### <u>Curriculum Maps</u>

# English, Maths and Science - KS2

ENGLISH	Reading:
<u>Writing:</u>	Lower Key Stage 2 years 3-4
Narrative Write stories with familiar settings (Y3). Write myths and legends (Y3/5). Write adventure and mystery stories (Y3). Authors and letters (Y3). Dialogue and plays (Y3). Stories with historical settings (Y4). Stories set in imaginary worlds (Y4). Stories set in imaginary worlds (Y4). Stories which raise issues/dilemmas (Y4). Novels and stories by significant children's authors (Y5) Older Literature (Y5). Film literature (Y5) Dramatic conventions (Y5) Journalistic writing linked to arguments (Y5/6). Fiction genres (Y6). Extending narrative (Y6). Authors and texts (Y6). Short stories and flashbacks (Y6). Nore Fiction Write reports (Y3) Write instructions (Y3) linked to explanation texts Write information texts (Y3) linked to persuasion (Y4) Write recounts: newspaper/magazines (Y4/5) Persuasion writing linked to arguments (Y5/6). Biographies and autobiographies (Y6) Journalistic wiring linked to arguments (Y5/6) Biographies and calligrams- linked to a performance element. (Y3) Language play (Y3) Creating images and exploring form- linked to a performance element (Y4) Classic/narrative poems (Y5). Choral and performance poems (Y5). The power of imagery (Y6).	Listen to and discuss 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. Use dictionaries to check the meaning of words 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. <b>Upper Key Stage 2 years 5-6</b> Continuing to read and discuss an increasingly 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. Increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions Recommending books that they have read to their peers, giving reasons for their choices. Identifying and discussing themes and conventions in and across a wide range of poetry by heart. Preparing poems and play to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience

#### Spoken Language and Communication

Listens to key information and makes relevant, related comments.

Able to infer meaning, reason and predict. Uses a range of words related to time and measurement.

Uses a wide range of verbs to express their thoughts, or about cause and effect.

Stories have a good structure with a distinct plot, an exciting event, clear resolution and conclusion.

Uses intonation to make storytelling and reports exciting and interesting.

Uses formal language when appropriate in some familiar situations.

Uses tone of voice, stress on words and gestures naturally to add meaning.

Sustains active listening to both what is said and the way it is said.

Uses questions to help conversations flow.

Knows when a sentence is not grammatically correct and can explain rules of grammar.

Tell elaborate entertaining stories which are full of detailed descriptions.

Uses different language depending on where they are, who they are with and what they are doing.

Communicates successfully; shares ideas and information, shares and receives advice, and offers and takes notice of opinions.

### MATHEMATICS

#### Number Sense:

To become fluent mathematicians by extending understanding of our number system, including negative numbers, fractions and decimals. Build an understanding of how our numbers work and fit together.

Explore place value (*identifying the value of digits in numbers given to three-decimal places*), comparing and ordering numbers up to 10 000 000 *including fractions <1*), rounding (*to the nearest 10, 100, 1000, 10 000 and 100 000*) and applying this understanding in different contexts.

#### Additive reasoning:

Develop an understanding of addition and subtraction and the relationship between them.

Use this to solve multi-step problems in different contexts, including measures and statistics. Reason mathematically by following a line of enquiry or conjecturing generalisations using mathematical language

Choose and use number facts, understanding of place value, mental methods, formal written methods, explaining decision making and justifying solutions.

#### Multiplicative reasoning

Develop an understanding of multiplication and division including fractions.

The focus is on understanding the relationship between multiplication and division, clearly connecting to this an understanding of fractions both as operators, e.g. the equivalence between dividing by five and multiplying by a fifth, and the outcome of divisions, e.g. understanding  $3/4 = \frac{3}{4}$ . This understanding is used to solve problems in different contexts, including measures and statistics.

Children will become increasingly fluent in mental methods drawing upon known facts as well as written methods *(including long multiplication and division).* 

#### Geometric Reasoning

Develop an understanding in shape and space (compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons). Understand properties of shapes and the relationship between them, using this understanding to solve problems including problems related to measures (perimeter, area and volume), and movement within space.

**Measures and statistics** are included throughout as contexts for number sense, additive reasoning and multiplicative reasoning.

Algebra (using simple formulae and expressing missing number problems algebraically) and Ratio and Proportion will be taught in Yr5/6.

## <u>SCIENCE</u>

#### Knowledge:

Explore the requirements of plants for growth and describe the function of the different parts of the plant and their role in their lifecycle. Identify the importance of nutrition for animals and learn about the role of skeletons and muscles. Compare different soils and rocks and describe how fossils are formed. Identify sources of light and discover how shadows are formed and change. Discover the properties and function of magnets. Compare how forces work on different materials. Classify and identify a variety of living things and discover how changes to environments can affect them. Describe the human digestive system, including the function of different teeth. Describe and name the different parts of a food chain. Identify solids, liquids and gases and how they change state. Describe the processes in the water cycle. Identify how sound is made from vibrations, then discover what affects the pitch and volume. Construct an electrical circuit and explain how switches work. Identify conductors and insulators. Describe the differences in life cycles of mammals, amphibians, insects and birds and describe reproduction in some plants and animals. Describe the changes as humans develop to old age. Use knowledge of solids, liquids and gases to group, describe suitability, dissolve and separate materials. Identify reversible and irreversible changes. Describe the movement of Earth, the Moon and other planets in the solar system. Explain how day and night occur. Identify the effect of gravity, air resistance, water resistance and friction. Discover the effect that levers, pulleys and gears have. Explain and give reasons for classifying plants and animals. Identify and describe the function of the main parts of the human circulatory system and describe how water and nutrients are transported. Explain the impact of diet, exercise, drugs and lifestyle. Discover how animals have changed over time and how animals and plants adapt to suit their environment. Recognise how offspring are not identical to their parents. Discover how light travels in straight lines and how this impacts on how we see things. Use the correct symbols in an electrical circuit diagram and describe the effect of changing components.

### Working Scientifically:

Answer their own questions using different scientific enquiries

Set up simple enquiries and fair tests

Make observations and record them in a variety of ways

Record findings using scientific vocabulary and present data in a variety of ways

Give oral and written explanations of their own practical enquiries

Use results to draw conclusions and make further prediction

Identify patterns in results

Use scientific evidence to answer their own questions and support their

Plan different types of scientific enquiries to answer questions

Take measurements using a range of scientific equipment

Record data and results using a variety of tables, keys and graphs

Use results to make predictions and set up further tests

Report and present findings from enquiries in different ways

Identify scientific evidence to support or refute ideas