Spring Term
Class 4

Enquiry Question: Does it take bravery to become an inventor?

Key concepts

- **Bravery**
- **Overcoming obstacles**
- **Curiosity**
- **Determination**

Curriculum

Welcome to an exciting and question-rich spring term. Through our project question, we aim to explore in more depth, many elements of the wider curriculum. The question will also seek to help children think about challenges and failures, and introduce a more positive mindset to tasks they might face in school and in the real world

Literacy

- Children will plan their writing by identifying the audience, noting and developing initial ideas and consider how authors have developed characters and settings
- Draft and write by selecting appropriate grammar and vocabulary, using a wide range of device, describing settings, characters and atmosphere, and summarising longer passages
- Evaluate and edit by assessing the effectiveness of their own and others' writing, proposing changes to vocabulary, grammar and punctuation,
- Proofread for spelling and punctuation errors

Term 1

- Fictional Piece 1: story writing based on Wallace and Gromit Autochef video
- Non-fictional Piece 2: instructional - making medicine and potions

Term 2

- Fictional Piece 3: creative letters 'The Day My Crayons Quit.'
- Non – fiction piece 4: Poetry Study –

Maths

- Compare and order fractions whose denominators are multiples of the same number
- Compare and order fractions, including fractions > 1
- Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths
- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number
- Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- Multiply simple pairs of proper fractions, writing the answer in its simplest form
- Divide proper fractions by whole numbers
- Read and write decimal numbers as fractions
- Associate a fraction with division and calculate decimal fraction equivalents
- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
- Read, write, order and compare numbers with up to three decimal places
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Identify the value of each digit in numbers given to 3 decimal places and multiply numbers by 10, 100 and 1,000 giving answers up to 3 decimal places
- Round decimals with two decimal places to the nearest whole number and to one decimal place
- Solve problems which require answers to be rounded to specified degrees of accuracy
- Solve problems involving number up to three decimal places
- Multiply one-digit numbers with up to 2 decimal places by whole numbers
- Use written division methods in cases where the answer has up to 2 decimal places
- Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- Solve problems which require knowing percentage and decimal equivalents of half, quarter, eighths etc and those fractions with a denominator of a multiple of 10 or 25
- Solve problems involving the calculation of percentages

Science

- Recognise that light appears to travel in straight lines
- Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them
- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object

Other curriculum areas

- Geography:
  - Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
  - Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features, and land-use patterns; and understand how some of these aspects have changed over time
- History:
  - A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066 For example: a significant turning point in British history – Industrial revolution
  - Bronze Age religion, technology and travel, for example, Stonehenge
  - Iron Age hill forts: tribal kingdoms, farming, art and culture
- Art and Design
  - J.M.W.Turner use of light - watercolour
  - Light/torch artwork using shadows – work of Vincent Bal
- Music (Charanga Scheme)
  - Improvise and compose music for a range of purposes using the interrelated dimensions of music
  - Develop an understanding of the history of music
- Computing
  - Design, write and debug programs that accomplish specific goals, including controlling or

Intended Outcome

The learning this term aims to open the children's eyes to different possibilities and alternative mindsets – looking at a variety of successes (and failures). The question and themes will lead children to think about where our modern world really took shape with the harnessing of steam power, and investigate various elements in both art and science – paying particular attention to light and

Important Diary dates

- Inset day Friday 10th Feb
- Half term week of 13th Feb (return Monday 20th Feb)

Class novels:

- Weird Little Robots – Carolyn Crimi
- Escape from Mr Limoncello's Library – Chris Grabenstein

This overview shows the intended learning, which may change due to pupil interests and questions.