

# Inventors and Industry

## Year 6

### Autumn Term



## Key Area of Learning – History & Geography

### Geography

The children will develop their knowledge of Higham and recognise how it has changed since Victorian times by studying a range of maps and aerial photographs, and by engaging in practical fieldwork. Children will build their confidence using atlases and Ordnance Survey maps to locate local landmarks and plot a route around Higham.

### History

Children will build upon their knowledge of British history through an in depth study of the Victorian era with a focus on Higham and its most famous resident – Charles Dickens. They will describe the ways of life for different classes of society from the Royal family to life in the workhouses. They will know how Britain changed throughout Queen Victoria's reign and will be able to explain the industrial revolution and its impact on the UK.

### English

We will advance our focus on grammar in the unit, "The Place Value of Punctuation and Grammar." Pupils will delve into abstract, common, proper, collective, and partitive nouns, while expanding their understanding of verbs to include being verbs, regular and irregular action verbs, phrasal verbs, and gerunds. Pupils will build on their sentence-writing skills by creating more complex structures, using coordinating and subordinating conjunctions to form compound and complex sentences. This will enhance their ability to vary sentence types and develop more sophisticated and fluent writing. We will explore the key features of non-chronological reports and apply what we've learned by writing our own, incorporating the punctuation, grammar, and structural features taught.

### Mathematics

In Maths we will focus on:

- Place Value including reading, writing, ordering and comparing numbers to 10 000 000. Round numbers accurately and use negative numbers in context.
- Four operations. Use BODMAS to solve calculations. Use formal written methods including long multiplication and long division with remainders.
- Fractions: Use common factors to simplify fractions. Add, subtract, multiply and divide fractions with different denominators and mixed numbers.
- Measurement: Use, read, write and convert between standard and non-standard units of measure.

### Science

**Light.** We will learn about sources of light, how light travels, the law of reflection, light and sight, functions of different parts of the eye.

**Electricity.** We will draw circuit diagrams using recognisable symbols. We will investigate the effects of changing different components in a circuit including voltage.

### Art

**Printing.** We will learn about William Morris, who he was and how he was important. We will look at his textile and wallpaper designs and will use our observation skills to sketch natural objects. We will design our own printing block using a soft polymer lino print and test using a repeating pattern. We will colour mix through printing and create prints using multiple colour overlays.

### DT

#### Electrical systems: Steady hand game

Pupils will be able to explain what is meant by 'form' (the shape of a product) and 'function' (how a product works) and state what they like or dislike about an existing children's toy and why. They will identify the components of a steady hand game and design a steady hand game of their own according to their design criteria, using different perspective drawings. They will create a secure base for their game and will make and test a functioning circuit and assemble it within a case.

### Computing

**Communication and collaboration** We will explore how data is transferred by working collaboratively online.

**Sensing movement** We will design and code a project that captures inputs from a physical device (micro:bit).

**Online Safety** We will focus on the following strands: managing online information; online bullying; online relationships.

### PSHE

**Being me in My World.** We will explain how my choices impact the wider world. Empathise with other people in the local and wider community and think about how this changes my actions.

**Celebrating Difference** Explain ways in which difference can be a source of conflict or a cause for celebration. Show empathy with people in situations where their difference is a source of conflict or a cause for celebration.

### Music

**Hey Mr Miller** – This unit allows children to explore rhythm work, creating and improvising off-beat (syncopated) rhythm patterns and melodies, and develop a polished group performance.

### PE

**Hockey.** Pupils will improve their defending and attacking skills playing even-sided games. They will start to show control and fluency in dribbling, sending and receiving a ball in a small game situation and under some pressure. Pupils will comment on their own and other's performances and suggest ways to improve.

**Gymnastics.** Pupils use their knowledge of compositional principles eg. how to use variations in level, direction and pathway, how to combine and link actions, how to relate to a partner and apparatus, when developing sequences.

### RE

In RE we will explore the following key questions:

- Christians and how to live: What would Jesus do? (Gospel)
- Why do Christians believe that Jesus was the Messiah? (Incarnation)

### French

Recap learning from year 5 linking from the topic 'What is the date?'

**At School** Pupils will learn the nouns and determiners/definite articles for ten school subjects in French. Pupils will talk about the subjects they like and dislike at school (along with a justification) and at what time and on which day they study various subjects.

