

Geography Knowledge Organiser Walk Like an Egyptian

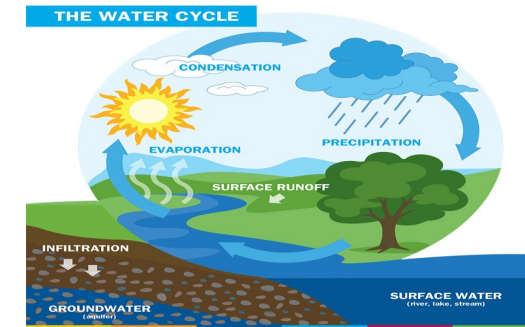
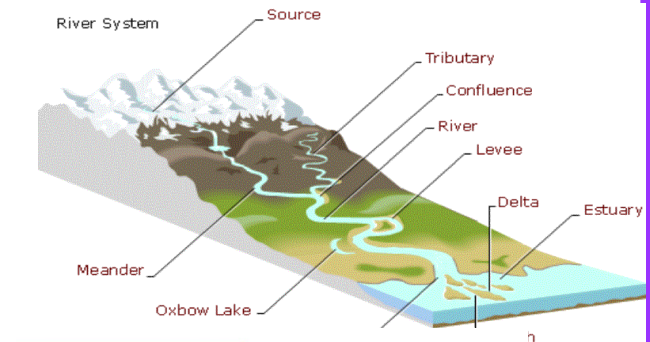
Year 3/4

Our learning

In our geography lessons this term we will be learning about the impact rivers have on society. We will learn about the **location** of Egypt in the world and some of the countries in the continent of Africa. We will learn about the **environment** of a river and the surrounding areas as well as discovering different features of a river and the names of famous rivers. We will think about the impact of a river on a local, national and global **scale**. We will learn all about the water cycle.



Features of a river



Information

A continent is a large area of land made up of other countries.

Egypt is in the continent of Africa.

Rivers flow downhill to another body of water.

Features of a river may include : mouth, tributary, source, oxbow lake, meander, river bed, bank and delta

The Nile Delta is the delta formed in Lower Egypt where the Nile River spreads out and drains into the Mediterranean Sea .

The water cycle is the path that all water follows as it moves around Earth in different states



Vocabulary

Africa - A large continent where Egypt is situated

Condensation - the process by which a gas (water vapour) turns back into a liquid,

Egypt- A country in Northern Africa

Equator - An imaginary line that runs around the centre of the Earth.

Evaporation - Describes the process of a liquid becoming a gas due to being heated

Settlement - An area where people come together to live.

Geography Knowledge Organiser

Raiders and Traders Year 3/4

Our learning

In our geography lessons this term we will be learning about life in Sweden, and how it differs from life in the UK. We will learn about the different **environments** in Sweden and the UK as well as finding out about some unique aspects of Swedish life. We will **locate** places within Sweden as well as discussing it on a global **scale**.

We will **locate** other countries in Northern Europe using a range of maps and atlases. Through our map work will identify Sweden as part of Scandinavia, find the Arctic Circle and pinpoint the lines of latitude and longitude. We will discover the time zones that Sweden and England are in.

Information

Sweden is a country in Northern Europe and is also part of a region known as Scandinavia and is close to Russia.

The United Kingdom and Sweden are located in the northern hemisphere.

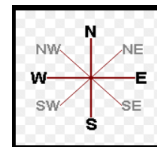
The most northerly part of Sweden lies within the Arctic Circle.

The capital city of Sweden is Stockholm, and other major cities include Gothenburg, Malmö, Uppsala and Helsingborg.

Sweden only has one time zone and is one hour ahead of Greenwich mean time (GMT) our time in the UK.

The most common biome in Sweden is coniferous forest. This used to trade wood with other countries.

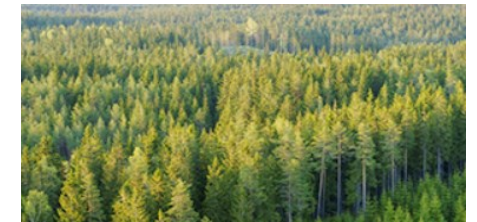
Sweden has many more lakes and forests than England.



United Kingdom



Stockholm—the capital city of Sweden



About 70% of Sweden is covered by forests.

Vocabulary

Arctic Circle—A line of **latitude**, which is an imaginary horizontal line around the Earth. North of this line is the Arctic which is very cold.

Biomes— A biome is a large region with a certain climate and certain types of living things.

Climate zone— areas around the world with specific patterns of weather

Continent—A large, solid area of land. Sweden and England are both in the continent of Europe.

Time zone— An area on Earth that has a specific time that all citizens set their clocks to.

Scandinavia— A part of Northern Europe made up of three countries: Norway, Sweden and Denmark.

Longitude— imaginary lines that are vertical across the earth which help decide time zones.

Geography Knowledge Organiser

Tudor Rose

Year 3/4

Our learning

In our geography lessons this term we will be learning about Michelham Priory in East Sussex and how the **place** has changed over time. We will look at maps of the **location** from today and from the past which show the same area.

We will develop our skills in geography fieldwork during our local study by using a range of maps (including digital mapping). We will become more confident in locating using 4 figure grid references and the 8 points on a compass. We will look at human and physical geographical features of the area and plan a route between two places. We will think about the **distance** between places.

Information

The area around Michelham Priory has changed over time.

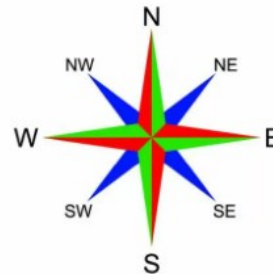
Michelham Priory was a Priory in Tudor times and is now run as an historical tourist attraction.

The River Cuckmere flows by the Priory.

There is a variety of different land uses around Michelham Priory.

Land use in the area includes farm land, urban areas, roads and a tourist attraction (adventure park).

There are a range of topographical features in the area. These include the River Cuckmere, as well as man made (human) features such as Arlington Reservoir, roads and buildings.



A map that uses 4 figure grid references



An oblique aerial photograph showing the area around Michelham Priory today.

Vocab-

4 figure Grid reference—A map reference showing the location of a point on a map using vertical and horizontal lines.

Compass—An instrument using a magnetized pointer which show the direction of magnetic north and bearings from it.

Ordnance Survey—The national mapping agency for Great Britain.

Aerial Photograph— A photo taken from the air , normally looking straight down.

Oblique photograph— A photo from above but not looking straight down, so the camera is held at an angle.

Topography— The physical features of an area of land e.g. mountains, rivers. Manmade features may also be included e.g. roads and reservoirs.

Symbol—A picture to represent a real world feature on a map.

Digital Mapping— Using computers to show and draw maps.

History Knowledge Organiser **Walk Like an Egyptian** Year 3/4

Our learning

In our history unit this term we will be learning about the wonders of Ancient Egypt. We will look at how their civilisation developed as well as finding out that other **civilisations** existed in other parts of the world at the same time.

We will study the lives of some famous Pharaohs and look at what made them powerful **leaders**. We will learn about

Information

The Ancient Egyptian civilisation began in Africa in around 3000 BC

Ancient Egypt was ruled by leaders that were called Pharaohs.

The Ancient Egyptian people built pyramids and other great monuments.

A system of writing called 'hieroglyphics' was invented during Ancient Egyptian times.

People were very religious and believed there was an afterlife which you went to after you died. Bodies were sometimes mummified and buried in tombs with their possessions.

We have learnt a lot about Ancient Egyptian life from the tomb of

Vocabulary

Archaeology - The study of the past by looking for the remains and artefacts left by the people who lived long ago.

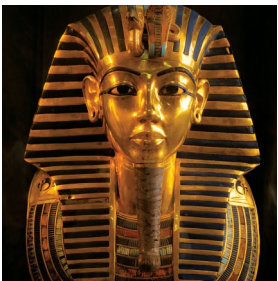
Ancient - From the distant past

Civilization - The society, culture, and way of life of a particular area

Gods - Supernatural beings (male) who are considered divine or sacred

Goddesses - Supernatural beings (female) who are considered divine or sacred

Pharaoh - A monarch in Ancient Egypt



The Death mask of the Pharaoh Tutankhamun, who became a leader when he still a young boy.

Rosetta Stone



Important Dates

2550 BC - The pyramids at Giza were built.

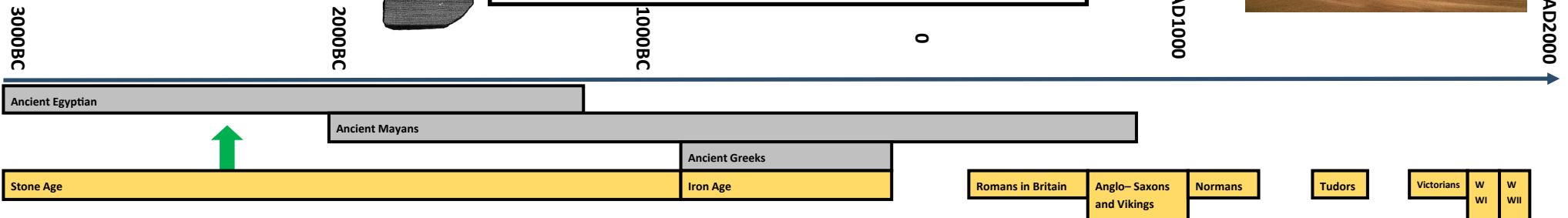
1324 BC - Tutankhamun became Pharaoh at nine years old.

1279 BC - Rameses II became pharaoh.

1799 - The Rosetta stone was found and reveals secrets of hieroglyphics

1922 - Howard Carter discovered the tomb of Tutankhamun.

The pyramids at Giza in Egypt



History Knowledge Organiser

Raiders and Traders

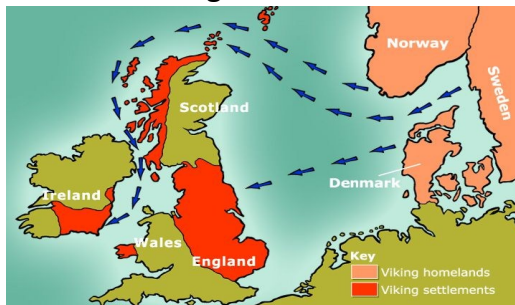
Year 3/4

Our learning

In our History lessons this term we will be learning about the Anglo-Saxon and Viking settlers who came to Britain. We will look at how this period **connected** to other periods of history. We will also study **similarities and differences** between Anglo-Saxon and Viking life.

We will look at what everyday life was like in Anglo-Saxon and Viking villages. We will also look at how they fought each other and lived peacefully at different times until the Norman Conquest in 1066.

Where the Vikings came from



Information

The Romans left Britain to take care of problems in other parts of their empire allowing first the Anglo-Saxons and then the Vikings to settle in Britain.

The Anglo-Saxons travelled from Northern Europe. They wanted new land to farm.

Vikings were pagans and worshipped many gods. The Anglo-Saxons were Christian.

In AD793 the Viking raids began and a monastery at Lindisfarne was attacked for the valuables inside and many monks were killed or enslaved.

After a number of battles, the Anglo-Saxon King Alfred (known as Alfred the Great) eventually made peace with the Vikings and Britain was divided up so that people could live peacefully together.

Vocabulary

Long ship—a long, wooden narrow boat

Longhouse—A type of Viking home

Pagans—A religion where many gods and goddesses were worshipped

Anglo Saxons—People that lived in England from the 5th century until the Norman Conquest

Vikings—Seafaring pirates and traders who came from Scandinavia and settled in Britain.

Settlement—A place where people come to live

Conquer—To take over by force

Monastery—A building where monks lived to worship God

Important Dates

AD410 Romans withdraw from Britain

AD410 Anglo-Saxon invaders arrive and settle in Britain

AD793 Vikings arrive, attacking and capturing Jorvik (York)

AD886 Anglo Saxon King Alfred and the Vikings divide England.

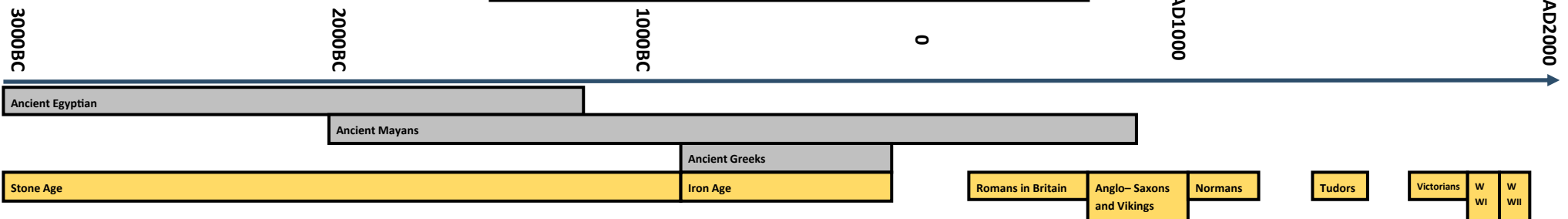
1066 The Normans conquer England. The end of the Anglo-Saxon and Viking era.



King Alfred the Great



Viking Long ship



History Knowledge Organiser

Tudor Rose

Year 3/4

Our learning

In our history lessons this term we will learn about Michelham Priory in Sussex and why it was important in the area. We will discover some of the changes that happened during the Tudor period in Britain and what **caused** them. We will learn about Henry VIII and discover how his **leadership** impacted on lives of people in England, and especially at Michelham Priory

As part of this local history study, we will use a range of skills and sources to help build up a picture of Michelham Priory and explain what life was like at this time.



Henry VIII



Michelham Priory in East Sussex

Information

The Tudor period in England lasted for 118 years. The most famous ruler in that time was King Henry VIII who ruled for 38 years.

Henry VIII was famous for having had 6 different wives during his life.

Henry VIII fell out with the Roman Catholic Church when he wanted to divorce his first wife, and he split away from it to form the Church of England, of which he became the head.

During the dissolution of the monasteries, King Henry VIII took away the land, property and money that the Roman Catholic Church owned. Michelham Priory in Sussex was seized by Henry's men in 1537 and given to Thomas Cromwell.

Henry spent many years at war with other European countries.

Important Dates

1485— The Tudor period began, after Henry Tudor (Henry VII) won the Battle of Bosworth. (It ended in 1603 when Elizabeth I died.)

1509—Henry VIII took to the throne (until his death in 1547).

1534— Henry VIII became head of the Church of England..

Vocabulary

Dissolution— Something being ended e.g. a marriage or a place of worship

Divorce— The legal end of a marriage

Heir—Someone who will inherit the crown after the current King or Queen dies

Monarchy— A form of government where a king or queen is Head of State

Pope— The head of the Roman Catholic Church

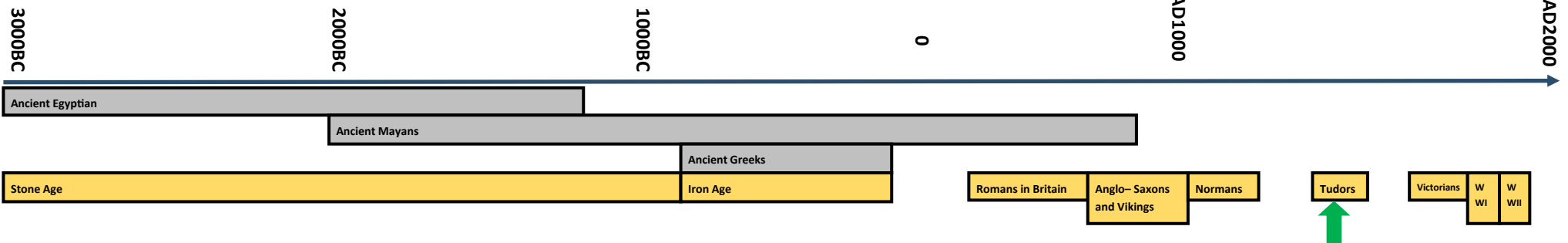
Prior— The head or leader of a priory

Priory— A small monastery of monks, nuns or canons ruled by a Prior or Prioress

Canon— A priest who lived and worked in a priory such as Michelham

Reformation— The act of changing something. In this case the reformation of the Church to remove the Pope's control

Treason— The crime of betraying your country, especially trying to kill or overthrow the King or Queen.



Religious Education Knowledge Organiser (Term 1)

ॐ Year 3/4
Hinduism

What do Hindus believe God is like?

Our learning

In our religious education lessons this term we will be answering the question :

'What do Hindus believe God is like?'

We will answer this by **making sense of the beliefs** that Hindus have in God.

We will **understand the impact** of the ways in which Hindus worship.

We will **make connections** between the Hindu idea of everyone having a 'spark' of God in them and ideas about the value of people in the world today.

Information

Hindus use the Aum symbol to represent Brahman (God).

Hindu deities Brahma (creator), Vishnu (preserver) and Shiva (destroyer) are different ways that Hindus describe and understand God. Hindus often choose a deity to worship in a shrine at their home.

In the story of Svetaketu, Brahman is the ultimate being, whose spirit is in everything but cannot be seen. Some Hindus believe that all living beings possess a spark of Brahman (Atman) inside them.

Many Hindus believe in the cycle of life, death and rebirth (reincarnation).

Vocabulary

Hindu - A person who believes in the religion called Hinduism

Hinduism - A religion that believes in one supreme God who created everything

Deity - A powerful spirit (or God / Goddess) that controls events and the nature of things

Aum - The most sacred symbol in Hinduism. Hindus also believe that Aum was the first sound that began the creation of the Universe

Brahman - The one true God according to Hindu beliefs



In the story of Rama and Sita, Rama rescues Sita who had been kidnapped by Ravana, the demon king.

People lit oil lamps to guide them safely back home.



Brahma



Vishnu



Shiva



Svetaketu learns about God being in everything by drinking a glass of salty water given to him by his father.

Religious Education Knowledge Organiser (Term 2)

What is the 'Trinity' and why is it important for Christians?



Year 3/4

Christianity

Our learning

In our religious education lessons this term we will be answering the question :

'What is the 'Trinity' and why is it important for Christians?'

We will answer this by **making sense of the beliefs** that Christians have about baptism and the Trinity.

We will **understand the impact** that the Trinity has on the lives of Christians.

We will **make connections** between Bible texts studied and the ideas of God in Christianity.



There are similarities and differences between Christian baptisms for babies and adults



Information

Christians believe that God is 'three in one'. This is known as the Trinity: The Father (creator), The Son (saviour) and the Holy Spirit (presence and power).

A Gospel is part of the life story of Jesus. The story of Jesus' baptism is told in Matthew 3:13-17. The water, the voice and the dove from the story all have symbolism for Christians.

Christians show their beliefs about God and the Trinity through baptism, prayer and the way they live their lives.

Water is used in Christian baptisms because it has many symbolic meanings.

Christians believe that Jesus is God who came to Earth to rescue humanity.



A dove symbolises the Holy Spirit. This is because the Holy Spirit is compared to a dove at the baptism of Jesus.

Vocabulary

Trinity- A way of describing God the Father, God the Son and God the Holy Spirit

Saviour - A person who saves someone or something

Humanity- Everyone on Earth (The human race)



God and the Trinity are shown in many works of art.

'Baptism of Christ' by Perugino



Fresco of the Holy Trinity (1758-1759) by Rossetti

Religious Education Knowledge Organiser (Term 3)

What does it mean to be a Hindu in Britain today?



Year 3/4
Hinduism

Our learning

In our Religious Education lessons this term we will be answering the question :

'What does it mean to be a Hindu in Britain today?'

We will **make sense** of Hindu beliefs and practices,

We will **understand the impact** that their faith has on the lives of Hindu people in Britain today.

We will **make connections** between faith, family and community.



This Mandir (temple) is in London.

Information

Hinduism is a European word for the religion Sanatan Dharma, which originated in Asia.

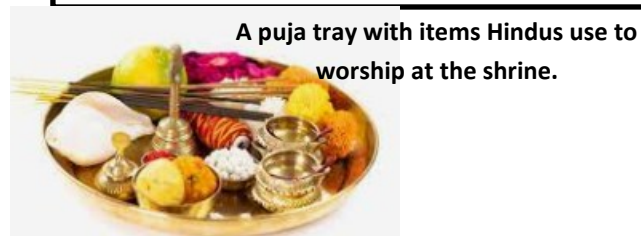
Many Hindus have murtis (pictures of gods and deities) in their home as a shrine where they can worship. This worship is called 'puja'.

A puja tray contains ; a bell, a pot of water, a lamp, and incense burner, a pot of kum kum powder and a spoon.

A Hindu family in Britain may show their faith in many ways during the week, such as daily 'puja' , singing bhajans (songs to glorify God) and visiting the Mandir.

Hindu families celebrate the festival of Diwali. This is a five day festival of lights and it celebrates good defeating evil.

Other celebrations include Holi, Navaratri and Durga Puja.



A puja tray with items Hindus use to worship at the shrine.

Vocabulary

Santana Dharma - The 'eternal way' which Hindus follow as a way of living their life.

Sharma - Joyfulness, comfort and happiness.

Arti - A Hindu ceremony to give thanks to the deities and God.

Mandir - A Hindu place of worship.

Deity - A powerful spirit. They can also be called gods.

Shrine - A place in the home where Hindus worship their Gods and Deities.



Hindus worshipping at their shrine.

Religious Education Knowledge Organiser (Term 4)

✝ Year 3/4

Why do Christians call the day that Jesus died 'Good Friday'? Christianity

Our learning

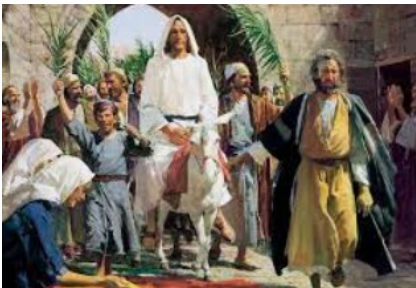
In our religious education lessons this term we will be answering the question :

'Why do Christians call the day that Jesus died 'Good Friday'?

We will **make sense of the belief** that stories from Holy Week and Easter link to the idea of Jesus saving people (salvation).

We will **understand the impact** that Christian beliefs have on the way they worship Jesus.

We will **make connections** between events in Holy Week and why Christians call the day Jesus died 'Good Friday'.



Jesus arrives in Jerusalem on 'Palm Sunday'.

Information

Palm Sunday marks the beginning of Holy Week. It was the day Jesus arrived in Jerusalem to rescue people from their sins. People celebrated his arrival by waving palm branches. Christians associate Palm Sunday with hope.

Jesus was crucified on 'Good Friday' by the Romans who saw him as a threat. This is a day of sadness for Christians.

Easter Sunday is a day of joy for Christians as it is the day that their King (Jesus) rose from the dead.

The Christian Church marks Holy Week in various ways. These include different types of services, music, readings, rituals, colours and decoration.

Vocabulary

Salvation - To be saved from sin

Holy Week - The week leading up to Easter Sunday in Christianity

Heaven - A place Christians believe you go to when you die

Crucify - To be killed by being nailed to a cross

Ritual - A set of actions people do in a religious ceremony

Religious service - A ceremony that has religious meaning

Sin - Things that Christians do that go against the word of God



The crucifixion of Jesus on 'Good Friday'..

Religious Education Knowledge Organiser (Term 5)



Year 3/4

For Christians, when Jesus left, what was the impact of Pentecost?

Christianity

Our learning

In our religious education lessons this term we will be answering the question :

'For Christians, when Jesus left, what was the impact of Pentecost?'

We will answer this by **making sense of the belief** that Christians have in the story of Pentecost and their beliefs about the 'Kingdom of God' on Earth.

We will **understand the impact** of the Pentecost on Christians today.

We will **make connections** between the Kingdom of God in the Bible and what people believe about following God today.



For Christians, the dove is a powerful symbol of the Holy Spirit and God's love for them.

Information

Pentecost is a Christian holy day celebrated 50 days after Easter. On this day, God sent the Holy Spirit to help his disciples to understand and spread his message.

In the Bible, 3000 people accepted Jesus as their king and joined the Kingdom of God.

Christians today believe that the power of the Holy Spirit is a gift that helps them to carry out God's work.

Since the Pentecost, Christians have tried to make the world more like the Kingdom of God. The Lord's Prayer gives ideas to Christians about how the Kingdom of God should look. Christians today consider Pentecost to be the beginning (and birthday) of the church.

Not all people want to have God as 'king' of their lives as they want to make up their own minds about how to live.

Vocabulary

Kingdom of God - A spiritual place where someone follows the word of God

Atheist - Someone who does not believe in any God

Gift - Something given to someone. This can be an idea or a feeling rather than a present.

Holy Spirit - The feeling of God being present



On the day of the Pentecost, as believers met together, flames of fire appeared on their heads and everyone was filled with the Holy Spirit.

Religious Education Knowledge Organiser (Term 6)



Year 3/4

How and why do people mark the significant events of life? Christianity Hinduism

Our learning

In our religious education lessons this term we will be answering the question :

'How and why do people mark the significant events of life?'

We will answer this by **making sense of the beliefs** in love, commitment and promises in Christianity and Hinduism.

We will **understand the impact** of religious ceremonies.

We will **make connections** between the ceremonies of religious and non-religious people

A Christian baptism ceremony



A Hindu sacred threads ceremony



Information

Many religious and non-religious people think of life as a 'journey' which has many important 'milestones' along the way.

Christians and Hindus believe that a marriage between two people symbolises love and the commitment they make to each other.

Ceremonies of commitment are also important in other religions and for non-religious people.

In Christianity, a baptism marks a person beginning their life as a Christian. Holy water is put on the baptised person's head by a church leader. This is to cleanse the person, making them ready for a life with God.

In Hinduism, a sacred threads ceremony marks a boy starting to study his faith.

Ceremonies mark other important points in the 'journey' through life for religious and non-religious people.



Many people think of life as a journey with many important events along the way.

Vocabulary

Commitment - An agreement or promise to do something in the future

Milestones - An important event in someone's life

Journey of life - A person's life from beginning to end



A Christian marriage ceremony



A Hindu marriage ceremony

Science Knowledge Organiser **Animals including Humans (Term 1) Year 3/4**

Our learning

In our science lessons this term we will be learning about animals including humans. This forms part of the **biology** aspect of science.

We will learn about different parts of our digestive system and the **connections** between them.

We will study food chains in order to understand how they work and

Information

Humans have different kinds of teeth which have different jobs. Incisors help you to bite food, canines help to tear food and molars help you to chew food.

Too much sugary food can cause tooth decay.

The digestive system is the how the body breaks down food so it can be taken in and used.

There are many organs in the digestive system each with a particular job to do .

A food chain shows how each living thing gets its food . The arrows point to what is doing the eating.

Vocabulary

Oesophagus - A tube that moves food from the back of your throat to your stomach.

Stomach - Uses juices to help to digest food.

Intestines –Long tubes. They help break down food so that the body can use it for energy.

Producer - An organism that makes its own food.

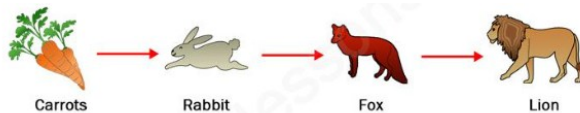
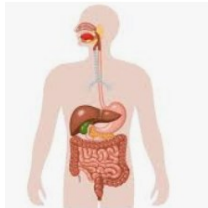
Consumer - An organism that feed on plants or other animals for energy.

Predator - Predators are carnivores which are animals that only eat other animals.

As a scientist I will ...

- Identify similarities and differences when talking about scientific processes.
- Choose suitable ways to show my information.
- Make predictions using scientific language.

The digestive system



A simple food chain. The carrot is a producer, the lion is an apex predator.



Science Knowledge Organiser

Living things and their habitats (Term 2) Year 3/4

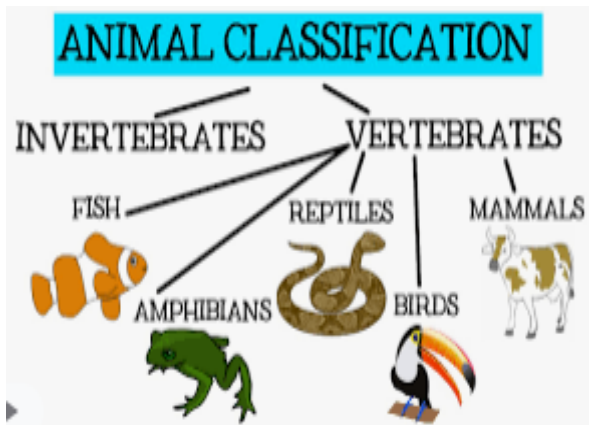
Our learning

In our science lessons this term we will be learning about living things and their habitats. This is part of the **biology** aspect of science.

We will learn about different types of animals and the **similarities and differences** between them.

We will think about how environments can change because

A classification key



Information

Classification keys can be used to identify plants and animals.

There are lots of different types of plants and animals.

Some animals are warm blooded. This means that they can make their own body heat even when it is cold outside. Humans are warm-blooded.

Some animals are cold-blooded. This means that they have a body temperature that varies with the temperature of the environment. Frogs are cold blooded.

Humans and birds are examples of vertebrates and spiders and worms are examples of invertebrates.

As a scientist I will...

- Use and begin to create simple keys.
- Use scientific language to support my findings.
- Suggest questions and know they can be answered in different ways.

Vocabulary

Vertebrate - An animal with a backbone.

Invertebrate - An animal without a backbone.

Mammal - Warm blooded vertebrates, including humans, which give birth to live young and feed them milk.

Amphibian - Cold blooded vertebrates that can live on land and in water.

Reptile - Cold blooded vertebrates with scales or bony plates.

Classification - Arranging into groups of similar things

Classification key - Used to help



Science Knowledge Organiser

Electricity (Term 3)

Year 3/4

Our learning

In our science lessons this term, we will be learning about electricity. This is part of the **physics** aspect of science. Through our learning we will be considering the **cause and effect** of simple scientific processes.

As well as learning about how electricity works, we will also discuss

Information

Many household appliances, such as televisions run on electricity.

Some materials are electrical conductors such as copper, silver and gold. This means they let electricity pass through them.

Some materials are electrical insulators, such as plastic, wood, rubber and glass. This means they do not let electricity pass through them.

Electricity travels around in an unbroken circuit. A simple series circuit is made up of cells, wires, a bulb or buzzer and a switch.

A switch can be used to open (break) or close (complete) a circuit. When the switch is closed the electricity will travel around the circuit.

As a scientist I will...

- Recognise when a fair test is necessary.
- Make systematic and careful observations.
- Answer questions using scientific

Vocabulary

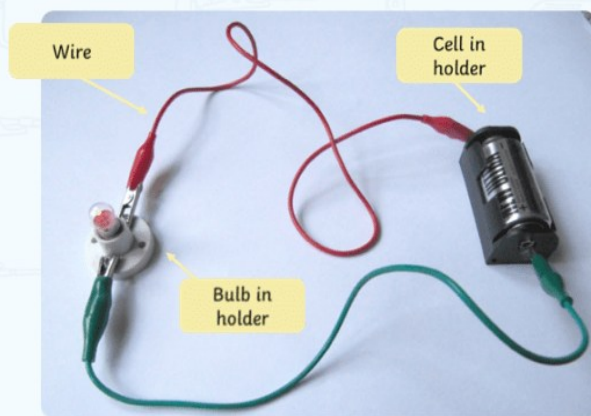
Electricity– A form of energy that can give things the ability to move and work.

Appliances– An electrical device or machine in your home that you use to do a job such as cleaning or cooking.

Bulb– A part that gives light.

Buzzer– A device that causes a buzzing sound.

A simple circuit



Electrical conductors



Copper



Iron



Gold

Electrical insulators



Rubber



Paper



Plastic



Science Knowledge Organiser **Sound (Term 4)**

Year 3/4

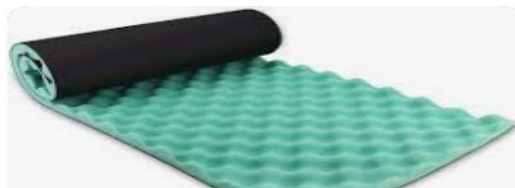
Our learning

In our science lessons this term, we will be learning about sound. This is part of the **physics** aspect of science. Through our learning we will be considering the **cause and effect** of simple scientific processes.

We will learn how sound is created and how we get to hear it in our ears.



Sounds travel in waves to our ears.



Foam is a good insulator of sound

Information

Sounds are created by vibrations and can be made in different ways.

Sounds created by vibrations travel in waves, through different materials, to the ear.

Vibrations travel in waves through the ear to the brain.

Vibrations cause part of the ear to vibrate, allowing us to hear (sense) the sound.

The distance from the sound source (where it starts) affects the volume of the sound. The sound is louder when closer to the source of the sound.

The pitch of a sound can vary. For example the longer, looser or thicker the object is, the lower the pitch of the sound will be. This is because the vibrations will be

As a scientist I will...

- Use data to make predictions, pose new questions and suggest improvements to my enquiries.
- Answer questions using scientific evidence.

Vocabulary

Vibration - Shaking back and forth.

Sound wave— Caused when an object vibrates the air particles called molecules close to it. This makes the molecules next to them vibrate and so on, forming a sound wave.

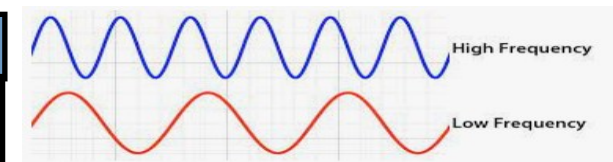
Volume – How loud or quiet a sound is.

Pitch – How high or low a sound is.

Tone - A repeating sound with a definite pitch.

Insulation - Material that prevents sound waves from travelling.

Faint- A quiet sound.



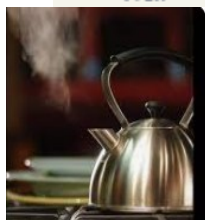
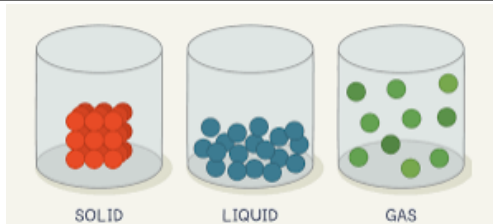
Sound waves



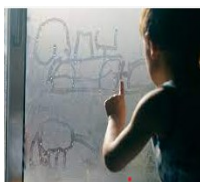
Our learning

In our science lessons this term, we will be learning about states of matter. This is part of the **chemistry** aspect of science. Through our learning we will be considering the **cause and effect** of simple scientific processes.

We will learn how materials can exist in different states of solid, liquid or



When a kettle boils, some of the water evaporates (changing in state from liquid to gas)



Condensation forms on a window when the temperature outside is much colder than the temperature inside.

Information

A material can be a solid, a liquid or a gas.

Some materials change when they are heated and cooled. If water is heated it turns into a gas, if it is cooled it turns to ice (freezes).

A solid keeps its shape and its volume stays the same.

A liquid's volume also stays the same but changes in shape to fit the container it is in. A liquid can be poured and keeps a level horizontal surface.

A gas has no definite volume and fills all available space.

As a scientist I will...

- Identify changes, patterns, similarities and differences in data to help form conclusions.
- Make systematic and careful observations.
- Take accurate measurements using standard

Vocabulary

Matter - Anything that has weight and takes up space

State - All matter is either a solid, liquid or a gas (3 main states)

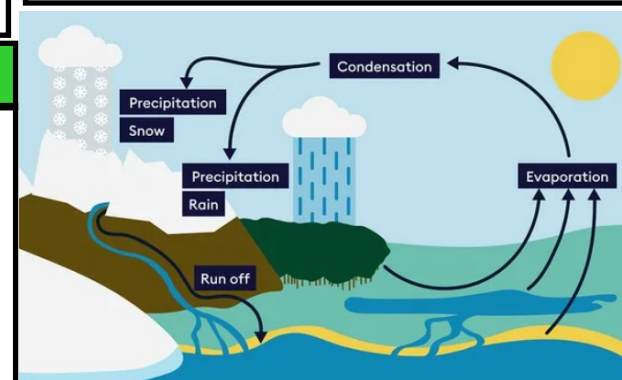
Volume - The space taken up by a solid, liquid or gas

Evaporation - When a liquid is heated and changes to a gas

Condensation - When a gas cools and becomes a liquid (e.g. water vapour)

Particle - A tiny piece of matter

Temperature - A degree of hotness or coldness that can be measured using a



The Water Cycle



Our learning

In our science lessons this term, we will be working scientifically with our knowledge of light and shadows. This is part of the **physics** aspect of science and will help us to develop the skills to become a scientist.

We will look at using our scientific knowledge to identify **patterns** from the data we collect and then use scientific evidence to explain our findings.

Ask a question

Plan an investigation

Make a prediction

Complete your investigation

Display your results

Explain what you found out

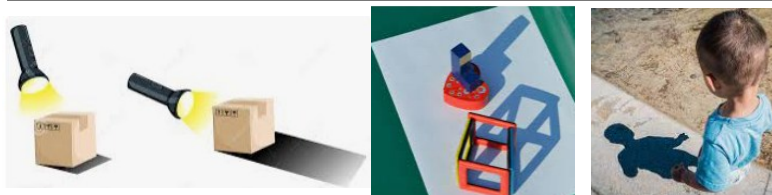
Information

Lurking in the shadows

Dark is the absence of light.

Shadows are form when light from a light source is blocked by a solid (opaque) object.

Shadows can be different sizes, shapes and tones.



As a scientist I will...

- Suggest questions and know they can be answered in different ways.
- Use data to make predictions, pose new questions and suggest improvements to my enquiries.
- Recognise when a fair test is necessary.
- Make systematic and accurate observations and measurements using standard units.
- Choose suitable ways to record and present information.
- Use scientific language to support my findings.

Vocabulary

Fair test- is a controlled investigation carried out to answer a scientific question.

Explanation- To make something understandable

Prediction – What you think will happen.

Data- Used to describe information that is often in numbers

Evidence- Something that is used to support an idea or argument

Interpret- Explain the meaning of something

Record- Note something

Light source - Something that makes light (natural or artificial)

Shadow - A dark shape made when something blocks light

Opaque - Material which cannot be seen through and does not allow light to pass

Eratosthenes discovered lots about shadows and how they worked.

