Year 5 and 6: Spruce, Sycamore, Whitebeam and Walnut

Friday 15th November 2024

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-opertation
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 artithmetic
- 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

Our learning

Year 5

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 creating our own animals to write non-chronological reports about.

Maths

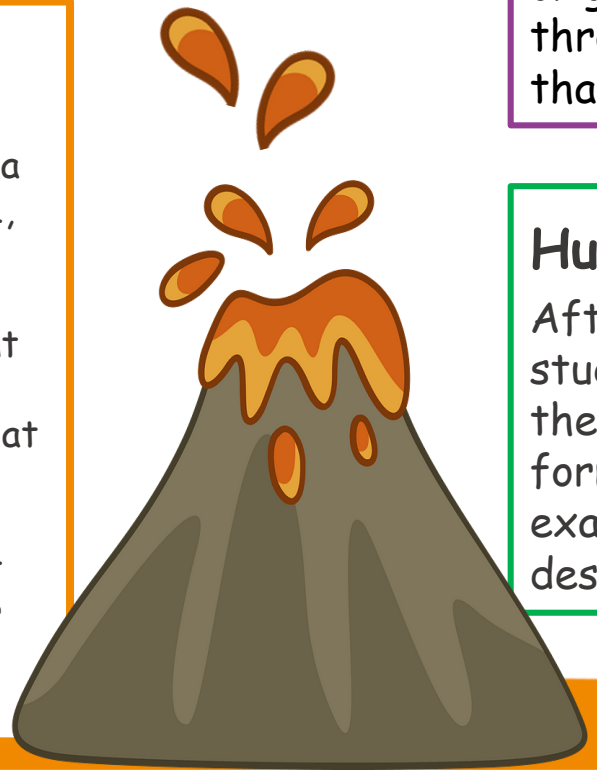
We have continued working on multiplication since half term, looking at the written strategies required to solve multiplication questions involving large numbers: 1 digit x 4 digit, 2 digit x 2 digit. Moving forwards we will look at 2 digit by 3 digits questions. This maths unit is the longest and most 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.

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.



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!

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!

SPACE VR EXPERIENCE!

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!

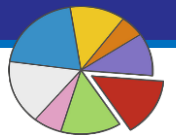
Our learning

Year 6

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.

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!

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.

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 known what a spreadsheet looks like and can navigate and enter data into cells.

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!)

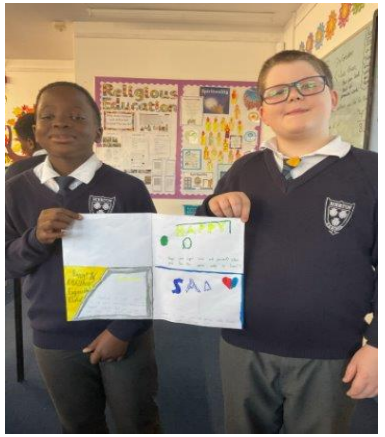
Then we weaved bamboo in and out of large sticks to help make a shelter and we managed to use a piece of flint and steel to create real sparks!

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?

L4L lessons

Every week the children have a L4L (learning for life) lesson, last term and this term they have been focusing on the Zones of Regulation. The children really value these lessons, and they have become more aware of and able to express their feelings and develop the ability to talk openly about them. They know that everyone experiences a different variety of thoughts and emotions, and how these affect our feelings and behavior, as well as maintaining them. The children have learnt different techniques to help regulate them, such as breathing exercises and the figure of eight hand technique.

Each class have created their own Zones of Regulation posters to explain what it is to a younger year group. The children truly benefit from these lessons and it's great that they are starting to talk more openly about their feelings and opinions, as well as be able to regulate themselves when needed. Each class has got their own Zones of Regulation display in their classrooms and the children are able to move themselves from zone to zone each day when they feel that they are moving to a different zone. This is an important skill that can be used in school, at home and in everyday life.



Whitebeam photos

















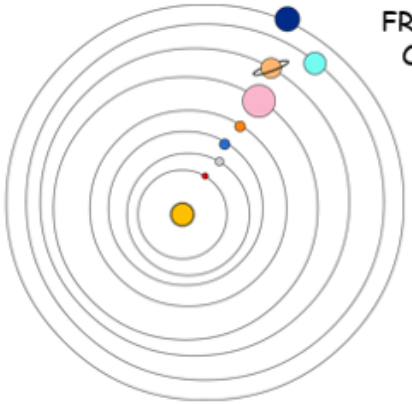
Walnut photos

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 17th 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.

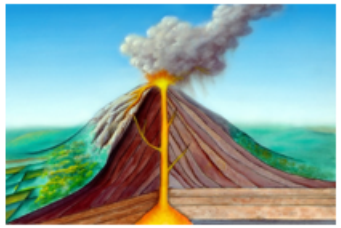
Key facts

Famous volcanoes:

Soufrière (St Lucia, North America), Eyjafjallajökul (Iceland, Europe), Popocatépetl (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.

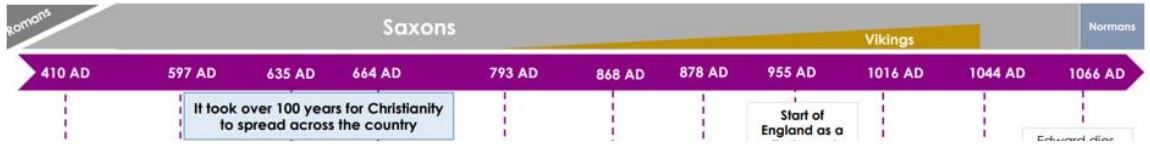


Place names	Geographical terms and processes	Locational terms
Great African Rift Valley Haiti Iceland Japan Mauna Loa Pacific Ring of Fire	crater disaster dormant eruption magma tsunami	epicentre plate boundary

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*

Year 6 Humanities Knowledge Organiser



Key vocabulary

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

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

Knowledge Organiser
Unit: Evolution and Inheritance

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.

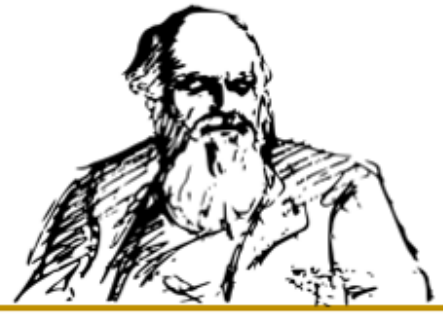
Animals can also be bred for cultural or ethical reasons, or to be kept as pets.

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.

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