height using their hands. |  | 1 day |
|  | Concrete 3-D using objects <br> Teacher puts a variety of objects on each group's table such as rulers, pencils, crayons, erasers, etc. <br> - Sort all the long objects and all the short objects together. <br> - Learners must arrange the objects from longest to shortest. <br> Height Chart <br> - The teacher has a height chart ready against the wall to plot each learner's height. <br> - Use learners' symbol cards to indicate each ones height on the height chart. <br> - Together with the learners the teacher will come to the conclusion that Sipho is 6 hands high and Abby is only 5 hands high, because she's shorter. | Rulers, Crayons, Pencils, Erasers, etc |  |


| $\stackrel{\rightharpoonup}{+}$ | WEEK 10 Use Week 10 to attend to conceptual weaknesses and/or identified barriers to learning. |  |  |
| :---: | :---: | :---: | :---: |
|  | Content Area | Topic | Assessment Criteria |
|  | Numbers, Operations and Relationships | 1.1Count objects | Estimates and rote counts up to 5 (Number songs \& rhymes included to develop number concept) |
|  |  |  | Recognises numbers in familiar context- e.g. age, register |
|  |  |  | Understands ordinal numbers (e.g. during toilet routine) |
|  |  |  | Understands one-to-one correspondence (Helpers' chart during refreshment time) |
|  |  |  | Identifies number pictures and dot cards that involve number one |
|  |  |  | Knows the number symbol 1 |
|  |  |  | Recognizes the number name one |
|  |  | 1.6 <br> Problem solving techniques | Uses concrete apparatus <br> Explains own thinking in words and through drawings or concrete objects |
|  | Patterns, Functions and | $2.1$ | Identifies patterns in the environment |
|  | Algebra | Geometric patterns | Copies, extends and creates own patterns |


| WEEK 10 Use Week 10 to attend to conceptual weaknesses and/or identified barriers to learning. |  |  |
| :---: | :---: | :---: |
| Content Area | Topic | Assessment Criteria |
| Space and Shape (Geometry) | 3.1 <br> Position, orientation and views | Knows in front of/behind |
|  |  | Knows on top of, on, under, below |
|  |  | Knows in, out |
|  |  | Knows up, down |
|  |  | Understands the concepts: forwards, backwards, front and back |
|  | 3.2 <br> 3-D objects and 3.3 <br> 2-D shapes | Recognises, identifies and names balls |
|  |  | Recognises, identifies and names boxes |
|  |  | Recognises, identifies and names his/her own symbol, his/her peers symbol and the class name |
|  |  | Builds at least a 6 piece puzzle |
|  |  | Shows the ability to distinguish between objects in the "foreground and background" |
|  |  | Identifies and recognises the circle |
|  |  | Identifies and recognises the triangle |
|  |  | Identifies and recognises the square |
|  |  | Compares which of two given collection of objects are bigger, smaller, biggest, smallest |
|  |  | Sorts objects in: Size - big and small |
|  |  | Colour - Primary colours (red, yellow, blue) |
|  |  | Shape - circle ,triangle and square |
|  |  | Objects that roll |
|  |  | Objects that slide |
| Space and Shape (Geometry) | 3.4 <br> Symmetry | Recognises line of symmetry in Self |
| Measurement | 4.1 <br> Time | Uses words like day, night, light and dark, morning, afternoon tonight to describe time of the day |
|  |  | Orders recurring events in own daily life (Daily Programme) |
|  |  | Shows and awareness of days of the week, seasons and weather |
|  |  | Knows own birthday date |
|  | $\begin{gathered} 4.2 \\ \text { Length } \end{gathered}$ | Distinguishes between tall, taller, tallest, short, shorter, shortest (Height chart) |


| $\stackrel{\rightharpoonup}{\mathrm{o}}$ | WEEK 10 Use Week 10 to attend to conceptual weaknesses and/or identified barriers to learning. |  |  |
| :---: | :---: | :---: | :---: |
|  | Content Area | Topic | Assessment Criteria |
|  | Data Handling | $5.1$ <br> Collect and sort objects | Able to collect, sort, draw, read and represent (analyse) objects according to one attribute |
| ¢ |  | $5.2$ <br> Represent sorted collection of objects |  |
| ¢ |  | $5.3$ <br> Discuss and report on sorted collection of objects |  |

Week 11 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.1 <br> Count objects | - Introduce the meaning of the number 2 <br> Oral: Count everyday objects up to 2 . <br> Count forwards and backwards up to 2 . <br> Rote counting 1-7 <br> Reinforce concepts of "many" and "few". <br> Clap hands many times...STOP. <br> Clap hands fewer times. The teacher claps up to 2 times. | Two pictures of birds for counting song "Two little Dickey birds" | 1 day |
|  | Kinaesthetic <br> Let the learners: <br> - Call 2 learners to the front. Count them <br> - Count 2 chairs, tables etc. <br> - Identify pairs of body parts such as eyes, ears, hands, legs, feet, knees, shoulders etc. <br> - Do body percussion e.g. clap hands twice, nod their heads twice, tap on floor twice or jump twice etc. <br> - Hold up 2 fingers, 2 hands, 2 feet. | Learner's bodies |  |

Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | Concrete using 3-D objects <br> Let the learners: <br> - Identify two of the same objects in the classroom e.g. two shoes, two crayons etc. <br> - Develop an awareness of number conservation by letting learners pack two counters or any objects in different ways e.g. <br> When counting, the number of objects is not affected by their size, or position, or whether they are of the same type. For example: <br> - Arrange 2 buttons, 2 pencils, 2 hoops, 2 learners etc. <br> - Count them in a different order e.g. count them spread out, close together, in a line or stacked up | 2 Counters or 2 objects for each learner | 1 day |

Week 11 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)


Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $3.2$ <br> 3-D objects and $3.3$ <br> (2-D) shapes | - Describe, sort and compare 3-D objects and 2-D shapes according to similarities and differences <br> Kinaesthetic <br> - Select two girls using a counting out rhyme. <br> - The other learners identify in which way the two girls are the same? <br> - Select a boy and a girl using a counting out rhyme. <br> - The other learners identify in which way the boy and girl is different. <br> - In pairs the one learners "poses" in a specific way and the other must copy the exact "pose" e.g. the <br> - one learner stands with his/her hands on his/her head and on one leg. The other copies the "position. <br> - Sort learners according to gender, those with shoes, those with sandals, and those that are bare feet. <br> - Call the following learners to the front. <br> o Girls and boys with trousers, a girl with a dress <br> o All children with shoes on, one that is bare feet. <br> - Ask questions such as: "Which learner does not match? "Which learner is different?" |  | 1 day |

Week 11 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.2 3-D objects and <br> 2-D shapes | - Describe, sort and compare 3-D objects and 2-D shapes according to similarities and differences <br> Concrete using 3-D objects <br> - Two learners bounce balls: a big ball and a small ball <br> - The other learners identify in which way the balls are the same and different. <br> - One learner rolls an orange, another roll a ball. <br> - The other learners identify in which ways the ball and the orange are the same and different. <br> - Learners observe a boys shoes and a girls sandals <br> - The other learners identify in which ways the shoes are the same and different. <br> - Learners find objects which are the same in the classroom <br> Semi-concrete using 2-D shapes or pictures <br> - Provide matching card games to promote similarities and differences e.g. <br> - Progress to more abstract cards later in the year. Learners do not have to read the letters. e.g. | Make own matching card games as in example below <br> Matching card games | 1 day |

Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Week 11 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 1.4 <br> Describe, compare and order numbers | - Order and compare collections of objects using "equal to" or "the same" <br> Kinaesthetic <br> Let the learners: <br> - Develop the concepts of same and different. <br> - Compare their fingers and their toes. Although they are the same number they look different. <br> - Compare fingers, toes and eyes. They look different. We have the same number of fingers and toes namely 10 but we only have two eyes. <br> - Compare ears, arms, legs and feet. They look different but they are the same number namely two of each. <br> - The teacher draws two circles on the ground or forms two circles with a string on the floor. Instruct the learners to divide themselves so that there's and equal number of learners in each circle. Count the number of learners. Points out the groups are equal to the same. |  | 1 day |

Week 11 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| and order numbers | Concrete using 3-D objects <br> - Develop the concepts of same and different. <br> - Place a set of the learner's symbols in the middle of the carpet. <br> - Give each learner his/her symbol card. The learners try to match their symbols with the same one on the carpet. <br> - Place a group of objects on the table and divide them into equal groups (one for you, one for me) <br> Examples: <br> 1. Place two objects of the same type e.g. crayons, in a row on the table. Ask one learner to match each of teacher's crayons with one of his/her own. (Learner needs to fetch two crayons to match teacher's number of crayons. "Now we each have the same/equal number of crayons" <br> 2. Repeat the same exercise as above with 4 and 6 objects for the learners to understand the concept of "the same/equal" <br> 3. The teacher places 2 blocks in a row on a table. She gives two learners each a block. Ask the learner to match each of their blocks with her blocks. (Learners each need to fetch another block to match teacher's two blocks) <br> "Now we each have 2 blocks. We have the same number of blocks". $\square$ $]----$ $\square$ $\square$ $=-=-$ $\square$ <br> Semi-concrete using 2-D shapes or pictures <br> - Let learners compare picture and dot flash cards. Identify the cards that are the same <br> - Provide matching card games during free play time indoors where learners can distinguish between similarities and differences. | (4) ( <br> Blocks | 1 day |

Week 11 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Week 11 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.4$ <br> Describe, compare and order numbers | - Order and compare collections of objects using "more than" <br> Oral: Count everyday objects up to the number 2. <br> Reinforce concepts of "many" and "few" <br> Clap your hands many times ...STOP <br> Clap your hands fewer times. The teacher claps up to the number 2 . <br> Kinaesthetic <br> The learner says which of two given collection of objects is: "more than" <br> Let the learners: <br> - Count their eyes and their fingers. Ask question: "Which do they have more of?" <br> - Show two fingers on one hand and 1 finger on the other hand. "Which hand is more?" <br> - Choose 3 learners using a counting out rhyme. Group them in groups of 2 and 1 <br> - Count how many learners in each group. Compare the two groups and ask questions such as: "Which group has more learners?" "Which group is more than one?" |  | 1 day |

Week 11 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.4 <br> Describe, compare and order numbers | Concrete using 3-objects <br> - Place 2 pairs of scissors, 3 counters and 4 crayons on the table. Count each group's objects. <br> - Ask question such as: "Which groups has more objects. Which group has the most objects". "Which group has more than the scissors? Which group has more than three?" <br> - Place a variety of concrete objects (shells, stones, corks etc.) on the table. Sort them into groups (all the corks together), counting the amount in each group and indicating which group is more, less, equal. Give them an opportunity to work with their own counters. Start with small numbers. <br> - Integration: Containers must be provided during water play and sand play to give opportunities to experiment with concepts such as more than, less than an equal. | Any objects in the classroom |  |
|  | Semi-concrete using 2-D shapes or pictures <br> - Let learners compare picture and dot flash cards. Identify the cards that are more than a number given by the teacher <br> e.g. <br> - Teacher says: Find a card which has more than 2 pictures of dots? <br> - Match the cards with the same number of objects or counters. (pack a counter on each dot or picture) | Picture and dot flashcards <br> Counters |  |


| $\stackrel{\rightharpoonup}{\text { ® }}$ | Week 12 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $1.1$ <br> Count objects | - Recognise and identify the number symbol and the number name that involve the number 2 <br> Oral: Count everyday objects up to the number 2. <br> Count forwards and backwards up to 2 . <br> Rote counting 1-7 <br> Reinforce concepts of "many" and "few". <br> Clap your hands many times ...STOP. <br> Clap your hands fewer times. The teacher claps up to 2. | Number songs and rhymes | 1 day |
|  |  | Kinaesthetic <br> Let the learners: <br> - Bounce a ball once, in other words 1 time. <br> - Bounce a ball twice, in other words 2 times. <br> - Draw the number two on the ground and let learners walk the number two. <br> - Draw the symbol two in the sand, in the air, on the carpet etc. <br> - Make a number 2 with play dough. <br> - Find 2 friends who are wearing shoes. | Balls <br> Play dough |  |
| n $\substack{\text { n } \\ 1 \\ 0 \\ 3 \\ 0 \\ 0}$ |  | Concrete using 3-D objects <br> Let the learners: <br> - Pick up one counter. <br> - Pick up two counters. | Counters |  |



| Week 12 | One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.7$ <br> Addition and subtraction | - Orally solve and explain solutions to word problems (story sums) that involve the number 2 <br> Kinaesthetic <br> Examples: <br> 1. Teacher calls 1 learner to the front. Learners count him/her. Teacher calls another 1 and asks: How many learners altogether?" 1 and $1 \rightarrow 2$. (The teacher says: 1 and 1 makes 2) <br> 2. Teacher packs out 1 chair. Add 1 more. How many chairs are there now? 1 and $1 \rightarrow 2$. <br> 3. Teacher holds up 2 fingers. And says: "Count my fingers. If I hide one finger, how many fingers can you see? 2 take away $1 \rightarrow 1$. <br> 4. Teacher holds up 2 fingers. And says: "Count my fingers. If I don't take away any fingers, how many fingers can you see? 2 take away $0 \rightarrow 2$. <br> 5. There is one child is at home. One comes to play. How many children are there now? <br> 6. There are two children at the table. Each child wants his own chair. How many chairs do we need? <br> Concrete using 3-D objects <br> Examples: (Use counters) <br> 1. If you have one cookie and mommy gives you another one, how many cookies will you have? <br> 2. Teacher has two counters in one hand and no counters in the other hand. How many counters does she have altogether? <br> 3. Cay has 2 balls and 1 ball hops away. How many balls does Cay have left? <br> 4. If you have 2 blocks and you give 1 block to a friend, how many blocks will each of you have? | Number songs and rhymes <br> Counters (if you don't have cookies) <br> Counters <br> Balls <br> Blocks | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.4 <br> Describe, compare and order numbers | - Order and compare collections of objects using "less than" <br> Oral: Count everyday objects up to the number 2. <br> Reinforce concepts of "many" and "few" <br> Clap your hands many times ...STOP <br> Clap your hands fewer times. The teacher claps up to 2 | Number songs and rhymes | 1 day |
|  | Kinaesthetic (Integrate with performing Arts in Life Skills - dance) <br> - Sing the song: "Heads and shoulders, knees and toes" singing every word the first round <br> - The next round you sing one word less e.g. "Heads and shoulders, knees and ....., knees and ...." <br> - Sing song with another word less e.g. "Heads and shoulders, $\qquad$ and $\qquad$ $\qquad$ and ...." <br> - Teacher points out that every time they sing one word less until no words are sung <br> Concrete using 3-D object <br> Teacher makes four strings of beads. <br> Place 3 beads on the first string, 2 beads on the second string, one bead on the third string and 3 beads on the fourth string. <br> Let learners identify: <br> - Which string has the least beads? <br> - Which string of beads has 1 more than the string with 2 beads? <br> - Which string of beads has one less than the string with 3 beads? | Song: "Heads on shoulders, knees and toes" <br> Four strings with a different number of beads. |  |


| Week 12 | Suggested Contact Time : |  |  |
| :---: | :---: | :---: | :---: |
|  | One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| Describe, compare and order numbers | - Let learners compare picture and dot flash cards. Identify the cards that are more than and less than a number given by the teacher e.g. which card is more than 2 ? <br> - Which card is less than 4? | Make your own picture and dot card sets. | 1 day |
|  | - Reinforce the comparison of two given collection of objects using: <br> - more than, <br> - less than (fewer) <br> Oral: Count everyday objects up to the number 2. <br> Rote counting 1-7 <br> Reinforce concepts of "many" and "few" <br> Clap your hands many times ...STOP <br> Clap your hands fewer times. The teacher claps up to the number 2. | Number songs and rhymes |  |
|  | The teacher makes two strings of beads. Place 3 beads on the first string, 2 beads on the second string, <br> Let learners identify: <br> - Which string has the least beads? <br> - Which string has the most beads? <br> - Which string of beads has more than 2 beads? <br> - Which string of beads has less than 3 beads? <br> Integrate with Visual Arts where learners tread straws, polystyrene chips, cut out shapes with punched hole in the middle, leaves etc. | Two strings with a different number of beads. |  |

- Reinforce the comparison of two given collection of objects using:
- more than,
- less than (fewer)

Rote counting 1-7
Reinforce concepts of "many" and "few"

The teacher makes two strings of beads. Place 3 beads on the first string, 2 beads
,

- Which string has the least beads?

Which string has the most beads?

- Which string of beads has less than 3 beads?
shapes with punched hole in the middle, leaves etc.

| Week 12 | Suggested Contact Time : |  |  |
| :---: | :---: | :---: | :---: |
|  | One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 1.4 <br> Describe, compare and order numbers | Semi-concrete using 2-D shapes or pictures <br> Place a group of objects on the table and divide them into: <br> - Equal groups (one for you, one for me) <br> - Unequal groups (compare to see which group has most/least and which are the same) <br> - If there are two groups that are not the same, what do we have to do to make them equal/same? | Two strings with a different number of beads. | 1 day |
| 3.2 <br> 3-D objects and <br> 3.3 <br> 2-D shapes | - Describe, sort and compare 3-D objects and 2-D shapes <br> Concrete using 3-D objects <br> Let the learners: <br> - Sort a variety of objects according to size <br> - Sort and compare the different building blocks according to size (big and small). <br> - Sort the blocks according to the same shapes <br> Semi-concrete using 2-D shapes or pictures <br> Divide learners into five groups. Give each group a variety of different shapes. <br> - Let learners sort the shapes according to: <br> - Colour <br> - Shapes (even if the learners do not know the shapes). <br> - Size <br> - Make use of card games that promote colours, size and shapes | Variety of big and small objects in the class e.g. ball, doll, toy car, Lego block etc. <br> Building blocks and balls of different sizes <br> Logi Shapes or any other colourful shapes available | 1 day |


| $\stackrel{\rightharpoonup}{N}$ | Week 13 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
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|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| C <br> $\frac{0}{0}$ <br> 00 <br> 0 <br>  <br>  <br> 3 <br> 3 | $1.1$ <br> Count objects | - Introduce the meaning of the number 3 <br> Oral: Count everyday objects up to number 3 . <br> Count forwards and backwards up to 3 . <br> Rote counting 1-7 <br> Reinforce the concepts of "many" and "few". <br> Clap your hands many times ...STOP. <br> Clap your hands fewer times. The teacher claps up to 3 times. | Number songs and rhymes. | 1 day |
|  |  | Kinaesthetic <br> - The teacher plays a drum or music. When the music stops the learners form groups of three. <br> - Ask learners whose family consists of only 3 members. <br> - Learners stand in a row; Teacher asks "who's third in the row?" <br> Divide learners into $\pm 5$ groups <br> Let the learners: <br> - Tear three pages from an old telephone directory. <br> - Crumple the three pages into three balls as tight as possible. To enhance laterality only use the dominant hand. Learner can sit on the non-dominant hand. <br> - Open the balls and crumple them again. <br> - Count the balls after all three have been crumpled. <br> - While counting throw the three balls in a basket placed in the middle of the group. <br> This activity could be integrated with Physical Education in Life Skills | Learners themselves. <br> Counters <br> Old telephone directories basket |  |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.1 | Concrete using 3-D objects: |  | 1 day |
| Count objects | Let the learners: |  |  |
|  | - Identify 3 objects in the classroom. |  |  |
|  | - Hold up 3 fingers. |  |  |
|  | - Place 3 objects on the table. Individual learners come to the table and count each object. The learner touches each object as he/she counts. Repeat with other objects. |  |  |
|  | - Develop an awareness of number conservation by letting learners pack three counters or any objects in different ways e.g. | Counters or objects |  |
|  | When counting, the number of objects is not affected by their size, or position, or whether they are of the same type. For example: |  |  |
|  | - Arrange 3 buttons, 3 pencils, 3 hoops, 3 learners etc. |  |  |
|  | - Count them in a different order e.g. count them spread out, close together, in a line or stacked up |  |  |
|  | Semi-concrete using 2-D shapes or pictures | Picture flash cards |  |
|  | - Show a picture of a "three legged cast iron pot". | Dot flash cards |  |
|  | - Count the legs. | Counters |  |
|  | - Let the learners think of anything else with three legs. |  |  |
|  | - Show the picture card of 3 objects. The learners count out the corresponding number of counters. | Picture of 3 |  |
|  | - Do the same with the dot cards. | objects |  |
|  | - The learners match the dot card with the picture cards. |  |  |



Week 13
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.7 Addition and subtraction | - Solves orally stated addition and subtraction problems (story sums) with solutions up to 3 <br> Oral: Count everyday objects up to number 3. <br> Count forwards and backwards up to 3. <br> Kinaesthetic <br> Examples: <br> 1. Teacher calls 2 learners to the front. Learners count them. Teacher calls another 1 and asks: How many learners altogether?" 2 and $1 \rightarrow 3$. (The teacher says: 2 and 1 makes 3) <br> 2. Teacher packs out 3 chairs. She doesn't add any more. How many chairs are there now? 3 and $0 \rightarrow 3$. <br> 3. Teacher calls 3 learners to the front. Count them .She sends 2 learners' back. How many learners are left? 3 take away $2 \rightarrow 1$ <br> Concrete using 3-D objects <br> Give each learner 3 counters. As the teacher "tells the story" the learners pack the counters. <br> Examples: <br> 1. Anne has 2 oranges and Peter gives her another 1. How many oranges does Anne have now? 2 and $1 \rightarrow 3$ (The teacher says: 2 and 1 gives you 3). <br> 2. There is 1 branch on the tree and another 2 branches grow. How many branches are on the tree now? 1 and $2 \rightarrow 3$. <br> Examples: <br> 1. A monkey has 3 bananas and eats 1 . How many bananas does he have left? 3 take away $2 \rightarrow 1$. <br> 2. There are 2 juicy apples on an apple tree. 1 apple falls off. How many apples are left on the tree? 2 take away 1 is $\rightarrow 1$. | Number songs and rhymes. <br> Chairs <br> 3 Counters for each learner | 1 day |


| Week 13 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $2.1$ <br> Geometric patterns | - Create own repeating patterns using 2 objects <br> Kinaesthetic <br> Learners sit in a circle. Chant word patters <br> Example: <br> Sun, sky, sun, sky <br> Banana, apple, pear, banana, apple, pear. <br> Susan, John, Abby, Susan, John, Abby <br> red, blue, blue, red, blue, blue etc. <br> Waka, waka, eh, eh, waka, waka, eh, eh <br> Concrete using 3-D objects <br> Let the learners: <br> - Collect 3 of the same objects in the classroom e.g. 3 crayons <br> - Collect another 3 objects that are the same in the classroom e.g. 3 Lego blocks <br> - Learners create their own patterns using two objects e.g. <br> - One crayon, one Lego block, one crayon .... <br> - Two crayons, one Lego block, two crayons, one Lego block ..... <br> - Allow learners to create patterns in different ways. <br> - Swop their objects with a friend and repeat exercise. | Crayons <br> Adhesive <br> Any other objects | 1 day |

\begin{tabular}{|c|c|c|c|}
\hline Topic \& Clarification Notes \& Recommended Resources \& Approximate Duration \\
\hline \begin{tabular}{l}
3.3 \\
2-D shapes
\end{tabular} \& \begin{tabular}{l}
Recognise, identify and name 2-D shapes in the classroom including pictures \\
- Triangle \\
- Reinforce the knowledge gained in week 4 to recognise, identify and name the triangle \\
Kinaesthetic \\
Draw, or use a rope to create the outline of a large shape of a triangle \\
Let the learners: \\
- Walk around the shape observing the features of the triangle. While walking let the learners say: "I am walking along the triangle. One, two, three sides or one, two, three corners (angles) \\
- The teacher points out that the triangle has 3 "corners" and three sides. \\
- Draw a triangle in the air and/or sand \\
- Form a triangle with clay \\
Concrete using 3-D objects \\
Let the learners: \\
- Recognise and identify objects in the classroom that have a triangular shape. \\
- Recognise and identify objects in nature that have a triangular shape. \\
- Place a variety of different size circles and triangles in a "Feely bag". Identify the triangle amongst other shapes.

 \& 

Clay or play dough <br>
Triangular object in the classroom and environment <br>
Make your own cards with 5 different circles, triangles and squares on them
\end{tabular} \& 1 day <br>

\hline
\end{tabular}

| $\stackrel{\rightharpoonup}{N}$ | Week 13 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $\stackrel{\square}{\square}$ | $\begin{gathered} 3.3 \\ \text { 2-D shapes } \end{gathered}$ | Sort 3-D objects and 2-D shapes <br> - Sort a variety of objects according to shape and colour. |  | 1 day |
|  |  | Semi-concrete using 2-D shapes or pictures <br> Let the learners: <br> - Identify the triangle shape in pictures. <br> - Draw a triangle on a piece of paper. <br> - Copy the triangle from a given card. <br> - Draw a ring around all the circles on a worksheet. <br> - Make pictures using triangles during visual art time. <br> - Play card games that enhance the reinforcement of shapes. | Pictures in which a triangle can be identified. <br> Card games that develop recognition of shapes such as "What's in a square" Logi shapes etc. |  |


| Week 14 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
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|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.1$ <br> Count objects | - Reinforce the knowledge gained that involves the numbers 3 <br> Oral: Count everyday objects up to number 3. <br> Count forwards and backwards up to 3 . <br> Rote counting 1-7 <br> Reinforce concepts of "many" and "few". <br> Clap your hands many times ...STOP. <br> Clap your hands fewer times. The teacher claps up to 3 times | Number songs and rhymes. | 1 day |
|  | Concrete 3-D using objects <br> Let the learners: <br> - Find 3 objects in the class that are red. <br> - Make a number 3 with clay. <br> - Roll 3 big balls with clay. <br> - Roll 3 small balls with clay <br> - Find 3 learners in the class wearing the same colour. | Red objects. <br> Clay |  |


| Week 14 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.7$ <br> Addition and subtraction | - Orally solve and explain solutions to word problems (story sums) that involve the number 3 <br> Oral: Count everyday objects up to number 3 . <br> Count forwards and backwards up to 3 . <br> Kinaesthetic <br> Examples: <br> 1. The teacher calls 2 learners to the carpet then calls one more learner. How many learners did teacher call to the carpet? Teacher says: 2 and 1 gives you 3. <br> 2. There are three children. Each child wants his/her own crayon. How many crayons do we need? <br> 3. Three children stand together. One leaves the room. How many are left? <br> Concrete using 3-D objects <br> Examples: <br> 1. The teacher puts 3 counters on the table. She takes away 2 counters. How many counters are left on the table? Teacher says 3 take away 1 gives you 2. <br> 2. Pat has 2 cats and gets another 1 cat from Busi. How many cats does Pat have altogether? 1 and $2 \rightarrow 3$. Teacher says 1 and 2 gives you 3 . <br> 3. If 1 cat has 1 tail, how many tails will three cats have altogether? 1 and 1 and $1 \rightarrow 3$ | Learners <br> Counters | 1 day |

Week 14
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)


| $\stackrel{\rightharpoonup}{\omega}$ | Week 14 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | 3.2 <br> 3-D objects | - Sorts and compares 3-D objects and 2-D shapes according to a certain attribute <br> Concrete using 3-D shapes <br> Divide learners into 5 groups. <br> - The teacher collects enough objects so that each group can sort them according to at least two attributes (It could be more). <br> - Give each group objects of two attributes to sort. <br> Let the learners: <br> - Sort the objects according to things that are the same and different. <br> Semi-concrete using 2-D shapes or pictures <br> Keep learners in the same groups. <br> - Compare and Sort different pictures collected by the teacher e.g. Pictures of a variety of clothing, food, furniture, transport etc. <br> - Let learners complete a work sheet matching two pictures e.g. tooth paste and tooth brush, face cloth and soap. | Objects such as: <br> Different clothing items <br> Different fruit <br> Different plastic farm animals <br> Different geometric shapes <br> Different building blocks <br> Different Lego blocks <br> Different objects from nature such as leaves, sticks, stones etc. <br> Different buttons etc. <br> Different colour of bottle tops <br> Different crayons <br> Collect pictures from magazines and flyers. Cut out and paste on cards. | 1 day |


| Week 14 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $3.1$ <br> Position, orientation and view | - The position of two or more 3-D objects in relation to the learner <br> - Reinforce the concepts "on/ under" and "on top of" <br> Kinaesthetic <br> Each learner sits on a chair. <br> - Learners demonstrate on top and under by following the commands of the teacher e.g. sit on the box, lie under the box or table. <br> - Sit under a table. Make yourself as small as you can under the table. <br> - Stand on your chair and stretch as high as you can. <br> - Get onto a table and swing your arms in big/small circles. Extend using bigger/ smaller. <br> - Put a block on your head and climb on the table. <br> - Choose five learners' using a number rhyme. <br> - Whisper an instruction to each learner. <br> - Sit with your hands under your legs <br> o Stand with your hands on your hips <br> o Stand with your hands behind your back <br> o Sit with your hands on your shoulders <br> o Stand with your hands crossed in front of you <br> The learners stand in the front while the rest of the group is sitting on the carpet. <br> Ask the learners: <br> - What is the first learner doing? (He/she is sitting) <br> - Where are his hands? (His/her hands are under his/her legs) <br> - Repeat with the other learners using second, third fourth and last. <br> - Select a new group to perform the same instructions <br> - Take the learners outside and let them demonstrate the concepts of "on', "under", and "on top" by showing their own initiative. | Learners <br> Box | 1 day |



## Week 15

Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.2 <br> Count forwards and backwards | - Use numbers 1, 2 and 3 in familiar contexts <br> Oral: Count everyday objects up to 3 , <br> Count forwards and backwards up to 3 . <br> Reinforce concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 3 times. <br> - Encourage learners to memorize their house number and street address <br> Semi-concrete using 2-D shapes or pictures <br> Let the learners: <br> - Look for pictures of the number 1, 2 and 3 from magazines and flyers and paste them on paper.(Integrate with visual Arts) <br> - Match the number of objects to the number of dots on a flash card. <br> - Show a dot card. Learners throw the same number of bean bags into a box <br> - Play the board game "Snakes and Ladders" and dominoes. | Number songs and rhymes <br> Magazines, Adverts <br> Flash cards with dots <br> Bean bags <br> "Snakes and Ladders" board game Dominoes | 1 day |

## Notes:

Numbers are all around us:

- Each house has a number
- We all have different telephone numbers
- We see numbers in shop windows.
- We see numbers on different products when shopping
- We see numbers on motor cars

Week 15
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

## Clarification Notes

Recommended Resources
Approximate Duration

## 1.4

Describe, compare and order numbers

- Order and compare collections of objects using ''more than, less than" and "equal to" up to number 3


## Kinaesthetic

Call three learners to the front. Let them sit in a circle.

- Let two learners stand. How many are sitting? Count them. How many are standing? Count them. Which number is more/most, which number is less/least?
- Let three learners stand. Count them. Which number is most/least? Let one more stand. Count them. Are the learners sitting more than the learners standing?
- Repeat with numbers 1 to 3.
- Count the girls. Count the boys. Are there more boys than girls?


## Concrete using 3-D objects

Divide learners into 5 groups
Provide each group with a piece of string/wool and $\pm 5$ objects.
Learners form a nest with the wool.

- Teacher whispers to each group asking them to make a group of 3 or 2 or 1 object(s) in their "nests"
- Learners must identify which group has more than 1 object.
- Which group has less than 3 objects?
- Which group has the same number of objects?

\begin{tabular}{|c|c|c|c|}
\hline Topic \& Clarification Notes \& Recommended Resources \& Approximate Duration \\
\hline \multirow[t]{2}{*}{\(\stackrel{2.1}{\text { Geometric patterns }}\)} \& \begin{tabular}{l}
- Copy and complete a given pattern according to the colours \\
Kinaesthetic \\
- Teacher acts out a pattern. Repeats it and keeps the rhythm e.g. \\
- Clap, snap (fingers), clap, snap \\
- Snap, clap, stamp, snap, clap, stamp \\
o Clap, snap, snap, clap, snap, snap \\
Concrete using 3-D objects \\
The teacher provides each learner with 3 red, 3 blue and 3 yellow counters or bottle tops Let the learners: \\
- Copy a given pattern from the teachers pattern e.g. red, red, blue, yellow, yellow (Repeat several times with a different pattern) \\
- Complete a given pattern e.g. blue, yellow, red........(Repeat several times with a different pattern) \\
- Let the learners sort counters according to the three different colours.
\end{tabular} \& Each learner receives 3 red, 3 blue and 3 yellow counters or bottle tops \& 1 day \\
\hline \& \begin{tabular}{l}
Semi-concrete using 2-D shapes or pictures \\
- Give each learner a piece of paper \\
- Let learners complete a 2-D shape pattern as a border. \\
- Complete the picture during visual arts time by drawing a picture in the middle. \\
Siya \\
\(\bigcirc \bigcirc \bigcirc \bigcirc\) \\
0

\end{tabular} \& A4 paper for each learner. Crayons \& <br>

\hline
\end{tabular}

## Clarification Notes

Recommended Resources
Approximate Duration
4.2 Length

## Concretely compares and orders objects using appropriate vocabulary to describe

 ength- long, short,
- longer, shorter
- longest, shortest


## Kinaesthetic

- Let one learner lie on the floor and the rest of the learner's place the blocks in a line alongside his/her body.
- The teacher asks the rest of the class/group to build something that is shorter than their friend and longer than their friend.


## Let the learners determine:

- Which structure is longer?
- Which structure is the longest?
- Which structure is shorter?
- Which structure is the shortest?

Let learners arrange a variety of materials:

- From longest to shortest
- From shortest to longest
- Let the learners compare the lengths of different objects.

The teacher provides learners with pieces of wool or string. Encourage learners to estimate before measuring.
Let the learners measure:

- Each other's heads.
- Each other's feet.
- Their own ankles.
- Their own wrists.
- Let the learners compare the different lengths by seeing which piece of string is longer or shorter e.g. string measure around my head is longer than the string measure around my wrist
- Let the learners determine whether their estimations were correct.

String
Rope
Strips of material
Crayons of different lengths

Wool or string
Learners

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.1 <br> Count objects | - Introduce the meaning of the number 4 <br> Oral: Count everyday objects up to 4 . <br> Counts forwards and backwards up to 4 . <br> Rote counting 1-7 | Counting rhymes and songs <br> Learners' bodies | 1 day |
|  | Reinforce concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 4 times. <br> Kinaesthetic <br> Let the learners: <br> - Nod their heads 4 times. <br> - Make the number 4 using their bodies. Learners determine how many children they would need. <br> - Learners close their eyes. Teacher taps on the table 4 times. They open their eyes and say how many taps they have heard. Repeat with numbers 1 to 4 . |  |  |

## Week 16 Suggested Contact Time ：

## One teacher－guided planned class activity（ring）of $\pm 30$ minutes per day（ $\pm 5$ Mathematics activities per week）

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | Concrete using 3－D objects <br> Let the learners： <br> －Make a number 4 with play dough． <br> －Find 4 friends who are wearing shoes． <br> －Find 4 objects that are round． <br> －Blindfold learners and let them identify the numbers 1 to 4 by feeling／tracing the tactile number cards． <br> －Develop an awareness of number conservation by letting learners pack four counters or any objects in different ways e．g． <br> －000 <br> When counting，the number of objects is not affected by their size，or position，or whether they are of the same type．For example： <br> －Arrange 4 buttons， 4 pencils， 4 hoops， 4 learners etc． <br> －Count them in a different order e．g．count them spread out，close together，in a line or stacked up <br> Semi－concrete using 2－D shapes or pictures <br> Let the learners： <br> －Look for 4 pictures and paste the pictures on paper． <br> －Match the number of objects to the number of dots on a flash card． <br> －Identify the flash card with four dots． | Play dough <br> Objects that are round <br> Make a set of tactile number cards by cutting out numbers from sand paper and pasting them on separate pieces of card board．If you laminate these cards learners could also use them to form a clay number on the card． <br> 4 Counters or 4 objects for each learners <br> Magazines，flyers，advertisement <br> A4 paper and glue | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.4$ <br> Describe, compare and order numbers | - Use the number 4 in familiar context <br> - What does the number four make you think of? <br> - To develop memory, encourage learners to memorise their house number and address <br> Concrete using 3-D objects <br> - Give opportunity to play number card games available in your class <br> Semi-concrete using 2-D shapes or pictures <br> - Show the number symbol 4 card <br> Play games such as: <br> - If your house number has a 4 in it, clap 4 times. <br> - Find a friend in the class who has the same house number as you. (Learners ask friends their house number) <br> - Whose house number is more than 4? <br> - Show learners a flash card with four dots. <br> - Identify the flash card with four pictures on. | Learners' home addresses <br> Learners <br> 4 <br> Any available number card games <br> flash cards with 4 pictures and 4 dots | 1 day |


| $\stackrel{\rightharpoonup}{\mathrm{A}}$ | Week 16 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | 3.2 <br> 3-D objects | - Explore the possibilities of building blocks <br> Let the learners: <br> - Use any four blocks to build a construction. <br> - Build a structure that is 3 blocks high and 5 blocks across. <br> - Use as many blocks as they need to build a train. <br> - Identify who built the longest train. <br> - Build a high tower (Vertical). <br> - Build a flat construction e.g. a road or a house (horizontal) <br> - Identify who built the highest tower. <br> - Provide building blocks during free play indoors for learners to continue exploring building blocks. | Building blocks e.g. | 1 day |
|  | 3.3 <br> 2-D shapes | - Develop the ability to distinguish between shapes in our environment, regardless of their size or angle sizes <br> - Shape conservation (form constancy) <br> Kinaesthetic <br> Let the learners in groups of 3 : <br> - Lie on the floor and make a triangle with their bodies. Point out that although each group's triangle shape looks different, the shape still remains that of a triangle. <br> - The teacher draws different triangles on the floor/ground e.g. <br> - Learners walk along the sides of the shapes and experience the different angles with their bodies <br> Concrete using 3-D objects <br> - Use 7 twigs and place them in a straight line | Learners <br> 7 Twigs for each learner | 1 day <br> Only select one kinaesthetic, concrete and semiconcrete activity |

Week 16
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)


Week 16 Suggested Contact Time :

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recomme | ded Resources | Approximate Duration |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 4.2 \\ \text { Length } \end{gathered}$ | Concretely compares and orders objects using appropriate vocabulary to describe length <br> - long, short, <br> - longer, shorter, <br> - longest, shortest, <br> - short, shorter, shortest <br> - tall, taller, tallest <br> Reinforce the concept of length <br> Kinaesthetic <br> Let the learners: <br> - Explore length by comparing objects with one another. <br> - Identify which object is the longest and which object is the shortest. <br> - Compare the height of two learners and identify which learner is short and which one is tall <br> - Compare the height of more than two learners and ask questions such as "Which learner is shortest, and which learner is tallest. <br> - Teacher measures learners again using the height chart from the first term. <br> - The teacher leaves last term's recordings (hands with learners symbol/photo) so that they can compare the two measurements. <br> - Learners discover whether they have grown since the last term. <br> - Who did not grow at all? <br> - Who grew the most since the first term? e.g. <br> o Sipho grew one hand span taller. <br> o Abby's height remained the same | Pencils, rope, <br> string, pegs, etc. <br> Hands-span <br> height chart | Height Chart <br> Term 1 <br> Term 2 <br> OीO | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | - Reinforce the knowledge gained of the meaning of the number 4 <br> Oral: Count everyday objects up to 4. <br> Count forwards and backwards up to 4 . <br> Reinforce concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 4 times. | Number songs and rhymes | 1 day |
|  | Kinaesthetic <br> Let the learners: <br> - Trace the number 4 in the air using their finger. <br> - Sing song e.g. 'Four green bottles hanging on the wall....' <br> - Turn around 4 times. |  |  |
|  | Concrete using 3-D objects <br> Let the learners develop number sense by: <br> - Drawing the number 4 in sand. <br> - Finding 4 3-D objects that can roll. <br> - Building puzzles with 4 pieces. <br> Semi-concrete using 2-D shapes or pictures <br> - The teacher selects 4 name flash cards. The teacher flashes a name and then a picture of a toy or an animal. <br> - The learner whose name was flashed reacts by making the noise the toy made. <br> - Repeat until all four names were flashed. <br> - Ask how many learners' names did I flash? How many toy/animal pictures did you see? | Flat baking tray/box with sand <br> 3-D objects that can roll <br> 4-Piece Puzzle <br> Card with a picture of a toy <br> Cards with a picture of an animal |  |


| Week 17 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.3$ <br> Number symbols and number names | - Knows the number symbol and recognises the number name of the number 4 <br> Oral: Count everyday objects up to 4 . <br> Count forwards and backwards up to 4. | Number songs and rhymes | 1 day |
|  | Reinforce concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 4 times. <br> Kinaesthetic <br> - Write the number four in the air, on the floor and on your friends back <br> - Hold up 4 fingers <br> - Teacher plays a drum. When drum stops, learners form groups of four. |  |  |
|  | Semi-concrete using 2-D shapes or pictures <br> - Show learners the flash card with the number symbol 4. <br> - Identify the number name on number flash cards. <br> - Link the number name to the same number of objects. | Flash card with number symbol Flash card with number name four 3-D objects $\square$ four |  |

Week 17
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.7$ <br> Addition and subtraction | - Orally solve and explain solutions to word problems (story sums) that involve the number 4 <br> Concrete using 3-D objects <br> Examples: <br> 1. Teacher gives you 2 blocks and you already have 2 blocks. How many do you have altogether? <br> 2. If you have 2 blue circles and 2 red circles, how many circles do you have all together? <br> 3. Sipho has 4 crayons and Joy has 1 crayon. Who has more crayons? <br> 4. If Jody has 4 dolls and she lost 1 , how many dolls will she have left? <br> Divide learners into groups. <br> - Give each group a heap of objects e.g. pencils, crayons, cups, shapes. Let the learners share the objects received between each group member (one-to-one correspondence) <br> - Ask questions such as: "Are there any objects left?" <br> - (The teacher must ensure there are more objects than the number of learners in a group. Remove objects to demonstrate equal sharing as well) | Blocks <br> Crayons <br> Blue and red circles <br> Dolls <br> Enough objects (one for each learner) such as pencils, crayons, cups, shapes | 1 day |


| Week 17 | Suggested Contact Time : |  |  |
| :---: | :---: | :---: | :---: |
| One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.4$ <br> Describe, compare and order numbers | - Order and compare collections of objects using "more than, less than" and "equal to" up to number 4 <br> Divide learners into groups <br> - The teacher provides each group with 4 counters and two pieces of wool. <br> Let the groups: <br> - Form two circles (sets) with the wool. <br> - On the teachers instruction they place counters in each set. <br> - Group members identify which set has more counters than the other? (more than) <br> - Which circle has fewer counters than the other? (less than) <br> - Which circle has the same number of counters as the other? (equal) <br> Semi-concrete using 2-D shapes or pictures <br> Arrange a set of picture cards in the correct order e.g. <br> Picture <br> Picture of 2 of 4 objects objects <br> Arrange a set of dot cards in the correct order e.g. <br> - Ask questions such as "Which card has more objects/dots? <br> - Which number is more than 2 etc? | Wool /string <br> 4 counters | 1 day |

Week 17

| Topic |
| :---: |
| 5.1 |
| Collect and sort <br> objects |
| 5.2 |
| Represent sorted <br> collection of objects |

Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: |
| - Develop the process of data handling <br> Concrete using 3-D objects <br> - Let the learners collect 9 twigs. <br> - Sort twigs according to small and large size. <br> Draw graphs to display data <br> Semi-concrete using 2-D shapes or pictures <br> - Make a pictograph with the twigs. <br> - The learners pack the twigs on the pictograph according to size i.e. small and large. <br> Read and interpret graphs <br> - Talk about the results by asking questions e.g. "How many small twigs are there? How Many large twigs? Which are most/least? | Learners make own collection of twigs <br> Worksheet pictograph. The teacher designs an A4 paper with the relevant columns for each learner | 1 day |



Week 18 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.7$ <br> Addition and subtraction | Solves orally stated addition and subtraction problems with solutions up to 4 <br> Oral: Count everyday objects up to 4 . Count forwards and backwards up to 4 . Rote counting 1-7 <br> Reinforce concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 4 times. <br> Kinaesthetic <br> Examples: <br> 1. Teacher calls 1 learner to the front of the classroom. She then calls another 3 learners. How many learners has she called altogether? <br> 2. Teacher packs out 3 counters. She adds another one. How many counters are on the table? <br> 3. Learners stand in the front of the classroom. Teacher asks one learner to sit down. How many learners are in the front of the classroom now? <br> 4. Busi has 4 pencils. He gives Justin 2 pencils. How many pencils does Busi have left? | Number songs and rhymes <br> Learners <br> Counters <br> Pencils <br> Make use of a variety of resources to give you ideas of how to apply different strategies. | 1 day |

Week 18 Suggested Contact Time ：
One teacher－guided planned class activity（ring）of $\pm 30$ minutes per day（ $\pm 5$ Mathematics activities per week）

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
|  | －Order and compare collections of objects using＂more than，less than＂and＂equal to＂up to number 4 <br> Concrete using 3－D objects <br> －The teacher provides each member of the group with a certain number of crayons． <br> －Group members must identify which learner has more crayons than the other learners． <br> －Which learner has fewer crayons than the other learners？ <br> －Which learners have the same number of crayons？ <br> Semi－concrete using 2－D shapes <br> －Arrange a set of number cards that involves the numbers 1 to 5 in the correct order e．g． <br> －Ask questions such as＂Which card has more objects／dots？ <br> －Which number is more than 2 ？etc． | Crayons <br> Dot and number symbol cards | 1 day |

Week 18 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $2.1$ <br> Geometric pattern | - Copy and complete a given pattern with coins <br> Copy a given pattern <br> - Teacher sets up a pattern using " play money" e.g. 5c, 5c, 5c, 10c, 10c, 10c,20c, 20c, 20c <br> Let the learners: <br> - Copy several patterns created by the teacher. <br> Complete a given pattern <br> Let the learners: <br> - Complete several patterns created by the teacher e.g. <br> o 5c, 5c, 10c, 10c, $\qquad$ <br> - 5c, 10c, $\qquad$ <br> o 10c, ,20c.. $\qquad$ .etc | Play money or real money (5c,10c,20c) | 1 day |


| $\stackrel{\rightharpoonup}{\sim}$ | Week 19 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | 1.1 <br> Count objects | - Reinforce the knowledge gained that involves the numbers 1, 2, 3 and 4. <br> Oral: Count everyday objects up to 4 . <br> Count forwards and backwards up to 4. Rote counting 1-7 <br> Reinforce concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 4 times. <br> Kinaesthetic <br> The teacher holds up a number card with the number symbol 3 and says to learners: <br> - I need so many boys. <br> - Holding up the number 2 saying, I need so many girls. <br> - Form groups of (holding up a number 2). <br> - Repeat activity with cards that involve number 1-4 | Number songs and rhymes <br> Number symbol cards that involve numbers 1 to 4 <br> e.g. <br> 3 | 1 day |
| $\overline{0}$ <br> 0 <br> 0 <br> 8 <br> $\Pi 1$ <br> 3 <br> 1 <br> 3 <br> 0 <br> 8 <br> 0 <br> 0 | $1.16$ <br> Mental mathematics | Mental Mathematics <br> The teacher holds up the number card 3 and asks learners: <br> - Which number is this? <br> - Which number comes before the number 3 ? <br> - Which number comes after the number 3 ? <br> - Repeat with numbers 1 to 4 <br> - Can you show me a picture card that has the same number as the number of dots on this card? | Set of picture and dot cards that involve numbers 1 to 4 |  |


| Topic | Clarification Notes | Recommended Resources |  |  | Approximate Duration |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1.16$ <br> Mental mathematics | Concrete using 3-D objects <br> - Teacher claps rhythmically and slowly to represent a number. The learners have to take out so many beads and show them. E.g. 4 beads <br> - Let the learners put 1, 2, 3 or 4 beads in front of them. <br> - Ask learners to show how many beads they have by matching their number of beads with the same number flashcard e.g. 4 beads with number symbol 4. <br> - Let them find a learner who has the same number of beads. <br> Semi - concrete using 2-D shapes or pictures <br> The teacher holds up the dot number card of the number 2 and asks learners: <br> - How many dots are on this card? <br> - Which number do these dots represent? <br> - Which number comes after this number? <br> - To draw the same number of dots on their papers | 4 Beads p <br> Flash card <br> Flash card | th | 2 4 |  |


| $\stackrel{\rightharpoonup}{\mathrm{g}}$ | Week 19 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $1.7$ <br> Addition and subtraction | - Solves orally stated addition and subtraction problems (story sums) with solutions up to 4 <br> Kinaesthetic <br> - Call 3 learners to the front. Count them <br> - Call 1 more learner.' How many altogether? 3 and $1 \rightarrow 4$ (three and one give 4) <br> - Send 3 learners back to the carpet. How many learners are there now? 4 take away 3 $\rightarrow 1$ <br> Divide learners into groups. <br> Ask questions like: <br> - How many noses do you see in your group? <br> - How many mouths? <br> - How many bodies: <br> - Between two learners, how many eyes are there? <br> - Between two learners, how many legs are there? <br> Concrete using 3-D shapes <br> Examples: <br> 1. Lindiwe's dad has a car. How many wheels does his car have? <br> 2. If 1 wheel is flat and taken off the car, how many wheels are left? <br> 3. A hen has 4 chicks. Two of the chicks get lost. How many chicks are still with the hen? <br> 4. The mother hen finds her two lost chicks. How many chicks does she have now? | Counters <br> Make use of a variety of resources to give you ideas of how to apply different strategies <br> Counters | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.4 <br> Describe, compare and order numbers | - Order and compare collections of objects using "more than, less than" and "equal to" up to number 4 <br> Kinaesthetic <br> - Teacher places various objects on a table for example, 2 crayons, 4 of the same blocks, 3 tins, 2 books. <br> Let the learners: <br> - Count the number of crayons and the tins. Are there more crayons or more tins? <br> - Count the number of blocks and the books. Are there fewer blocks than books? Are there more blocks than books? <br> - Count the books and the crayons. Are there an equal number of objects or not? | Crayons, blocks, tins, books. | 1 day |
|  | Concrete using 3-D objects <br> - Let the learners sit on the carpet and provide each learner with a number of counters. <br> - Learners should each have a different number of counters. <br> - Let the learners put the counters out in front of them. The teacher asks the learners: <br> o Who has the most counters? <br> o Who has the least counters? <br> o Which learners have the same number of counters? | Counters <br> Teacher gives each learner a different number of counters up to 4 |  |
| 3.3 <br> 2-D shapes | Recognise, identify and name 2-D shapes in the classroom and in pictures <br> - Make and complete own 4 piece puzzle <br> (Integrate with Visual Arts) <br> Let the learners: <br> - Draw a picture on an A4 paper. <br> - The teacher draws the lines on the back of the learner's drawing. <br> - The learner cuts his/her picture on the given lines. <br> - The learner completes/builds his/her own puzzle. | Learners own drawings | 1 day |


| $\stackrel{\rightharpoonup}{\mathrm{O}}$ | Week 19 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $\begin{gathered} 4.1 \\ \text { Time } \end{gathered}$ | - Develop an awareness of what happens between suppertime and bedtime (Integrate with Beginning Knowledge topics in Life Skills) <br> Let the learners: <br> - Talk about what they do after they have had supper. <br> - Talk about what happens at home after suppertime. <br> The teacher asks: <br> - "Do you come to school in the morning or evening?" <br> - If Peter gets to school after the bell has rung, is Peter late or early for school? <br> - Where is the sun at night?" <br> Semi-concrete using 2-D shapes or pictures <br> - Learners draw a picture to show any event after supper. <br> - Provide puzzles that reflect the sequencing of events and/or activities. | Pictures that show what happens from suppertime to bedtime. <br> Paper and crayons | 1 day |


| Week 20 | Use Week 20 to attend to conceptual weaknesses and/or identified barriers to learning. |  |
| :---: | :---: | :---: |
| Content Area | Topic | Assessment Criteria |
| Numbers, Operations and Relationships | 1.1 <br> Count objects | Estimates and rote counts up to 7 (number songs and rhymes included to develop number concepts) |
|  |  | Counts backwards and forwards (1-4) |
|  |  | Understands the concepts "many and few" (clapping) |
|  |  | Recognises numbers in familiar context - e.g. house number, address register |
|  |  | Identifies number pictures and dot cards |
|  |  | Knows the number symbols 1, 2, 3, 4 |
|  |  | Recognizes the number names two, three and four |
|  |  | Understands one-to-one correspondence (Helpers' chart during refreshment time) |
|  |  | Distinguish between more, less and equal, many and few up to 4 |
|  |  | Recognises the different South African coins |
|  | $1.6$ <br> Problem solving techniques | Uses concrete apparatus <br> Explains own thinking in words and through drawings or concrete objects |
|  | 1.7 and 1.13 <br> Addition and subtraction | Orally solves addition and subtraction problems up to number 4 |
| Patterns, Functions and Algebra | $2.1$ <br> Geometric patterns | Copies, extends and creates own patterns (objects, shapes and coins) |


| Week 20 | Use Week 20 to attend to conceptual weaknesses a | $r$ identified barriers to learning. |
| :---: | :---: | :---: |
| Content Area | Topic | Assessment Criteria |
| Space and Shape (Geometry) | 3.1 <br> Position, orientation and views | Understands the position of two or more objects in relation to the learner On, under |
|  | $\begin{gathered} 3.2 \\ \text { 2-D shapes } \end{gathered}$ | Builds at least a 12 piece puzzle |
|  |  | Shows the ability to distinguish between objects in the "foreground and background" (assess again) |
|  |  | Recognise, identify and names the triangle |
|  |  | Understands form constancy of triangle (Shape conservation) |
|  | $\stackrel{3.2}{\text { 3-D objects }}$ | Compares which of two given collection of objects are long, longer; short/shortest |
|  |  | Sorts objects in Size - long and short |
|  |  | Colours - (red, yellow, blue and green) |
|  |  | Shapes |
|  |  | Explores with building blocks |
|  | 3.4 <br> Symmetry | Recognises line of symmetry in self and own environment |
|  |  | Able to cross the mid-line |
| Measurement | $\begin{gathered} 4.1 \\ \text { Timo } \end{gathered}$ | Understands the days of the week, seasons and weather chart (Songs and rhymes - assess again) |
|  |  | Knows own birthday (assess again) |
|  | $\begin{gathered} 4.2 \\ \text { Length } \end{gathered}$ | Distinguish between longest, shortest, longer, shorter (Height chart) |
| Data Handling | $5.1$ <br> Collect and sort objects | Able to collect, sort, draw, read and represent (analyse) objects according to one attribute |
|  | $5.2$ <br> Represent sorted collection of objects |  |
|  | 5.3 <br> Discuss and report on sorted collection of objects |  |


| Week 21 | TERM 3 MATHEMATICS GRADE R |  |  |
| :---: | :---: | :---: | :---: |
|  | One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 1.1 <br> Count objects | - Introduce the meaning of the number 5 <br> Oral: Count everyday objects up to 5 . <br> Count forwards and backwards up to 5 . <br> Rote counting 1-10 <br> Reinforce ordinal counting: <br> Teacher packs 3 objects in a row. Point at each object while counting first, second, third. <br> Reinforce the concept of "many and few". <br> Clap hands many times $\qquad$ STOP <br> Clap hands fewer times. Teacher claps up to 5 times. <br> Ask question which number of claps was most/least. <br> Kinaesthetic <br> Encourage learners to discover the number 5 by: <br> - Clapping their hands 5 times. <br> - Finding out how many learners in the class are already 5 years -old. | Number songs and rhymes <br> Counting rhymes and songs e.g."Five little monkeys jumping on the bed". <br> 3 objects | 1 day |


| $\stackrel{\rightharpoonup}{\sim}$ | Week 21 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $1.16$ <br> Mental Mathematics | Mental Maths <br> - The teacher claps her hands rhythmically and slowly to represent a number e.g. 5. The learners have to take out the same number of counters (5) and show them. <br> - Learners pack 5 counters out in a row and count them. <br> - Teacher asks: <br> - What number comes before the number 5 ? <br> - What comes after 4 etc? <br> - If you have 5 apples and you give 2 apples away. How many apples will you have left? <br> - Show me 5 fingers. <br> - How many toes do you have on 1 foot? <br> Concrete using 3-D objects <br> Learners develop number sense by: <br> - Making a number 5 with play dough. <br> - Picking up 5 leaves. <br> - Counting objects and linking them with counters. <br> - Develop an awareness of number conservation by letting learners <br> - Pack five counters or any objects in different ways e.g. <br> When counting, the number of objects is not affected by their size, or position, or whether they are of the same type. For example: <br> - Arrange 5 buttons, 5 pencils, 5 hoops, 5 learners etc. <br> - Count them in a different order e.g. count them spread out, close together, in a line or stacked up | Counters in a container <br> Clay or play dough <br> Leaves | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| and order numbers | - Develop memory and encourage learners to memorise their house number, address and telephone number <br> Play games such as: <br> - The teacher says a house number, address or telephone number of a learner. The learner whose number or address it is must respond. <br> - When completing the attendance register the teacher may ask questions such as: "Is the learner with the telephone number 435-6256 here today?" "Is the learner that lives in Mandela Drive 123 here today?" <br> - Learners use number symbol flash cards to pack their house number or telephone number in sequence even if not successful. <br> - Role-play conversations on a play telephone. Learners phone someone special. Integrate with Performing Arts (drama) in Life Skills <br> Semi-concrete using 2-D shapes or pictures <br> The teacher shows learners: <br> - Different types of media where she can find a number 5 e.g. birthday cards, newspapers, magazines, flyers etc. <br> - The flash card with 5 dots and the flash card with 5 pictures. <br> - Let the learners link the picture flash cards with the dot cards and with the same number of counters or objects. <br> - Make number puzzles that involve the number 5 e.g. | The telephone number should be the contact number of the parent or guardian and could be a cell phone number <br> Attendance register <br> Number symbol flash cards or large number symbols made from cardboard <br> Play telephone <br> Birthday cards <br> Newspapers, magazines <br> Flash card with 5 dots <br> Flash card with 5 pictures <br> Objects <br> Counters | 1 day |

## Clarification Notes

Recommended Resources
Approximate Duration

- Know the number symbol and recognise the number name that involve the number 5

Oral: Count everyday objects up to 5
Count forwards and backwards up to 5
Rote counting 1-10
Number songs and rhymes

## Kinaesthetic

- Let the whole class sit in a circle.
- Number the learners according to a pattern. 1, 2, 3, 4, 5. 1, 2, 3, 4, 5. 1, 2, 3, 4, 5
- Ask questions such as; "Who will be the next number 5 ? "Who will be the next number 4?
- How did you solve the problem?
- (Learners solve the problem in a practical way predicting the next number by counting on)


## Concrete using 3-D objects

- Use the tactile number cards that involve numbers 1 to 5.
- The learners close their eyes and feel the number five using their fingers amongst other number symbols.

Give learners 5 counters each and two plastic cups or two egg containers.

- Ask the learners: "How many different ways can you arrange the five counters into two baskets?


| Week 21 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | Semi-concrete using 2-D shapes or pictures <br> Let the learners: <br> - Identify the flash card with 5 pictures on it. <br> - Identify the flash card with 5 dots on it. <br> - Identify the number symbol 5 anywhere displayed the classroom. <br> - Identify the number symbol on the flash card. <br> Recognise the number name on a flash card. <br> - Link the number of counter with the number name and number symbol by packing a counter on each picture and dot card. | Flash cards with pictures, dots, number symbol and number name <br> 5 Counters |  |
| $3.4$ <br> Symmetry | - Reinforce the line of symmetry in self by performing actions that encourage the crossing of the mid-line <br> Kinaesthetic <br> Let the learners: <br> - Play follow-the leader where learners copy positions from the chart. <br> - Play "follow the leader" where the teacher demonstrates a position and the learners copy him/her.(Include actions where learners cross the mid-line e.g. touch right knee with left hand) <br> - Play "follow the leader" where a learner demonstrates a position and the rest copy him/ her. <br> - The teacher demonstrates "star jumps" and the learners are encouraged to perform the same actions <br> Concrete using 3-D objects <br> Let the learners: <br> - Place a beanbag on the left, right, in front and behind his/her body. <br> - Use his/her left hand and place a bean bag on the right side of his/her body. <br> - Stretch to cross the mid-line. <br> - Repeat action with right hand. <br> Integrate this activity with Physical Education in Life Skills |  | 1 day <br> Thereafter on a continuous basis during free play and physical development activities |

## Clarification Notes

Recommended Resources
Approximate Duration

- Estimate and measure the length of different objects using feet, hands, a piece of string, a stick etc.


## Kinaesthetic

Let the learners:

- Compare the length of their feet and hands.
- Learners estimate which object is long and which one is short by measuring them with their feet or hands e.g. the table or the broken piece of hose from home.
- Estimate which object is the longest or shortest e.g. A footpath or a row of bricks.
- Let learners guess which would be longer e.g. the classroom or the teachers' staff room?
- Pose question such as: "Which is longer/longest, the pencil or the piece of string?" etc

| Week 22 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.1$ <br> Count objects | - Reinforce the knowledge gained that involves the number 5 <br> Oral: Count everyday objects up to 5 <br> Count forwards and backwards up to 5 <br> Rote counting 1-10 <br> Reinforce the concepts "many and few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 5 times <br> Ask question:"Which number of claps was most/least.?" <br> Kinaesthetic <br> Encourage learners to discover the number 5 by: <br> - Showing 5 fingers in the air. <br> - Finding 5 objects that are red, blue yellow, green. <br> - Finding 5 objects that look like a circle, square, triangle. <br> Concrete using 3-D objects <br> Let the learners develop number sense by: <br> - Fetching 5 books in the book corner <br> - Building a tower with 5 unifix cubes or building blocks. | Number songs and rhymes <br> e.g. Counting rhymes and songs e.g. "1,2,3,4,5 once I caught a fish alive" <br> Counters <br> Books <br> Building blocks or unifix cubes | 1 day |

## Week 22 Suggested Contact Time

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.7$ <br> Addition and subtraction | - Orally solve word problems (story sums) and explain solutions to problems that involve the number 5 <br> Kinaesthetic: <br> - Call 5 learners to the front. Share 5 chairs equally between the five. <br> - Take one chair away. Now share the chairs between the five. One learner remains without a chair. <br> - Start at 5. Count backwards. Start at 3 . Count to 5 . Start at 1. Count to 4 etc. <br> Concrete using 3-D objects <br> Examples: <br> 1. Show 1 finger on your one hand and 4 fingers on your other hand. How many fingers altogether? <br> 2. Sam has 4 biscuits. Mpho gives him 1 more. How many biscuits does Sam have altogether? <br> 3. One cat has two ears. How many ears do two cats have? <br> 4. Tiny has 5 stones and gives all 5 stones to Mia. How many stones does Mia have? <br> 5. Jan has 5 marbles and loses 2 . How many marbles does he have left? <br> 6. Song, "Five green bottles hanging on a wall, ending with zero" (Point out that the bottles become less). | Counters <br> Marbles <br> Song | 1 day |

## Topic

Clarification Notes
Recommended Resources
Approximate Duration

- Compares which of two given collection of objects are more than, less than, equal to


## up to number 5

Oral: Count everyday objects up to 5
Count forwards and backwards up to 5
Rote counting 1-10
Reinforce the concepts of "many" and" few".
Clap your hands many times. .STOP
Clap your hands fewer times. The teacher claps up to 5 times.
Ask question: "Which number of claps was most/least?

## Kinaesthetic

- Teacher places various objects on a table for example, 2 mugs, 5 of the same blocks, 4 tins, 2 books.


## Let the learners:

- Count the number of mugs and tins. Are there more mugs or more tins?
- Count the number of blocks and the books. Are there fewer blocks than books? Are there more blocks than books?
- Count the books and the mugs. Are there an equal number of objects or not?


## Concrete using 3-D objects

- Learners sit on the carpet and make two "nests" with the wool
- The teacher gives an instruction e.g. the learners place 2 counters in one nest and 3 in the other nest. Which nest has more? Which nest has fewer?
- The teacher calls 5 learners to the front. She puts a different number of beads in each of the learner's hands
- Which hand has more in it?
- Which hand has less in it?


## Semi-concrete using 2-D shapes or pictures

- The teacher shows two cards with a different number of dots and pictures on them.
- Let the learners compare cards with pictures and dots on them and identify the "more than", "less/fewer than" and "equal to" concepts.

2 mugs, 5 of the same blocks, 4 tins, 2 books.

Two pieces of wool for each learner
6 counters for each learner


## Beads

Picture cards and dot cards involving numbers 1 to 5

| Week 22 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 2.1 <br> Geometric patterns | - Reinforce the copying of a given pattern <br> Kinaesthetic <br> - Work in groups and copy a given pattern e.g. learner, chair, learner, chair. <br> - Two learners, one chair, two learners, one chair. <br> - Stamp one foot, stamp other foot, hop forwards, hop backwards <br> - Concrete using 3-D objects <br> - The teacher creates a pattern using counters and bottle tops e.g. counter, counter, bottle top, counter, counter, bottle top. Learners copy the pattern. <br> - Move slow, slow, quick, quick. (Teacher talks while moving) Learners copy the pattern. <br> Semi-concrete using 2-D shapes or pictures <br> - Divide learners into five groups. Give each group pictures to make patterns with. <br> - The learners creates own picture pattern using the provided pictures e.g. <br> - Orange, Apple, Apple, Orange. <br> - Butterfly, Butterfly, Bee, Bee. <br> This activity could be integrated with Visual Arts in Life Skills | Learners <br> Chairs <br> Counters <br> Bottle tops <br> Any available pictures e.g. advertisements from "Spar" / "Pick and Pay" etc.. <br> Duplicate the pictures to ensure you have enough. | 1 day |

Week 22
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.3 <br> 2-D shapes | Recognise, identify and name 2-D shapes in the classroom and in pictures <br> - Reinforce the knowledge gained in week 6 that involves a square Integrate with Physical Education in Life Skills <br> Kinaesthetic <br> - Draw a square on the play ground and let the learners skip all along the square. Let learners say: "I am skipping along the square - one side, two sides, three sides, four sides - all the sides the same" <br> - Let learners lay head-to- toe on the grass/floor/carpet to form one big square. <br> - Let groups of learners lie down on the carpet and form smaller squares. <br> Concrete using 3-D objects <br> - Game: The teacher draws a grid on the play ground. <br> - Place actual shapes e.g. Logi shapes, or shape pictures into each block. <br> - The teacher calls a shape. <br> - The learners throw a beanbag into the block that correlates with the called out shape. <br> Semi- concrete using 2-D shapes or pictures <br> Learners must differentiate between the different sizes and colours of squares the teacher has prepared. <br> Let the learners: <br> - Identify the squares according to the different sizes by saying which squares are the biggest, which are the smallest and which squares are medium sized. <br> - Identify the colours of the different squares. <br> Sort objects according to shape, size and colour <br> - Sort a variety of objects according to colour and shapes | Square on the floor/ground <br> Beanbag <br> 2 large cardboard squares one blue and one green <br> 2 slightly smaller cardboard squares one blue and one green (medium) <br> 2 cardboard squares that are the smallest, one blue and one green | 1 day |


| Week 23 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 1.1 <br> Count objects | - Reinforce the knowledge gained involving the numbers 1 to 5 <br> Oral: Count everyday objects up to 5 . <br> Count forwards and backwards up to 5 . <br> Rote counting 1-10 <br> Reinforce the concepts of " many and few" <br> Clap your hands many times...STOP. <br> Clap your hands fewer times. The teacher claps her hands up to 5 times. <br> Ask question which number of claps was most/least. <br> Kinaesthetic <br> Let's play a game: <br> - The teacher plays an instrument e.g. a drum. <br> - The learners move around. <br> - When the drum stops beating, the teacher calls out a number between 1 and 5 . <br> - The learners arrange themselves into small groups e.g. the teacher calls out 3 and learners arrange themselves into groups of 3 . <br> - Concrete using 3-D objects <br> - The teacher places objects in a pile on the table. Let learners estimate how many objects are in the pile. <br> - Count them afterwards. | Number songs and rhymes <br> A drum | $1 \text { day }$ <br> Select only a few activities |

Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Topic \& Clarification Notes \& \multicolumn{6}{|c|}{Recommended Resources} \& Approximate Duration \\
\hline \begin{tabular}{l}
1.6 \\
Problem solving techniques
\end{tabular} \& \begin{tabular}{l}
Let's play a game: \\
The teacher creates a number ladder on the floor or ground. The number on the number ladder represents the number of the house the learner lives in. \\
The teacher selects learners using a counting rhyme and gives instructions such as: \\
- Always stand on the zero or start at the zero. Point out that zero means "nothing" and that counting actually starts at 1 . \\
- Always count while moving. \\
- The teacher says to the learner: "You are at house number 2, which house comes after number 2?" \\
- Further instructions could be: "Move to house number 3. Move back to house number 2. Move forward to house number 4." \\
- The teacher says: "I am at number 3, which house comes after mine?" \\
- Move to house number 4. Move 1 number forward. Move 2 numbers backward. \\
- Stand between house number 3 and 5 .
\end{tabular} \& \begin{tabular}{l}
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\] \& 4 \& 5 \& <br>

\hline | 1.4 |
| :--- |
| Describe, compare and order numbers | \& | - Use the number 5 in familiar context |
| :--- |
| In order to develop memory, encourage learners to: |
| - Memorise their mothers' or fathers' telephone number. |
| - Memorise their home address. |
| - The telephone/cell phone numbers should be repeated during the control of the daily attendance register. | \& Moth and \& \& \& \& \& \& 1 day <br>


\hline | 3.2 |
| :--- |
| 3-D objects | \& | - Build 3-D objects using concrete materials |
| :--- |
| - Let learners build from the teacher's example. She gives the following instructions: |
| - Build a tower that is the same height as mine. |
| - Build a tower that is lower (shorter) than mine |
| - Build a tower that is higher (taller) than mine. |
| - Let learners build own construction by copying from a given construction example. | \&  \& \& \& \& \& \& | 1 day |
| :--- |
| Then ongoing | <br>

\hline
\end{tabular}

Week 23

| One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 3.1 <br> Position, orientation and view | Follows directions <br> to move or place self within a specific space (directionality) <br> - Develop a sense of direction by introducing both the concepts of "forwards and backwards" <br> Kinaesthetic <br> - As introduction, reinforce the knowledge gained in week 8. <br> Concrete using 3-D objects <br> - Draw a large circle, triangle, or square on a piece of paper and place it on the floor/carpet. <br> - Let learners: <br> - Push a toy car along the lines and let the learner tell you in which direction the car is moving (forwards and backwards, left and right using your arm to signal left and right) | Large drawn shapes on a piece of paper Toy car | 1 day |
|  | Semi-concrete using 2-D shapes or pictures <br> - Let learners experience the concept of forwards/backwards by indicating the direction in pictures e.g. the direction a car is travelling, the direction a person is walking. | Pictures that clearly show direction e.g. the direction a car is travelling, the direction a person is walking. |  |


| Week 23 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 4.2 <br> Length | Concretely compares and orders objects using appropriate vocabulary to describe length <br> - Estimate the length of different objects <br> Kinaesthetic <br> - Learners arrange themselves from shortest to tallest. Compare their height with the heights of their friends. <br> - Play "Follow the leader" games. The tallest performs an action while others behind him/her copy. Turn the whole row around so that the shortest is the leader now. <br> - Let learners compare their hands and feet to see whose are the longest/shortest. <br> Estimate and then measure: <br> - Learners estimate which object is long and which one is short e.g. the length of the table or the piece of string. <br> - Estimate which object is the longest or shortest e.g. the pencil or the wax crayon. <br> - Let learners guess which objects would be longer e.g. 2 straws laid end-to-end or three paperclips laid end-to-end. <br> - Pose questions such as: "Which is longer/longest, the pencil or the piece of string?" etc. <br> - Which chair is the farthest away from the teacher's desk? <br> - How many pencils can fit on the long side of the teacher's desk? <br> - How many steps do you have to take to get to the door? <br> - How many matchboxes, filled with sand, will fill this box? <br> - How many egg-cups full of water will fill this glass? <br> - Here are four learners and three chairs. <br> - How many more chairs do we need? | Objects with different lengths such as: <br> Pencils, wax crayon, pieces of string (of which one is curled up), table, books, straws, paperclips (folded open and curled up) etc. | 2 days <br> or <br> Only select a few activities |

## Week 24 Suggested Contact Time ：

## One teacher－guided planned class activity（ring）of $\pm 30$ minutes per day（ $\pm 5$ Mathematics activities per week）

| Topic |  |
| :---: | :---: |
| 1.1 | • |

## Clarification Notes

Recommended Resources
Approximate Duration

## Counting objects

－Introduce the meaning of the number 6
Oral：Count everyday objects up to 6 ．
Count forwards and backwards up to 6 ．
Rote counting 1－10
Reinforce ordinal counting：Teachers packs 3 objects in a row．Point at each object while counting first，second，third
Reinforce the concepts of＂many and few＂
Clap your hands many times．．．STOP．
Clap your hands fewer times．The teacher claps her hands up to 6 times
Ask question which number of claps was most／least．

## Kinaesthetic

Let the learners：
－Count up to six while climbing the steps．
－Count backwards while climbing down．
－Draw number 6 in sand and walk／skip／jump with one leg along it．
－Clap hands 6 times
－Recognise numbers 1 to 6 with the set of large number symbols．
－Pack out his／her house number or telephone number with the large number symbol cards．

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
|  | Concrete using 3-D objects <br> Count objects in the class. Let the learners: <br> Ask questions such as: " <br> - Which number comes after three, which number comes after 5 etc?'" <br> - The teacher places objects in a pile on the table. Let learners estimate how many objects are in the pile. Count them afterwards. <br> - Develop an awareness of number conservation by letting learners pack six counters or any objects in different ways e.g. <br> When counting, the number of objects is not affected by their size, or position, or whether they are of the same type. For example: <br> - Arrange 6 buttons, 6 pencils, 6 hoops, 6 learners etc. <br> - Count them in a different order e.g. count them spread out, close together, in a line or stacked up <br> Divide learners into six groups. Give each group 6 building blocks. <br> Let the groups: <br> - Count their blocks <br> - Build a tower with their 6 building blocks. Encourage learners to count the "bricks" as they build the tower. <br> - Teacher moves to each group and labels their towers with a number card. Learners count the number of towers. Repeat this several times. <br> - Choose a learner to throw a dice. Make sure all the learners can see the dice. The learners count the number of dots and point to the matching tower. | Objects in classroom and environment. <br> Make use of a variety of resources to give you ideas of how to apply different stategies. <br> 6 building blocks per learner |  |


| Topic | Clarification Notes | Recommended Resources |  |  |  | Approximate Duration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.3 <br> Number symbols and number names | - Know the number symbol and recognise the number name that involve the number 6 <br> Oral: Count everyday objects up to 6 . <br> Count forwards and backwards up to 6 . <br> Reinforce the concepts of "many and few". <br> Clap your hands many times...STOP. <br> Clap your hands fewer times. The teacher claps her hands up to 6 times. <br> Ask question which number of claps was most/least. <br> Kinaesthetic <br> - Draw the number 6 on the ground/floor and let the learners walk along the number. <br> - Draw the number 6 in the sand, air. <br> - Form the number 6 with clay. <br> - Let learners predict how many learners will be needed to form the number 6 with their bodies. Form the number 6 with their bodies. <br> Concrete using 3-D objects <br> - Place a heap of objects on the table. Play around with numbers 1 to 6 e.g. <br> - Let the learners' estimate how many objects there are. <br> - Count the objects. | 6 objects |  |  |  | 1 day |
|  | Semi- concrete using 2-D shapes or pictures <br> - Identify from a mixture of flash cards those with 6 pictures on them and link them with the same number of counters. <br> - Show the flash cards with 6 pictures and link them with the same number of dots and counters. <br> - Show the flash cards with 6 dots and link them with the same number symbol and the same numbers of counters. <br> - Identify from a variety of flash cards those with the number name six on them and link them with the number symbol and the same number of counters. |  | dot flas e.g. | ts. | volving the |  |

## Topic

1.13

## Addition and

 subtraction
## Clarification Notes

Recommended Resources
Approximate Duration

- Solves orally stated addition and subtraction problems with answers up to 6.

Oral: Count everyday objects up to 6 .
Count forward and backward up to 6 .
Ask question which number of claps was most/least.

## Kinaesthetic

## Examples

1. Teacher calls 3 learners to the front. Learners count them. Teacher calls another 2 and asks: How many learners altogether?" 3 and $2 \rightarrow 5$. (The teacher says: 3 and 2 gives 5)
2. Teacher packs out 2 chairs. Add 2 more. How many chairs are there now? 2 and $2 \rightarrow 4$.
3. Teacher holds up one hand. And says: "Count my fingers. If I hide my thumb, how many fingers can you see? 5 take away $1 \rightarrow 4$.
4. Let the learners count the fingers on one of their hands. Hide your thumb; how many fingers do you see? 5 take away $1 \rightarrow 4$

Number songs and rhymes.

## Concrete using 3-D objects

| Let learners pack out 6 counters and do the following: | Beads or counters. |
| :--- | :--- |

- The teacher gives each learner 6 counters.
- The teacher gives instructions and learners respond e.g., pack out 2 counters, add another 3 .
- How many altogether? and $3 \rightarrow 5$.
- Count 4 counters. Count 2 on from four. How many do you have now? 4 and $2 \rightarrow 6$.
- Count all the beads you have. If you cover two beads with your hand, how many beads do you see? 6 take away $2 \rightarrow 4$.

| $\infty$ | Week 24 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $1.13$ <br> Addition and subtraction | - Orally solve word problems that involve the number 6 <br> Oral: Count everyday objects up to 6 . <br> Count forwards and backwards up to 6 . <br> Reinforce the concepts of many and few. <br> Clap your hands many times...STOP. <br> Clap your hands fewer times. The teacher claps her hands up to 6 times. <br> Ask question which number of claps was most/least. | Number songs and rhymes | 1 day |
|  |  | Concrete using 3-D objects <br> Examples: <br> 1. Mpho has 4 cookies. Peter gives him 2 more. How many cookies does Mpho have altogether? <br> 2. Beauty has 3 dolls and Martha has 2 dolls. Who has the most dolls? How many more dolls does Beauty have than Martha? <br> 3. There are 5 birds on the fence. 2 fly away. How many birds are left? <br> 4. Patrick has 6 toy cars. Tiny has 4. How many toy cars does Tiny have less than Patrick? <br> 5. One child has one nose. Three children have $\qquad$ <br> 6. One child has two feet. Three children have $\qquad$ <br> 7. One child has two arms. Two children have..... <br> 8. One child has one mouth. Three children have..... | Counters <br> Make use of a variety of resources to give you ideas of how to apply different stategies. |  |
|  | $\begin{gathered} 3.2 \\ \text { 3-D objects } \end{gathered}$ | - Build a 3-D construction from a design or picture card <br> - Let the learners: <br> - Build a construction from a design or picture. <br> - Learners thread beads according to the sequence in a given picture. | "Logi Shapes" skill blocks <br> Any construction equipment <br> Beads, shoestring <br> A variety of drawn card illustrating the sequence of the beads |  |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.1 <br> Count objects | - Reinforce the knowledge gained in week 24 that involves the number 6 <br> Oral: Count everyday objects up to 6 . <br> Count forwards and backwards up to 6 . <br> Rote counting 1-10 <br> Reinforce the concepts of "many" and few". <br> Clap your hands many times...STOP <br> Clap your hands fewer times. The teacher claps her hands up to 6 times. <br> Ask question which number of claps was most/least. | Number songs and rhymes | 1 day |
|  | Kinaesthetic <br> Let's play a game: <br> The teacher places the large cardboard number shapes or cards that involve numbers 1 to 6 in sequential order on the floor. <br> The teacher gives the children instruction such as: <br> - Sit on number 6. <br> - Put your toe on number 3. <br> - Run around number 2 three times. <br> - Hop over number 1. <br> - The teacher can later scatter the number symbol cards and give the same instructions as above. | A set of large cardboard number symbol cards. <br> You can also paint them on pieces of thick plastic or cardboard |  |
|  | Concrete using 3-D objects <br> Let learners: <br> - Count objects in the classroom involving numbers 1 to 6 . <br> - The teacher places objects in a pile on the table. Let learners estimate how many objects are in the pile. Count them afterwards. |  |  |

## Week 25 Suggested Contact Time :

One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources |  |  | Approximate Duration |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.3 <br> Number symbols and number names | - Recognise and identify the number symbol and the number name that involves the number 6 <br> Oral: Count everyday objects up to 6 . <br> Count forwards and backwards up to 6 . <br> Reinforce the concepts of "many" and "few". <br> Clap your hands many times...STOP <br> Clap your hands fewer times. The teacher claps her hands up to 6 times. <br> Ask question which number of claps was most/least. | Number songs and rhymes |  |  | 1 day |
|  | Semi-concrete using 2-D shapes or pictures <br> - Show learners the flash card with six dots and link it to the same number of counters. <br> - Play games identifying a specific number symbol amongst others and link it with the same number of counters. <br> - Play games identifying a specific number name amongst others and link it with the same number of counters. <br> - Play games by linking the number of counters with the number name, the number symbol and the picture cards. <br> - Trace the number 6 with a crayon. | Objects <br> Flash car number $n$ | counters <br> with number me e.g. | ol and <br> six |  |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.4 <br> Describe, compare and order numbers | - Order and compare collections of objects using "more than/less than" and "equal to" up to number 6 <br> Oral: Count everyday objects up to 6 <br> Count forwards and backwards up to 6 <br> Reinforce the concepts of "many" and "few". <br> Clap your hands many times...STOP <br> Clap your hands fewer times. The teacher claps her hands up to 6 times. <br> Ask question which number of claps was most/least. | Number songs and rhymes | 1 day <br> Select only a few activities |
|  | Kinaesthetic <br> - The teacher places two hoops on the floor. <br> - She calls 3 learners to stand in the one "nest" and 2 learners to stand in the other "nest". <br> - Which "nest" has more learners in it? | 2 hoops |  |
|  | Concrete using 3-D objects <br> - Learners sit on the carpet and make two "nests" with wool. <br> - The teacher gives instruction e.g. the learners place 2 counters in one "nest" and 4 in the other "nest". Which "nest" has more counters? Which "nest "has less (fewer)?" "Which nest has more/most"?" <br> - Repeat using numbers up to 6 . <br> - The teacher uses the lid of an ice-cream container. She pegs 3 clothes pegs on the top side of the lid and 3 clothes pegs on the right side of the lid. Which number of pegs are more than the other, or are they equal? <br> The learners can perform this activity in groups each with their own lid and clothes pegs. | 2 pieces of wool for each learner Counters |  |

Week 25 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.4 <br> Describe, compare and order numbers | Semi-concrete using 2-D shapes or pictures <br> - The teacher shows cards with different number of dots and pictures on them. <br> - Let the learners compare cards with pictures and dots on them and identify the "more than", "less than" and "equal to" concepts. <br> The learners draw two nests on a piece of paper. On instruction they pack counters and link the counters in each nest with a crayon. Develop concepts such as equal sharing e.g. <br> Do grouping of whole numbers with answers that include remainders as well e.g. | Picture and dot cards <br> A4 Paper and wax crayons Counters |  |
| 3.3 <br> 2-D shapes | Recognise, identifies and names two-dimensional shapes in the classroom and in pictures <br> - Make and complete own 5 puzzle <br> Let the learners: <br> - Draw a picture on an A4 paper. <br> - The teacher draws the lines on the back of the learner's drawing. <br> - The learner cuts his/her picture on the given lines. <br> - The learner completes his/her own puzzle. | Crayons <br> A4 paper <br> Crayons <br> Scissors <br> Envelope or self-made bag to place puzzle in (fold A4 paper and glue sides) | 1 day |



## Week 26 Suggested Contact Time :

One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)
Topic
1.1

## Clarification Notes

Recommended Resources
Approximate Duration

## Count objects

- Reinforce the knowledge gained involving the numbers 1 to 6

Oral: Count everyday objects up to 6 .
Count forwards and backwards up to 6 .
Reinforce the concepts of "many "and" few".
Clap your hands many times...STOP
Clap your hands fewer times. The teacher claps her hands up to 6 times.
Ask question which number of claps was most/least.

## Kinaesthetic

Let the learners:

- Form number symbols with their bodies.
- Hold up the number of fingers on teacher's instruction.
- Form number symbols with pieces of string or play dough.
- Feel cardboard number shapes in a bag and identify each number.
- Write the number symbols 1 to 6 on the ground or in the air etc.


## Concrete using 3-D objects

Let the learners:

- Count objects in the classroom involving numbers 1 to 6
- Count counters up to number 6.
- Place a few unifix cubes or coloured counters in a row on the table
- The learners match the cubes by colour using other unifix cubes or counters. For example:

- Make groups of different lengths. The learners match according to quantity



## Week 26 Suggested Contact Time :

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.3 <br> Number symbols and number names | - Knows the number symbols and recognise number names that involve the numbers 1 to 6 <br> Oral: Count everyday objects up to 6 . <br> Count forwards and backwards up to 6 . <br> Reinforce the concepts of" many" and "few". <br> Clap your hands many times...STOP. <br> Clap your hands fewer times. The teacher claps her hands up to 6 times. <br> Semi-concrete using 2-D shapes or pictures <br> Let's play a game: <br> - The teacher writes the number name on one side of a card and writes the number symbol on the other side of the same card involving numbers 1 to 6 (make a few sets). <br> - Learners "read" the number name and guess the number symbol. <br> - They turn the card over and correct themselves. | Front of card <br> Back of card <br> 6 <br> Cards that involve numbers 1-6 with the number name on one side and the number symbol on the other side. (Make a few sets so that each learner can have his/her own card). | 1 day |

Week 26
Suggested Contact Time :

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

## Clarification Notes

Recommended Resources
Approximate Duration

## Addition and

 subtraction- Orally solve word problems (story sums) in context and explain own solutions to problems that involve the number 6.

Oral: Count everyday objects up to 6 .
Count forwards and backwards up to 6
Reinforce the concepts of "many" and "few"
Clap your hands many times...STOP
Clap your hands fewer times. The teacher claps her hands up to 6 times.
Ask question which number of claps was most/least.

## Concrete using 3- D objects

1. Give each learner a piece of A4 paper with a line drawn vertically on it and 6 counters e.g.

2. Let learners throw the counters carefully on the piece of paper and explain how they have fallen e.g.

3. Repeat with numbers 1 to 5 as well.

4. Problem solving: Explain own solutions to problems
5. Do the same with subtraction problems

Week 26 Suggested Contact Time :

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 4.4 Capacity/Volume | - Introduce the measuring concept of capacity by comparing how much various containers hold e.g. <br> - "empty/full" <br> - "more than/less than" <br> - a lot, a little <br> Introduce capacity to the learners by asking which container holds more. <br> Learners often make the comparison on height rather than on capacity. <br> For example, when asked which holds more, a tall container or a short container, most learners will choose the tall container even if the short container actually holds more liquid. <br> Kinaesthetic <br> "More than/less than" <br> - Use one container as a standard measure e.g. a yoghurt cup. Provide the learners with a variety of containers. <br> - Let learners: <br> - Find out which containers hold "more" and which hold "less than" the standard measure i.e. the yoghurt cup. "Which container is a lot? Which container is only a little bit?" <br> Give the learners a tablespoon and bucket with sand to spoon the sand into a mug. <br> Let learners: <br> - Count how many spoons of sand he/she needs to fill the mug. The experiment can be made more difficult by giving more than one container e.g. a cup, a plastic glass and a small jar. <br> - Repeat the activity using cups. | Water (during water play) and sand (during sand play in the sandpit) are ideal areas to develop capacity. <br> A variety of containers in different shapes and sizes. <br> Yoghurt cup <br> A bucket with sand <br> Mug <br> A Tablespoon | $1 \text { day }$ <br> Only select one or two activities |

## Week 26 Suggested Contact Time :

One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.1 <br> Position, orientation and views | Describes one or more three-dimensional objects in relation to another <br> - The position of two or more objects in relation to each other and to one another <br> Concrete using 3-D objects <br> Pegboard work: <br> Let the learner first use his right and then his left hand, then both hands together to place the pegs on the board. <br> - Teacher tells the learners where to place the pegs e.g. <br> In the top row <br> In the bottom row <br> On the left side <br> On the right side <br> In the middle <br> Let the learners: <br> - Make shapes on the pegboard with the coloured pegs <br> - The teacher composes a simple pattern with the pegs on her pegboard and learners copy her pattern on his/her own pegboard. <br> - Learners copy the pattern from a card which has a pattern drawn on it. | A pegboard for each learner or work in groups. <br> Cards which have a pattern drawn on it. <br> A pegboard for each learner or work in groups <br> Card which has a pattern drawn on it | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | - Introduce the meaning of the number 7 <br> Oral: Count everyday objects up to 7 . <br> Count forwards and backwards up to 7 . <br> Rote counting 1-10 <br> Reinforce ordinal counting: <br> Teacher packs 3 objects in a row. Point at each object while counting first, second, third, fourth. <br> Reinforce the concepts of "many" and" few". <br> Clap your hands many times...STOP <br> Clap your hands fewer times. The teacher claps her hands up to 7 times. <br> Ask question which number of claps was most/least. <br> Kinaesthetic <br> - Teacher divides learners into groups. Give each group 7 balls made out of newspaper. <br> - Let learners throw the balls into a basket. Learners must count aloud while throwing the balls. <br> - Count the number of times the teacher taps on the table and copy her. <br> - Count in time to a regular beat while learners walk down steps, hop in and out of hoops. <br> - Stamp feet in time to a regular beat. | Number rhymes and songs <br> Newspaper balls <br> Baskets | 1 day |



Week 27
Suggested Contact Time
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources |  |  |  |  |  |  |  | Approximate Duration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.13 <br> Addition and subtraction | - Solve orally stated addition and subtraction problems that involve the number 7 <br> Oral: Count everyday objects up to 7 . <br> Count forwards and backwards up to 7 . <br> Reinforce the concepts of "many" and" few". <br> Clap your hands many times...STOP <br> Clap your hands fewer times. The teacher claps her hands up to 7 times <br> Ask question which number of claps was most/least. | Number songs and rhymes |  |  |  |  |  |  |  | 1 day |
| 1.6 <br> Problem solving techniques | Kinaesthetic <br> - Use the number ladder lying flat (horizontally) <br> - Always start at 0 . Always count while moving. <br> The teacher asks: <br> - What number lies between 4 and 6? Learners experience using the number ladder. <br> - What numbers lie between 2 and 5 ? <br> - Make use of your own ideas to let learners experience the meaning of the number 7 kinaesthetically with their bodies. <br> Concrete using 3-D objects <br> Give each learner 7 beads or counters <br> Ask questions such as: <br> - Move 1 counter to the one side (left). If we add another counter to the counter on the left, how many do we have now? <br> - 1 and $1 \rightarrow 2$ (The teacher says: 1 and 1 is 2 ) <br> - Move 4 counters to the left. If we add another 2 more counters to the counters on the left, how many do we have? <br> - and $2 \rightarrow 6$ <br> - You have 5 counters and you take away 2, how many are left? | Beads or countersCounters |  |  |  |  |  |  |  |  |


| Week 27 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.11$ <br> Money | - Recognise and identify South African <br> Banknotes <br> - Use banknotes e.g. R10, R20, R50, R100, R200 <br> - Make the learners aware of the different animal pictures on the banknotes <br> - Role-play with money in the house corner. | Real examples of a R10, R20 and R50 banknotes (or use play money) | 1 day |
| $1.9$ <br> Grouping and sharing leading to division | - Orally solve and explain solutions to word problems in context (story sums) that involve: <br> - equal sharing, <br> - grouping with whole numbers and <br> - solutions with remainders up to 7 <br> Oral: Count everyday objects up to 7 <br> Count forwards and backwards up to 7 <br> Reinforce the concepts of many and few <br> Clap your hands many times...STOP <br> Clap your hands fewer times. The teacher claps her hands up to 6 times. <br> Ask question which number of claps was most/least. | Number songs and rhymes | 1 day <br> Select only one or two of the kinaesthetic <br> Concrete and Semi-concrete activities. |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.9 <br> Grouping and sharing leading to division | Kinaesthetic <br> Form sets using the learners: <br> Examples: <br> 1. Let learners form groups of $2,3,4,5$ and 6 . Count how many are in the group. <br> 2. Draw large shapes on the concrete or in the sand. Learners make a group of e.g. 4 learners inside the shape. <br> 3. During the refreshment routine the teacher says: "You can go in a group of four to wash your hands" instead of saying: "Four learners can go to wash their hands". <br> 4. Choose 7 learners using a counting rhyme. <br> 5. Let the 7 learners pretend to be birds and make a "pretend tree" using the climbing apparatus outside or chairs and tables inside. <br> 6. The teacher sends 2 birds to the "pretend tree" (2 learners climb on the apparatus). One more bird goes to the tree each time. "How many 'birds' in the tree now, and how many birds on the ground?" <br> 7. Repeat grouping learners using numbers 1 to 7 <br> Concrete using 3-D objects <br> Examples: <br> 1. The teacher gives the learners counters. Let the learners make a set of 4 counters. Make another set of 3 . "How many counters do you have in the new set?" <br> 2. Let the learners draw two circles on a piece of paper. On instructions from the teacher, the learners pack counters in the two sets so that there are more counters in the one set than in the other. Ask questions such as "Which set has most/least counters?" | Make use of a variety of resources to give you ideas of how to apply different stategies. <br> Climbing apparatus or tables and chairs. <br> Counters <br> Piece of paper and a crayon for each learner <br> counters |  |


| $\stackrel{\rightharpoonup}{\circ}$ | Week 27 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | 4.4 Capacity/Volume | Concretely compares and orders objects using appropriate vocabulary to describe: <br> a) capacity <br> b) empty, full, less than, more than, a lot, a little <br> - Reinforce the knowledge gained in week 26 involving capacity <br> Oral: Count everyday objects up to 7 <br> Count forwards and backwards up to 7 . <br> Rote counting 1-10 <br> Reinforce the concepts of "many" and" few". <br> Clap your hands many times...STOP <br> Clap your hands fewer times. The teacher claps her hands up to 6 times. <br> Ask question which number of claps was most/least. | Water (during water play) and sand (during sand play in the sandpit) are ideal areas to develop capacity. <br> Number song and rhymes <br> A variety of containers in different shapes and sizes | 2 days <br> Or only select two or three activities |
|  |  | Kinaesthetic <br> Let the learners: <br> - Arrange two to three different empty containers in order of capacity. In other words which container will take the most or least? The learners can test their guesses by pouring cups of water into the empty containers and counting which one takes the most cups. Increase the number of empty containers to make it more difficult. <br> - The learners can use the same cup as a measure and determine how many cups of rice or beans or sand it would take to fill the same containers used above. <br> - Order the similar kinds of containers (e.g. buckets in the sandpit) from small to big. <br> - Give learners a variety of containers (different sizes and shapes) and ask questions such as: <br> o "Which of these containers do you think holds the most sand/water? <br> o If you pour water from one container to another, guess whether you will fill it?" <br> - Let learners discover what happens to a partially filled container of water when small items are added e.g. add clean pebbles, Lego blocks, plastic blocks e.g. learners enjoy guessing games in which they guess which container holds more and then check the results to see who wins. (Teacher points out that items that float will not influence the height of the water). | Cup <br> Cup <br> Rice <br> Beans <br> Different size buckets from the sandpit <br> A variety of containers in different shapes and sizes <br> Water <br> Sand <br> Items such as clean pebbles, Lego blocks plastic blocks |  |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | - Reinforce the knowledge gained involving the number 7 <br> Oral: Count everyday objects up to 7 . <br> Count forwards and backwards up to 7 . <br> Reinforce the concepts of "many" and" few". <br> Clap your hands many times...STOP. <br> Clap your hands fewer times. The teacher claps her hands up to 7 times. <br> Ask question, "Which number of claps was most/least?" | Number rhymes and songs | 1 day |
|  | Kinaesthetic <br> - Two learners are called to the front. The other learners count them. The two learners in front hold up the corresponding number symbol. <br> - Call one more learner to the front. The other learners count them. One learner in front holds up the corresponding number symbol namely 3 . <br> - Continue until there are 7 learners in front. | Number symbol cards that involve numbers 1 to 7 |  |
|  | Concrete using 3-D objects <br> - Put 7 tins in a row e.g. <br> - Let the learners put one seed/stone in the first tin, two seeds/stones in the second tin, three seeds in the third tin, and continue until the 7 tins have the number of seeds/stones in it as shown on the outside of the tin. <br> - Take a handful of crayons (between 10 and 15 ) and place them in a mug. Ask the learners to guess how many are in the mug. Discuss their answer. <br> - Demonstrate how to count them by taking one out at a time and laying them in a row. | 7 tins with the number symbol pasted on them <br> Seeds or stones <br> Crayons and a mug |  |

- Let the learners put one seed/stone in the first tin, two seeds/stones in the second tin,恠 to guess how many are in the mug. Discuss their answer.
Demonstrate how to count them by taking one out at a time and laying them in a row.


| Week 28 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 3.4 <br> Symmetry | - Develop the ability to cross the midline <br> Kinaesthetic <br> Let the learners: <br> - Review previous knowledge gained; touch the different body parts on instruction. Play "Simple Simon says: Touch your...." <br> - Give further instructions where learners need to cross their mid-line such as: "Touch your knee with your nose. Touch your shoulder with your ear. Touch your left knee with your right foot. Touch your elbow with your one hand etc. | Game: "Simple Simon says, touch your......." | Recognise line of symmetry in self and own environment <br> - Crossing the mid-line |
|  | Concrete using 3-D objects <br> Let learners: <br> - Draw big circles on the chalkboard. <br> - Draw straight lines on the chalkboard. Ensure that learner crosses his/her midline. <br> - On the chalkboard draw a line from one dot to the other dot that is far apart. <br> - Draw a horizontal figure eight on the chalkboard. Use big movements to ensure that the learner crosses his/her midline. <br> (The learner uses both left and right hands). | Learners draw on the chalkboard |  |
|  | Semi-concrete using 2-D shapes or pictures <br> Integrate with Visual Arts <br> Let learners: <br> - Paint on a double sheet of newspaper from left to right. | A double sheet of newspaper for each learner <br> Paint and brush |  |

Suggested Contact Time :
Week 28

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 4.3 \\ \text { Mass } \end{gathered}$ | Concretely compares and orders objects using appropriate vocabulary to describe: <br> - mass e.g. light, heavy, lighter, heavier <br> - Introduce the concept mass <br> Measuring mass means finding how much something weighs. <br> Kinaesthetic <br> Let learners guess the masses of objects: <br> - Hold the following objects, one in each hand to be able to guess which is heavier or lighter e.g. <br> o A stone and a building block. <br> o A plastic toy car and a metal toy car. <br> o A coffee tin and a toilet roll. <br> - A large rubber ball and a cricket ball. <br> Learners usually judge the larger object to be heavier when asked to guess the mass of two objects. <br> - Introduce the balancing scale e.g. weigh the objects to see which learners were correct. <br> - Ask questions such as: "Which object is heavier/lighter? Let learners find an object in the classroom that they think is heavier/lighter than the objects that they weighed. <br> - Make the balancing scale available during free play so that learners can continue with the weighing activity. <br> - Provide a balancing scale in the "house corner" so that the learners can see how many Lego blocks weigh the same as, for example, an apple. | 3-D objects of different weights and sizes e.g. Lego blocks, toys, building blocks, tins, containers etc. <br> Balancing Scale <br> You can devise a simple scale: <br> - You will need a plastic coat hanger, <br> - Two small round margarine tubs or coke bottles and some string. <br> - Punch two holes opposite each other in the margarine tubs/coke bottles. <br> - Attach the tubs/bottles to the two ends of the hanger - you will have a scale. <br> - Hang the hanger on a nail or a hook and the learners can start weighing - <br> - Show the learners that the hanger must first be in balance each time they start weighing. | 1 day <br> Only select two or three activities |

ifferent weights and sizes e.g. Lego blocks, toys, building blocks tins, containers etc.

## Balancing Scale

You can devise a simple scale:

- You will need a plastic coat hanger,
- Two small round margarine tubs or coke bottles and some string.
Punch two holes opposite each other in the margarine tubs/coke bottles.

Attach the tubs/bottles to the two ends of the hanger - you will have a scale. the learners can start weighing -
start weighing.

| Topic | Clarification Notes | Recommended Resources |  |  | Approximate Duration |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | - Reinforce the knowledge gained that involve the numbers 1 to 7 <br> Oral: Count everyday objects up to 7 . <br> Count forwards and backwards up to 7 . <br> Rote counting 1-10 <br> Reinforce the concepts of "many" and" few". <br> Clap your hands many times...STOP <br> Clap your hands fewer times. The teacher claps her hands up to 7 times. <br> Ask question which number of claps was most/least. | Number rhymes and songs |  |  | 1 day |
|  | Concrete using 3-D objects <br> Let the learners: <br> - Collect twigs. Keep them in the class to use again. <br> - Use your twigs e.g. to write the number 5 symbol. | Twigs |  |  |  |
|  | Let the learners: <br> - Make use of your set of flash cards that involve numbers 1 to 7 . <br> - Draw the number of objects on the teacher's instruction e.g. draw 2 circles. <br> - Count on from a given number e.g. the teacher says the number three. The learner would count on... four, five, six. <br> - During refreshment time the teacher would ask: "How many learners have brown bread sandwiches? How many have white bread sandwiches? Do more children have white bread sandwiches? Which is more/less?" <br> - The teacher places objects in a pile on the table. Let learners estimate how many objects in the pile. Count them afterwards. | Picture and dot flash cards that involve number 1 to 7 <br> Number symbol and number name flash cards that involve numbers 1 to 7 e.g. |  |  |  |


| Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: |

- Recognise the number symbol and the number name that involve the numbers 1 to 7

Oral: Count everyday objects up to 7 .
Number symbols and number names

Count forwards and backwards up to 7 .
Reinforce the concepts of "many" and "few".
Clap your hands many times...STOP
Clap your hands fewer times. The teacher claps her hands up to 7 times.
Ask question which number of claps was most/least.

## Kinaesthetic

- Place large number symbol cards around the room or outdoor play area.
- Call the area "Number Land' and the learners are "The Numeral King and/or Queen" Place a crown on each learner's head made from cardboard, with numbers clearly written on it.
- Give the learners instructions such as:
o All children wearing red skip to 2 .
o All children with long hair, tip-toe to 6 .


## Semi-concrete using 2-D shapes or pictures

Let the learners:

- Draw the number of dots on the teacher's instruction e.g. draw 2 dots. Repeat with numbers 1 to 7
- Have many sets of number symbol and number name cards available. Give each learner one card. The teacher holds up a card and those learners with the matching card hold theirs up.
- Suggestion: Involve learners in making their own cards.
- Play matching games with the number symbol and number name flash cards.


Enough number crowns for each learner made of cardboard with numbers written over it.


Paper and crayon

More than one set of number cards that involve numbers 1 to 7 e.g


## Week 29 Suggested Contact Time :

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.7$ <br> Addition and subtraction | - Solves orally stated addition and subtraction problems with answers up to 7 <br> Oral: Count everyday objects up to 7 . <br> Count forwards and backwards up to 7 . <br> Reinforce the concepts of "many" and" few". <br> Clap your hands many times...STOP <br> Clap your hands fewer times. The teacher claps her hands up to 7 times. <br> Ask question which number of claps was most/least. <br> Kinaesthetic <br> - Refer to week 24 and 27 for ideas. <br> - Make use of your own ideas to let learners experience the meaning of the number 7 kinaesthetically with their bodies. <br> Concrete using 3-D objects <br> - Refer to week 24 and 7 <br> - Make use of your own ideas to let learners experience the meaning of number 7 concretely using 3-D objects. | Number songs and rhymes <br> Counters | 1 day |



Week 29 Suggested Contact Time :

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 4.3 \\ \text { Mass } \end{gathered}$ | - Reinforce the knowledge gained in week 28 that involves mass : Lightest/heaviest <br> Kinaesthetic <br> Let learners: <br> - Compare the masses of three to five identical containers (e.g. 400 g empty tins) containing different amounts of sand, so that their masses differ. <br> - Put them in order from lightest to heaviest by feeling the masses. Afterwards a balancing scale may be used to determine whether or not the learners were correct <br> - Suggestion: <br> Experiment to see how many metal washers or nails can be balanced to have the same mass. Any other objects can be used. <br> Teacher puts articles with different masses into identical closed containers <br> e.g., two cottage cheese containers; one containing a block and one a tennis ball. <br> Let learners: <br> - Feel the difference between the masses of the two objects and guess which one is the lightest or the heaviest. <br> - Use a balancing scale to get to the actual answer. <br> - Challenge learners to find objects in the classroom that have the same mass. <br> The sandpit and water play area are valuable areas which should be used to reinforce concepts such as light/heavy/heavier using different size containers a balancing scale, damp and dry sand. <br> NB: Sit with the learners while talking, discussing and explaining. | Empty tins which are the same size <br> A balancing scale <br> Objects such as Lego blocks <br> Objects with different masses such as metal washers or nails <br> Two cottage cheese containers; one containing a block and one a tennis ball <br> Sandpit <br> Water play basin, container or trough | 1 day |


|  | Week 30 | Use Week 30 to attend to conceptual weaknesses and/or identified barriers to learning. |  |
| :---: | :---: | :---: | :---: |
| N | Content Area | Topic | Assessment Criteria |
|  | Numbers, Operations and Relationships | 1.1 Count objects | Estimates and rote counts up to 7 (number songs and rhymes included to develop number concept) |
|  |  |  | Counts backwards and forwards (1-7) |
|  |  |  | Knows which number of claps are more/less |
|  |  |  | Recognises numbers in familiar context - e.g. age, register (assess again) |
|  |  |  | Identifies number pictures and dot cards up to number 7 |
|  |  |  | Knows the number symbols 5, 6, 7 |
|  |  |  | Recognizes the number names five, six, seven |
|  |  |  | Distinguishes between more, less and equal, many and few up to 7 |
|  |  |  | Recognises the colour as well as the different animals on South African notes |
|  |  | 1.6 | Uses concrete apparatus |
|  |  | Problem solving techniques | Explains own thinking in words and through drawings or concrete objects |
|  |  | 1.7 and 1.13 Addition and subtraction | Orally solves addition and subtraction problems up to 7 |
|  | Patterns, Functions and Algebra | 2.1 <br> Geometric patterns | Copies, extends and creates own patterns using pictures |
|  | Space and Shape (Geometry) | 3.1 <br> Position, orientation and views | Knows the position of two or more objects in relation to each other <br> - In front of, behind, on top of, on, under, bottom, below, next to, middle, left and right |
|  |  |  | Executes instructions on pegboard |
|  |  |  | Knows directions on the arrow chart |
|  |  | $\begin{gathered} 3.2 \\ \text { 3-D objects } \end{gathered}$ | Builds from a given construction example |
|  |  |  | Copies a construction from a design or picture card |
|  |  | $\begin{gathered} \text { 3.3 } \\ \text { 2-D shapes } \end{gathered}$ | Builds at least an 18 piece puzzle |
|  |  |  | Recognises, identifies and names the square |
|  |  |  | Understands form constancy of shapes learnt up to date (Shape conservation) |
|  | Measurement | $\begin{gathered} 4.2 \\ \text { Length } \end{gathered}$ | Estimates and measures the length of different objects |
|  |  | $\begin{aligned} & 4.3 \\ & \text { Mass } \end{aligned}$ | Understands the concepts "light, heavy; lighter, heavier; lightest, heaviest" |
|  |  | 4.4 Capacity/Volume | Understands the concepts "empty, full, more than, less than" |
|  | Data Handling | Collect and sort objects | Able to collect, sort, draw, read and represent (analyse) objects according to one attribute |
|  |  | 5.2 <br> Represent sorted collection of objects |  |
|  |  | Discuss and report on sorted collection of objects |  |



Week 31
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources |  |  | Approximate Duration |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1.3$ <br> Number symbols and number names | - Recognise the number symbols and the number names <br> Concrete using 3-D objects <br> Let the learners: <br> - Count objects in the classroom involving the numbers 1 to 8. <br> - Count counters up to the number 8. | A set of 8 objects in the classroom Objects or counters. |  |  | 1 day |
|  | - Develop an awareness of number conservation by letting learners pack eight counters or any objects in different ways e.g. <br> When counting, the number of objects is not affected by their size, or position, or whether they are of the same type. For example: <br> - Arrange 8 buttons, 8 pencils, 8 hoops, 8 learners etc. <br> - Count them in a different order e.g. count them spread out, close together, in a line or stacked up <br> Semi-concrete using 2-D shapes or pictures <br> Let the learners: <br> - Play games by linking the number of counters with the number name, the number symbol, the dots and the picture cards that involves the number 8. <br> - Trace the number 8 with a crayon. | 8 counters or 8 objects |  |  |  |
|  |  | Picture <br> of 8 <br> objects | 8 | eight |  |
|  |  | Crayons <br> Counters |  |  |  |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.4 <br> Describe, compare and order numbers | - Use the number 8 in familiar context <br> Oral: Count everyday objects up to 8 . <br> Count forwards and backwards up to 8 . <br> Reinforce counting in two's using number rhymes <br> Reinforce the concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps 8 times. <br> Ask question which number of claps was most/least. | Number songs and rhymes | 1 day |
|  | Kinaesthetic <br> Let the learners: <br> - Make the number 8 with their fingers. <br> - Form the number with pieces of string or play dough. <br> - Write the number symbols in a tray with sand. <br> - Place the large number symbol cards in consecutive order on the floor up to 8 . | String/wool or play dough. <br> A tray with sand <br> Set of large number symbol cards |  |
|  | Concrete using 3-D objects <br> The teacher gives each learner 8 beans and a flash card with 8 dots on it <br> Let the learners: <br> - Pack a bean on each dot of the flash card. <br> - Count the beans. <br> - Link the dot flash card to the number name flash card and the counters. | 8 beans for each learner. <br> The dot flash card, the name flash card and counters |  |


| Week 31 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics | ctivities per week) |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 3.3 <br> 2-D shapes | Recognise, identify and name 2-D shapes in the classroom and in pictures <br> - a rectangle <br> - Introduce a rectangle <br> Kinaesthetic <br> Let learners: <br> - Form shapes with their bodies e.g. 6 learners form a rectangle with their bodies <br> - Form a rectangle using their fingers. <br> - Make/form a rectangle with pieces of wool or play dough. <br> - Walk on the outline of a rectangular shape. While walking learners say: "I am walking along the rectangle - one long side, one short side, another long side, another short side." <br> - Feel the shapes. Use giant size shapes or place different shapes in a "feely bag" Have a matching set of cards with shapes drawn on them. The learner "feels" the shape in the bag and matches it with the cards. <br> - Draw the rectangle shape in the air, on the ground/floor (chalk) and eventually on paper. | Card games that develop the recognition of shapes. <br> Wool or play dough. <br> "Feely bag" with different geometric shapes. <br> Matching set of cards with shapes drawn on them. <br> A4 paper and crayon. | 1 day |
|  | Sort 3-D objects and 2-D shapes according to size, colour and shapes <br> Concrete using 3-D objects <br> Let learners look for rectangular objects in the classroom. <br> Semi-concrete using 2-D shapes or pictures <br> - Identify rectangular shapes in pictures. <br> - Identify all the shapes introduced up to date in pictures <br> Sort 3-D objects and 2-D shapes according to size, colour and shapes <br> - Sort the collected objects according to size, colour and shapes | Rectangular objects in the classroom <br> All the shapes learnt up to date: <br> Variety of pictures with shapes in them $\square$ $\square$ |  |

Topic
5.1

Collect and sort objects
5.2

Represent sorted collection of objects
5.3

Discuss and report on sorted collection of objects

Clarification Notes

- Reinforce the concept of data handling by collecting objects in the class or environment according to stated features for example the learners' birthdays Concrete using 3-D objects


## Collect and sort data

- Using the Birthday Chart, determine whose birthdays are in which month.
- The learners assist to make a graph to see in which month of the year the most birthdays appear.
- The teacher draws a graph of the 12 months of the year.
- With the assistance of the teacher the learners plot the graph according to the status of each learner's birthday month

| Jan | Feb | March | April | May | Jun | Jul |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sipho |  |  |  |  |  |  |
| Martha <br> Helen <br> Dolly | David <br> Bongi <br> Claire |  | Nelson <br> Jacob <br> Tim | Kabelo <br> Pat <br> Thandi | Selina <br> Liz <br> Titus | Thabo <br> Jane |
| $\mathbf{4}$ | $\mathbf{3}$ | $\mathbf{0}$ | $\mathbf{3}$ | $\mathbf{3}$ | $\mathbf{3}$ | $\mathbf{2}$ |

- The learners count the names and write the total number of birthdays under each month.
- The learners compare the number of birthdays in the different months.

The teacher asks questions such as:

- "Which month has the most birthdays?"
- "Which month has the least birthdays?"
- "Which months have the same number of birthdays?
- "Which months have the most boys celebrating their birthdays"?
- "Which months have the most girls celebrating their birthdays"?

Learners discuss the following conclusions:

- January has the most birthdays. Four learners celebrate their birthdays in January
- There are zero (none) birthdays during March. There is only 1 month when no learners have a birthday.
- Some months have equal numbers of birthdays etc. Which months are they?

The birthday chart


A card with learner's names on it.

Draw 12 columns on a large strip of paper. Indicate with a name card in which months the learners have their birthdays.Use $\pm 3$ sheets of A2 paper with 12 columns drawn on it.

## Week 32

Suggested Contact Time
One teacher－guided planned class activity（ring）of $\pm 30$ minutes per day（ $\pm 5$ Mathematics activities per week）

| Week 32 | Suggested Contact Time ： <br> One teacher－guided planned class activity（ring）of $\pm 30$ minutes per day（ $\pm 5$ Mathematics | ities per week） |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 1.1 <br> Count objects | －Reinforce the knowledge gained in week 31 that involves the number 8 <br> Oral：Count everyday objects up to 8 ． <br> Count forwards and backwards up to 8. <br> Rote counting 1－10 <br> Reinforce counting in two＇s using number rhymes <br> Reinforce the concepts of＂many＂and＂few＂ <br> Clap hands many times ．．．．．．STOP． <br> Clap hands fewer times．Teacher claps up to 8 times． <br> Ask question which number of claps was most／least． <br> Kinaesthetic <br> Let＇s play a game： <br> －The teacher plays an instrument e．g．a drum． <br> －The learners move around． <br> －When the drum stops，the teacher calls out a number between 1 and 8 and learners arrange themselves in small groups e．g．the teacher calls out 8 and learners arrange themselves in groups of 8 ． <br> －Show 8 fingers on your two hands． <br> －Form sets with the learners．Draw large circles in the sand．Let learners form groups of 8 inside the circles．The groups of eight learners can perform certain tasks together during the day e．g．play in block corner；go to the art area etc． | Number songs and rhymes <br> Drum | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | Concrete using 3-D objects <br> Let the learners: <br> - Use counters to recognise which number comes before 8 and after 5 ? Which number is between 6 and 8 ? <br> - Count objects in pairs (two's): <br> - A pair of shoes, <br> - A pair of socks <br> - A pair of eyes, <br> - A pair of earrings <br> o A pair of ears, <br> - A pair of legs <br> Semi-concrete using 2-D shapes or pictures <br> - When taking the attendance register the teacher asks: "Is the learner with the house number or address $\qquad$ here?" The learner must respond by indicating that he /she is "here". <br> - Repeat the next day with telephone or cell phone numbers. | Counters <br> A pair of shoes, socks, earrings <br> Cards with learner's telephone numbers and addresses on |  |

## Week 32

Suggested Contact Time ：

## One teacher－guided planned class activity（ring）of $\pm 30$ minutes per day（ $\pm 5$ Mathematics activities per week）

## Clarification Notes

Recommended Resources
Approximate Duration
1.7

Addition and subtraction
－Orally solve word problems（story sums）that involve the number 8

## Kinaesthetic

－The teacher assists the learners to make a group of 6 learners and another group of 2 learners．
－Combine the two groups to make one group．
－Ask the learners how many learners are in the combined group？ 6 and $2 \rightarrow 8$ ．（The teacher says： 6 and 2 gives 8 ）
－Group 8 learners together．Take 3 learners away in a smaller group．How many learners remain in the large group？ 8 take way $3 \rightarrow 5$ ．
－Select two learners using a counting rhyme．
Place 4 twigs in the one learner＇s hands and 4 twigs in the other learner＇s hands．How many twigs altogether now？ 4 and $4 \rightarrow 8$ ．

## Concrete using 3－D objects

Give each learner 8 twigs．
－Tshidi has 6 twigs and her friend has 2 twigs．How many twigs do they have altogether？ 6 and $2 \rightarrow 8$ ．
－Monica has 8 twigs．She lost 2 twigs．How many twigs does Monica have left？ 8 take away 2 $\rightarrow 6$ ．
Semi－concrete using 2－D objects or pictures
－The teacher puts 2 pictures on the flannel board．She adds another 5 pictures．How many pictures are there now？ 2 and $5 \rightarrow 7$ ．
－Place 8 shapes on the flannel board．Take away 5 ．How many are left． 8 take away $5 \rightarrow 3$ ．

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $2.1$ <br> Geometric patterns | - Copy and extend an auditory pattern <br> Kinaesthetic <br> The learners move to the beat of the music with their whole body e.g. <br> - Step, step, hop, hop ........ <br> - Jump one leg, Jump one leg, Jump two legs, Jump two legs ....... <br> Concrete using 3-D objects <br> Integrate with Performing Arts (music) in Life Skills <br> The learners move to the beat of the music with only their hands and touching their thighs e.g. <br> - Clap, clap, tap, tap (clap hands and tap hands on thighs). <br> - The teacher makes rhythm cards and learners repeat them by clapping the rhythm (using hands to clap and feet to stamp) <br> e.g. <br> $\pi \pi$ <br> $\pi \pi$ <br> m <br> - clap, clap, stamp, stamp $\qquad$ <br> - clap shout, clap, shout....... | CD Player With music | 1 day |


| Week 32 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $3.3$ <br> 2-D shapes | Recognise, identify and describe 2-D shapes in the classroom <br> - Reinforce the knowledge of a rectangle <br> Kinaesthetic <br> Let the learners: <br> - Make/form shapes with their bodies e.g. 4 learners form a rectangle with their bodies. <br> - Form a rectangle using their fingers. <br> - Form a rectangle using 6 match sticks. <br> - Make/form a rectangle with pieces of wool or play dough. <br> - Walk on the outline of a rectangular shape. <br> - Feel the shapes. Place different shapes in a "feely bag" Have a matching set of cards with shapes drawn on them. The learner "feels" the shape in the bag and matches it with the cards. <br> - Draw the rectangle shape in the air, sand, on the floor/ground and eventually on paper. | Card games that develop the recognition of shapes. <br> Matchsticks <br> Wool or play dough. <br> "Feely bag" with different geometric shapes. $\square$ <br> Include big and small shapes and triangles of different angles in the "feely bag" e.g. <br> Matching set of cards with shapes drawn on them <br> A4 paper and crayon | 1 day |

Week 32
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 3.3 \\ \text { 2-D shapes } \end{gathered}$ | Concrete using 3-D objects <br> - Let learners look for rectangular objects in the classroom. <br> Semi-concrete using 2-D shapes <br> Play a game: "Which one is missing?" <br> - Put a number of 2-D shapes (not more than 5 shapes) on a piece of paper in the middle of the carpet e.g. the shapes from the "Logi-Shapes" game. <br> - Discuss each shape with the learners. <br> - Give the learners opportunity to memorise the type of shapes on the piece of paper. <br> - The learners close their eyes. <br> - The teacher removes one of the shapes. <br> - The learners must open their eyes and identify which shape is missing. <br> - Repeat the process. <br> - Promote the development of geometric shapes by providing a variety of card games such as "What's in a square?" or any other available games. | Rectangular objects in the classroom. <br> Variety of shapes e.g. Logi-shapes. |  |


| Topic |
| :---: |
| 3.1 |

## Clarification Notes

Recommended Resources
Approximate Duration

| Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: |
| Describe the position of two or more 3-D objects in relation to one another <br> Kinaesthetic <br> Let the learners: <br> - Stand between two objects or two learners. <br> - Stand next to the girl with the blue dress. <br> - Stand next to the boy with the brown sandals. <br> - Walk between the boxes. <br> - Crawl round the table. <br> - Crawl under the chair. <br> - Put the chair in front of you. <br> - Put the chair behind you. <br> - Stand on your chair. <br> - Sit on the floor. <br> - Put the chair on top of you. <br> - Put the chair next to you. <br> - Put the chair on your left side/right side. | 2 chairs | 1 day |
| Concrete using 3-D objects <br> - Let the learner complete puzzles with pictures of people or animals. <br> - Thread beads according to instructions of the teacher e.g. thread a red bead. Put a green bead next to the red bead etc. <br> - Thread beads according to a given picture sequence. <br> Work in small groups. The teacher gives each learner a pegboard and a handful of pegs. <br> Give the following instructions: <br> - Put two red pegs in the top left corner. <br> - Put one green peg to the right of the red peg. <br> - Put one blue peg below the green peg etc. | Puzzles <br> Beads to thread <br> Pegboards and pegs <br> $\because:$ |  |
| Semi-concrete with 2-D shapes or pictures <br> - Draw people or animals without arms or legs and ask the learners to complete the drawing. | Worksheets with drawings |  |


| Week 33 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.1$ <br> Count objects | - Reinforce the knowledge gained in week 31 and 32 that involves the numbers 1 to 8 <br> Oral: Count everyday objects up to 8 . <br> Count forwards and backwards up to 8. <br> Rote counting 1-10 <br> Reinforce counting in two's using number rhymes <br> Reinforce ordinal counting: <br> Teacher packs 8 objects in a row. Point at each object while counting first, second, third, fourth, fifth. <br> Reinforce the concepts of "many" and "few" <br> Clap hands many times $\qquad$ STOP. <br> Clap hands fewer times. Teacher claps up to 8 times. <br> Ask question which number of claps was most/least. | Number songs and rhymes | 1 day |
|  | Kinaesthetic <br> - The learners use their bodies to form number symbols. <br> - The teacher makes numbers from different materials that learners can feel e.g. sandpaper clay/ string. <br> - Say number rhymes/songs. | Large number symbols made of sandpaper |  |
|  | Concrete using 3-D objects <br> - Use concrete objects such as blocks and plastic animals. <br> - Count them, sort them, place eight in a row etc. <br> Divide learners into groups. <br> Place a heap of plastic farm animals in the middle of each group. <br> Let the learners: <br> - Work in pairs within the groups and have a guess how many animals in the heap. <br> - Each pair takes a number card to match their guess. <br> - Count the actual number of animals. <br> - The pairs may each receive a star on the forehead. <br> - Repeat by placing a different number of animals in the middle of the carpet. | Blocks and plastic animals <br> 9 plastic farm animals <br> A few sets of number symbol cards. <br> Reward stars |  |

Topic

## Clarification Notes

Recommended Resources
Approximate Duration

## Number symbols

 and number namesRecognise and identify number symbols and number names that involve numbers 1 to
8
Semi-concrete using 2-D shapes or pictures

- Match the number symbols to the correct pictures.
- The learner must understand that a group of objects can contain the same number of objects

- The learners must point to each object as they count.
- Learners must be able to match ech object to each other e.g. One heart to one sun.
- Match the picture flash cards, dot flash cards, the number symbol and the number name flash cards with the same number of counters.

Week 33 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.4 <br> Describe, compare and order numbers | - Order and compare collections of objects using "more than/less than" and "equal to" up to number 8 <br> Oral: Count everyday objects up to 8. <br> Count forwards and backwards up to 8. <br> Reinforce counting in two's using number rhymes <br> Reinforce the concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 8 times. <br> Kinaesthetic <br> - The teacher places 8 blocks on a table. Without counting the learners must estimate (guess) the number of blocks. <br> - The teacher asks: <br> o "Are there more than 3 blocks?" <br> o The learners check their answer by counting the blocks." <br> o "How close was your guess? <br> Concrete using 3-D objects <br> - Form a group of four learners. Give each group 8 counters and a page with two large circles drawn on it. Call the circles nests. <br> - On the teacher's instructions the learners put counters in each nest and say how many there are. <br> - The learners compare the "nests" and determine which nest has "more than, ""less than", and the "same" or an "equal" number of counters. | Number songs and rhymes <br> Blocks <br> Counters <br> A4 page with two" nests" drawn on it | 1 day |


| $\begin{aligned} & \mathrm{N} \\ & \mathrm{~N} \end{aligned}$ | Week 33 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | 1.4 <br> Describe, compare and order numbers | Divide learners into groups <br> - Give each group many unifix cubes and a set of number symbol cards that involve numbers 1 to 8 <br> - Let the groups build towers and label each tower with the numbers of cubes used e.g <br> Semi-concrete using 2-D shapes or pictures <br> - The teacher shows two cards with a different number of dots and pictures on them. <br> - Let the learners compare cards with pictures and dots on them to identify the "more than", "less than" and "equal to". | Unifix cubes <br> Number symbol cards 1-8 <br> Dot and picture flash cards. <br> Picture of 8 objects |  |
|  | $1.13$ <br> Addition and subtraction | - Solves orally stated addition and subtraction problems up to number 8 <br> Oral: Count everyday objects up to 8 . <br> Count forwards and backwards up to 8. <br> Reinforce counting in two's using number rhymes <br> Reinforce the concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 8 times. <br> Ask question which number of claps was most/least. | Number songs and rhymes | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.13 | Kinaesthetic |  |  |
| Addition and subtraction | Examples: |  |  |
|  | 1. Teacher calls 3 learners to the front. Learners count them. Teacher calls another 2 and asks: How many learners altogether?" 3 and $2 \rightarrow 5$. <br> (The teacher says: 3 and 2 makes 5) |  |  |
|  | 2. Teacher packs out 2 chairs. Add 2 more. How many chairs are there now? 2 and $2 \rightarrow 4$. |  |  |
|  | 3. Teacher holds up one hand. And says: "Count my fingers. If I hide my thumb, how many fingers can you see? 5 take away $1 \rightarrow 4$. |  |  |
|  | 4. Let the learners count the fingers on one of their hands. Hide your thumb; how many fingers do you see? 5 take away $1 \rightarrow 4$. |  |  |
|  | Concrete using 3-D objects |  |  |
|  | Let learners pack out 6 counters and do the following: |  |  |
|  | - The teacher gives each learner 6 counters. The teacher gives instructions and learners respond e.g., pack out 2 counters, add another 3 . How many altogether. 2 and $3 \rightarrow 5$. |  |  |
|  | - Count 4 counters. Count 2 on from four. How many do you have now? 4 and $2 \rightarrow 6$. |  |  |
|  | - Count all the beads you have. If you cover two beads with your hand, how many beads do you see? 6 take away $2 \rightarrow 4$ | Objects and /or counters |  |
|  | Semi-concrete using 2-D shapes or pictures |  |  |
|  | Make number puzzles and allow the learners to explore with the puzzles. |  |  |
|  | $\begin{array}{l\|l\|l\|} \hline 6\rangle & 3 & 9 \\ \hline \end{array}$ | Number puzzles |  |

## Week 33 Suggested Contact Time ：

One teacher－guided planned class activity（ring）of $\pm 30$ minutes per day（ $\pm 5$ Mathematics activities per week）
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Recommended Resources

## Approximate

 Duration3.3

Clarification Notes
Recognise，identify and describe 2－D shapes in picture
Visual conceptualization
－Identifies parts from the whole

## Kinaesthetic

The teacher describes and object and asks the learners what it is e．g．
－＇I am thinking of something that is red，has four wheels，four doors and window that can open and makes the sound＇wroom＇＂This exercise can be done with groups and turned into a competition－one group has to describe，the other group has to guess what the object is．
－Describe a person and ask the learners to identify the person．

## Semi－concrete using 2－D shapes

－Show a learner a picture and let him／her look at it．Then take it away and ask the learner to describe as much detail as he／she can remember．
－Take individual pictures and cut off parts of them．Put the pictures and the parts in a box and ask the learners to look for the missing parts of each picture they pick up．
－Draw incomplete pictures on a piece of paper and ask the learners to complete the picture．

| 7 | Week 33 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
| U | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | 3.4 <br> Symmetry | - Develop the awareness that one's body has a left and right side that can move independently <br> Kinaesthetic <br> - Put an elastic band on each learner's right wrist. <br> - Sing the action song: "I put my left foot in" <br> Let learners: <br> - Put their right hand on their heads. <br> - Touch their left knee with their right elbow. <br> - Touch their right shoulder with their left hand etc. | Action songs/rhymes e.g. "I put my left foot in" | 1 day |
|  |  | Concrete using 3-D objects <br> Give each learner a building block <br> Let the learners sit on the carpet and: <br> - Put the block on their right side/ left side <br> - On their left/right shoulder. <br> - On their left/right knee. <br> - On their left/right foot etc | Block for each learner |  |
| $\begin{aligned} & \text { N } \\ & \text { N } \end{aligned}$ | 3.1 <br> Position, orientation and views | Semi-concrete using 2-D shapes or pictures <br> - Each learner receives a sheet of paper and a crayon. <br> - Let learners draw a line in the middle of the paper from the top to the bottom and another line in the middle from left to right <br> - Teacher give instructions: <br> o Put your finger in the middle of the cross. <br> o Draw a circle in the top left block. <br> o Draw a triangle in the right bottom block. <br> o Draw a square in the right top block. <br> o Draw a rectangle in the left bottom block <br> - Discuss a picture poster. Learners respond to questions that enables them to explain (without showing) the position of items in the picture. | Sheet of paper |  |


| Week 34 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.1$ <br> Count objects | - Introduce the meaning of the number 9 <br> Oral: Count everyday objects up to 9 . <br> Count forwards and backwards up to 9 . <br> Reinforce counting in two's using number rhymes <br> Reinforce ordinal counting: <br> Teacher packs 6 objects in a row. Point at each object while counting first, second, third, fourth, fifth, sixth. <br> Reinforce the concepts of "many" and "few" <br> Clap hands many times ...... STOP <br> Clap hands fewer times. Teacher claps up to 9 times. <br> Ask question which number of claps was most/least. <br> Kinaesthetic <br> Let the learners: <br> - Count up to 9 while climbing the steps. <br> - Draw number 9 in the sand/floor/ground and walk on it. <br> - Clap hands 9 times. <br> - Recognise numbers 1 to 9 with the set of large number symbols. <br> - Make use of own ideas to let learners experience the meaning of number 9 with their bodies. | Number songs and rhymes <br> Set of large number symbols | 2 days |



Week 34
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)
Topic

- Recognise the number symbols and the number name.

Number symbols and number names

## Kinaesthetic

- Put 5 objects in a row.
- Let the learners have a good look at them
- Learners look away and the teacher remove one object.
- The learners have to say which object has been removed.
- Replace the objects and repeat several times and progress to removing 2 and more objects.
Let the learners:
- Select the number 9 symbol and number name amongst other flash cards.
- Place the number symbol flash cards on the floor in the correct number order.
- Place the number symbol flash cards in a scattered order.

Divide the learners into smaller groups. The teacher gives each group a set of number symbol cards.
Give the learners instructions e.g.

- Touch number 4, put your elbow on number 8, sit on number 3, run around number 5 five times etc.
- Play games by linking the number of counters with the number name, the number symbol, the dots and the picture cards.
- Ensure that the number symbol and number name is always linked with the same number of objects.


## Week 34 Suggested Contact Time :

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.1 <br> Position, orientation and views | Follows directions to move or place self within a specific space <br> - Develop a sense of direction <br> Kinaesthetic <br> - Draw a large triangle, or square on the ground or the floor. <br> - Learners walk along the shape indicating aloud whether they are turning left of right and showing it with their hands, <br> Concrete using 3-D objects <br> Draw a large triangle, or square on a sheet of paper and put it on the floor. <br> Let one learner: <br> - Push a toy car along the lines. <br> - The rest of the learners stretch out their left or right hands in the corresponding direction and say left or right. <br> Let the learners: <br> - Describe objects from different perspectives e.g. a doll (front/back), a house (front/back), the front/back of the school, a car (front/back) depending on where you stand. <br> - Learners describe what they see e.g. if there is a tree in front of the house they describe the position of the tree. <br> Semi-concrete using 2-D shapes or pictures <br> - Let learners experience the concept of forwards/backwards by indicating the direction in pictures. | Large drawn shapes on a sheet of paper <br> Toy car <br> Doll <br> Actual house <br> car <br> Pictures that clearly show direction e.g. the direction a car is travelling, the direction a person is walking. | 1 day |


| N | Week 34 | Suggested Contact Time ： <br> One teacher－guided planned class activity（ring）of $\pm 30$ minutes per day（ $\pm 5$ Mathematics activities per week） |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| dVગ）$\perp$ NヨWヨLVIS＾ગITOd $\perp$ NヨWSSヨSSV aNV Wกากכાyyกว | $3.3$ <br> 2－D shapes | Recognise，identify and name 2－D shapes in the classroom and in pictures and sort them <br> －Reinforce the knowledge about the circle，triangle，square and rectangle <br> Kinaesthetic <br> Let the learners form pairs． <br> －Draw a shape on the friends back with his／her finger．The other learner must identify the shape． <br> Concrete using 3－D objects <br> Provide geometric shapes of different sizes and thickness． <br> Let the learners： <br> －Sort geometric shapes according to e．g．circles，triangles，squares and rectangles． <br> －Sort geometric shapes according to size． <br> －Sort geometric shapes according to colour． <br> Semi－concrete using 2－D shapes or pictures <br> Let the learners： <br> －Cut out the abovementioned shapes from a sheet of paper．Include big and small shapes and triangles of different angles． <br> －Sort the different shapes together． <br> －Plan a picture with the cut－out shapes and use them during art activity． | A variety of shapes <br> A sheet of paper with circles，triangles and squares and rectangles on it e．g． <br> Include big and small shapes and triangles of different angles e．g． | 1 day |


| Topic | Clarification Notes |
| :---: | :--- | :--- | :--- |
| 3.4 | - Develop the awareness that there is symmetry in objects <br> Concrete using 3-D objects <br> - Look for real objects that will illustrate symmetry. (The one side looks the same as the <br> other side) e.g. butterfly, flower leaf etc. <br> - The teacher and learners collect pictures of designs that are symmetrical .e.g. the designs <br> painted on houses, designs on tiles, designs on vases and parachutes. <br> Semi-concrete using 2-D shapes or pictures <br> - The learners cut out the shape of a heart or flower vase from a paper folded in half and <br> decorate it during visual art time. |


| $\underset{N}{N}$ | Week 35 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $1.1$ <br> Count objects | - Reinforce the knowledge gained in week 34 that involves the number 9 <br> Oral: Count everyday objects up to 9 . <br> Count forwards and backwards up to 9 . <br> Rote counting 1-10 <br> Reinforce counting in two's using number rhymes <br> Reinforce the concepts of "many" and "few" <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 9 times. <br> Ask question which number of claps was most/least. <br> Kinaesthetic <br> Let's play a game: <br> The teacher places the large cardboard number shapes or cards that involve numbers 1 to 9 in order on the floor. <br> The teacher gives the children instruction such as: <br> - Sit on number 6. <br> - Put your toe on number 3. <br> - Run around number 2 three times. <br> - Hop over number 1. <br> - The teacher can later scatter the number symbol cards. | Number rhymes and songs <br> A set of large cardboard number symbol cards. <br> You can also paint them on pieces of thick plastic or hardboard | 1 day |
|  | 1.4 <br> Describe, compare and order numbers | - Use numbers in familiar context <br> Concrete using 3-D objects <br> Let the learners: <br> - Count objects in the classroom <br> - Count with counters <br> - The teacher places objects in a pile on the table. Let learners estimate how many objects in the pile. Count them afterwards | Counters <br> Objects in the classroom | 1 day |

Week 35
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)


## Suggested Contact Time :

One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.1 <br> Position, orientation and views | - Describes two objects in relation to one another <br> Kinaesthetic <br> - A learner asks a friend to stand between two objects / learners. <br> - A learner asks a friend to stand next to the girl with the blue dress <br> - A learner asks a friend to stand next to the boy with the brown sandals <br> Concrete using 3-D objects <br> - Hang a line between two objects. <br> - Learners hang actual clothes according to a specific command .e.g. <br> - "Hang the shirt on the left side of the clothes line" <br> - "Hang the dress on the right side of the shirt" " <br> - Hang the handkerchief next to ..... etc." <br> - "Hang the pants between the .... etc." <br> Semi-concrete using 2-D shapes or pictures <br> - Draw a picture of a house according to instructions e.g. <br> - Draw the roof at the top of the page <br> - Draw the walls of the house in the middle of the page etc. <br> - Draw a dog on the left hand side of the house. <br> The sheet of paper should not be too large to ensure that the different shapes touch one another to form a picture of a house. | Sheet of paper Crayons | 1 day |




| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | Reinforce the knowledge gained that involve numbers 1 to 9 <br> Oral: Count everyday objects up to 9 . <br> Count forwards and backwards up to 9 . <br> Reinforce counting in two's using number rhymes <br> Reinforce the concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 9 times. <br> Concrete using 3-D objects <br> - Place objects into groups that involve numbers 1 to 9 and count the objects aloud. <br> - Play number dominoes <br> Semi-concrete using 2-D shapes or pictures <br> Give each learner a picture, dot, number symbol or number name card. <br> Learners respond to teachers instructions <br> - Learners sit in a circle. <br> - The teacher calls a number e.g. 9. The learners with the picture, dot, number symbols and number name cards representing 9, walks around the circle, saying "I have a nine" <br> - Repeat with the other numbers. <br> - When everyone has had a turn to 'be' a number, call the numbers in order. <br> - The learners stand up and hold their cards in the air if their number is called. <br> - See if learners are able to arrange themselves in order from 1 to 9. <br> - See if learners are able to arrange all the cards representing the number 1, 2, and 3 up to number 9 together. | Number songs and rhymes <br> Objects in the classroom. <br> Number dominoes <br> Enough sets of number cards that involve numbers 1 to 9 for each learner in your class to receive a flash card | 1 day |


| $\begin{aligned} & N \\ & \hline \end{aligned}$ | $\begin{array}{ll}\text { Week } 36 & \text { Suggested Contact Time : } \\ & \text { One teacher-guided planned class activity (ring) of } \pm 30 \text { minutes per day ( } \pm 5 \text { Mathematics activities per week) }\end{array}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | 1.4 <br> Describe, compare and order numbers | - Compare which of two given collections are: <br> - more than <br> - less than (fewer) <br> - equal to (the same) <br> Concrete using 3-D objects <br> - The teacher provides a variety of objects such as leaves, stones, bottle caps, crayons, blocks, etc. <br> Let the learners: <br> - Sort them into "groups" e.g. all the stones together. <br> - Count the number of objects in each "group". <br> - Indicating which "group" is "more than", "less than" and "equal to". <br> Sets that involve numbers up to 9 : <br> - Learners sit on the carpet and make two "nests" with the wool. <br> - Teacher gives instruction to the learners to place 2 counters in one nest and 4 in the other nest. <br> - Ask questions such as: "Which nest has "more than", "less than" and the "same" number of counters?" e.g. the "nest" with 2 counters is less than the "nest" with 4 counters. <br> - Let the learners form "more than, less than" and "equal" sets with numbers up to 9 . | Two pieces of wool for each learner 9 counters for each learner | 1 day |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.13$ <br> Addition and subtraction | - Solves orally stated addition and subtraction problems that involve the numbers 1 to 9 <br> Oral: Count everyday objects up to 9 . <br> Count forwards and backwards up to 9 . <br> Reinforce counting in two's using number rhymes <br> Reinforce ordinal counting: <br> Teacher packs 6 objects in a row. Point at each object while counting first, second, third, fourth, fifth, sixth. <br> Reinforce the concepts of "many" and "few" <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 9 times. <br> Ask question which number of claps was most/least. | Number song and rhymes | 1 day |
|  | Kinaesthetic <br> - The teacher calls 1 learner to the front. <br> - The teacher puts a different number of beads (up to 9 ) in each of the learner`s hands e.g. 4 in the one hand and 5 in the other <br> - The teacher arranges the learners in groups of nine. <br> - The learners sit on the floor. <br> - The teacher asks 2 learners to stand up. <br> - The teacher asks: "How many learners are sitting on the floor?" | Beads or counters |  |
| $\begin{aligned} & N \\ & \stackrel{\rightharpoonup}{+} \end{aligned}$ | Week 36 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $1.13$ <br> Addition and subtraction | Concrete using 3-D objects <br> - The learners sit on the carpet. <br> - Each learner receives 8 beads placed in a cup with a saucer. <br> - Take 6 beads from the cup and put them into the saucer. Take another 2 beads and add to the beads in the saucer. How many beads are in the cup? 6 and $2 \rightarrow 8$. <br> - Take 4 beads from the plastic cup and put them into the saucer. Take another 4 beads and add to the beads in the saucer. How many beads are in the cup? 8 take away 4 take away $4 \rightarrow 0$. <br> - Move 4 beads from the cup to the saucer. How many are left in the plastic cup? 8 take away $4 \rightarrow 4$. <br> - Move 4 beads from the saucer to the cup. How many are left in the saucer? 8 take away $4 \rightarrow 4$. <br> Semi-concrete with 2-D shapes or pictures <br> Divide learners into groups. Give each group a set of picture flash cards <br> - Count the 6 pictures on the flash card. If you add a flash card with 2 pictures on it, how many will you have now? 6 and $2 \rightarrow 8$. <br> - Count the 8 objects on the picture card. If you cover 3 of the pictures, how many can you see? 8 take away $3 \rightarrow 5$. <br> - Pack the same number of counters. | Improvise if you don't have cups and saucers. <br> A few sets of picture flash cards |  |
| $\begin{aligned} & z \\ & 8 \\ & 8 \\ & 0 \\ & 8 \end{aligned}$ | 2.1 <br> Geometric patterns | - Copy a noise pattern <br> Kinaesthetic <br> - The teacher divides the learners into three groups. Whisper and demonstrate to each group which vehicle's sound they will represent. <br> - Each group makes their sound allocated to them as the teacher points to them e.g. <br> - Woosh, brrrm, zonk / Woosh, brrrm, zonk. | Pictures of three different vehicles or machines. | 1 day |

| Week 37 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematic | activities per week) |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 1.1 <br> Count objects | - Introduce the meaning of the number 0 (zero) <br> Oral: Count everyday objects up to 10 starting at zero. <br> Count forwards and backwards up to 10 starting at zero. <br> Reinforce counting in two's using number rhymes <br> Reinforce ordinal counting: <br> Teacher packs 6 objects in a row. Point at each object while counting first, second, third, fourth, fifth, sixth. <br> Reinforce the concepts of "many" and "few" <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 10 times. <br> Ask question which number of claps was most/least <br> The teacher points out that zero means "nothing" and that counting actually starts at 1. <br> Kinaesthetic <br> - The teacher shows the learners the number name zero. <br> - Let the learners identify which body part can form a zero e.g. <br> o The learners mouth <br> - The learners fingers | Number songs and rhymes | 1 day |
|  | Concrete using 3-D objects <br> - The teacher puts one counter in her one hand and no counters in her other hand. <br> - She opens her one hand and shows the learners the one counter, then she opens her other hand and shows the learners there is nothing. <br> - This activity can be conducted using the learners as well. <br> Semi-concrete using 2-D shapes or pictures <br> - The teacher shows the learners the flash cards with no pictures and the number symbol 0 . | Counters | 1 day |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | - Introduce the meaning of the number 10 <br> Oral: Count everyday objects up to 10. <br> Count forwards and backwards up to 10. <br> Rote counting 0-10 <br> Reinforce counting in two's using number rhymes <br> Reinforce ordinal counting: <br> Teacher packs 6 objects in a row. Point at each object while counting first, second, third, fourth, fifth, sixth. <br> Reinforce the concepts of "many" and "few" <br> Clap hands many times $\qquad$ STOP. <br> Clap hands fewer times. Teacher claps up to 10 times. <br> Ask question which number of claps was most/least. | Number songs and rhymes | $1 \text { day }$ <br> Select only a few activities |
|  | Kinaesthetic <br> Let the learners: <br> - In pairs form the number 10 with their bodies (4 learners). <br> - Count up to 10 while moving to the beat of a drum. <br> - Hold up 10 fingers. <br> - Draw the number 10 in the sand/floor/ground and walk on it. <br> - Jump 10 times. <br> - Place cut-out cardboard numbers in a" feely bag". <br> - Have a set of flash cards with pictures representing the number e.g. two balls on a card with number 2. The learner "feels" the numbers in the bag and matches them with the cards | Cut-out cardboard numbers <br> Large number symbol flash cards. |  |

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.1 Count objects | Semi-concrete using 2-D shapes or pictures <br> Let the learners on the teacher's instructions: <br> - Place objects into groups that involve numbers 1 to 10 and count the objects aloud. <br> The teacher divides the learners into 5 groups. <br> Let the learners: <br> - Order and link the picture cards, the dot flash cards, the number symbols and the number names in the correct sequence up to the number 10 e.g. <br> - Pack the number of counters on each dot card | Objects in the classroom <br> A set of picture cards up to the number 10 $\square$ 0 <br> Counters |  |
$\begin{array}{ll}\text { Week } 37 & \text { Suggested Contact Time ：} \\ & \text { One teacher－guided planned class activity（ring）of } \pm 30 \text { minutes per day（ } \pm 5 \text { Mathematics activities per week）}\end{array}$
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 2.1 | －Play a pattern game－＂Hop scotch＂ |  | 1 day |
| Geometric patterns | Integrate with Physical Education in Life Skills |  |  |
|  | Kinaesthetic |  |  |
|  | －Move around the room．On a signal，or when the music stops，the teacher calls out the name of a shape．The learners form that shape with their fingers．They can also form groups and form the shape with their bodies． | The example of the given pattern drawn on the floor／ground／verandah |  |
|  | －Draw the pattern below on the floor／ground or the veranda for the learners to move in a specific way． |  |  |
|  |  |  |  |
|  | Discuss the pattern e．g． |  |  |
|  | －Ask questions such as： |  |  |
|  | －＂What shape comes after the first rectangle？＂ |  |  |
|  | －＂What shape comes before the first circle？ |  |  |
|  | Learners follow the pattern in the following way： |  |  |
|  | －Teacher says：＂John，you jump before Melissa＂，and Mary ，you can jump after Kabelo＂ |  |  |
|  | －Jump with both feet on the rectangle． |  |  |
|  | －Jump with left foot on the triangle． |  |  |
|  | －Jump with right foot on the square． |  |  |
|  | －Jump with both feet on circle and turn your body around while standing in the circle． <br> －Complete the pattern． |  |  |
|  | －Complete the pattern． |  |  |
| Week 37 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| 2.1 <br> Geometric patterns | Concrete using 3-D objects <br> - Each learner receives the following shapes: <br> The teacher forms a pattern with her shapes <br> Let the learners: <br> - Copy the teacher's pattern using the above shapes. <br> - Develop their own pattern with the given shapes. | Each learner receives the following shapes:Each learner receives the following shapes: |  |
| 3.1 <br> Position, orientation and views | Follow directions to move or to place self within a specific space <br> - Develop a sense of direction by executing instructions including left and right <br> Kinaesthetic <br> Let the learners follow instruction of the teacher: <br> - Look up /look down/look upwards. <br> - Bend down / bend downwards. <br> - Lift left leg / lift right leg. <br> - Crawl around the table. <br> - Walk forward/walk backward. <br> - Put your hand in/out. <br> - Stand on the right side of the chair / Stand on the left side of the chair. <br> - Stand in front of your chair/behind your chair. <br> - Stand between two chairs. <br> - Look to the right/look to the left. <br> - Turn on your left foot. Turn on your right foot | Instructions from the teacher. <br> Terminology: <br> Up/down <br> In/out <br> Top/bottom <br> Front/back <br> In front of/behind <br> On top/above/under/below <br> The one side/the other side <br> Next to <br> Left/right <br> In between | 1 day |
Week 37 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)
| Week 37 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | Concrete using 3-D objects <br> Let the learners do the following on the chalkboard: <br> - Draw circles and continue going around and around <br> - Draw straight lines from left to right <br> - Draw lines up and down. <br> - The teacher draws two dots and the learners draw a line to join them. | Chalkboard |  |

Week 37
Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)


| Week 38 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.1$ <br> Count objects | - Reinforce the knowledge gained in week 37 that involves the number 0 to 10 <br> Oral: Count everyday objects up to 10 . <br> Count forwards and backwards up to 10 . <br> Rote counting 0-10 <br> Reinforce counting in two's using number rhymes <br> Reinforce ordinal counting: <br> Teacher packs 6 objects in a row. Point at each object while counting first, second, third, fourth, fifth, sixth. |  | 1 day <br> or <br> only select some of the activities |
|  | Reinforce the concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 10 times. <br> Ask question which number of claps was most/least. | Number rhymes and songs |  |
|  | Kinaesthetic <br> - The teacher draws 11 ( 0 to 10 ) circles on the playground or use hoops. Write numbers 0 to 10 inside each circle. The teacher calls a number and a learner throws his bean bag into the circle called out. <br> - Remind learners that 0 means nothing. If a learner throws a bean bag in the "zero circle" he/she will be out of the game. <br> - The learner throws his/her bean bag into the circle corresponding with the dot and/or picture card shown by the teacher. <br> - The learner throws his/her bean bag into the circle shown on the number symbol card shown by the teacher. <br> - Proceed by using the number name cards the same way. | 10 beanbags <br> Drawn circles in the sand/ground or on the floor or use hoops |  |
| 1.3 <br> Number symbols and number names | Recognise and identify number symbols and number names <br> Semi-concrete using 2-D shapes or pictures <br> Let's play a game: <br> - The teacher writes the number name on one side of a card and writes. the number symbol on the other side of the card involving numbers <br> - 0 to 10 (Use a few sets). <br> - Learners "read" the number name and guess the number symbol. <br> - They turn the card over and correct themselves. | A set of number cards that involve number 0-10 <br> Cards that involve numbers $1-10$ with the number name on one side and the number symbol on the other side. (Make a few sets so that each learner have his/her own card). |  |

## Week 38 Suggested Contact Time :

## One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.4 <br> Describe, compare and order numbers | - Introduce ordinal numbers - first, second, third, up the sixth..... last <br> This concept is best developed over time and through the use and labelling of natural situations as they occur in the classroom e.g. lining up to go outside "Siya is first, Helen is second ......." <br> Kinaesthetic <br> - Let learners run a race. Who came first, who came second, and who came last? <br> Play a game - "Which one is it"? <br> - Ask five learners to sit in a row on five chairs. <br> - The teacher says: "I'm thinking of one of these learners. The learner is wearing a red jersey." <br> - Starting with the learner sitting in front, she moves along the row, touches each learner and asks: "Is it the first, the second, the third. $\qquad$ learner? <br> Let 5 learners stand on the steps outside. The teacher places the correct number symbol card under each child on the steps. <br> Show me which learner is standing on the: <br> - First step. <br> - Second step. <br> - Third step etc. <br> The learner on the first step holds up the number symbol card only after the answer has come from his/ her classmates. Proceed up to the number 6. | Five chairs <br> A set of number symbol cards that involve the numbers 1 to 10 Improvise if there are no steps | 1 day |


| $\begin{aligned} & N \\ & \text { N } \\ & \mathrm{N} \end{aligned}$ | Week 38 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
|  | $1.7$ <br> Addition and subtraction | - Orally solve word problems (story sums) that involve the number 10 <br> Oral: Count everyday objects up to 10. <br> Count forwards and backwards up to 10. <br> Reinforce the concepts of "many" and "few" <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 10 times. <br> Ask question which number of claps was most/least. <br> Examples: <br> 1. There were 5 girls in the room. 5 more girls entered. How many are there now? 5 and $5 \rightarrow 10$. <br> 2. Count 7 counters. Count two on. Count one on. How many altogether? 7 and 2 and $1 \rightarrow 10$. <br> 3. There were 10 counters on the table. There are only 4 left. How many have been removed? 10 take away $6 \rightarrow 4$. <br> 4. You have 10 marbles. Take away 3. How many do you have left? 10 take away $3 \rightarrow 7$ <br> 5. You made 10 cakes. You sold 2 cakes. How many do you have left? | Counters | 1 day |
|  | 3.1 <br> Position, orientation and views | - Follows directions to move or place self within the classroom <br> Kinaesthetic <br> - The teacher asks the learner's to stand at the back of the classroom (the door opening indicates the front of the class) <br> - The teacher asks the learners to stand at the one side of the classroom / other side of the classroom. <br> - The teacher asks the learner to stand in the front of the classroom. <br> Concrete using 3-D objects <br> Sound has meaning. <br> Learners listen to: <br> - A bell. <br> - A whistle. <br> - A musical instrument. <br> - Bang two blocks against each other. | A bell <br> A whistle <br> Any musical instrument <br> Two wooden blocks | 1 day |


| Topic |
| :---: |
| 3.1 |
| Position, <br> orientation and <br> views |

The learners close their eyes and identify the sound of the bell, or the whistle or the musical instrument.

- The learners close their eyes and identify where the sound comes from. They can first throw a bean bag in the direction of the noise and later communicate where the noise is e.g. in the front of the classroom, close to the book corner etc.
- The teacher instructs 4 learners to stand against the side walls of the classroom. 4 learners in four sides of the classroom, each with a different instrument (bell, whistle, musical instrument and two blocks).
- The teacher indicates with her hand to individual learners to make a noise with their instrument e.g. only the bell.
- The rest of the class indicates where the sounds come from by pointing in the direction of, for example, the bell.
- To reinforce the left and right concept, send the two learners standing in the front and at the back of the classroom back to the rest of the group.
- Repeat the same activity focusing on sounds coming from the left and the right side of the classroom.
- The learners say "left" when the sound comes from the left hand side and "right "when the sound comes from the right hand side.


## Concrete using 3-D objects

- The leaners use a block e.g. Move the block in relation to the chair
o Move backward / move foward.
o Stand on the right side of the chair / Stand on the left side of the chair
- Stand between two chairs
- Sort shoes in left right shoes


## Semi-concrete using 2-D shapes or pictures

Let the learners complete a worksheet using a crayon to draw a line between lines e.g.


| $\begin{aligned} & \mathrm{N} \\ & \mathrm{~N} \end{aligned}$ | Week 38 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Topic | Clarification Notes | Recommend | Approximate Duration |
|  | $4.2$ <br> Length | Concretely compare and order objects using appropriate vocabulary to describe length <br> - Measure the height of the learners with a tape measure <br> Kinaesthetic <br> - Refer to the first and third terms when the learner's heights were measured using hands on the height chart. <br> - Measure the height of the learners again. <br> - The teacher puts a tape measure next to the pictures of hands on the height chart. <br> - Learners' heights are measured once again. <br> - Make learners aware that we are using a standard measuring tool and this is what mommy uses when making dresses. <br> - Now they are not 10 hands tall but one meter 10 cm tall. <br> - Learners can compare their height. Who is the tallest/ shortest in the class? <br> Concrete using 3-D shapes <br> - A learners lies on the floor, and the others place building blocks (same size) in a line alongside the learner's body. <br> - Teacher gives an instruction: "Build something that is longer/shorter than your friend" | A height chart <br> A tape measure |  |

## Week 39

Suggested Contact Time
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 1.1 | - Reinforce the meaning of number 10 |  | 1 Day |
| Count objects | Oral: Count everyday objects up to 10. |  |  |
|  | Count forwards and backwards up to 10. |  |  |
|  | Rote counting 0-10 | Number songs and rhymes |  |
|  | Reinforce ordinal counting: |  |  |
|  | Teacher packs 6 objects in a row. |  |  |
|  | Point at each object while counting first, second, third, fourth, fifth, sixth. |  |  |
|  | Reinforce the concepts of "many" and "few" |  |  |
|  | Clap hands many times ...... STOP. |  |  |
|  | Clap hands fewer times. Teacher claps up to 10 times. |  |  |
|  | Ask question which number of claps was most/least. |  |  |
|  | Kinaesthetic |  |  |
|  | Let the learners: |  |  |
|  | - Say a number rhyme using ten fingers. |  |  |
|  | - Count the number of times the teacher taps on the table and copy her. |  |  |
|  | - Clap your hand ten times. |  |  |
|  | - Count in time to a regular beat while learners walk down steps, hop in and out of hoops. |  |  |
|  | - Stamp feet in time to a regular beat. | Bean bags and a basket |  |
|  | - Ten learners stand in a circle with a basket in the centre each with a beanbag. Let the learners throw their beanbag into a basket and continue up to the number 10. Learners must count aloud while throwing. Repeat the activity until all the learners have had a turn. |  |  |


| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| $1.1$ <br> Count objects | Semi－concrete using 2－D shapes or pictures <br> Divide learners into smaller groups． <br> －The teacher provides learners with number puzzles． <br> －The learners discover and investigate all the possibilities． <br> －Learners can throw a dice to determine which number puzzle to build． <br> 1 <br> 2 <br> 3 <br> 4 <br> 5 | Make number puzzles that involve the number s 1 up to 10 |  |

## Topic

1.13

## Addition and

 subtraction
## Clarification Notes

Recommended Resources
Approximate Duration

- Reinforcing addition and subtraction with answers up to 10

Oral: Count everyday objects up to 10.

| Count forwards and backwards up to 10. | Number songs and rhymes |
| :--- | :--- |

Reinforce counting in two's using number rhymes
Reinforce the concepts of "many" and "few"
Clap hands many times . . STOP.
Clap hands fewer times. Teacher claps up to 10 times.
Ask question which number of claps was most/least.

## Kinaesthetic

- The teacher calls 5 learners to the front and keeps on adding one more learner up to the number 10.
- The learners count aloud.
5 and $1 \rightarrow 6$. (Say: Five and one gives six)
6 and $1 \rightarrow 7$.
7 and $1 \rightarrow 8$.
8 and $1 \rightarrow 9$.
9 and $1 \rightarrow 10$.
- The teacher sends the learners back and the learners count backwards.

10 take away $1 \rightarrow 9$
9 take away $1 \rightarrow 8$
10 take away $2 \rightarrow 8$
Concrete using 3-D objects
The learners sit on the carpet. Each learner has 10 counters and a plastic lid.
Let the learners follow instructions:

- Pack 4 counters on your lid. Add 4 more. How many altogether? 6 and $4 \rightarrow 0$
- Pack 10 counters. Take away 5. How many are left? etc.

| Week 39 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| $1.13$ <br> Addition and subtraction | Semi-concrete using 2-D shapes or pictures <br> - Count the 8 objects on the picture card. If you add the picture card with 2 objects on, how many will you have now? <br> -8 and $2 \rightarrow 10$. Pack the same number of counters. <br> - Count the 10 objects on the pictures card. If you cover 3 of the objects, how many can you see? 10 take away $3 \rightarrow 7$. Pack the same number of counters. | Picture flash cards that involve the numbers 1 to 10 <br> Counters |  |
| 1.4 <br> Describe, compare and order numbers | - Compare which of two given collections are: <br> - more than <br> - less than (fewer) <br> - equal to (the same) <br> Oral: Count everyday objects up to 10 . <br> Count forwards and backwards up to 10 using number rhymes and songs. <br> Reinforce counting in two's using number rhymes <br> Reinforce the concepts of "many" and "few". <br> Clap hands many times ...... STOP. <br> Clap hands fewer times. Teacher claps up to 10 times. <br> Ask question which number of claps was most/least. <br> Kinaesthetic <br> - The teacher places 6 learners together in a hoop and 4 learners in another hoop. <br> - The Teacher asks:" Are there more learners, less learners or the same number of learners in each hoop. <br> - "The learners identify which hoop has "More than" " less than", and "same" number of learners. | 2 Hoops | 1 day |

Week 39 Suggested Contact Time :
One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)

| Topic |  | Clarification Notes | Recommended Resources |
| :---: | :--- | :--- | :--- |

$\begin{array}{ll}\text { Week } 39 & \text { Suggested Contact Time : } \\ & \text { One teacher-guided planned class activity (ring) of } \pm 30 \text { minutes per day ( } \pm 5 \text { Mathematics activities per week) }\end{array}$

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.1 <br> Position, orientation and views | Describe two or more 3-D objects in relation to one another <br> - Reinforce Left and Right <br> Kinaesthetic <br> - The teacher places left and right footsteps all around the classroom. <br> - The learners crawl with the same arm and the same knee moving simultaneously <br> - Walk on them for example on their way to the washbasin <br> The teacher ties a piece of red wool on each learner's right palm. <br> The teacher gives instructions. <br> - Lift your left leg. <br> - Put your right foot on the chair. <br> - Touch your left knee with your right elbow. <br> - Pull your left ear with your right hand. <br> - Put your right hand on your left shoulder and your left hand on your right shoulder simultaneously. <br> - Hug yourself (crossing the midline). | Paper foot prints marked "left' and "right" <br> A piece of red wool | 1 day |

Suggested Contact Time : One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week)
Week 39

| Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| :---: | :---: | :---: | :---: |
| 3.1 <br> Position, orientation and views | Concrete using 3-D objects <br> - The teacher put 7 tins on the table. <br> - Let the learners say which number is on the left of number 3, which number is on the right of number 6 , which number is between 3 and 6 . <br> - Which number is first and which number is last. <br> - The teacher places 3 dolls/cars with clearly distinguishable clothing or colours on the table. <br> - She asks questions such as: <br> o Which doll/car one is on the left? <br> o Which doll /car is on the right? <br> o Which doll/car is in middle? Which doll/car is first/last? <br> Semi-concrete using 2-D shapes or pictures <br> - During Visual Art s the learners make paint prints using their left and right hands. <br> - Cut out and paste on a sheet indicating the left and right foot. | Numbered tins. <br> Three dolls or cars. |  |
| 2.1 <br> Geometric patterns | - Create own pattern <br> Concrete using 3-D objects <br> - Learners initially copy patterns from given patterns. <br> - Eventually learners create their own pattern and describe their own pattern. $\square$ <br> $\square \square \triangle \triangle \square \square \triangle \triangle \square \square$ <br> $\square \triangle \square \triangle \square \triangle \square$ | Shapes and pattern cards. | 1 day |


| $\begin{aligned} & N \\ & \text { N } \end{aligned}$ | Week 39 | Suggested Contact Time : <br> One teacher-guided planned class activity (ring) of $\pm 30$ minutes per day ( $\pm 5$ Mathematics activities per week) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Topic | Clarification Notes | Recommended Resources | Approximate Duration |
| CURRICULUM AND ASSESSMENT POL | $2.1$ <br> Geometric patterns | Pegboard work: <br> Let the learner use first his right and then his left hand, then both hands together to place the pegs on the pegboard. <br> - The teacher tells the learners where to place the pegs e.g. <br> - In the top row. <br> - In the bottom row. <br> - On the left side. <br> - On the right side. <br> - In the middle. <br> Let the learners: <br> - Make shapes on the pegboard with the coloured pegs. <br> - The teacher composes a simple pattern with the pegs on her pegboard and learners copy her pattern on his/her own pegboard. | Pegboards and pegs. <br> Patterns for learners to copy from. |  |



