**WHOLE SCHOOL TOPIC - We are technologists!**

**TOPIC OVERVIEW**

You’re an engineer, a scientist, a maker of men (iron men, of course).

Explore the scientific world of forces and magnetism, metals and materials. Expand your mind as you test and trial, build and move.

Which force is at play as you slide down a slide or swing on a swing?

Can you explain why magnets repel and attract?

Can you make a penny look shiny and new or build a steel band from pots and pans?

Then, meet Hogarth the Iron Man’s companion. The Iron Man wants a friend. Can you build him one? You must make him strong, sturdy and ready to rumble.

If you were a metal, which one would you be? Gold, a shimmering, precious and costly mineral? Or steel, that strong and useful alloy? Maybe you’re iron, malleable and easy to shape, but ready to rust. Maybe you’re not a metal at all, but a force to be reckoned with.

**VALUES AND PSHE**

**This term’s Values are:**

|  |
| --- |
| Co-operation |
| Peace |

**We will also be learning about:**

* Relationships
* Online presence/ safety
* Sustainability

**Autumn term 2 – 2020**

**Torak Class**

**ENGLISH**

***Writing***

Story writing including the development of characters

Letter writing

***Texts***

* The Iron Man by Ted Hughes

MEMORY BOX

**FRENCH**

***At the end of the Autumn term 2, we will be able to understand, speak and write some basic vocabulary related to “Getting to know each other”***

**MATHS**

Place value

Adding and subtraction

Multiplication

Division

WE ARE TECHNOLOGISTS!

BOX

**COMPUTING**

***This term we will be developing our word processing skills. At the end of the Autumn term 2, we will be able to:***

* Use undo and redo.
* Make text bold, italic or underline.
* Select text in different ways.
* Change case.
* Align text
* Select single words.
* Cut, copy and paste text.
* Format the font.
* Insert images.
* Copy a screenshot into another application.
* Use a secure password.
* Use <ctrl> keyboard shortcuts.

**SCIENCE**

***Magnets and Electricity***

***At the end of the Autumn term 2, we will be able to:***

* observe how magnets attract or repel each other and attract some materials and not others.
* compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
* compare and group materials based on their magnetic properties
* set up and carry out some simple, comparative and fair tests, making predictions for what might happen.
* begin to independently plan, set up and carry out a range of comparative and fair tests, making predictions and following a method accurately
* understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors).
* incorporate a simple series circuit into a model
* understand how an electric circuit can be used in a model, such as a lighthouse and that it can be controlled using a switch.

**MUSIC**

***Mama Mia***

***At the end of the Autumn term 2, we will be able to:***

* listen and appraise the mamma Mia song and other Abba songs and how the Abba sound was made. What was the technbology?
* undertake musical activities to listen - learn and/or build on our knowledge and understanding about the interrelated dimensions of music through:
  + a. Warm Up Games (including vocal warm ups)
  + b. Flexible Games (optional extension work)
  + c. Learn to Sing the Song
  + d. Play Instruments with the Song
  + e. Improvise with the Song (and optional extension activities)
  + f. Compose with the Song
* perform our learning as we progress through the unit of work

**ART AND DESIGN**

***At the end of the Autumn term 2, we will be able to*** ***improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay) by:***

* using and combing a range of visual elements in artwork
* developing techniques through experimentation to create different types of art

***Learning opportunities will include:***

* Embossing foil
* Sketching wheels and cogs based on Andy Warhol design
* Create an Iron Man sculpture based on the work of Anthony Gormley
* Design and Create a Space Bat Angel Dragon

**DESIGN AND TECHNOLOGY**

***At the end of the Autumn term 2, we will be able to:***

* generate, develop, model and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
* develop design criteria to inform a design.
* use annotated sketches and exploded diagrams to test and communicate their ideas
* plan which materials will be needed for a task and explain why
* choose from a range of materials, showing an understanding of their different characteristics
* your models:
* understand what a recycled metal object is and use it in my design and model
* build a model that can communicate with the Iron Man by lighting up, speaking or buzzing, move around, just like he can, that is magnetic and looks look absolutely magnificent
* identify what has worked well and what aspects of our products that could be improved, acting on their own suggestions and those of others when making improvements

**RELIGIOUS EDUCATION**

***In the Autumn term 2 our focus will be Christianity.***

**We will be focussing on the key question:**

**What can we learn about the bible?**