

Lead subjects:

Design and Technology
Science
Music

Science Key Vocabulary:

Attract – exert a force on an object which is directed towards the source of the force.

Repel – magnetic poles forced away from themselves

Magnet – a piece of iron which attracts other iron-containing objects

Accelerate – begin to move more quickly

Decelerate – reduce in speed

Poles – each of the two opposite points on the surface of a magnet

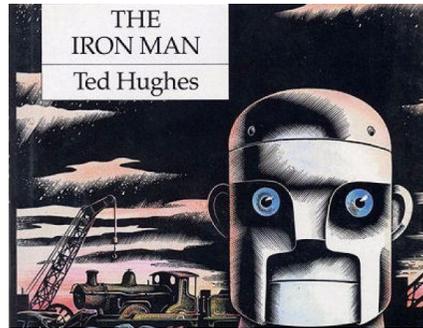
Incline – a sloped surface

Science: Forces and Magnets

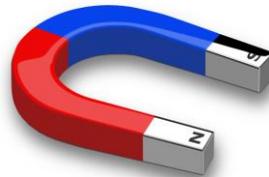
- **How can we change movement?** – working scientifically to compare how things move on different surfaces
- **What materials are attracted to magnets?** - notice that magnetic forces can act as a distance.
- **Is every object magnetic?** Group materials on the basis of whether they are attracted to a magnet
- **How can we make objects move?**
- **Do different surfaces makes a difference?**
- **What effect do magnetic poles have?** – observe how magnets attract or repel each other

English:

- **The Iron Man by Ted Hughes**
- **Recount: Diaries**



The Iron Man



Visitors/Experiences

TBC

DT Key Vocabulary

Mechanical – operated by a machine

Lever – a rigid bar resting on a pivot

Linkage – a system of links

Evaluate – assessing the value of an idea

Purpose – the reason for which something is done

Strengthen – to make something stronger

Mechanism – a system of parts working together in a machine

Pivot – the central point which a mechanism turns

DT: Mechanical Systems

A poster with moving parts to advertise The Iron Man

- **What products already exist?** – investigate existing products, considering user requirements.
- **Which materials/skills will you use?** -consider which materials will ensure the product is robust.
- **What do you need to consider in your design?** – use sketches and vocabulary to convey ideas
- **How will you decide on a final plan?** – model ideas to decide which one to use
- **Can we use our knowledge to build a product?** – include levers and linkages in a mechanical system
- **Has your product met the design criteria?** – evaluate the product for how it could be improved.

Music: Iron Man

The children will study the music of Marvel Studios – home to the Iron Man movie franchise. This will lead them to investigate the impact of music on film trailers, before they compose their own music or special effects to a trailer of their choice.

- **How are musical elements used by Marvel Studios?** - *listen with attention to a range of high quality live and recorded music*
- **How does music in different films make you feel and why?** - *explore and explain their own ideas and feelings about music, using expressive language and musical vocabulary*
- **How effective are trailers/movies without any music or sounds?** - *experience how the combined musical elements of pitch, duration, dynamics, tempo, timbre, texture and silence can be organised within musical structures to communicate different moods and effects*
- **What happens on screen that needs to be considered when performing?** - *explore, choose, combine and organise musical ideas within musical structures*
- **Rehearse composition to work towards a confident and accurate performance for their trailer** - *play tuned and untuned instruments with control and rhythmic accuracy*
- **Present trailer to the class for evaluation** - *practise, rehearse and present performances with an awareness of the audience*

Music Key Vocabulary

Trailer – a series of extracts from a film or broadcast, used for advance publicity

Impact – a marked effect or influence.

Synthesizer – an electronic musical instrument, typically operated by a keyboard, producing a wide variety of sounds.

Complement – something that contributes extra features to something else in such a way that it improves or emphasises its quality.

Contrast – the state of being strikingly different from something

Record – the action/process of recording sound or a performance for broadcast

Conduct – direct the performance of a piece of music

Intention – the aim or plan for how a piece of music should be played and make the listener feel

Percussion – musical instruments played by striking with the hand, with a stick/beater or by shaking

Synchronise – to occur or operate at the same time or rate as another

Geography

Locational Knowledge

Identify the position and significance of:

- Latitude and longitude
- The Equator
- The Northern Hemisphere and the Southern Hemisphere
- The Tropics of Cancer and Capricorn
- The Arctic and Antarctic circle.

Digimap skills

- Use the zoom function to locate and explore places at different scales
- Use maps and aerial views to talk about given examples
- Use atlases, maps and globes

History

A significant turning point in British history – **the first railways**

- Developing historically valid questions, constructing informed responses and from a range of sources.
- The earliest locomotives
- Steam locomotives – link to forces unit
- The growth of Britain's railways
- Impact of railways
- Locomotive technology

Computing: Computer Science - Programming

- **What is an input/output?** – work with various forms of input and output, using logical reasoning to predict outputs.
- **How can we implement algorithms to achieve specific goals?** – understand what the term sequencing means and know how to use it in programs
- **How can we detect and correct errors in programs?** - know what debugging is and how it can be used during evaluation.

Spanish: Festivals

- **Easter**
 - **Cinco de Mayo**
 - **Dia de los Muertos**
- Explore the patterns and sounds of language through songs and rhymes
- Speak in sentences, using familiar vocabulary and phrases
- Appreciate stories, songs, poems and rhymes in the language.

Maths

- Number and place value
- Mental addition and subtraction
- Problem solving, reasoning and algebra
- Measurement
- Mental multiplication and division
- Fractions, ratio and proportion

RE: Exploring Easter as a story of betrayal and trust

- **What is trust?** – link trust and responsibility, qualities of trustworthiness
- **Why is trust important?** – link to how Jesus' disciples showed their trust in him
- **Why did Judas betray Jesus?** – critically analyse the Easter story, highlighting times of trust and betrayal.
- **How does it feel to be betrayed?**
- **What is forgiveness?** – understand that after betrayal comes forgiveness, explore how we can express forgiveness
- **Have you experienced being forgiven?**