Year 6 Foundation Subject Overview Spring 1 2025

All subjects will be taught discretely, making links to other areas of learning where appropriate. These links will be to prior learning and to other subject areas to give knowledge meaning and context.

Computing
Programming – find out what variables are and relate them to real-world examples of values that can be set and changed. Use them in their own game which they design and create.

RE
We will be exploring what Christians believe about the old and new covenants.

PSHE
Our work this half term will focus on 'dreams and goals.'

Art
We are delighted to welcome Paul (aka Fabric Lenny) back into school this term to lead our next art project. We will be exploring how identify can be represented in art and creating multi-layered portraits using a range of media.

Prior Learning:
Don't forget to ask your children about what they can remember about what they have learned in previous half terms.
For example – ask them to make a quiz using the knowledge mats we send home, design a poster about a unit of work they have covered before.

French
We will learn about ordering food and how to use dates, times and the calendar. We will practise reading, writing and speaking fluently in French.

PE
In PE we will be developing our skills within gymnastics and tag rugby.

Music
We will be working with Nick, a musician from the Parallel Rhythms project this half term. We will be learning to play the Ukulele and develop our composition and performance skills.

Science
We will be looking at Light, how it travels, refraction and shadows.

History
We will be looking at local history linked to canals and railways and how they were built and used to improve transport links for the textile industry.

How can you help?
- Ask your child about their learning in school.
- Be aware of what your child is accessing online.

Local History - Year 6

Key Vocabulary

Waterway	any navigable body of water
Canal	a long, man-made strip of waterway used for irrigation or boat access to a bigger body of water
River	a ribbon-like body of water that flows downhill from the force of gravity
Freight	goods transported in bulk by the canal boats
Navigators	name given to the men who built the canals. Also known as 'navvies'
Commercial canals	used to make a profit by transporting freight
Barrow runs	A plank stretching from the bottom to the top of a cutting. Men pushed barrows filled with excavated earth up them
Embankment	a long artificial mound of earth and stone, built to hold back water
Aqueduct	a bridge like structure that carries a canal across a valley or over a river.
Locks	stretch of water enclosed by gates, one at each end, built into a canal for the purpose of raising or lowering a boat from one water level to another

Sticky Knowledge

A canal is a waterway made by humans. They are usually narrower and more shallow than rivers.

From the 1700s to the 1900s canals were used for freight. Now they are used for leisure.

Canals were built by people called navvies. They dug out channels in the earth and diverted water from other places to fill the canals.

Railways could transport freight quicker than canals. Railways were also cheaper to build than canals. The railways became the main mode of transport for heavy goods.

Canals are made for barges to travel on them. They have sections called locks to enable barges to move up and down hills. The locks have special gates to hold or release the water.

What should I already know?

Local textile industry – children didn't go to school they worked in the mills.

Titus Salt built Salts Mill in Bradford and created villages for workers to improve quality of life.

Local mining – coal seam laid under most of the Spen Valley area. .

Prospect Pit was the mine in Roberttown, Strawberry Bank/Liversedge Colliery (Headlands)

Who the Luddites were and the key places/ areas they were from and the cause they were fighting for.

Key People

George Stephenson - 'Father of the railways' was an engineer who invented the 'Rocket' most famous early locomotive. In 1821, Stephenson was appointed engineer for the construction of the Stockton and Darlington railway. It opened in 1825 and was the first public railway. The following year Stephenson was made engineer for the Liverpool to Manchester Railway.

Isambard Kingdom Brunel – was an *engineer of the 19th century, responsible for the design of tunnels, bridges, railway lines and ships.*

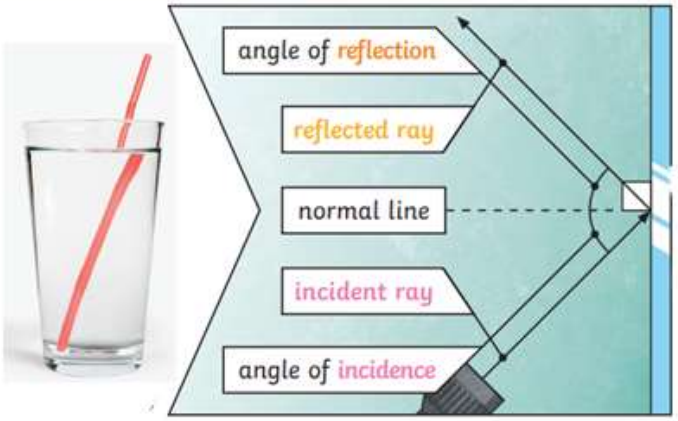
Interesting Places

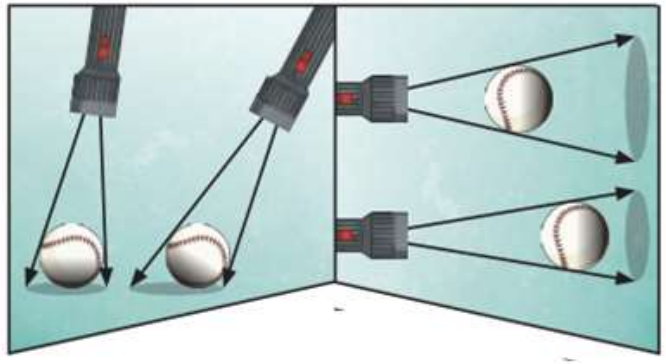
- Standedge Tunnel
- Calder and Hebble Navigation
- Huddersfield Broad Canal
- Leeds Liverpool Canal

Light - Year 6

Key Vocabulary

Light	A form of energy that travels in a wave from a source.
Light source	An object that makes its own light
Reflection	When light bounces off a surface, changing the direction of a ray of light.
Refraction	When light bends as it passes from one medium to another. E.g. Light bends when it moves from air into water.
Periscope	A device which uses mirrors to see things which are out of sight.
Visible spectrum	Light that is visible to the human eye. It is made up of a colour spectrum.
Prism	A solid 3D shape with flat sides which separates out visible light into all the colours of the spectrum.
Shadow	An area of darkness where light has been blocked.





Sticky Knowledge

- Light appears to travel in straight lines.
- Objects are seen because they give out or reflect light into the eye.
- We see things because light travels from light sources into our eyes or from light sources to objects then our eyes.
- Shadows have the same shape as the objects that cast them.

What should I already know?

- Light is needed in order to see things and that dark is the absence of light (Y3)
- Light is reflected from surfaces (Y3)
- Light from the sun can be dangerous and that there are ways to protect their eyes (Y3)
- Shadows are formed when the light from a source is blocked by an opaque object (Y3)

Famous Scientists/People

Isaac Newton shone a **light** through a **transparent** **prism**, separating out **light** into the colours of the rainbow (red, orange, yellow, green, blue, indigo and violet) - the colours of the **spectrum**. All the colours together merge and make visible **light**.

Interesting Websites

SCIENCE MUSEUM GROUP

Explorify