

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