



## News and reminders

### PE days:

**Year 5:** Monday      **Year 6:** Tuesday

Children should come into school in their correct PE kit.

Please ensure that your child is wearing the Bierton P.E. hoodie, blue Bierton P.E. t-shirt and black leggings/joggers.

We would also like to remind everyone that due to health and safety, earrings need to be removed or taped for PE lessons. Unfortunately, we cannot help children to remove their earrings or put them back in.

## Diary dates

- **Friday 22nd November:** Mufti day (for Christmas donations)
- **Monday 25th November:** Coffee morning - Supporting your child's wellbeing and mental health (all parents / carers invited)
- **Thursday 5th December:** Children watch Christmas pantomime (in school)
- **Friday 13th December:** Last day of after-school clubs for this term. Y5 production to Y5 parents.
- **Wednesday 18th December** - Children's hot Christmas lunch
- **Thursday 19th December** - Christmas party day

## Superstar Learners in September

Well done to these children who have received a Christian Value certificate:

	Spruce	Sycamore	Whitebeam	Walnut
22nd October	Elsie Responsibility	Rose Responsibility	Ashvithaa - Love	Jessica - Co-operation
14th November	Emilia Cooperation	Arron Respect	Harper - Respect	Arjith - Love



## Homework

Just a reminder that homework is set on a Friday and is due by the following Friday.

The homework requirements in Year 5 and 6 are:

- 30 minutes across the week on TTRockstars (split into 20 minutes garage and 10 minutes studio)
- 30 minutes of maths arithmetic
- 30 minutes completing the SPaG or reading task
- Daily reading (complete at least one quiz on Accelerated Reader each week)
- Website for Accelerated Reader: <https://global-zone61.renaissance-go.com/educatorportal/entry?t=6703196>



## Literacy

We have started a non-fiction unit looking at non-chronological reports. We have looked at some different examples to help us to understand the features of this text type. To start the unit, we have carried out some research all about emperor penguins which we will be using to write our guided non-chronological reports. For our independent piece of writing at the end of the unit, we will be creating our own animals to write non-chronological reports about.

## Maths

We have continued working on multiplication since half term, looking at the written strategies required to solve multiplication questions involving large numbers: 1 digit x 4 digit, 2 digit x 2 digit. Moving forwards we will look at 2 digit by 3 digits questions. This maths unit is the longest and most in depth one in Year 5 and we are delighted with how well the children have picked up these skills.

## RE

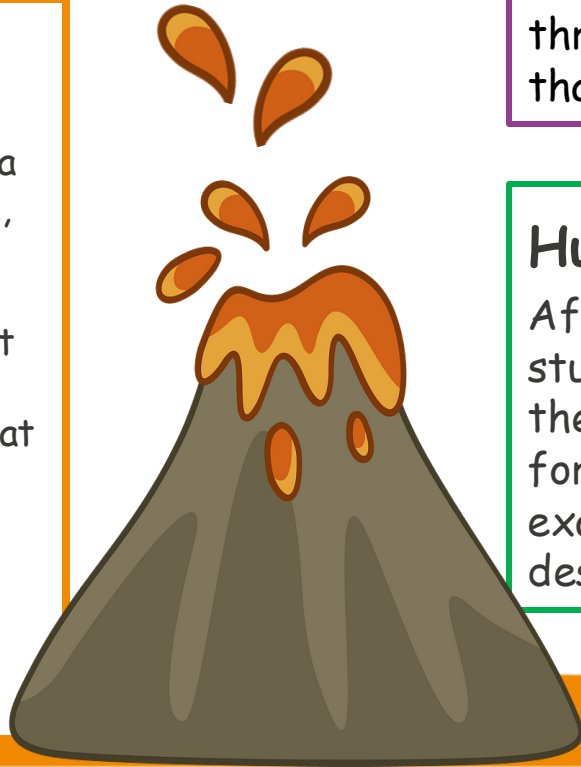
In religious education, we have started a new unit looking at the origins of the Early Church, how Christianity has changed throughout history and the different denominations of Christianity that are around today.

## Humanities

After studying mountains in Autumn 1, we are now moving on to study the most dramatic of mountains- Volcanoes! We will look at the incredible power of these natural phenomena, how they are formed and the dangers they pose to us. Linked to this we will examine the causes and effects of earthquakes too- a very destructive half term!

## Science

In Science we are continuing our focus on Space but having covered a large amount of ground in Autumn 1, it is now time for the children to pursue their own interests and produce and present an independent project, based on an area of space, the solar system or space travel that they find particularly interesting. The children are currently researching their areas of interest and will bring these notes together into their final presentations over the following weeks.





We are well underway with the rehearsals for our spectacular Christmas pantomime - "The Pirates of the Curry Bean!" The children have made a great start on learning their lines, (keep practising!) Lots of props are beginning to appear around Year 5. Next week we will send out costume lists for all children, we hope we've made the email easy to understand, but please ask one of us if you have any questions!



Last week, Year 5 had a whole day dedicated to SPACE, our current science topic. We spent the day finding out about the Solar System and using the magic of VR, we were able to visit our celestial neighbours in the afternoon!



## Literacy

This week we have started looking at persuasive speeches in Literacy. We are studying different techniques that leaders might use to call their army into battle. We have been looking at techniques such as repetition, personification and rhetorical questions.

## Science



Our new unit is Evolution and Inheritance this term. We have started thinking about the genes we inherit from our family members and designed our own 'Mr Men' offspring by looking at its Mr men and Little Miss parents! We also used jelly babies to show how genes can be passed down to their offspring. We will move on to look at examples of evolution and how animals have adapted to their surroundings and also study the work of Charles Darwin.

## Music



In Music, the children have been focusing on dynamics, pitch and texture. They learned how to improvise as a group, using dynamics and pitch to create their own piece of music with xylophones and replicate waves. They used 'Coast - Fingal's Cave by Mendelssohn' as inspiration. The children all enjoyed creating their own pieces of music and they each performed them to the class.



## Maths



We have just finished our fraction unit and will be moving on to look at decimals. We have learnt how to add, subtract, multiply and divide fractions. We have also found out the difference between mixed and improper fractions and we can now convert them from one to the other. We have realised how important knowing our times tables is as it really helps us with our fractions!

## Humanities



In Humanities this term we are still focusing on Anglo-Saxons & Vikings. The children have learnt about Viking longboats and were using drama to act as 'Sven' a Viking who knew all about longboats, took on the role of journalists asked many questions about what life was like being Viking and learnt a lot about longboats. The children this week also had an amazing trip to Ufton Court, they all thoroughly enjoyed themselves.

## Computing

Our new unit is spreadsheets they have been using Google Sheets for this. The children know what a spreadsheet looks like and can navigate and enter data into cells.



Google Sheets



# Ufton Court

On Tuesday year 6 went to Ufton Court to learn more about Anglo Saxon life. We all had an amazing time and learnt so much. We took part in three workshops. In the first workshop, we found out what different artefacts were used for. We had to play two lies and a truth to determine which one was correct! Did you know they would look through a white crystal and look towards the sunlight. The light would then help them know which direction they were going in. (They didn't use it as a piece of jewellery or as an ice cube!)

Then we weaved bamboo in and out of large sticks to help make a shelter and we managed to use a piece of flint and steel to create real sparks!

Finally, we were taken to court! We accused each other of being witches, treason and not working hard enough as a slave. The jury decided whether the defendant was guilty and the judge had the final say on what they punishment would be. Would they be hanged, have their hands cut off or be put in the stocks?

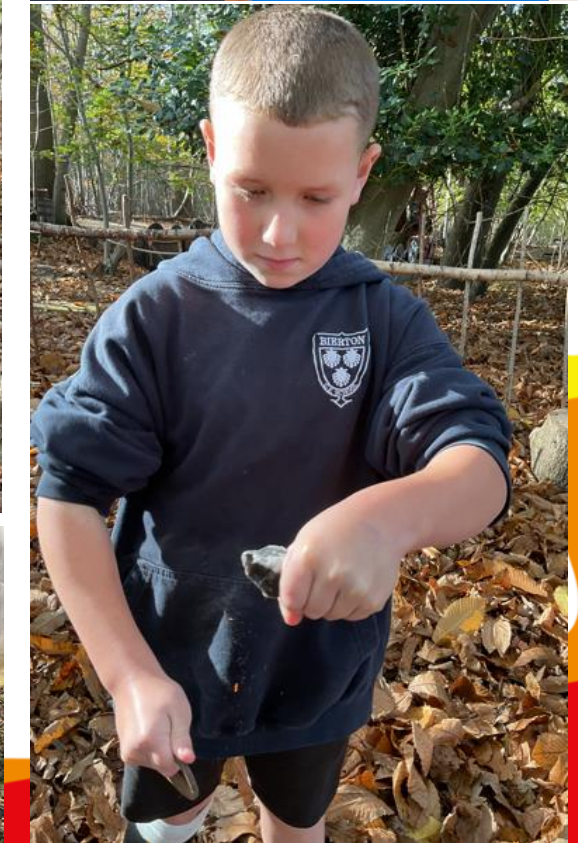




# Whitebeam photos



# Walnut photos





## Knowledge Organiser Unit: Earth and Space

Key  
Question 1

• Can I Describe the contribution  
Nicholas Copernicus made to science?

Key  
Question 2

• Can I define 'orbit' and 'axis' and  
explain what phenomena they cause?

Key  
Question 3

• How does gravity act as a force?

Key  
Question 4

• Can I name the different planets in  
the solar system?

Key  
Question 5

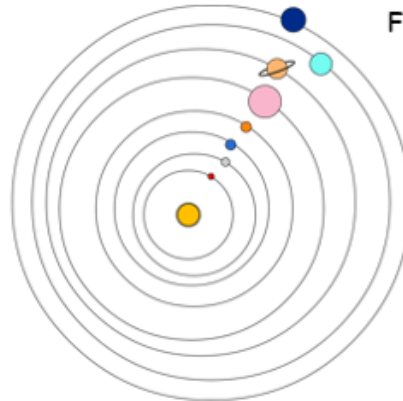
• Can I understand and explain  
theories about The Big Bang and the  
Universe?

Key  
Question 6

• Can I explain the cause of the  
changes of the Moon phase?

It takes the Earth 365.25 days to orbit the sun, which is why every four years we have a leap year of 366 days, to catch up with the orbit!

The Earth takes 24 hours to spin on its axis and complete one rotation, which is why our days are 24 hours long.



FROM THE SUN  
OUTWARDS:

Mercury  
Venus  
Earth  
Mars  
Jupiter  
Saturn  
Uranus  
Neptune

This diagram is a good, simple way to remember the order of the planets and also to understand **planetary motion** and the way the planets **orbit** the sun. **Copernicus** developed the **heliocentric** theory that the sun was at the centre of the **solar system**. However, the **ellipses-shaped orbit** was an idea that was discovered by Johannes Kepler in the 17<sup>th</sup> century.

### gravitational force

We are constantly attracted to the Earth by its gravitational force. The reason the Moon doesn't fall to Earth because of gravity is because it constantly moves around us. Without the Earth's gravity, it would float away into space.

## Key Vocabulary

Key Word	Meaning
heliocentric	The modern model of the solar system, which places the sun at the centre.
geocentric	The old solar system model, which thought the Earth was at the centre.
solar system	The name for the sun and all the planets, asteroids, meteors and comets that orbit it.
astronomy	The study of space, planets and the universe as a whole.
Big Bang Theory	The most widely accepted scientific theory of how the Universe was made.
gravitational force	The force that causes two particles to pull towards each other.
orbit	The path of one celestial object around another i.e. the Moon around the Earth.
hemisphere	On Earth, there are two of these - the North and South, separated by the equator.

### Comets, asteroids, and meteors

Comets are chunks of ice and rock with tails that orbit a long way around the Sun.  
Asteroids are chunks of rock and metal that orbit more closely to the Sun.  
Meteors are fragments of Asteroids that fly into the Earth's atmosphere and catch fire, leaving a bright streak in the sky.

## Knowledge organiser – Volcanoes and Earthquakes

### What will we be learning?

- The structure of the Earth.
- Features of a volcano.
- Famous volcanoes and earthquakes.
- Effects of volcanoes and earthquakes.
- Preparing for an earthquake.
- What it's like living near a volcano.

### Key facts

Famous volcanoes:

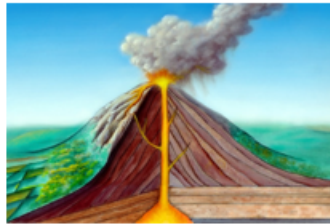
Soufrière (St Lucia, North America), Eyjafjallajökull (Iceland, Europe), Popocatepetl (Mexico, North America), Vesuvius (Italy, Europe), St Helens (USA, North America), Etna (Italy, Europe).

### Key knowledge

The Earth is made up of layers. The top layer, the Earth's crust, consists of large slabs of rocks, called plates. The plates move as the hot mantle flows beneath them. The movement of the plates causes earthquakes and leads to volcanoes erupting.

Earthquakes are measured on the Richter scale, They can cause devastating damage to buildings, roads and land.

When volcanoes erupt they spew out lava. This is a very hot liquid that destroy anything in its path.



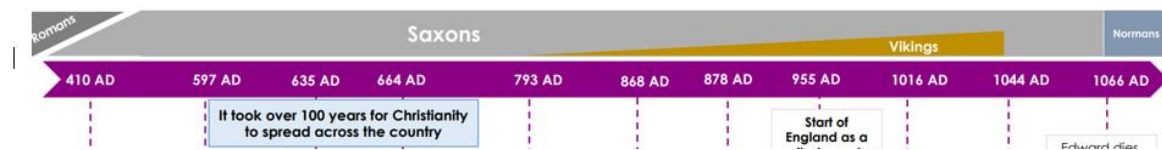
Place names	Geographical terms and processes	Locational terms
Great African Rift Valley Haiti Iceland Japan Mauna Loa Pacific Ring of Fire	crater disaster dormant eruption magma tsunami	epicentre plate boundary

### Glossary

**dormant:** a dormant volcano is a volcano, like Kilimanjaro, that has not erupted for a long time

**epicentre:** where an earthquake starts and is felt most strongly

**tsunami:** a huge, powerful wave caused by an earthquake



## Key vocabulary

<b>Cemetery</b>	Burial place
<b>Cenotaph</b>	Empty grave to remember someone important buried elsewhere
<b>Christianity</b>	Religion based on life and teachings of Jesus Christ which came to Britain in Saxon times
<b>Danelaw</b>	Name given to northern and eastern part of Britain under Danish control from 9 <sup>th</sup> to 11 <sup>th</sup> century
<b>Hoard</b>	Store of money often hidden away to come back to later
<b>Hypothesis</b>	Theory that has to be tested
<b>Monastery</b>	Large religious building where monks lived and prayed
<b>Pagan</b>	Word used to describe people who didn't follow one of the main religions
<b>Picts</b>	Group of people who lived in part of Britain what we think of as Scotland
<b>Sceptre</b>	Looks like a stick richly decorated, carried by kings only
<b>Settlement</b>	Place people moved to live in
<b>Sutton Hoo</b>	Site of very important archaeological excavation in 1939.
<b>Treaty</b>	A formal, legally binding written agreement
<b>Turning point</b>	Time when things changed suddenly
<b>Urn</b>	Container for ashes
<b>Viking</b>	Name given to people from Scandinavia who raided traded and settled in Britain between the 9 <sup>th</sup> and 11 <sup>th</sup> centuries

### Top takeaways:

Having studied this unit you should be able to understand:

1. The reasons why the Anglo-Saxons invaded
2. That it was during this time that England became united, with Wessex as the leading kingdom
3. That it was at this time that England became a Christian country
4. That King Alfred was the only English king to be given the name 'Great' and know why not everybody agrees that he deserves it
5. That the Saxons were frequently under attack from the Vikings until Alfred defeated them and they settled in the Danelaw area to the north and east.
6. That the Vikings then settled in the East with some becoming kings of England at the end of the Saxon period.
7. That the Vikings were highly skilled shipbuilders, taking them vast distances across dangerous seas.

## Who's who?

<b>Alfred</b>	King of Wessex, known as the Great, ruled 871-899
<b>Asser</b>	Man who wrote flattering life history of Alfred
<b>Augustine</b>	In the late 6 <sup>th</sup> century, he was sent from Rome to England to bring Christianity to the Anglo-Saxons.
<b>Bede</b>	He wrote a very important book on the early history of Britain,
<b>Burhs</b>	Forts built in 9 <sup>th</sup> century to defend against Viking raids
<b>Gildas</b>	6 <sup>th</sup> century monk who wrote a history of Britain before and during Saxon period
<b>Guthrum</b>	Danish leader and King of East Anglia who fought against Alfred, later christened Athelstan
<b>Hengist and Horsa</b>	Leaders who some people think arrived to take over Britain in AD449.
<b>Raedwald</b>	King of East Anglia died about 625AD
<b>Vortigern</b>	King of the Britons at the time of the arrival of the Saxons under

## Knowledge Organiser Unit: Evolution and Inheritance

### Key Vocabulary

Key Word	Meaning
evolution	A process of formation, growth or development.
inheritance	A quality, characteristic or trait which is passed down generations.
DNA	The material in chromosomes that transfers genetic information in all life forms (Deoxyribonucleic acid).
natural selection	Coined by Charles Darwin, it means the survival and reproduction of the fittest species.
ancestor	A person from whom one is descended.
husbandry	The care, cultivation and breeding of crops and animals.
generation	A group of individuals belonging together at the same time period.
fossilisation	The process of an animal or plant being turned to stone.

Humans are 99.9% all the same, but the other 0.1% contains enough DNA information to make us all different!

Some animals are bred to make products and others for scientific research.

Animals can also be bred for cultural or ethical reasons, or to be kept as pets.

### Charles Darwin and Natural Selection

- Different species of animal had evolved from one shared ancestor.
- Animals had adapted to suit the habitats and environments they live in.
- Those animals that didn't adapt had become extinct. Called the 'Survival of the Fittest.'
- Many religious people were angry at his theory to start with.



### Genetic Modification

#### Pros

- Can protect crops and mean the produce has less disease.
- The produce can be bigger and tastier
- Can mean lower cost to consumer.

#### Cons

- We don't know the long-term effects of safety
- Research isn't yet finished
- Could cause more allergies or diseases for consumers



### FACTOIDS:

Can you find out more?

Q1. What is a GM crop?  
This means 'genetically modified' and is one which scientists have altered to protect against disease.

Q2. Who was Mary Anning?  
A famous palaeontologist who discovered lots of fossils.

Q3. What are fossils?  
Casts of dead organisms who were alive millions of years ago.

1

• To recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.

2

• To identify how animals and plants are adapted to suit their environment in different ways

3

• To understand that adaptation of plants and animals to suit their environment may lead to evolution.

4

• To find out about how the work of scientists has helped develop our understanding of the process of evolution.

5



• To recognise that living things have changed over time and that a number of factors can affect a species' evolution.

6

• To understand how humans have evolved over time, and how human behaviour can affect change in species over time

This unit is designed to help you learn about the history of organisms (animals and plants) and how they need to adapt to survive. From Darwin's theory of natural selection, to genetic modification and cloning today, you will gain an understanding of how inheritance and genetics works.

You will also gain an understanding of what history tells us, such as fossils and geology. It really is a fascinating subject to see how life on earth has evolved over all these years!

<b>belonging</b>	Feeling accepted and included.
<b>Dharmic</b>	Religious groups that originated in South Asia who have similar ideas about life and death.
<b>diversity</b> 	The quality of being varied or different to each other.
<b>enlightenment</b>	In Dharmic worldviews, gaining a very deep spiritual understanding and breaking free from the cycle of rebecoming or reincarnation.
<b>initiated</b>	When someone is formally introduced or welcomed into a new role or group.
<b>interpretation</b>	An explanation or understanding of what something means.
<b>Jain</b> 	A person who believes in non-violent living and that the universe has always existed without a creator god.
<b>liberation</b>	The act of becoming free.



 **Key vocabulary**

**Diversity**

India's size and varied geography have led to a diverse array of belief systems throughout its regions.

In the past, people travelled far to spread their beliefs and learn from others, often leading to variations within worldviews.

More recently, people have moved to other parts of the world bringing with them their beliefs, culture and traditions.

## Hindu deities



Deities can be worshipped for different reasons:

- ▶ Personal beliefs.
- ▶ Regional traditions.
- ▶ Family customs



Krishna



Murugan



Shiva



Vishnu



Durga

Deities often represent particular attributes or life situations, allowing people to seek guidance, blessings, or protection in those areas of life.

1

## Festivals of light

Light can symbolise a variety of things, including:

- ▶ The triumph of good over evil.
- ▶ Knowledge.
- ▶ Freedom.
- ▶ Enlightenment or awakening.
- ▶ Hope.



## Buddhist practices

There are different Buddhist schools or groups, including Theravada, Mahayana, Vajrayana and Zen.

Buddhists may choose to practise the Buddha's teachings in different ways. This can be influenced by culture, tradition, scripture or personal preference.



Kesh



Kashera



Kirpan



Kanga



Kara



Dastaar

## Initiation



Guru Gobind Singh established the Khalsa and the Amrit Sanchar (initiation ceremony). Many Sikhs choose to be initiated and become Amritdhari, wearing the five articles of faith and the Dastaar. Others do not choose to become initiated and practise their Sikh identity in other ways.

## Year 6 - Health and wellbeing

Growth mindset	Believing that we can achieve things if we work hard. 'I can't do it YET!'.
Habit	A repeated action.
Qualities	The personality traits that make someone who they are.
Responsibility	Being in charge of our own actions.
Skill	The ability to do something well.
Vaccination	An injection that gives us a very mild form of the disease and allows our bodies to develop antibodies to protect us from that disease.

## Key facts

We can decide what type of person we want to be and we can develop skills and qualities to achieve this.



Meditation and mindfulness can help us to relax.



Lots of things contribute to keeping our bodies healthy including diet, exercise and sleep.

As we get older, we will make our own choices and have responsibility for our health.

There are strategies we can use to improve our resilience.

## Health tips



Decide which relaxation methods work best for you.



If you notice changes in your body or you feel unwell, talk to an adult you trust or the doctor.



Using a tracker might help to start a good habit.

## Getting help

If you are worried about your health, talk to an adult you trust.

As a child it is best to see a doctor with your parent and carer but you can go on your own if you are really worried about something.

**Contact:** Childline  
[www.childline.org](http://www.childline.org) | 0800 1111  
 Calls DO NOT show on the phone bill



Vaccinations prevent us from getting diseases which can make us very ill or could kill us.



We can have good and bad habits. It can be hard to start good habits and to stop bad habits.