

Cleves School Curriculum Map 2021-22

Year 5 – Spring Term

‘SPACE’

Maths

The expectation is that children will begin to be able to achieve these objectives with some support.

Multiplication and Division

- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
- Continue to use the distributive law to partition numbers when multiplying them
- Divide numbers up to 4 digits by a one-digit number using formal written method of short division and interpret remainders appropriately for the context
- Check answers to calculations and to multiplication and division calculations using the inverse

Fractions

- Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- Compare and order fractions whose denominators are all multiples of the same number
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number, including calculations > 1
- Recognise mixed numbers and improper fractions and convert from one form to the other
- Write mathematical statements > 1 as a mixed number
- Continue to apply their knowledge of multiplication table facts to find equivalent fractions
- Write percentages as a fraction with denominator hundred, and as a decimal
- Know percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of a multiple of 10 or 25
- Solve problems which require knowing key percentage and decimal equivalents
- Recognise the per cent symbol and understand that per cent relates to "number of parts per hundred"
- Compare and order fractions whose denominators are all multiples of the same number

Decimals and Percentages

- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Read and write decimal numbers as fractions
- Relate thousandths to decimal equivalents
- Round decimals with two decimal places to the nearest whole number and to one decimal place

- Read, write, order and compare numbers with up to three decimal places
- Recognise the per cent symbol and understand that per cent relates to "number of parts per hundred"
- Write percentages as a fraction with denominator hundred, and as a decimal
- Know percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of a multiple of 10 or 25
- Solve problems which require knowing key percentage and decimal equivalents

Properties of Shapes (Angles and Polygons)

- Draw given angles, and measure them in degrees and draw shapes with sides measured to the nearest millimeter
- Use conventional markings for parallel lines and right angles
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
- Use the term diagonal
- Identify angles at a point and one whole turn, angles at a point on a straight line and $\frac{1}{2}$ a turn and other multiples of 90°
- Estimate and compare acute, obtuse and reflex angles
- Use the properties of rectangles to deduce related facts and find missing lengths and angles

Addition and Subtraction

- Add and subtract numbers mentally with increasingly large numbers
- Continue to develop knowledge of addition and subtraction facts and to derive related facts
- Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- Solve addition and subtraction multi-step problems in familiar contexts, deciding which operations and methods to use and why (*)
- Develop their understanding of the meaning of the equals sign (*)

Literacy

Poetic Style

The children will study a range of poetic styles, including language effects, pattern and form, subjects, themes and meaning. They will then write their own poems based on Rollercoasters.

Stories from Other Cultures

Based on the Firework Makers Daughter by Philip Pullman, the children will be developing their narrative skills. They will write the missing chapter of an adventure journey using the structure of a story mountain; including description, action, suspense and dialogue.

Recounts

The children will write a recount about the Apollo 11 mission using appropriate language and grammar.

We will also develop our skim reading and note-taking skills and text evaluation.

Narrative (Science Fiction)

Based on *'The Lost Thing'* by Shaun Tan, the children will create their own creature.

They will then write a detailed characterisation including figurative language, show not tell and dialogue.

Balanced Discussion

The children will be looking at two different points of view based on Space exploration and then write a balanced argument in which both views are considered and a conclusion reached.

Computing

Digital Citizenship

Using We are Internet Legends

- Use technology safely, respectfully and responsibly
- Enhance student knowledge of Digital Safety and the use of social media.

HTML coding

- Design, write and debug programs that accomplish specific goals
- Use logical reasoning to explain how some simple algorithms
- Detect and correct errors in algorithms and programs

Lego - We - Do

- Designing computer programs that use a range of inputs and outputs, including controlling physical systems (e.g. using tilt and motion sensors);
- Designing efficient solutions to problems by creating algorithms that use the fewest steps
- recognising that different solutions exist for the same problem.
- Solving problems based on Moonbase creation

Typing proficiency

To use 'Typing Web' to develop the skill of touch typing effectively.

Topic

SPACE

The children will study the key events and development of Space exploration. This unit of work is closely linked to our learning within science and literacy.

- Understand key terms associated with space
- Know the names and key differences between the planets of our Solar System
- Understand the historical context of the Space Race in relation to the Cold War
- Understand key terms associated with space exploration
- Understand the key events of the Space Race between the USA and USSR from 1957-1975
- Know the key events of the history of space exploration and place on a timeline
- Know about the key figures associated with the Space Race
- Understand the significance of key events of unmanned space exploration between 1971 - present day
- Know about key British figures associated with space exploration
- Understand how technology helps us learn about space?
- Know about the development of space exploration around the world (China, India, Japan, ESA)

Science

Space

The children will learn about the shapes and relative movements of the Sun, Moon, Earth and other planets in the solar system. We will be able to explain the apparent movement of the sun across the sky in terms of the Earth's rotation and that this results in day and night.

Forces

- The children will be able to explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Investigate and identify the effects of air resistance, water resistance and friction, that act between moving surfaces

The children will also continue to develop their Working Scientifically skills

Games

Various ball skills related to the following invasion games:

- Revision and extension of basic skills used in football, netball and hockey
- Attacking and defending strategies

PE

Gymnastics

We will be focusing on learning and practising various skills including;

- to perform actions, body shapes and balances accurately and consistently
- to create sequences that meet set conditions
- to chose shapes, balances and linking movements that they can include in a sequence
- to adapt their sequences to new situations
- to apply their own compositional ideas to the sequences they create
- to perform counterbalances and incorporate them into their sequences
- to choose and apply basic compositional ideas to the sequences they create
- to perform movements in canon and unison and incorporate them into their sequences
- to use changes in speed, level and direction in their work and apply their own compositional ideas to the sequences they create

Art

This term the children will be learning about the POP ART movement.

Children will

- Know key facts about the artist Andy Warhol

RE

Islam

Through discussions, reading of stories, drama and research the children will develop an understanding of '**What Muslims believe**'.

They will also investigate '**The Five Pillars of Islam**' and understanding will be

Design Technology

Space Buggies

The children will use their teamwork skills to design and produce an electrically powered space buggy that moves reliably and quickly across rocky terrain!

<ul style="list-style-type: none"> ● Be able to answer questions about 32 Campbell's Soup Cans by Andy Warhol ● Recognise other artists from this period their artwork - Bridget Riley, Frank Stella, Keith Haring and Banksy (Street Art) <p>The children will create a Whole Class installation based on 32 Campbell's Soup Cans by Andy Warhol.</p> <p>The children will also create their own digital art based on the style of Andy Warhol.</p>	<p>developed through the reading of traditional stories and discussions about festivals and culture.</p> <p><u>Easter</u> How do Christians know about the Easter story?</p>	<p style="text-align: center;"><u>PSHE</u></p> <ul style="list-style-type: none"> ● Belonging to a community ● Media literacy and Digital resilience ● Money and Work
<p><u>Music</u></p> <p>Throughout the year the children will be part of a termly rotation that will include;</p> <ul style="list-style-type: none"> ● guitar tuition (Surrey Arts), ● learning how to play the Glockenspiels ● using Charanga.com to explore jazz music and voice <p>This term 5B & 5M - guitar tuition (Surrey Arts), 5T & 5C - learning how to play the Glockenspiels 5F & 5G - using Charanga.com to explore jazz music and voice</p>	<p><u>French</u></p> <ul style="list-style-type: none"> ● Asking for food ● Making a sandwich ● Opinions about food ● Healthy v unhealthy ● Places in the town ● Giving and asking for directions ● Saying where you're going ● Telling the time ● Easter traditions 	