# The Australian **Curriculum**

Subjects	Mathematics
Year levels	Year 3



# **Year 3 Content Descriptions**

# **Number and Algebra**

# Number and place value

Investigate the conditions required for a number to be odd or even and identify odd and even numbers (ACMNA051 - Scootle (3))





## Elaborations

identifying even numbers using skip counting by twos or by grouping even collections of objects in twos







explaining why all numbers that end in the digits 0, 2, 4, 6 and 8 are even and that numbers ending in 1, 3, 5, 7 and 9 are odd







Recognise, model, represent and order numbers to at least 10 000 (ACMNA052 - Scootle 🕜)





# Elaborations

placing four-digit numbers on a number line using an appropriate scale







reproducing numbers in words using their numerical representations and vice versa





Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems (ACMNA053 - Scootle )







#### Elaborations

recognising that 10 000 equals 10 thousands, 100 hundreds, 1000 tens and 10 000 ones





justifying choices about partitioning and regrouping numbers in terms of their usefulness for particular calculations





Recognise and explain the connection between addition and subtraction (ACMNA054 - Scootle 🕜)







### Elaborations

demonstrating the connection between addition and subtraction using partitioning or by writing equivalent number sentences







Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation (ACMNA055 - Scootle 🗷)



#### Elaborations

recognising that certain single-digit number combinations always result in the same answer for addition and subtraction, and using this knowledge for addition and subtraction of larger numbers





combining knowledge of addition and subtraction facts and partitioning to aid computation (for example 57 + 19 = 57 + 20 - 1)





Recall multiplication facts of two, three, five and ten and related division facts (ACMNA056 - Scootle (3))



#### Elaborations

establishing multiplication facts using number sequences





Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies (ACMNA057 - Scootle 🗷)









# Elaborations

writing simple word problems in numerical form and vice versa





using a calculator to check the solution and reasonableness of the answer



#### Fractions and decimals

Model and represent unit fractions including 1/2, 1/4, 1/3, 1/5 and their multiples to a complete whole (ACMNA058 - Scootle 🕜)



#### Elaborations

partitioning areas, lengths and collections to create halves, thirds, quarters and fifths, such as folding the same sized sheets of paper to illustrate different unit fractions and comparing the number of parts with their sizes





locating unit fractions on a number line



recognising that in English the term 'one third' is used (order: numerator, denominator) but that in other languages this concept may be expressed as 'three parts, one of them' (order: denominator, numerator) for example Japanese







## Money and financial mathematics

Represent money values in multiple ways and count the change required for simple transactions to the nearest five cents (ACMNA059 - Scootle )





#### Elaborations

recognising the relationship between dollars and cents, and that not all countries use these denominations and divisions (for example Japanese Yen)







## Patterns and algebra

Describe, continue, and create number patterns resulting from performing addition or subtraction (ACMNA060 - Scootle 🕜)







#### Elaborations

identifying and writing the rules for number patterns







describing a rule for a number pattern, then creating the pattern







# **Measurement and Geometry**

## Using units of measurement

Measure, order and compare objects using familiar metric units of length, mass and capacity (ACMMG061 - Scootle ☑)





# Elaborations

recognising the importance of using common units of measurement





recognising and using centimetres and metres, grams and kilograms, and millilitres and litres







Tell time to the minute and investigate the relationship between units of time (ACMMG062 - Scootle 🕜)





# Elaborations

recognising there are 60 minutes in an hour and 60 seconds in a minute





### **Shape**

Make models of three-dimensional objects and describe key features (ACMMG063 - Scootle 🕜)





#### Elaborations

exploring the creation of three-dimensional objects using origami, including prisms and pyramids









#### Location and transformation

Create and interpret simple grid maps to show position and pathways (ACMMG065 - Scootle ?)







#### **Elaborations**

creating a map of the classroom or playground







Identify symmetry in the environment (ACMMG066 - Scootle 🗷)



#### Elaborations

identifying symmetry in Aboriginal rock carvings or art







identifying symmetry in the natural and built environment





# Geometric reasoning

Identify angles as measures of turn and compare <u>angle</u> sizes in everyday situations (ACMMG064 - Scootle (3))





#### Elaborations

opening doors partially and fully and comparing the size of the angles created





recognising that analogue clocks use the turning of arms to indicate time, and comparing the size of angles between the arms for familiar times





# **Statistics and Probability**

## Chance

Conduct chance experiments, identify and describe possible outcomes and recognise variation in results (ACMSP067 - Scootle 🕜)







Elaborations

conducting repeated trials of chance experiments such as tossing a coin or drawing a ball from a bag and identifying the variations between trials





# Data representation and interpretation

Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording (ACMSP068 - Scootle 7)







#### Elaborations

refining questions and planning investigations that involve collecting data, and carrying out the investigation (for example narrowing the focus of a question such as 'which is the most popular breakfast cereal?' to 'which is the most popular breakfast cereal among Year 3 students in our class?')





Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies (ACMSP069 - Scootle (7)









#### Elaborations

exploring meaningful and increasingly efficient ways to record data, and representing and reporting the results of investigations







collecting data to investigate features in the natural environment







Interpret and compare data displays (ACMSP070 - Scootle 🗷)







#### Elaborations

comparing various student-generated data representations and describing their similarities and differences





