

Year 6 New Curriculum

SCIENCE - Animals including Humans

- The heart. The structure of the human heart and how it compares to animal hearts.
- Double circulation. Find out more about this and the history of the understanding.
- The structure and function of the lungs.
- The important function of our blood.
- The effect of exercise on our pulse rates
- Healthy bodies and how to stay healthy through a balanced diet and exercise.

RE

- **Loving** - to know and understand the love and care of people, the different kinds of love and God's love is unconditional and never ending.
- **Vocation and Commitment** - to know and understand the commitments we make in life, the vocation to the priesthood and religious life.
- **Expectations** - to know and understand the meaning of expectation. Advent is a time of joyful expectation of Christmas, the Word becoming a human person, Jesus.
- **Judaism** - To study the season of Yom Kippur and Rosh Hashanah as a time of atonement and fresh starts.

ICT

Research Topic

Using the internet and other programs the children will be producing a poster or PowerPoint presentation on a given topic

We Are Photographers

To develop a sensitivity to the qualities of effective and evocative photographs

To develop technical skills in taking and uploading photographs

SCIENCE - Light

We will learn about:

- How light travels in straight lines looking at a range of light sources and carrying out our own investigations.
- How shadows are formed by carrying out our own enquires.
- Our eyes and how we see things. We will also look at how to take care of our eyes.
- Reflection and how this happens by planning and taking part in our own investigations.
- Colours and why colours appear in our eyes.
- Compare the speed of light and sound.

ADVENT TERM

ENGLISH

- To compare novel and film versions
- To empathise with characters and their viewpoint
- To write narrative that affects the reader through word choices and plot
- To write a modern retelling of a fairy tale
- To write a playscript based on a given text
- To write poems using powerful imagery: personification, metaphor and simile
- To distinguish between biography and autobiography
- To write effective diary entries
- To write newspaper articles, leaflets and reports based on texts read or linked to other topics

HISTORY - World War II

- when and where WWII took place
- about the leaders and key events and dates of the war
- the characteristic features of the Blitz and what type of area was most likely to be affected
- to locate where bombing raids took place
- about the effects of air raids
- about the causes of evacuation
- to find out about the experiences and feelings of evacuees, from a wide range of information sources
- why rationing was necessary
- about the impact of rationing on the way of life of people living in England during WWII
- an overview of how the war affected people's everyday lives
- about the restrictions on people, how they suffered during the war, their courage and resilience
- about the effects of WWII on their locality
- Evacuation Day - at the end of the topic the children will become evacuees for the day and live a day in WWII classroom.

ART - Bridget Riley and Mondrian

- Learn about artists in history
- Develop a better understanding of colour and how certain colours work well together.
- Look at the colour wheel
- Improve artistic skills by mastering their techniques.

GEOGRAPHY - The UK & Skills

- Looking at counties, regions and features of the UK.
- Using OS maps looks at symbols and 6 figure grid referencing on those maps.

FRENCH - Le Weekend & Les Vetements

Ask and talk about regular activities
Say what you don't do
Ask and say what other people do
Talk about what you like/dislike doing
Ask and say what clothes you'd like
Give opinions about clothes
Say what clothes you wear
Ask and talk about prices

MATHS

Counting, Partitioning and Calculating

- Explain reasoning and conclusions, using words, symbols or diagrams as appropriate
- Use decimal notation for tenths, hundredths and thousandths; partition, round and order decimals with up to three places, and position them on the number line
- Calculate mentally with integers and decimals: $U.t \pm U.t$, $TU \times U$, $TU \div U$, $U.t \times U$, $U.t \div U$
- Use a calculator to solve problems involving multi-step calculations
- Use approximations, inverse operations and tests of divisibility to estimate and check results
- Find the difference between a positive and a negative integer, or two negative integers, in context
- Use knowledge of place value and multiplication facts to 10×10 to derive related multiplication and division facts involving decimals (e.g. 0.8×7 , $4.8 \div 6$)

Securing number facts and understanding shape

- Represent and interpret sequences, patterns and relationships involving numbers and shapes; suggest and test hypotheses; construct and use simple expressions and formulae in words then symbols (e.g. the cost of c pens at 15 pence each is $15c$ pence)
- Use knowledge of multiplication facts to derive quickly squares of numbers to 12×12 and the corresponding squares of multiples of 10
- Use knowledge of place value and multiplication facts to 10×10 to derive related multiplication and division facts involving decimals (e.g. 0.8×7 , $4.8 \div 6$)
- Recognise that prime numbers have only two factors and identify prime numbers less than 100; find the prime factors of two-digit numbers
- Use approximations, inverse operations and tests of divisibility to estimate and check results
- Describe, identify and visualise parallel and perpendicular edges or faces; use these properties to classify 2-D shapes and 3-D solids
- Make and draw shapes with increasing accuracy and apply knowledge of their properties

Handling data and measures

- Solve problems by collecting, selecting, processing, presenting and interpreting data, using ICT where appropriate; draw conclusions and identify further questions to ask
- Construct and interpret frequency tables, bar charts with grouped discrete data, and line graphs; interpret pie charts
- Describe and interpret results and solutions to problems using the mode, range, median and mean
- Select and use standard metric units of measure and convert between units using decimals to two places (e.g. change 2.75 litres to 2750 ml, or vice versa)
- Read and interpret scales on a range of measuring instruments, recognising that the measurement made is approximate and recording results to a required degree of accuracy; compare readings on different scales, for example when using different instruments
- Use efficient written methods to add and subtract integers and decimals, to multiply and divide integers and decimals by a one-digit integer, and to multiply two-digit and three-digit integers by a two-digit integer

Calculating measuring and understanding shape

- Solve multi-step problems, and problems involving fractions, decimals and percentages; choose and use appropriate calculation strategies at each stage, including calculator use
- Calculate mentally with integers and decimals: $U.t \pm U.t$, $TU \times U$, $TU \div U$, $U.t \times U$, $U.t \div U$
- Use efficient written methods to add and subtract integers and decimals, to multiply and divide integers and decimals by a one-digit integer, and to multiply two-digit and three-digit integers by a two-digit integer
- Use a calculator to solve problems involving multi-step calculations
- Use approximations, inverse operations and tests of divisibility to estimate and check results
- Select and use standard metric units of measure and convert between units using decimals to two places (e.g. change 2.75 litres to 2750 ml, or vice versa)
- Solve problems by measuring, estimating and calculating; measure and calculate using imperial units still in everyday use; know their approximate metric values
- Read and interpret scales on a range of measuring instruments, recognising that the measurement made is approximate and recording results to a required degree of accuracy; compare readings on different scales, for example when using different instruments
- Calculate the perimeter and area of rectilinear shapes; estimate the area of an irregular shape by counting squares

Securing number facts calculations and relationships

- Tabulate systematically the information in a problem or puzzle; identify and record the steps or calculations needed to solve it, using symbols where appropriate; interpret solutions in the original context and check their accuracy
- Use a calculator to solve problems involving multi-step calculations
- Express a larger whole number as a fraction of a smaller one (e.g. recognise that 8 slices of a 5-slice pizza represents $\frac{8}{5}$ or $1\frac{3}{5}$ pizzas); simplify fractions by cancelling common factors; order a set of fractions by converting them to fractions with a common denominator
- Relate fractions to multiplication and division (e.g. $6 \div 2 = \frac{1}{2}$ of 6 = $6 \times \frac{1}{2}$); express a quotient as a fraction or decimal (e.g. $67 \div 5 = 13.4$ or $13\frac{2}{5}$); find fractions and percentages of whole-number quantities (e.g. $\frac{5}{8}$ of 96, 65% of £260)
- Solve simple problems involving direct proportion by scaling quantities up or down
- Explain reasoning and conclusions, using words, symbols or diagrams as appropriate
- Solve multi-step problems, and problems involving fractions, decimals and percentages; choose and use appropriate calculation strategies at each stage, including calculator use
- Use knowledge of place value and multiplication facts to 10×10 to derive related multiplication and division facts involving decimals (e.g. 0.8×7 , $4.8 \div 6$)
- Use efficient written methods to add and subtract integers and decimals, to multiply and divide integers and decimals by a one-digit integer, and to multiply two-digit and three-digit integers by a two-digit integer