



Luther King

Class Year 6

2017/18

Mathematicians will be able to:

Demonstrate an understanding of place value, including large numbers and decimals (e.g. what is the value of the '7' in 276,541?; find the difference between the largest and smallest whole numbers that can be made from using three digits; $8.09 = 8 + 9/?$; $28.13 = 28 + ? + 0.03$).

Calculate mentally, using efficient strategies such as manipulating expressions using commutative and distributive properties to simplify the calculation (e.g. $53 - 82 + 47 = 53 + 47 - 82 = 100 - 82 = 18$; $20 \times 7 \times 5 = 20 \times 5 \times 7 = 100 \times 7 = 700$; $53 \div 7 + 3 \div 7 = (53 + 3) \div 7 = 56 \div 7 = 8$).

Use formal methods to solve multi-step problems (e.g. find the change from £20 for three items that cost £1.24, £7.92 and £2.55; a roll of material is 6m long: how much is left when 5 pieces of 1.15m are cut from the roll?; a bottle of drink is 1.5 litres, how many cups of 175ml can be filled from the bottle, and how much drink is left?).

Substitute values into a simple formula to solve problems (e.g. perimeter of a rectangle or area of a triangle).

Recognise the relationship between fractions, decimals and percentages and can express them as equivalent quantities (e.g. one piece of cake that has been cut into 5 equal slices can be expressed as 15 or 0.2 or 20% of the whole cake).

Calculate using fractions, decimals or percentages (e.g. knowing that 7 divided by 21 is the same as 7 21 and that this is equal to 13; 15% of 60; $112 + 34$; 79 of 108; 0.8×70).

Calculate with measures (e.g. calculate length of a bus journey given start and end times; convert 0.05km into m and then into cm).

Use mathematical reasoning to find missing angles (e.g. the missing angle in an isosceles triangle when one of the angles is given; the missing angle in a more complex diagram using knowledge about angles at a point and vertically opposite angles).

Describe positions on the full co-ordinate grid (all four quadrants).

Draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes.

Interpret and construct pie charts and line graphs and use these to solve problems.

Scientists will use scientific enquiry to be able to:

Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.

Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

Use my test results to make predictions to set up further comparative and fair tests.

Report and present my findings from enquiries, including conclusions, causal relationships and explanations with a degree of trust in the results, in oral and written forms such as displays and other presentations.

Identify scientific evidence that has been used to support or refute ideas or arguments.

Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

Give reasons for classifying plants and animals based on specific characteristics

Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.

Recognise the impact of diet, exercise, drugs and lifestyle on the way my body functions.

Describe the ways in which nutrients and water are transported within animals, including humans.

Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.

Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.

Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Recognise that the human skeleton has changed over time since we separated from other primates

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Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.

Speakers and listeners will be able to:

Talk confidently and fluently in a range of situations, using formal and Standard English, if necessary.

Ask questions to develop ideas and take account of others' views.

Explain ideas and opinions giving reasons and evidence.

Take an active part in discussions and can take on different roles.

Listen to, and consider the opinions of, others in discussions.

Make contributions to discussions, evaluating others' ideas and respond to them.

Sustain and argue a point of view in a debate, using the formal language of persuasion.

Express possibilities using hypothetical and speculative language.

Engage listeners through choosing appropriate vocabulary and register that is matched to the context.

Perform my own compositions, using appropriate intonation, volume and expression so that literal and implied meaning is clear.

Perform poems and plays from memory, making deliberate choices about how to convey ideas about characters, contexts and atmosphere.

Readers will be able to:

Apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words.

Use my combined knowledge of phonemes and word derivations to pronounce words correctly, e.g. arachnophobia.

Work out the meaning of words from the context

Read fluently, using punctuation to inform meaning.

Read age-appropriate books with confidence and fluency (including whole novels).

Read aloud with intonation that shows understanding.

Explain and discuss my understanding of what I have read, drawing inferences and justifying these with evidence.

Predict what might happen from details stated and implied.

Retrieve information from non-fiction.

Summarise main ideas, identifying key details and using quotations for illustration.

Evaluate how authors use language, including figurative language, considering the impact on the reader.

Make comparisons within and across books.

Prepare poems and plays to read aloud and to perform, and to perform, showing understanding through intonation, tone, volume and action.

Writers will be able to:

Write for a range of purposes and audiences (including writing a short story):

creating atmosphere, and integrating dialogue to convey character and advance the action
selecting vocabulary and grammatical structures that reflect the level of formality required mostly correctly

using a range of cohesive devices*, including adverbials, within and across sentences and paragraphs
using passive and modal verbs mostly appropriately

using a wide range of clause structures, sometimes varying their position within the sentence
using adverbs, preposition phrases and expanded noun phrases effectively to add detail, qualification and precision

using inverted commas, commas for clarity, and punctuation for parenthesis mostly correctly, and making some correct use of semi-colons, dashes, colons and hyphens

spelling most words correctly* (years 5 and 6)

maintaining legibility, fluency and speed in handwriting through choosing whether or not to join specific letters.

Manage shifts between levels of formality through selecting vocabulary precisely and by manipulating grammatical structures

selecting verb forms for meaning and effect

using the full range of punctuation taught at key stage 2, including colons and semi-colons to mark the boundary between independent clauses, mostly correctly.

Historians will be able to use historical enquiry to :

Vikings

Place features of historical events and people from the past in an appropriate chronological framework

Summarise the main events from a specific period in history, explaining the order in which key events happened

Summarise how Britain has learnt from other countries and civilizations over time and more recently

Describe features of historical events and people from past societies and periods

Look at two different versions of a historical event and say why the author may be giving that specific viewpoint

Present orally and in writing my research about a key event from Britain's past using a range of evidence from different sources

Geographers will be able to:

Rivers

Recognise key symbols used on ordnance survey maps and use OS maps to answer questions

Use maps, aerial photos, plans and web to describe what a locality might be like

Describe how some places are similar and others are different in relation to their physical features

Describe how some places are similar and others are different in relation to their human features

Name and locate the Tropics of Cancer and Capricorn as well as the Arctic and Antarctic circles

Explain how the time zones work

Computer Literate children will be able to:

Use the basic functionality of the popular software used in an office (word processor, spreadsheet, and presentational tool).

Use technology to improve performance (such as in sport or music).

Speculate and propose new technologies for the future, researching currently emerging technologies of the day.

Set and store variables and use them for code-based decision making.

Use conditional statements based on stored variables to make decisions in real-time, to make a pseudo-intelligent system.

Evaluate the effectiveness of others' programming.

Use logical reasoning to detect and debug errors in algorithms within a program.

Use age appropriate text, photographs, sound and video editing tools and skills to present a project to the class.

Select, use and combine the appropriate technology tools to create image and sound effects that will have an impact on others.

Select and use different graphical methods using a spreadsheet to present numerical data, and present to others.

Give a range of reasons why it is important to be careful about what is shared online and give some examples of the risks involved.

Give examples of possible risks if someone's online identity if not protected, and suggest ways of safeguarding against these risks.

Suggest improvements to personal profiles.

In French, children will be able to:

Listen attentively and show understanding by joining in and responding

Respond in sentences, using familiar vocabulary, phrases and basic structures

Engage in conversations; ask and answer questions; seek clarification and help, express opinions and respond to those of others

Read carefully and show understanding of words, phrases and simple writing,

Use a dictionary where necessary

Understand basic grammar, including: feminine and masculine forms and conjugation of high-frequency verbs

Write phrases from memory, and adapt these to create new sentences to

Describe people, places, things and actions

In PE, children will take part in gymnastic and games (softball and hockey) and be able to:

Apply my skills, techniques and ideas consistently

Perform physical activities fluently with precision and control

Apply a range of strategies and tactics for attack and defence in games

Explain why I have used specific skills or techniques and modify that use to improve my work

Explain how the body reacts to different kinds of exercise

Explain why we need regular and safe exercise

As part of their Personal Development children will be able to:

Deal with my feelings towards myself, my family and others in a positive Way

Resolve differences by looking at alternatives, making decisions and explaining choices

Understand that my body is changing and also understand the effects and risks of drugs

Demonstrate respect and tolerance towards people with beliefs, customs and cultures other than my own

Artists will study

Explain why I have combined different tools or chosen specific techniques for my drawing or painting

Plan and create a piece of art that meets a given criteria (e.g. a hanging involving different kinds of stitches, a block print using at least 4 colours etc.)

Compare my methods to those of others and keep notes and annotations in my sketch book

Create a piece of art using digital images, animation, video and sound, which can be used as part of a wider presentation

Musicians will be able to:

Sing a harmony part accurately

Take part in a performance (singing or playing an instrument to provide rhythmic support)

Use a variety of different musical devices in my composition (melody, rhythms and chords)

Use different forms of notation to serve different purposes

Analyse features within different pieces of music, thinking about how the venue, occasion or purpose has influenced the way the music is created

Compare and contrast the impact that different composers from different times will have had on the people of that time

In R.E. children will be able to:

Use an increasingly wide religious vocabulary to explain the impact of beliefs upon individuals and communities

Describe why people belong to religions

Know that similarities and differences illustrate distinctive beliefs within and between religions, and suggest possible reasons for this

Explain how religious sources are used to provide authoritative answers to ultimate questions and ethical issues, recognizing diversity in forms of religious, spiritual and moral expression, within and between religions.

Pose, and suggest answers to, questions of sacredness, identity, diversity, belonging, meaning, purpose and truth, values and commitments, relating them to my own and others' lives

Explain what inspires and influences me, expressing my own and others' views on the challenges of belonging to a religion.

Designers will be able to:

Bridges

Convincingly justify my plan to someone else (e.g. why I have selected specific materials or market research evidence)

Use tools and materials precisely, changing the way I am working if necessary

Come up with a way to test and evaluate their final product (e.g. scoring a set of questions i.e. Does it meet the design criteria? etc.)

Explain how I have strengthened, stiffened or reinforced a complex structure

Evaluate and improve how my mechanical systems or electrical systems work (using computing to programme, monitor or control the product if appropriate)

Apply the principles of a healthy and varied diet to prepare and cook a variety of predominantly savoury dishes, using a range of cooking techniques and taking seasonality into account along with where and how ingredients are grown, reared, caught and processed