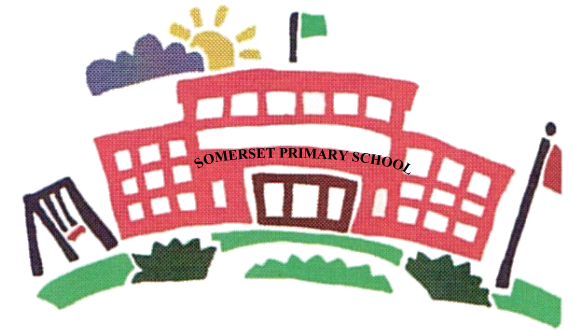# Francis Patton Primary School

Primary Three Cambridge Curriculum

English Language Arts

Phonics, spelling & vocabulary

- Use effective strategies to tackle blending unfamiliar words to read, including sounding out, separating into syllables, using analogy, identifying known suffixes and prefixes, using context.
- Use and spell compound words.
- Know irregular forms of common verbs.
- Use effective strategies to tackle segmenting unfamiliar words to spell, including segmenting into individual sounds, separating into syllabus, using analogy, identifying known suffixes and prefixes, applying known spelling rules, visual memory, mnemonics.
- Learn rules for adding *–ing, -ed, -s* to verbs.
- Extend earlier work on prefixes and suffixes.
- Explore words that have the same spelling but different meanings (homonyms), e.g. *form, wave*.
- Use a dictionary or electronic means to find the spelling and meaning of words.

- Organise words or information alphabetically using first two letters.
- Identify misspelt words in own writing and keep individual spelling logs.
- Consider how choice of words can heighten meaning.
- Infer the meaning of unknown words from the context.
- Explore vocabulary for introducing and concluding dialogue, e.g. *said, asked*.
- Generate synonyms for high frequency words, e.g. *big, little, good*.

Grammar and punctuation

Reading

- Use knowledge of punctuation and grammar to read age-appropriate texts with fluency, understanding and expression.
- Recognise the use of the apostrophe to mark omission in shortened words, e.g. *can't, don't*.
- Collect examples of nouns, verbs and adjectives, and use the terms appropriately.
- Identify pronouns and understand their function in a sentence.
- Understand that verbs are necessary for meaning in a sentence.
- Understand pluralisation and use the terms 'singular' and 'plural'.

Writing

- Maintain accurate use of capital letters and full steps in showing sentences.
- Learn the basic conventions of speech punctuation and begin to use speech marks.
- Use question marks, exclamation marks, and commas in lists.
- Continue to improve consistency in the use of tenses.
- Ensure grammatical agreement of pronouns and verbs in using standard English.
- Use a wider variety of sentence types including simple, compound and some complex sentences.
- Begin to vary sentence openings, e.g. with simple adverbs.

Reading

Fiction and poetry

- Sustain the reading of 48 and 64 page books, noting how a text is organised into sections or chapters.
- Read aloud with expression to engage the listener.
- Answer questions with some reference to single points in a text.
- Begin to infer meanings beyond the literal, e.g. about motives and character.

- Identify different types of stories and typical story themes.
- Identify the main points or gist of a text.
- Consider words that make an impact, e.g. adjectives and powerful verbs.
- Understand and use the terms 'fact', 'fiction' and 'non-fiction'.
- Read a range of story, poetry and information books and begin to make links between them.
- Read and comment on different books by the same author.
- Read play-scripts and dialogue, with awareness of different voices.
- Practise learning and reciting poems.

Non-fiction

- Scan a passage to find specific information and answer questions.
- Locate information in non-fiction texts using contents page and index.
- Read and follow instructions to carry out an activity.
- Consider ways that information is set out on page and on screen, e.g. lists, charts, bullet points.
- Locate books by classification.
- Identify the main purpose of a text.
- Use ICT sources to locate simple information.

- ## Writing

Fiction

- Write first-person accounts and descriptions based on observation.
- Develop descriptions of settings in stories.
- Write portraits of characters.
- Write simple play-scripts based on reading.
- Plan main points as a structure for story writing.
- Begin to organise writing in sections or paragraphs in extended stories.
- Develop range of adverbials to signal the relationship between events.
- Use reading as a model for writing dialogue.
- Write and perform poems, attending to the sound of words.
- Choose and compare words to strengthen the impact of writing, including noun phrases.

Non-fiction

- Write book reviews summarising what a book is about.
- Establish purpose for writing, using features and style based on model texts.
- Write letters, notes and messages.
- Make a record of information drawn from a text, e.g. by completing a chart.

Presentation

- Ensure consistency in the size and proportion of letters and the spacing of words.
- Practise joining letters in handwriting.
- Build up handwriting speed, fluency and legibility.
- Use ICT to write, edit and present work.

- ## Speaking and listening

- Speak clearly and confidently in a range of contexts, including longer speaking turns.
- Adapt tone of voice, use of vocabulary and non-verbal features for different audiences.
- Take turns in discussion, building on what others have said.
- Listen and respond appropriately to others' views and opinions.
- Listen and remember a sequence of instructions.
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- Practise to improve performance when reading aloud.
- Begin to adapt movement to create a character in drama.
- Develop sensitivity to ways that others express meaning in their talk and non-verbal communication.

Mathematics

Numbers and the number system

- Recite numbers 100 to 200 and beyond.
- Read and write numbers to at least 1000.
- Count on and back in ones, tens and hundreds from two- and three-digit numbers.
- Count on and back in steps of 2, 3, 4 and 5 to at least 50.
- Understand what each digit represents in three-digit numbers and partition into hundreds, tens and units.
- Find 1, 10, 100 more/less than two- and three-digit numbers.
- Multiply two-digit numbers by 10 and understand the effect.
- Round two-digit numbers to the nearest 10 and round three-digit numbers to the nearest 100.
- Place a three-digit number on a number line marked off in multiples of 100.
- Place a three-digit number on a number line marked off in multiples of 10.
- Compare three-digit numbers, use $<$ and $>$ signs, and find a number in between.
- Order two- and three-digit numbers.

- Give a sensible estimate of a number as a range (e.g. 30 to 50) by grouping in tens.
- Find half of odd and even numbers to 40, using notation such as $13\frac{1}{2}$.
- Understand and use fraction notation recognizing that fractions are several parts of one whole, e.g. $\frac{3}{4}$ is three quarters and $\frac{2}{3}$ is two thirds.
- Recognise equivalence between $\frac{1}{2}$, $\frac{2}{4}$, $\frac{4}{8}$, and $\frac{5}{10}$ using diagrams.
- Recognise simple mixed fractions, e.g. $1\frac{1}{2}$ and $2\frac{1}{4}$.
- Order simple or mixed fractions on a number line, e.g. using the knowledge that $\frac{1}{2}$ comes half way between $\frac{1}{4}$ and $\frac{3}{4}$, and that $1\frac{1}{2}$ comes half way between 1 and 2.
- Begin to relate finding fractions to division.
- Find halves, thirds, quarters and tenths of shapes and numbers (whole number answers).

Calculation

Mental strategies

- Know addition and subtraction facts for all numbers to 20.
- Know the following addition and subtraction facts:
- -   multiples of 100 with a total of 1000
- -   multiples of 5 with a total of 100
- Know multiplication/division facts for 2×, 3x, 5x, and 10x tables.

- Begin to know 4x table.
- Recognise two- and three-digit multiples of 2, 5 and 10.
- Work out quickly the doubles of numbers 1 to 20 and derive the related halves.
- Work out quickly the doubles of multiples of 5 ($<$ 100) and derive the related halves.
- Work out quickly the doubles of multiples of 50 to 500.

Addition and subtraction

- Add and subtract 10 and multiples of 10 to and from two- and three-digit numbers.
- Add 100 and multiples of 100 to three-digit numbers.
- Use the = sign to represent equality, e.g. 75 + 25 = 95 + 5.
- Add several small numbers.
- Find complements to 100, solving number equations such as 78 + □ = 100.
- Add and subtract pairs of two-digit numbers.
- Add three-digit and two-digit numbers using notes to support.
- Re-order an addition to help with the calculation, e.g. 41 + 54, by adding 40 to 54, then 1.
- Add/subtract single-digit numbers to/from three-digit numbers.
- Find 20, 30,…90, 100, 200, 300 more/less than three-digit numbers.

Multiplication and division

- Understand the relationship between halving and doubling.
- Understand the effect of multiplying two-digit numbers by 10.
- Multiply single-digit numbers and divide two-digit numbers by 2, 3, 4, 5, 6, 9 and 10.
- Multiply teens numbers by 3 and 5.
- Begin to divide two-digit numbers just beyond 10x tables, e.g. 60 ÷ 5, 33 ÷ 3.
- Understand that division can leave a remainder (initially as 'some left over').
- Understand and apply the idea that multiplication is commutive.
- Understand the relationship between multiplication and division and write connected facts.

- **<u>Geometry</u>**

Shapes and geometric reasoning
- Identify, describe and draw regular and irregular 2D shapes including pentagons, hexagons, octagons and semi-circles.
- Classify 2D shapes according to the number of sides, vertices and right angles.

- Identify, describe and make 3D shapes including pyramids and prisms; investigate which nets will make a cube.
- Classify 3D shapes according to the number and shape of faces, number of vertices and edges.
- Draw and complete 2D shapes with reflective symmetry and draw reflections of shapes (mirror line along one side).
- Relate 2D shapes and 3D solids to drawings of them.
- Identify 2D and 3D shapes, lines of symmetry and right angles in the environment.
- Identify right angles in 2D shapes.

Position and movement
- Use the language of position, direction and movement, including clockwise and anti-clockwise.
- Find and describe the position of a square on a grid of squares where the rows and columns are labeled.
- Use a set square to draw right angles.
- Compare angles with a right angle and recognize that a straight line is equivalent to two right angles.

- **<u>Measure</u>**

Money

- Consolidate using money notation.
- Use addition and subtraction facts with a total of 100 to find change.

Length, mass and capacity
- Choose and use appropriate units and equipment to estimate, measure and record measurements.
- Know the relationship between kilometers and metres, metres and centimetres, kilograms and grams, litres and millilitres.
- Read to the nearest division or half division, use scales that are numbered or partially numbered.
- Use a ruler to draw and measure lines to the nearest centimeter.
- Solve word problems involving measures.

Time
- Suggest and use suitable units to measure time and know the relationships between them (second, minute, hour, day, week, month, year).
- Read the time on analogue and digital clocks, to the nearest 5 minutes on an analogue clock and to the nearest minute on a digital clock.
- Begin to calculate simple time intervals in hours and minutes.

- Read a calendar and calculate time intervals in weeks or days.

• <u>Handling data</u>

Organising, categorizing and representing data
- Answer a real-life question by collecting, organising and interpreting data, e.g. investigating the population of mini-beasts in different environments.
- Use tally charts, frequency tables, pictograms (symbol representing one or two units) and bar charts (intervals labelled in ones or twos).
- Use Venn or Carroll diagrams to sort data and objects using two criteria.

• <u>Problem solving</u>

Using techniques and skills in solving mathematical problems
- Choose appropriate mental strategies to carry out calculations.
- Begin to understand everyday systems of measurement in length, weight, capacity and time and use these to make measurements as appropriate.
- Make sense of and solve word problems, single (all four operations) and two-step (addition and subtraction), and

begin to represent them, e.g. with drawings or on a number line.
- Check the results of adding two numbers using subtraction, and several numbers by adding in a different order.
- Check subtraction by adding the answer to the smaller number in the original calculation.
- Check multiplication by reversing the order, e.g. checking that 6 x 4 = 24 by doing 4 x 6.
- Check a division using multiplication, e.g. check 12 ÷ 4 = 3 by doing 4 x 3.
- Recognise the relationships between different 2D shapes.
- Identify the differences and similarities between different 3D shapes.
- Estimate and approximate when calculating, and check working.
- Make a sensible estimate for the answer to a calculation, e.g. using rounding.
- Consider whether an answer is reasonable.
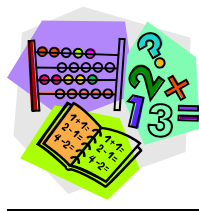
Using understanding and strategies in solving problems
- Make up a number story to go with a calculation, including in the context of money.
- Explain a choice of calculation strategy and show how the answer was worked out.
- Explore and solve number problems and puzzles, e.g. logic problems.
- Use ordered lists and tables to help to solve problems systematically.
- Describe and continue patterns which count on or back in steps of 2, 3, 4, 5, 10, or 100.
- Identify simple relationships between numbers, e.g. each number is three more than the number before it.
- Identify simple relationships between shapes, e.g. these shapes all have the same number of lines of symmetry.
- Investigate a simple general statement by finding examples which do or do not satisfy it, e.g. when adding 10 to a number, the first digit remains the same.
- Explain methods and reasoning orally, including initial thoughts about

possible answers to a problem.

Science

Ideas and evidence

- Collect evidence in a variety of contexts to answer questions or test ideas.

Plan investigative work

- Suggest ideas, make predictions and communicate these.
- With help, think about collecting evidence and planning fair tests.

Obtain and present evidence

- Observe and compare objects, living things and events.
- Measure using simple equipment and record observations in a variety of ways.
- Present results in drawings, bar charts and tables.

Consider evidence and approach

- Draw conclusions from results and begin to use scientific knowledge to suggest explanations.
- Make generalisations and begin to identify simple patterns in results.

- ## Biology

Plants

- Know that plants have roots, leaves, stems and flowers.
- Explain observations that plants need water and light to grow.
- Know that water is taken in through the roots and transported through the stem.
- Know that plants need healthy roots, leaves and stems to grow well.
- Know that plant growth is affected by temperature.

Humans and animals

- Know life processes common to humans and animals include nutrition (water and food), movement, growth and reproduction.
- Describe differences between living and non-living things using knowledge of life processes.
- Explore and research exercise and the adequate, varied diet needed to keep healthy.
- Know that some foods can be damaging to health, e.g. very sweet and fatty foods.
- Explore human senses and the ways we use them to learn about our world.
- Sort living things into groups, using simple features and describe rationale for groupings.

- ## Chemistry

Material properties

- Know that every material has specific properties, e.g. hard, soft, shiny.
- Sort materials according to their properties.
- Explore how some materials are magnetic but many are not.
- Discuss why materials are chosen for specific purposes on the basis of their properties.

- ## Physics

Forces and motion

- Know that pushes and pulls are examples of forces and that they can be measured with forcemeters.
- Explore how forces can make objects start or stop moving.
- Explore how forces can change the shape of objects.
- Explore how forces, including friction, can make objects move faster or slower or change direction.