

# Year 3 Overview



## Maths

### Number: Number and Place Value

- count from 0 in multiples of 4, 8, 50 and 100
- find 10 or 100 more or less than a given number
- recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- compare and order numbers up to 1000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1000 in numerals and in words
- solve number problems and practical problems involving these ideas.



### Number: Addition and Subtraction

- add and subtract numbers mentally, including
  - a three-digit number and ones
  - a three-digit number and tens
  - a three-digit number and hundreds
- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers
- solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

## Number- Multiplication and Division

- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
- solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which  $n$  objects are connected to  $m$  objects.



## Fractions

- count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
- recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
- recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- recognise and show, using diagrams, equivalent fractions with small denominators
- add and subtract fractions with the same denominator within one whole [for example,  $7\frac{5}{10} + 7\frac{1}{10} = 7\frac{6}{10}$ ]
- compare and order unit fractions, and fractions with the same denominators
- solve problems that involve all of the above.



## Measurement

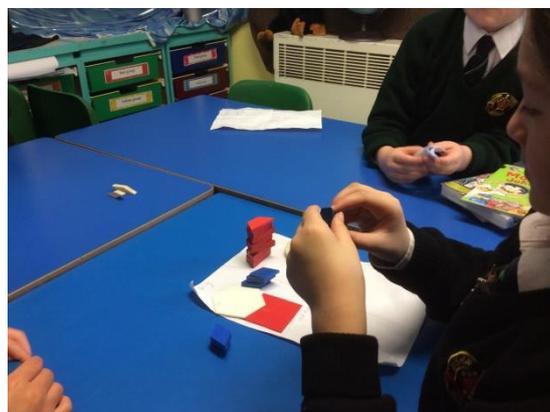
- measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) □ measure the perimeter of simple 2-D shapes
- add and subtract amounts of money to give change, using both £ and p in practical contexts
- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and

hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight

- know the number of seconds in a minute and the number of days in each month, year and leap year
- compare durations of events [for example to calculate the time taken by particular events or tasks].

### Geometry

- draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
- recognise angles as a property of shape or a description of a turn
- identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
- identify horizontal and vertical lines and pairs of perpendicular and parallel lines.



### Statistics

- interpret and present data using bar charts, pictograms and tables
- solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

## Literacy

### Reading Comprehension



- apply their growing knowledge of root words, prefixes and suffixes both to read aloud and to understand the meaning of new words they meet
- read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.

### Reading

- develop positive attitudes to reading and understanding of what they read by: listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks

- reading books that are structured in different ways and reading for a range of purposes
- using dictionaries to check the meaning of words that they have read
- increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally
- identifying themes and conventions in a wide range of books
- preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action
- discussing words and phrases that capture the reader's interest and imagination
- recognising some different forms of poetry [for example, free verse, narrative poetry]
- understand what they read in books they can read independently, by:
  - checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context
  - asking questions to improve their understanding of a text



- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
- predicting what might happen from details stated and implied
- identifying main ideas drawn from more than one paragraph and summarising these
- identifying how language, structure, and presentation contribute to meaning
- retrieve and record information from non-fiction
- participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say.

### Writing Transcription

- use further prefixes and suffixes and understand how to add them
- spell further homophones
- spell words that are often misspelt
- place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's]
- use the first two or three letters of a word to check its spelling in a dictionary

- write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far.

### Handwriting

- use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined
- increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].



### Writing Transcription

- discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
- discussing and recording ideas
- draft and write by: composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures
- organising paragraphs around a theme in narratives, creating settings, characters and plot in non-narrative material, using simple organisational devices [for example, headings and sub-headings]
- evaluate and edit by: assessing the effectiveness of their own and others' writing and suggesting improvements
- proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences
- proof-read for spelling and punctuation errors
- read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear.



	<p><u>Fiction</u>          Stories from other Cultures.          Stories from the same author.          Stories about Imaginary worlds .          Myths and Legends.          Adventure Stories.          Plays and Dialogues.</p>	<p><u>Non- Fiction</u>          Letters.          Non- Chronological Reports.          Instructions and explanations.          Persuasive Writing.          Recounts.</p>	<p><u>Poetry</u>          Imagery.          Humorous poems.          Performance poems.          Poems to express emotions.          Shape poems.</p>
<p><b>Science</b></p>	<p><u>Plants</u></p> <ul style="list-style-type: none"> <li>• Identify the basic functions of a plant's roots, stem/trunk, leaves and flowers</li> <li>• Understand that plants need air, light, water, nutrients and room to grow</li> <li>• Understand the role of flowers in the life cycle, including pollination and seed dispersal</li> </ul> <p>Pollination is the act of reproduction in which pollen is transferred - usually to another plant - to make seeds. Seed dispersal is the distribution of seeds by actions such as sprinkling, through the wind, or by being eaten as part of a fruit.</p> <p><u>Animals including Humans</u></p> <ul style="list-style-type: none"> <li>• Know that animals get their nutrition from food, and need the right types and amounts of nutrition</li> <li>• Identify that humans and some other animals have skeletons and muscles, and know their basic functions</li> </ul> <p><u>Rocks</u></p> <ul style="list-style-type: none"> <li>• Compare and group different types of rocks based on their appearance and properties</li> <li>• Describe how fossils are formed</li> <li>• Recognise that soils are made from rocks and organic material</li> </ul> <p>At this level, rocks are often grouped into one of three categories:  <u>Igneous</u>: rocks formed from magma under the Earth's surface, often after a volcano, or deep underground.  <u>Metamorphic</u>: rocks formed under great heat or pressure under the Earth's surface, such as slate or marble.  <u>Sedimentary</u>: rocks formed where sediment builds up in deposits under lakes or oceans.</p>		



<p>R.E</p>	<p><u>HINDUISM</u> Beliefs and festivals</p> <p><u>PEOPLE OF GOD</u> What is it like to follow God?</p> <p><u>Jesus the Teacher</u> Who is your neighbour?</p> <p><u>The parables and Jesus' miracles</u> Could Jesus really heal people or is there another explanation? Discovery RE</p> <p><u>Easter</u> Forgiveness - what is good about 'Good Friday'</p> <p><u>KINGDOM OF GOD</u> When Jesus left, what was the impact of Pentecost?</p> <p><u>INCARNATION</u> What is the Trinity?</p>	
<p>History</p>	<p><u>Changes in Britain from the Stone Age to the Iron Age.</u></p> <p><u>River Tamar</u> Local History study including the then and Now.</p>	
<p>Geography</p>	<p>Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time. (River Tamar and Stone age Topics)</p> <p>Understand geographical similarities and differences through the study of human and physical geography of two regions of the United Kingdom.</p> <p>Describe and understand key aspects of physical geography: Biomes and vegetation belts.</p> <p>Describe and understand key aspects of physical geography Rivers and mountains (River Tamar Topic)</p>	
<p>PE</p>	<p>Gymnastics This is over Year 3 and 4</p>	

	 <p>Dance Basketball Hockey Netball Tag Rugby Football</p>
DT	<p><u>Design</u></p> <ul style="list-style-type: none"> <li>• Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</li> <li>• Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul> <p><u>Make</u></p> <ul style="list-style-type: none"> <li>• Select from and use a wider range of tools and equipment to perform practical tasks ( for example cutting, shaping, joining and finishing), accurately</li> <li>• Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul> <p><u>Evaluate</u></p> <ul style="list-style-type: none"> <li>• Investigate and analyse a range of existing products</li> <li>• Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> </ul>  <p>Also</p> <ul style="list-style-type: none"> <li>• Understand how key events and individuals in design and technology have helped shape the world <ul style="list-style-type: none"> <li>• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> </ul> </li> <li>• Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages)</li> <li>• Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</li> </ul>
Art	<p><u>Drawing</u> pencil, wax, chalk, ink, pen, brushes</p>

	<p><u>Colour pigment</u> Paint, inks, pastels, dyes etc and tools to apply colour - brushes, sponges, straws etc</p> <p><u>Texture</u> Pigment - paint, inks, pastels, dyes etc and tools to apply colour - brushes, sponges, straws etc</p> <p><u>Form</u> 3D experience, rigid and malleable materials</p> <p><u>Printing</u> fingers, hands, vegetables, card, wood, string, lino, clay, polystyrene etc</p> <p>Pattern (painted, printed, dyed, rubbed, imprinted, embossed etc.)</p>	
<p><b>Computing</b></p>	<p><u>Programming and animation</u> In this unit, the children create an animated cartoon using characters they design. They use a paint tool to create characters and backgrounds. They then create an animation by translating a storyboard into a series of scripted instructions (program) for graphic objects.</p> <p><u>We are bug fixers</u> In this unit, the children work with six example Scratch projects. They explain how the scripts work, finding and correcting errors in them, and explore creative ways of improving them. The children learn to recognise some common types of programming error, and practise solving problems through logical thinking.</p> <p><u>We are presenters</u> Do your children love watching sport or other performances on TV? This unit gives them a chance to make a short narrated video of themselves practising a sport or other skill, and to use this to help improve their performance.</p> <p><u>We are opinion pollsters</u> In this unit, the children create their own opinion poll, seek responses, and then analyse the results.</p>	