#### Cleves School Curriculum Map Year 5 – Spring Term 2022-23 SPACE

#### <u>Maths</u>

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

- Multiplication and Division 2 weeks wb 4/1
- 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 - 4 weeks wb 23/1

- 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 1/2, 1/4, 1/5, 2/5, 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 - 3 weeks wb 20/2

- 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 1/2, 1/4, 1/5, 2/5, 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 Shape (Angles and Polygons) - 3 weeks wb 13/3

- 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 ½ 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

#### Literacy

Rollercoaster Poetry - Forms of poetry; figurative language; poetic devices

Firework Maker's Daughter - An adventure based on the book by Phillip Pullman

Report (Video Voice over) - Information and human interest from the Apollo 11 Moon Landing Expedition

The Lost Thing - An science fiction narrative inspired by the book by Shaun Tan

Balanced Argument - Learning to put forward arguments for and against a statement such as 'Space Exploration is a waste of money'

## **Computing**

### **Digital Citizenship**

Using We are Internet Legends

- Use technology safely, respectfully and responsibly
- Enhance 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.

### Science

#### Earth and Space

- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of the Moon relative to the Earth
- Describe the Sun, Earth and Moon as approximately spherical bodies
- Use the idea of Earth's rotation to explain day and night
- To understand the contribution of scientists: Ptolemy, Copernicus, Galileo Galilei, Charlotte Herschel, Maggie Aderin-Pocock

### **Forces - Gravity**

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- To understand the contribution of scientists: Aristotle, Galileo Galilei, Newton, Einstein

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### **All Living Things - Reproduction**

- Describe the changes as humans develop from birth to old age human life cycle
- Puberty and conception (in conjunction with PSHE)

# <u>Space</u>

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 and key events of the Space Race between the USA and USSR from 1957-1975
- Know about the key figures associated with the Space Race
- Understand key terms associated with space exploration
- Understand the significance of key events of manned and unmanned space exploration between 1971 present day
- Know about key British figures associated with space exploration
- Understand how technology helps us learn about space
- Understand how the surface of Mars has been studied
- Understand the challenges of colonising Mars and ways to overcome them

Games and PE/Dance	Art	PSHE
<ul> <li>Gymnastics</li> <li>Focus on learning and practising accuracy and consistency with: <ul> <li>actions, body shapes and balances and counterbalances</li> <li>choosing shapes, balances and linking movements within a sequence</li> <li>creating and adapting sequences of movements, applying their own compositional ideas</li> <li>performing movements in canon and unison</li> <li>using changes in speed, level and direction</li> </ul> </li> <li>Lacrosse</li> <li>Focus on learning and practising accurate: <ul> <li>holding of the lacrosse stick</li> <li>sending and receiving the ball</li> <li>passing and collecting the ball</li> <li>throwing the ball towards a target</li> <li>throwing and receiving the ball</li> </ul> </li> <li>This unit also focuses on performing in a team environment - working together on a common goal</li> </ul>	<ul> <li>Pop Art Study of the Pop Art movement including the works of Andy Warhol, Keith Haring and others. <ul> <li>Using digital tools to create art</li> <li>Create a whole class installation inspired by Warhol's 32 Campbell Soup Cans</li> <li>Use various media to create works inspired by Pop Art artists. </li> <li>Design Technology Space Buggies <ul> <li>Design products that are innovative and appeal to individuals or groups.</li> <li>Create a prototype and design more complex mechanical systems in products.</li> <li>Select the most appropriate way to join or secure materials within a design. <li>Evaluate existing products in relation to their purpose and audience.</li> <li>Collect feedback from others to find out how to improve a product.</li> </li></ul></li></ul></li></ul>	Relationships         • Families and friendships         • Safe relationships         • Respecting ourselves and others         • Relationship and Sex Education (RSE)         Rights and Responsibilities – UNICEF.         Form a Class Charter linked to Rights and         Responsibilities.         Anti - Bullying Week         RE         Islam         • Knowand understand the Important beliefs and values of Muslims         • The importance of prayer, the Mosque, the Qu'ran, Pilgrimage and Ramadan to Muslims.         Easter         • Comparing various versions of the Easter story found in the different Gospels

<ul> <li>Music</li> <li>Throughout the year the children will be part of a termly rotation that will include;</li> <li>Trumpet tuition (Surrey Arts),</li> <li>learning how to play the Glockenspiels</li> <li>using Charanga.com to explore jazz music and voice</li> </ul>	<ul> <li>French</li> <li>Asking for food</li> <li>Making a sandwich</li> <li>Opinions about food</li> <li>Healthy v unhealthy</li> <li>Places in the town</li> <li>Giving and asking for directions</li> </ul>
This term:	<ul><li>Saying where you're going</li><li>Telling the time</li></ul>
5N & 5M - trumpet tuition (Surrey Arts),	Easter traditions
5K & 5C - learning how to play the Glockenspiels	
5F & 5G - using Charanga.com to explore jazz music and voice	