

# CURRICULUM OVERVIEW YEAR 2



TRIDENT  
PREPARATORY  
KALUMBILA

# Numeracy

## Number

### Numbers and the number system

- **2Nn1** Count, read and write numbers to at least 100 and back again
- **2Nn2** Count up to 100 objects, e.g. beads on a bead bar
- **2Nn3** Count on in ones and tens from single- and two-digit numbers and back again
- **2Nn4** Count in twos, fives and tens, and use grouping in twos, fives or tens to count larger groups of objects
- **2Nn5** Begin to count on in small constant steps such as threes and fours
- **2Nn6** Know what each digit represents in two-digit numbers; partition into tens and ones
- **2Nn7** Find 1 or 10 more/less than any two-digit number
- **2Nn8** Round two-digit numbers to the nearest multiple of 10
- **2Nn9** Say a number between any given neighbouring pairs of multiples of 10, e.g. 40 and 50
- **2Nn10** Place a two-digit number on a number line marked off in multiples of ten
- **2Nn11** Recognise and use ordinal numbers up to at least the 10th number and beyond
- **2Nn12** Order numbers to 100; compare two numbers using the > and < signs
- **2Nn13** Give a sensible estimate of up to 100 objects, e.g. choosing from 10, 20, 50 or 100
- **2Nn14** Understand even and odd numbers and recognise these up to at least 20
- **2Nn15** Sort numbers, e.g. odd/even, multiples of 2, 5 and 10
- **2Nn16** Recognise that we write one half  $\frac{1}{2}$ , one quarter  $\frac{1}{4}$  and three quarters  $\frac{3}{4}$
- **2Nn17** Recognise that  $\frac{2}{2}$  or  $\frac{4}{4}$  make a whole and  $\frac{2}{1}$  and  $\frac{4}{2}$  are equivalent
- **2Nn18** Recognise which shapes are divided in halves or quarters and which are not
- **2Nn19** Find halves and quarters of shapes and small numbers of objects

### Calculation

#### *Mental strategies*

- **2Nc1** Find and learn by heart all number pairs to 10 and pairs with a total of 20
- **2Nc2** Partition all numbers to 20 into pairs and record the related addition and subtraction facts
- **2Nc3** Find all pairs of multiples of 10 with a total of 100 and record the related addition and subtraction facts
- **2Nc4** Learn and recognise multiples of 2, 5 and 10 and derive the related division facts
- **2Nc5** Find and learn doubles for all numbers up to 10 and also 15, 20, 25 and 50

#### *Addition and subtraction*

- **2Nc6** Relate counting on/back in tens to finding 10 more/less than any two-digit number and then to adding and subtracting other multiples of 10, e.g.  $75 - 30$
- **2Nc7** Use the = sign to represent equality, e.g.  $16 + 4 = 17 + 3$
- **2Nc8** Add four or five small numbers together
- **2Nc9** Recognise the use of a symbol such as  $\cdot$  or  $\triangle$  to represent an unknown, e.g.  $\triangle + \cdot = 10$
- **2Nc10** Solve number sentences such as  $27 + \cdot = 30$
- **2Nc11** Add and subtract a single digit to and from a two-digit number
- **2Nc12** Add pairs of two-digit numbers
- **2Nc13** Find a small difference between pairs of two-digit numbers
- **2Nc14** Understand that addition can be done in any order, but subtraction cannot
- **2Nc15** Understand subtraction as both difference and take away

### *Multiplication and division*

- **2Nc16** Understand multiplication as repeated addition and use the  $\times$  sign
- **2Nc17** Understand multiplication as describing an array
- **2Nc18** Understand division as grouping and use the  $\div$  sign
- **2Nc19** Use counting in twos, fives or tens to solve practical problems involving repeated addition
- **2Nc20** Find doubles of multiples of 5 up to double 50 and corresponding halves
- **2Nc21** Double two-digit numbers
- **2Nc22** Work out multiplication and division facts for the  $3\times$  and  $4\times$  tables
- **2Nc23** Understand that division can leave some left over

## Geometry

### **Shapes and geometric reasoning**

- **2Gs1** Sort, name, describe, visualise and draw 2D shapes (e.g. squares, rectangles, circles, regular and irregular pentagons and hexagons) referring to their properties; recognise common 2D shapes in different positions and orientations
- **2Gs2** Sort, name, describe and make 3D shapes (e.g. cubes, cuboids, cones, cylinders, spheres and pyramids) referring to their properties; recognise 2D drawings of 3D shapes
- **2Gs3** Identify reflective symmetry in patterns and 2D shapes; draw lines of symmetry
- **2Gs4** Find examples of 2D and 3D shape and symmetry in the environment

### **Position and movement**

- **2Gp1** Follow and give instructions involving position, direction and movement
- **2Gp2** Recognise whole, half and quarter turns, both clockwise and anti-clockwise
- **2Gp3** Recognise that a right angle is a quarter turn

## Measure

### **Money**

- **2Mm1** Recognise all coins and notes
- **2Mm2** Use money notation
- **2Mm3** Find totals and the coins and notes required to pay a given amount; work out change

### **Length, mass and capacity**

- **2Ml1** Estimate, measure and compare lengths, weights and capacities, choosing and using suitable uniform non-standard and standard units and appropriate measuring instruments
- **2Ml2** Compare lengths, weights and capacities using the standard units: centimetre, metre, 100 g, kilogram, and litre

### **Time**

- **2Mt1** Know the units of time (seconds, minutes, hours, days, weeks, months and years)
- **2Mt2** Know the relationships between consecutive units of time
- **2Mt3** Read the time to the half hour on digital and analogue clocks
- **2Mt4** Measure activities using seconds and minutes
- **2Mt5** Know and order the days of the week and the months of the year

## Handling data

### Organising, categorising and representing data

- **2Dh1** Answer a question by collecting and recording data in lists and tables, and representing it as block graphs and pictograms to show results
- **2Dh2** Use Carroll and Venn diagrams to sort numbers or objects using one criterion; begin to sort numbers and objects using two criteria; explain choices using appropriate language, including 'not'

## Problem solving

### Using techniques and skills in solving mathematical problems

- **2Pt1** Choose appropriate mental strategies to carry out calculations and explain how they worked out the answer
- **2Pt2** Explain methods and reasoning orally
- **2Pt3** Explore number problems and puzzles
- **2Pt4** Make sense of simple word problems (single and easy two-step), decide what operations (addition or subtraction, simple multiplication or division) are needed to solve them and, with help, represent them, with objects or drawings or on a number line
- **2Pt5** Make up a number story to go with a calculation, including in the context of money
- **2Pt6** Check the answer to an addition by adding the numbers in a different order or by using a different strategy, e.g.  $35 + 19$  by adding 20 to 35 and subtracting 1, and by adding  $30 + 10$  and  $5 + 9$
- **2Pt7** Check a subtraction by adding the answer to the smaller number in the original subtraction
- **2Pt8** Describe and continue patterns which count on in twos, threes, fours or fives to 30 or more
- **2Pt9** Identify simple relationships between numbers and shapes, e.g. this number is double ...; these shapes all have ... sides
- **2Pt10** Make a sensible estimate for the answer to a calculation
- **2Pt11** Consider whether an answer is reasonable

# Literacy

The following genres and text types are recommended at Stage 2:

Fiction and poetry: real-life stories, traditional tales from different cultures, different stories by the same author, longer stories, poetry.

Non-fiction: non-chronological reports, instructions, explanations, dictionaries.

## Reading

### Develop broad reading skills

- **2Ro1** Learn the different ways in which vowels can be pronounced, e.g. *how, low, apple, apron*
- **2Ro2** Use phonics as the main method of tackling unfamiliar words
- **2Ro3** Identify syllables and split familiar compound words into parts
- **2Ro4** Extend the range of common words recognised on sight
- **2Ro5** Begin to develop likes and dislikes in reading and listening to stories drawing on background information and vocabulary provided
- **2Ro6** Read aloud with increased accuracy, fluency and expression
- **2Ro7** Begin to read with fluency and expression, taking notice of punctuation, including speech marks
- **2Ro8** Explore a variety of non-fiction texts on screen
- **2Ro9** Locate words by initial letter in simple dictionaries, glossaries and indexes
- **2Ro10** Discuss the meaning of unfamiliar words encountered in reading

### Demonstrate understanding of explicit meaning in texts

- **2Rx1** Read and respond to question words, e.g. *what, where, when, who, why*
- **2Rx2** Read and follow simple instructions, e.g. in a recipe
- **2Rx3** Find answers to questions by reading a section of text
- **2Rx4** Find factual information from different formats, e.g. charts, labelled diagrams

### Demonstrate understanding of implicit meaning in texts

- **2Ri1** Predict story endings
- **2Ri2** Identify and describe story settings and characters, recognising that they may be different
- **2Ri3** Make simple inferences from the words on the page, e.g. about feelings

### Explain, comment on and analyse the way writers use stylistic and other features of language and structure in texts

- **2Rw1** Comment on some vocabulary choices, e.g. adjectives
- **2Rw2** Talk about what happens at the beginning, in the middle or at the end of a story
- **2Rw3** Read poems and comment on words and sounds, rhyme and rhythm

### Recognise conventions and evaluate viewpoint, purpose, themes and ideas in texts

- **2Rv1** Show some awareness that texts have different purposes
- **2Rv2** Identify general features of known text types

## Writing

### Develop broad writing skills

- **2Wo1** Form letters correctly and consistently
- **2Wo2** Practise handwriting patterns and the joining of letters
- **2Wo3** Begin to re-read own writing aloud to check for sense and accuracy
- **2Wo4** Use simple non-fiction texts as a model for writing
- **2Wo5** Use the structures of familiar poems and stories in developing own writing
- **2Wo6** Plan writing through discussion or by speaking aloud
- **2Wo7** Make simple notes from a selection of non-fiction texts, e.g. listing key words

## Select and develop content and use register and language appropriate to genre, purpose and audience

- **2Wa1** Develop stories with a setting, characters and a sequence of events
- **2Wa2** Choose interesting words and phrases, e.g. in describing people and places
- **2Wa3** Build and use collections of interesting and significant words
- **2Wa4** Begin to use dialogue in stories
- **2Wa5** Use features of chosen text type
- **2Wa6** Write instructions and recount events and experiences
- **2Wa7** Write simple evaluations of books read

## Structure and organise ideas coherently using sections or paragraphs

- **2Wt1** Structure a story with a beginning, middle and end
- **2Wt2** Use the language of time, e.g. *suddenly, after that*
- **2Wt3** Link ideas in sections, grouped by content
- **2Wt4** Use a variety of simple organisational devices in non-fiction, e.g. headings, captions

## Use a range of sentence structures and punctuation accurately to convey meaning and create particular effects

- **2Wp1** Write in clear sentences using capital letters, full stops and question marks
- **2Wp2** Find alternatives to *and/then* in developing a narrative and connecting ideas
- **2Wp3** Use mainly simple and compound sentences, with *and/but* to connect ideas. *Because* may begin to be used in a complex sentence
- **2Wp4** Use the past and present tenses accurately (if not always consistently)
- **2Wp5** Begin to vary sentence openings, e.g. with simple adverbs
- **2Wp6** Write using a variety of sentence types

## Use accurate spelling

- **2Ws1** Learn the different common spellings of long vowel phonemes
- **2Ws2** Apply knowledge of phonemes and spelling patterns in writing independently as well as when writing sentences dictated by the teacher from memory
- **2Ws3** Secure the spelling of high frequency words and common irregular words
- **2Ws4** Spell words with common prefixes and suffixes, e.g. *un-, dis-, -ful, -ly*

## Speaking and listening

- **2SL1** Recount experiences and explore possibilities
- **2SL2** Explain plans and ideas, extending them in the light of discussion
- **2SL3** Articulate clearly so that others can hear
- **2SL4** Vary talk and expression to gain and hold the listener's attention
- **2SL5** Show awareness of the listener by including relevant details
- **2SL6** Attempt to express ideas precisely, using a growing vocabulary
- **2SL7** Listen carefully and respond appropriately, asking questions of others
- **2SL8** Demonstrate 'attentive listening' and engage with another speaker
- **2SL9** Extend experiences and ideas through role-play
- **2SL10** Begin to be aware of ways in which speakers vary talk, e.g. the use of more formal vocabulary and tone of voice
- **2SL11** Show awareness that speakers use a variety of ways of speaking in different situations and try out different ways of speaking

# Science

## Scientific enquiry

### Ideas and evidence

- **2Ep1** Collect evidence by making observations when trying to answer a science question
- **2Ep2** Use first hand experience, e.g. observe melting ice
- **2Ep3** Use simple information sources

### Plan investigative work

- **2Ep4** Ask questions and suggest ways to answer them
- **2Ep5** Predict what will happen before deciding what to do
- **2Ep6** Recognise that a test or comparison may be unfair

### Obtain and present evidence

- **2Eo1** Make suggestions for collecting evidence
- **2Eo2** Talk about risks and how to avoid danger
- **2Eo3** Make and record observations
- **2Eo4** Take simple measurements
- **2Eo5** Use a variety of ways to tell others what happened

### Consider evidence and approach

- **2Eo6** Make comparisons
- **2Eo7** Identify simple patterns and associations
- **2Eo8** Talk about predictions (orally and in text), the outcome and why this happened
- **2Eo9** Review and explain what happened

## Biology

### Living things in their environment

- **2Be1** Identify similarities and differences between local environments and know about some of the ways in which these affect the animals and plants that are found there
- **2Be2** Understand ways to care for the environment. Secondary sources can be used
- **2Be3** Observe and talk about their observation of the weather, recording reports of weather data

## Chemistry

### Material properties

- **2Cp1** Recognise some types of rocks and the uses of different rocks
- **2Cp2** Know that some materials occur naturally and others are man-made

### Material changes

- **2Cc1** Know how the shapes of some materials can be changed by squashing, bending, twisting
- **2Cc2** Explore and describe the way some everyday materials change when they are heated or cooled
- **2Cc3** Recognise that some materials can dissolve in water

## Physics

### Light and dark

- **2PI1** Identify different light sources including the sun
- **2PI2** Know that darkness is the absence of light
- **2PI3** Be able to identify shadows

### Electricity

- **2Pm1** Recognise the components of simple circuits involving cells (batteries)
- **2Pm2** Know how a switch can be used to break a circuit

### The Earth and beyond

- **2Pb1** Explore how the sun *appears* to move during the day and how shadows change
- **2Pb2** Model how the spin of the Earth leads to day and night, e.g. with different sized balls and a torch