

# AIS Maths Curriculum Overview

## Grade 1

### By the end of Grade 1 students will:

#### **Data Handling**

- sort and label objects into *sets* by one or more attributes.
- record and represent data.
- look at different representations of the data set.
- discuss and compare data represented in teacher generated *Venn* diagrams.
- collect, display and interpret data for the purpose of finding information.
- understand the purpose of graphing data.
- create a *pictograph* and simple *bar graph* from a *graph* of real objects, and interpret data by comparing quantities: more, fewer, less than, greater than.
- discuss, identify, predict and place outcomes in order of likelihood: impossible, unlikely, likely and certain.

#### **Measurement**

- *estimate*, measure, label and compare using *nonstandard units of measurement*: length, *mass*, time and temperature.
- use a calendar to determine the date, and to identify and sequence days of the week and months of the year.
- *estimate*, identify and compare lengths of time: day, week, month.
- estimate, identify and compare lengths of time: hour and half hour.
- read the time to the hour and the half hour.

#### **Shape and Space**

- use what they know about *2-D shapes* to see and describe *3-D shapes*.
- sort and label *2-D* and *3-D shapes* using appropriate mathematical vocabulary: *sides*, *corners*, *circle*, sphere, *square*, cube.
- create *2-D shapes*.
- find and explain *symmetry* in their immediate environment.
- create and explain simple symmetrical designs.
- visualize paths between locations, estimating distances, which way to turn (consolidating left and right), comparing distances, recording written directions, counting and adding distances.

#### **Pattern and Function**

- create, describe and extend *patterns*.
- recognize, describe and extend *patterns* in numbers: even, skip counting, 2s, 5s and 10s.
- identify *patterns* and rules for *addition*:  $4 + 3 = 7$ ,  $3 + 4 = 7$  (*commutative property*).
- identify *patterns* and rules for *subtraction*:  $7 - 3 = 4$ ,  $7 - 4 = 3$ .
- *model*, with *manipulatives*, the relationship between *addition* and *subtraction*:  $3 + 4 = 7$ ,  $7 - 3 = 4$ .

#### **Number**

- read, write and *model* numbers, using the *base 10 system*, to 100.
- count (in 1s, 2s, 5s and 10s), compare and order numbers to 100.
- *estimate* quantities to 100.
- use mathematical vocabulary and symbols of *addition* and *subtraction*: add, subtract, +, -.
- read, write and *model addition*.
- automatically recall addition and subtraction facts to 10.
- describe the meaning and use of *addition and subtraction*.
- use *fraction* names (half, third, quarter) to describe part and whole relationships and to make a whole.
- *estimate* the reasonableness of answers.
- select and explain an appropriate method for solving a problem.