Prior Knowledge

Think of simple ideas for a product.
How to plan, design, make and evaluate.
Glue, sticky tape and a glue gun can be used for joining materials.
How to make structures more stable.

Technical Knowledge

Measure, cut and shape materials/components to build the Iron Age house structure with some accuracy.

Assemble, join and combine materials and components with some accuracy, using a range of methods -e.g. weaving and layering.

Conical roof is made by drawing a circle and then cutting it out. Then draw a line from the middle to the bottom. After cut on the line, make a cone shape and apply glue.

What will I be able to do after I make my Iron Age Village.

Design : Use what I have found out about Iron Age houses to design a structure of my own. Label and annotate my design in detail, clearly identifying materials needed and how to make the structure stable.

Make: Use the correct joining materials to make my product long lasting. Use the best material and joining method to make a stable structure.

Evaluate: Say which material was the best to use and why. Explain how the structure was/was not stable enough.
Explain how my Iron Age house could be improved.

Iron Age Village
Year 3

Key Vocabulary	Definition
Annotate	To add notes to work.
Evaluate	To judge how well something has gone.
Layer	A surface covered several times.
Weave	To make something by crossing threads or other long pieces of material over and under each other
Conical roof	A cone-shaped roof that is circular at its base and terminates in a point.
Reinforce	To strengthen.
Stable	Something that is secure so it will not fall down.
Structure	Something built or constructed like a bridge, building or dam.

Image / diagram

Health and Safety

Hold scissors safely: blades closed, hand around the blade, always walk when carrying scissors.

Clean work area before clay dries out.

Hand washing – wash hands properly after using clay to remove any residue.

Key facts

Weather is short term. It is what happens in our atmosphere day to day.

Climate is long term. Climates can be predominantly hot, wet, cold, dry, hot and dry, cold and wet and so on. The climate of a place affects the soil, flora and fauna and impacts human activity.

Biomes are made up of many ecosystems which are adapted to the climate. Biomes include deserts, forests, grasslands, tundra and aquatic environments.

Prior knowledge

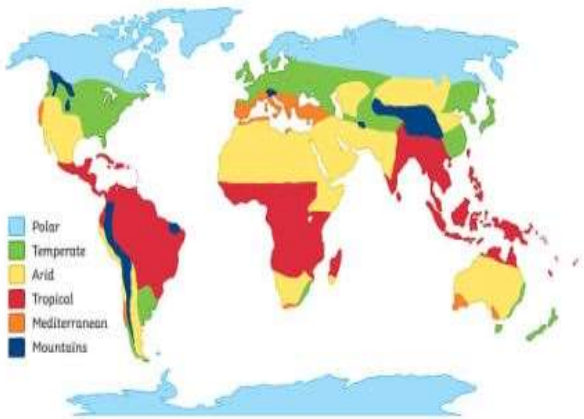
I know the weather changes.
I know that people can predict what the weather will be like.
I know the wind blows in different directions.
The wind gets its name from the direction it blows from.
There are four compass directions.
Our weather changes because the Earth is tilted.

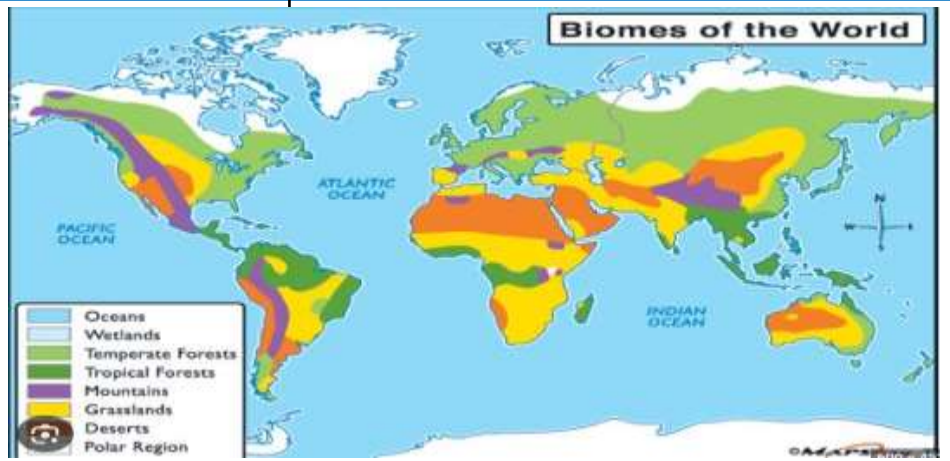
Climate & Weather

Vocabulary	Definition
Weather	What happens in our atmosphere from day to day
Climate	Climate is the average weather pattern of a place over many years.
Biomes	Biomes are regions of the world with similar climate (weather, temperature) animals and plants.
ecosystems	An ecosystem is a geographic area where plants, animals, and other organisms, as well as weather and landscape, work together to form a bubble of life.
Climate change	Climate change describes a change in the typical weather for a region — such as high and low temperatures and amount of rainfall — over a long period of time

Image / diagram

- **Temperate** - Mild temperatures and moderate rainfall.
- **Tropical** - Warm temperatures and lots of rain.
- **Arid** - Hot temperatures and little rain.
- **Mountainous** - Cold temperatures and precipitation often falling as snow.
- **Polar** - Very cold temperatures and precipitation falls as snow.
- **Mediterranean** - Dry summers and mild, wet winters.

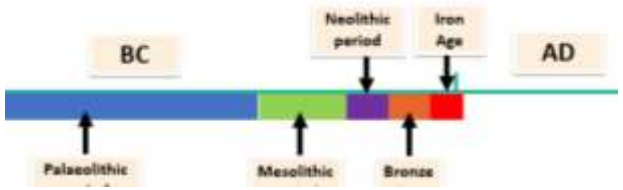




Bronze and Iron AgeY3

Key Facts

- Bronze was imported mainly, but was heavy
- Iron ore was a natural mineral, lighter when melted and harder wearing than bronze, so became more useful
- Much evidence from this period has decomposed as it was made from natural materials. We have to base our knowledge on what is left – mainly metal



Prior Knowledge

- Children have just learned about the stone age and where this fits in history. They have just started to explore the concept of archaeology and using primary sources to gain information. They have used pictures of artefacts to learn about life. Children know that the predominant work of early Britons is farming.

Key Vocabulary	Definition
Bronze	A metal that is made by smelting copper and tin together
Chariot	Open wooden vehicle power by horses to transport warriors in battle
Fort	A place of protection – good defensively, so normally on a hill or near a river
Hoard	A store of objects – normally valuable – kept somewhere secret
Iron	A metal made by smelting iron ore
reconstruction	Not an original, but made using archaeological evidence to be exactly the same
Thatch	Roof made of straw
Wattle and daub	Early plaster and wall covering – used to create houses. Made of straw, dung, mud and grasses.
woad	Blue coloured dye

Image / diagram

Important People / Places

- Amesbury Archer / Lindow Man – remains found of people who have provided a lot of evidence about these times in history
- Caesar – Roman leader
- Maiden Castle - Dorset

Key Facts

- Forces are pushes and pulls. Pushes moves things away and pulls move things towards an object.
- These forces change the motion of an object.
- Forces can make an object - start moving / speed up
  - slow down / stop
  - change direction
  - change shape
- Forces act in opposite directions to each other.
- When an object moves across a surface, friction acts as an opposite force.
- Some surfaces create more friction than others which means that objects move across them more slowly.

Different surfaces create different amounts of friction. The amount of friction created by an object moving over a surface depends on the roughness of the surface and the object, and the force between them.

- A magnet is a piece of iron or other material that attracts magnetic materials.
- When objects enter the magnetic field, they are attracted or repelled if they are magnetic.
- Opposite poles attract, like poles repel (opposites attract).

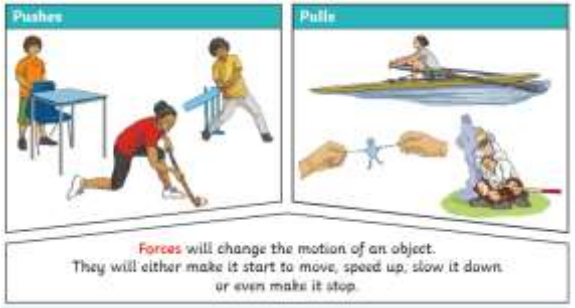
Prior Knowledge?

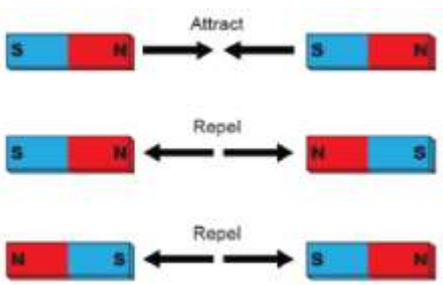
I know how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

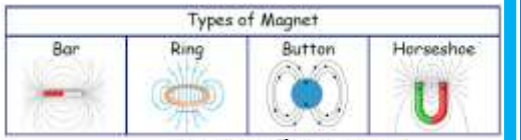
FORCES and MAGNETS

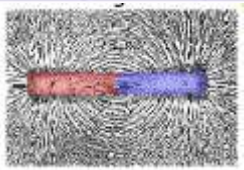
Key Vocabulary	Definition
attract	Attraction is a force that pulls things together (e.g. when north and south poles of magnets are out together).
forces	Pushes and pulls.
friction	A force that acts between two surfaces or objects that are moving, or trying move, across each other.
magnet	An object (iron or another material) which produces a magnetic force that pulls certain materials towards it.
magnetic	Objects which are attracted to a magnet are magnetic (e.g. iron, nickel, cobalt)
magnetic field	The area around a magnet where there is a magnetic force.
poles	North and south poles are found at different ends of a magnet.
repel (repulsion)	Repulsion is a force that oushes objects away (e.g. when a north and north pole are placed together).

Images / diagrams









Objects that are magnetic, are attracted to magnets.

Magnetic Materials					Non-Magnetic Materials				
Iron	Steel	Nickel	Cobalt	Gadolinium	Copper	Gold	Rubber	Wood	Leather

Important People / Places / Events

William Gilbert (1540-1603) was the first to investigate the idea of magnetism systematically using scientific methods. He discovered that the Earth is itself a weak magnet.

Purple Mash Computing Scheme: Knowledge Organiser

Year 3
Touch Typing

Key Learning

- To learn correct finger positioning on the keyboard and understand when to use the left or right hand.
- To learn how to type numbers accurately and to use the shift key for capital letters.
- To practise typing punctuation marks and symbols and build accuracy with simple words.
- To practise typing sentences using capital letters, spaces, and full stops.

Key Resources

2Type

Key Vocabulary

Bottom Keys
The row of letters on a keyboard below the home row.

Home Keys
The middle row of letters on the keyboard where your fingers rest when you are not typing.

Keyboard
A device with a set of keys (buttons) that you press to type letters, numbers, punctuation, and commands into a computer.

Number Row
The horizontal row of number keys (0-9) found at the top of a keyboard.

Posture
The position in which someone holds their body when standing or sitting.

Shift Key
A special key on the keyboard that you hold down while pressing another key to make a capital letter or a symbol.

Space Bar
The long key at the bottom of the keyboard that makes a space between words when typing.

Top Keys
The row of letters on a keyboard above the home row.

Typing
The action or skill of writing something by means of a typewriter or, in this case, a computer.

Purple Mash Computing Scheme: Knowledge Organiser

Year 3
Touch Typing

Key Images

Key Questions

What is touch typing?

Touch typing means typing without looking at the keys. Instead, you use your sense of touch to find the correct letters. You start with fingers on the home row and use the correct fingers for each key. This builds accuracy and speed so you can type more confidently.

Why is posture important when typing?

Good posture keeps your body comfortable and safe while typing. Sitting up straight with both feet flat helps you to avoid aches, see the screen clearly and move your fingers quickly.

What are the home row keys?

The home row keys are the middle row of the keyboard: A, S, D, F, G, H, J, K, L, and ;. They are the starting point for touch typing, helping fingers reach other keys quickly. The F and J keys have small bumps to guide index fingers, making it easier to find the home row and type accurately.

Purple Mash Computing Scheme: Knowledge Organiser

Year 3
Email

Key Learning

- To understand how people communicate with each other.
- To understand and respond to an email.
- To compose and send an email.
- To send an email attachment.
- To learn how to use email safely.
- To explore email simulations.

Key Resources

2Email

Key Vocabulary

Address Book
A place where all contact's email addresses can be found and saved.

Attachment
A file, which could be a piece of work or a picture, that is sent with the email.

Communication
The process of giving, receiving and sharing information. Examples of types of communication methods include: Email, text message, speaking and listening, sending letters.

Compose
Another word for 'write'.

Email
(Electronic Mail) An Internet service that allows people who have an email address to send and receive instant electronic letters.

Email Simulation
A representation of email communication that is not real.

Inbox
The folder where new emails go into when they are received.

Password
A secret word, phrase or combination of letters, numbers and symbols that must be used to gain admission to a site or application such as email.

Personal Information
Identifying information about yourself such as your name, address and telephone number.

Recipient
The person a message is being sent to. In an email, their email address will be found in the 'To' field.

Trusted Contact
A person who you know and trust, making an email from them safe to open.

Purple Mash Computing Scheme: Knowledge Organiser

Year 3
Email

Key Images

Key Questions

What is email?

Email is a method of sending electronic communication from one device to another.

What information can I send in an email?

As well as sending a message, files such as photographs, videos, music and other resources can be attached to the email and sent to the receiver.

What are the advantages of email over written communication such as a posting a letter?

Email is faster, cheaper, and more convenient than posting a letter. It allows instant delivery, easy storage, and quick access anywhere. Emails can include attachments and links, don't require paper, and are environmentally friendly. Unlike letters, there's no need for stamps or waiting for postal delivery.

How can you stay safe over email?

To stay safe over email, avoid opening messages from unknown senders. Don't click suspicious links or download unknown attachments. Never share personal information like passwords. Use strong passwords and keep your email software updated. Report spam or phishing emails to your provider and always tell a trusted adult if you are unsure about anything.