The Castle School
ACHIEVE | BELONG | PARTICIPATE

Knowledge Organisers

Year 7

Spring Half Term 1

'Practice of what is taught'

Name: …………………………………………………

Tutor: ……………………………………………….

House: ……………………………………………….

Computing Knowledge Organiser

The Castle School
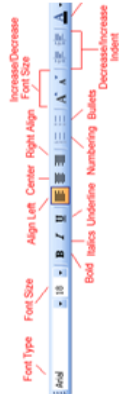ACHIEVE | BELONG | PARTICIPATE

Topic: Using Media

Rationale: Understanding of information technology and digital literacy by using skills to create a blog post about a real-world cause

Key Words

Software	Programs on the computer such as Word and Sway
Word Processor	A program which allows the input, editing and output of text.
Formatting	The way in which text and images are displayed. Bold, Underline, Numbering
Icons	A graphic symbol (usually a simple picture) that denotes a program or a command
Audience	The group of people encountering the work.

Word Processing

Formatting Tools

Font Type   Font Size   Increase/Decrease Font Size
Bold   Italics   Underline   Numbering   Bullets   Decrease/Increase Indent
Align Left   Center   Right Align

Copyright

Copyright law gives rights to authors of creative works such as books, plays, artwork, and music so that they would like their work to be used.

By default, copyright law protects work from being used without permission

Credibility

Check the **author** and the **source**

Why do you think the article was written?

Check **when** the article was written

Check the **facts**

Blog

A regularly updated website or web page, typically one run by an individual or small group, that is written in an informal or conversational style.

Creating

Reference your sources appropriately

Credit the authors of the images

Use the formatting tools to make your blog suitable for your audience

Use your success criteria and assessment criteria to make sure that you are including everything that you need

Sway

Create Blogs
Create and name Sway

Add a title and additional content

Insert images

Use formatting techniques

Select Design and Style to preview the Sway and change colour schemes and layout

DT

Insects have segmented bodies, jointed legs, and external skeletons (exoskeletons).

Insects are distinguished from other arthropods by their body, which is divided into three major regions:

- The head, which bears the mouthparts, eyes, and a pair of antennae
- The three-segmented thorax, which usually has three pairs of legs (which is where the term Hexapoda comes from)
- The many-segmented abdomen, which contains the digestive, excretory, and reproductive organs

What is a Hexpoda?

A class of six-legged arthropods. The name is used as another term for Insects.

Every insect plays a role in the ecosystem in which it is found. The act of pollination is mostly carried out by bees and butterflies; however, some ants, flies, beetles and even wasps contribute.

When an insect lands on a flower, some pollen is transferred onto its body from the stamen (the male part of the flower). This pollen is rubbed off onto a different flower of the same species, where it can fertilise the stigma (the female part) to produce seeds. Some plants are capable of self-pollinating or being pollinated by seeds in the wind, however, a majority cross-pollinate as described.

The continuation of most plant species is dependent on insects. Not only is this important for wildlife habitats, but also for humans, who rely on effective pollination for food.

It is therefore important for humans to aim to reduce the damage – one way of doing this is by providing areas where they can lay their eggs.

3

Key Words

Ecosystem -Where plants, animals, and other organisms, as well as weather and landscape, work together to form a bubble of life.

Habitat-the natural home or environment of an animal, plant, or other organism.

Pollination -the process in which pollen is taken from one plant or part of a plant to another so that new plant seeds can be produced

Species –
a group of living organisms

Arthropods – having a segmented body, jointed limbs, and a mineralized shell covering

English – Sparx Reader

On a Tuesday and Friday, you should log on to Sparx reader and spend 30 minutes reading.

Reading Articles

You will have a reading article each week linking to the whole school theme for that week:

Week 1: Values

Week 2: Goals

Week 3: Holocaust Memorial Day

Week 4: Equality and Diversity

Week 5: Online Safety

Week 6: Mental Health and Wellbeing

Read the article and highlight three words of which you were not sure. Then write the definition and draw an image which will help you remember.

As you read the articles, you will identify that the articles are not in UK English. However, the articles offer some great messages.

Use this QR code to access the reading articles read by a teacher:
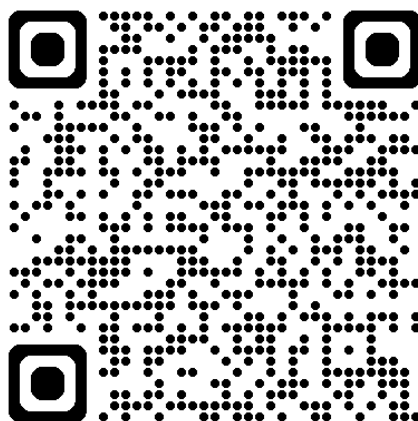
Food

History of Bread
The Egyptians first made bread more than 10,000 years ago.
The first bread was unleavened, which means it was flat,
similar to a Mexican tortilla. Around 5,000 years ago the Egyptians started producing fermented bread which made the dough spongy and the bread had more volume. Bread consumed in the UK is made from fermented dough. Until the mid-18th century white bread was only consumed by the wealthiest people, as it was more expensive. Today, white bread and wholemeal bread are equally affordable, and both are a popular staple of the UK diet.

Ingredients Used To Make Bread

Wheat - Wheat is the most commonly used grain for bread making in the UK. Flour made from wheat that is high in protein/gluten is called 'strong' flour.

Yeast - Yeast is a living microscopic organism that converts sugar or starch into alcohol and carbon dioxide; It needs moisture, warmth, food and time to multiple. It is needed for the dough to rise through fermentation; High temperatures during the baking process kill any live yeast cells.

Salt - Although it is usually used in small amounts, salt is an essential ingredient in bread.

It helps to strengthen the gluten and helps the yeast during fermentation and is therefore important for good volume and texture. **Water -** Water is needed to form the dough.

All bread making processes rely on **four key steps**. These have been used for hundreds of years.

1. **Mixing/kneading** - The ingredients are mixed together and kneaded. Kneading is required for the development of the gluten and to incorporate air bubbles. The gluten structure is also required to catch the gas produced during fermentation.
2. **Proving** - This process leads to the production of carbon dioxide which causes the gluten network to expand and therefore makes the dough rise; the produced gas is trapped in pockets. The quality of gluten is important – if it is too weak bubbles can burst causing a lack of volume, if it is too strong the dough won't stretch enough.
3. The dough is **knocked back** to remove the large gas bubbles produced by the yeast. This ensures a more even texture and a better rise. Large bubbles of gas would make large holes in the finished bread.
4. **Baking** - This step is required to produce a solid structure and deactivate the yeast. Bread is cooked at a very high temperature. Holes created by gas bubbles.

Breads around the World

Bread is one of the most popular foods and is eaten frequently in almost all countries throughout the world. Different countries have different types of bread. This makes bread one of the most varied types of food.

Mexico
Tortillas

South America
Corn bread

France
Baguette

Germany
Sourdough bread

India/ Pakistan/Iran
Naan

Italy
Focaccia

Turkey
Bazlama (Flatbread)

Greece/ Middle East
Pita

Ireland
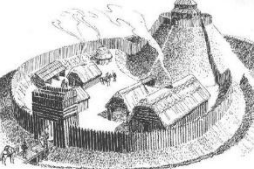Soda bread

Somalia/Ethiopia
Injera

Geography - 'What challenges and opportunities does Africa face?'

Week 2 - To know what biomes exist in Africa	Week 4 - To know how colonisation has affected Africa
A **biome** is a large region on Earth that has its own special climate, plants, and animals. In Africa, there are four main biomes. **Hot deserts** are found about 30 degrees north and south of the equator and get very little rain. They can be extremely hot during the day, reaching up to 50°C, but very cold at night. **Tropical rainforests** are located around the equator, between the Tropic of Cancer and the Tropic of Capricorn, and are hot and wet all year round. **Savannas** are found between 15 and 30 degrees north and south of the equator and have distinct wet and dry seasons, though they don't get a lot of rain overall. **Semi-deserts** lie between the deserts and the savannas, where it is always hot but not as hot as the deserts, and they receive some rain for a few months each year.	**Colonialism** is when a foreign power rules over a geographic area. A **colony** is a country or area that is under the control of another country. The Portuguese were the first to explore the west coast of Africa in 1420, which encouraged other European countries to do the same. European nations like Britain, France, Germany, and Italy took natural resources such as gold, timber, and rubber from Africa. In 1884, the Berlin Conference led to Africa being divided among European nations to avoid conflicts over these resources. Over time, the colonies rebelled and fought for their independence, with Libya being the first to gain independence from Italy in 1951.
Week 6 - To understand the benefits and problems of population change	**Week 8 - To understand how developed African countries are**
Population distribution refers to how people are spread out over a certain area, while **population density** is the average number of people living in a place per square kilometre. Africa has a total population of about 1.3 billion people, and this number is expected to double to around 2.4 billion by 2050. There are 200 million young Africans aged between 15 and 24 years old, which means Africa has a youthful population that can provide a young and relatively cheap workforce.	**Development** is the progress a country makes in terms of economic growth, technology use, and the well-being of its people. We can measure development using various indicators, such as life expectancy, literacy rate, Gross National Income (GNI) per capita, death rate, and the number of people per doctor. The **literacy rate** is the percentage of adults who can read and write. **Life expectancy** is the average age a person can expect to live. **GNI per capita** is the value of a country's income divided by its population. The **Human Development Index (HDI)** is a measure of economic development that combines GNI per capita, life expectancy, and literacy rates to give an average score. For example, Norway has the highest HDI score of 0.957 out of 1.0.

History - what did the English think when William took control?

| Component	Granular substantive knowledge	Disciplinary literacy (Key words)
Week 1: Gaining control: Why did William win the Battle of Hastings? **What problems did William face and what impact would this have on the English?**	**The Romans left England around 400AD/CE**. Between 400 AD/CE and 1066, England was ruled by the Saxons. The Vikings also conquered parts of England from 800 AD/CE. **This time is known as the Dark Ages.** **In 1066** Saxon King, Edward the Confessor died with no **heir**. Three key **contenders** wanted the throne: Harold Godwinson (An English/Saxon Earl), Harald Hardrada (A Norwegian/Viking King) and Duke William of Normandy (A Norman) **On the 14th of October 1066, Duke William of Normandy defeated King Harold at the Battle of Hastings**. Some argue that William was a better leader. **However, many factors contributed to William's victory:** William was better prepared. The English army was severely weakened before Hastings. Harold had just had to fight off an invasion in the North of England by Harald Hardrada and the Vikings (This was the **Battle of Stamford Bridge** just outside York, 300 miles from Hastings). Harold lost many of his best men and his men were tired. Harold made the mistake of entering the Battle of Hastings before his men had fully recovered. **Luck or chance played a part** because Harold had been ready for William's invasion but storms had stopped William from crossing the English Channel to attack. While Harold was North fighting the Vikings, the weather changed and William was able to cross the Channel and land safely in England. During the Battle of Hastings, the **Normans pretended to retreat** and when the Saxons left Senlac Hill and chased after them, the Normans turned around and slaughtered them. The Normans had another advantage, they had cavalry whereas the Saxons all fought on foot. **Harold Godwinson was killed. William and the Normans had won!**	**Contender:** a person or group competing with others to achieve something. **Saxons:** a group of people from Saxony (Northern Germany) **Anglo-Saxons:** The Saxons who settled in England…eventually known as the English **Vikings:** Is the modern name given to sea travelling people from Scandinavia (Northern Europe: present-day Denmark, Norway and Sweden) **Normans:** Originally Vikings, this group settled in Normandy (Northern France) in 911 A.D **Monarch:** A King or Queen **Baron:** A rich, landowning Norman knight **Invasion:** An unwelcome attack of one country's army into another country **Cavalry:** Soldiers who fight on horseback. **Conquest:** When one country takes over another. **To conquer is to achieve conquest** **Victory:** To win a war – to have success **Bayeux Tapestry:** A long set of pictures sewn on cloth showing the story of the Norman conquest of England. This gives the Norman version of events!
Week 3: How did William's use of terror help him to keep control over the English? 	William had to crush many rebellions. The biggest rebellion was in the **north** of England between **1068- 1069**. He trusted two Saxon Earls, Edwin and Morcar, to look after that part of the country for him. When William tried to raise taxes from their land, they joined forces with some Danish invaders and rose up against the Normans in 1069. William marched an army up North to teach them a lesson that they would never forget. **From 1069 to 1070,** he ordered villages to be destroyed and people to be killed. Herds of animals and crops were burnt. Most people who survived starved to death (100,000). Not only was the population reduced by 75% but land was salted (poisoned) to prevent people growing crops in the future. This was	**To Harry**: To trouble a group of people by repeated attacks **Harrying of the North:** Mass killing of Saxon's in and around the city of York. **Terror and terrorism:** using fear to try and control people. **Absolute Monarchy:** King can do anything he wants. **Control:** power over people

	called the Harrying of the North. **Following these events there were no more widespread rebellions against William.**	**Rebel / rebellion:** to fight back against those in power **Famine:** When crops fails and large numbers of people starve **Cannibalism:** Eating human flesh
Week 5: How did William's use of castles help him to keep control over the English? 	Castles were vital to Williams's takeover and control of England. The Normans built **Motte and Bailey style castles**. These were constructed out of **earth and wood.** They were built for speed as there were **10,000 Normans facing a population of two million Saxons!** Castles would protect Norman soldiers as well as acting as a base to attack and conquer a new area of land. They were built on high ground at river crossings so Normans could control the movement of goods and people. **Castles would have helped maintain law and order. They provided jobs for the local community. Saxons were forced to build them without payment, often taxes were raised to pay for the very buildings which would control them. Often Saxons homes were destroyed to make way for the castles e.g. in Lincoln. The Saxons would have felt intimidated and fearful and felt watched over.** Alongside the Motte and Bailey Castles some early stone castles were constructed e.g. the Tower of London and Chepstow Castle.	**Motte and Bailey Castles:** Castles constructed out of soil and wood **Motte:** Norman word for mound. **Bailey**: A courtyard enclosed by a curtain wall or palisade. This area had the day to day living areas housed within it. **Palisade:** a wooden fence of pales or stakes set firmly in the ground, acting as a defensive wall. **Keep:** A strong tower. The best place to keep safe! This was built at the top of a motte in a Motte and Bailey castle **Moat:** A ditch filled with water surrounding a castle. **Drawbridge:** A gate over a ditch or moat that can be raised as defence.

Maths

On a Monday, your Maths task will be set by your teacher. You should log on to Sparx Maths to complete this task. Your practice book has an area for your workings which you need to use as during the homework, Sparx Maths undertakes a bookwork check.

On a Thursday you practice independently on an area where you have a gap in your knowledge.

When logged in to Sparx students will always be able to see the Independent Learning option on the main menu:

On desktop

On mobile
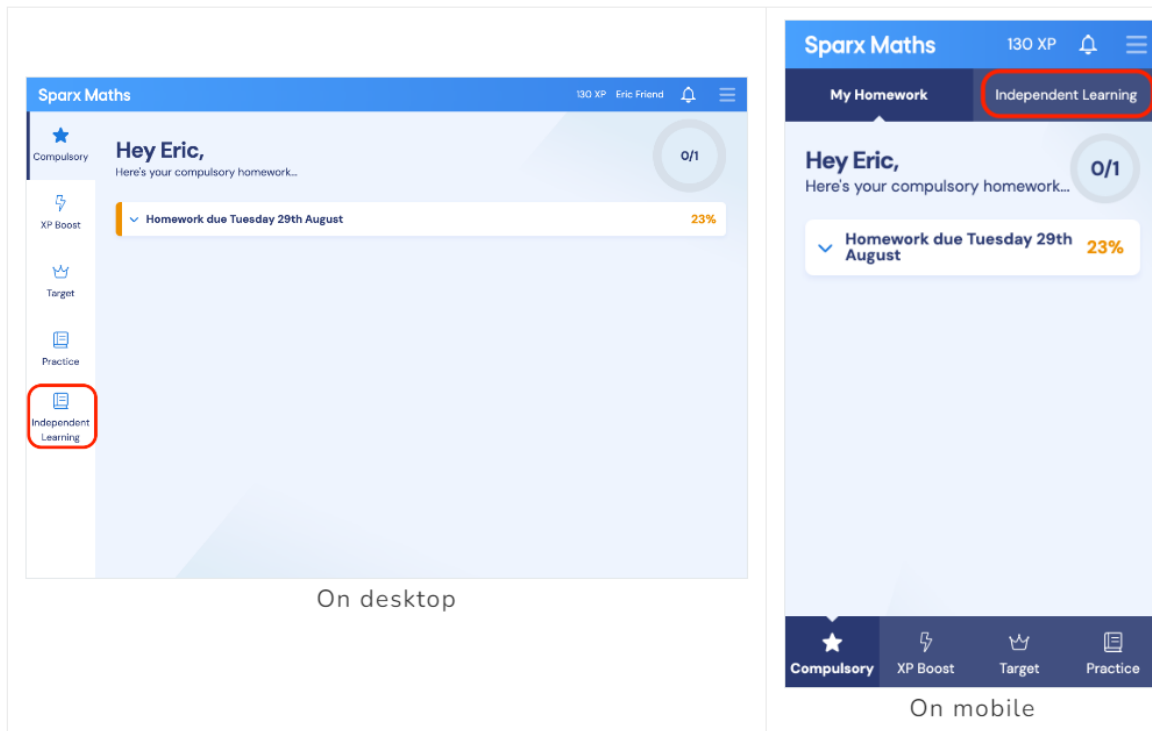
MFL – French

Tu aimes l'histoire? Do you like history?
Quelle est ta matière préférée? What is your favourite subject? (opinions + reasons)

Opinion phrase	School subject	Conjunction	Verb	Qualifier	Adjective
Ma matière préférée c'est.. *(My subject favourite is…)*	**le** français *(french)* **le** théâtre *(drama)*	car (because)	**c'est** *it is*	*assez (quite) très (very) vraiment (really)*	utile *(useful)* facile *(easy)* intéressant *(interesting)* amusant *(fun)* créatif *(creative)* difficile *(difficult)* ennuyeux *(boring)* nul *(rubbish)*
J'adore (I love)	**la** musique *(music)* **la** technologie *(DT)* **la** géographie *(geography)*	parce que (because)			
J'aime *(I like)* **Je préfère** *(I prefer)* **Je n'aime pas** *(I don't like)*	**l'**anglais *(english)* **l'**informatique *(ICT)* **l'**espagnol *(spanish)* **l'**EPS *(pe)* **l'**histoire *(history)*	mais (but)	**le prof est** *the teacher is*		sympa (nice) trop sévère (too strict)
Je déteste *(I hate)*	**les** arts plastiques *(art)* **les** sciences *(science)* **les** maths *(maths)*		**j'ai** *I have*		trop de devoirs (too much homework)

Parle-moi d'une journée typique au college:
Tell me about a typical school day: (present tense verbs)

==le / la / les = the au / à la / aux = to the / at the==

Verb (conjugated –er form)	school subject	at	time (hours + minutes)
j'étudie *(I study)* **nous étudions** *(we study)*	**le** français *(french)* **la** technologie (DT) **l'**informatique (ICT) **les** maths (maths)	à	[huit] heures *([8] O'clock)* [huit] heures dix *([8] hours ten – 8:10)* [huit] heures et quart *([8] hours and quarter – 8:15)* [huit] heures et demie *([8] hours and half – 8:30)* [huit] heures moins cinq *([8] hours minus five – 7:55)* [huit] heures moins le quart *([8] hours minus the quarter -7:45)*
je commence (I begin/start) *nous commençons (we begin/start)*	**les** cours (lessons)		
je quitte *(I leave)* *nous quittons* (we leave)	**la** maison (the house)		
j'arrive *(I arrive)* **nous arrivons** *(we arrive)*	**au** collège *(at the school)*		
je mange *(I eat)* **nous mangeons** *(we eat)*	**à la** cantine *(at the canteen)* un sandwich *(a sandwich)*		
je retrouve *(I meet)* **nous retrouvons** *(we meet)*	mes amis (my friends) nos amis (our friends)		

Qu'est-ce que tu portes normalement? What do you wear normally?

Time phrase	Verb (present/future)	clothing
Normalement *(normally)* **Au collège** *(at school)* **D'habitude** *(usually)*	je porte *(I wear/I am wearing)* nous portons *(we wear/we are wearing)*	**un** *pantalon*
		une chemise
		une cravate
		une jupe
		une veste
		des gants (some gloves)-m pl
		des baskets – trainers
		des chaussettes
		des chaussures

Qu'est-ce que tu portes au collège?
What do you wear to school? (Present and near future tenses)

Time phrase	Verb (present/future)	clothing	colour (m/f/m pl / f pl)
Normalement *(normally)* **Au collège** *(at school)* **D'habitude** *(usually)*	je porte *(I wear/I am wearing)* nous portons *(we wear/we are wearing)*	**un** polo *(a polo shirt)* **un** pantalon *(a pair of trousers)* **un** tee-shirt *(a t-shirt)* **un** manteau *(a coat)*	blanc /blanche / blancs / blanches (white) noir / noire / noirs/ noires (black) bleu / bleue/bleus / bleues (blue) vert/verte/verts/vertes (green) chic/chic/chics/chics (stylish) confortable/confortable/ confortables/confortables (comfortable) pratique/pratique/pratiques/pratiques (practical) démodé/démodée/ démodés/ démodées (unfashionable)
Ce week-end (this weekend) **Le week-end prochain** (the weekend next) **Demain** *(tomorrow)*	je vais porter *(I am going to wear)*	**une** chemise (a shirt) **une** cravate (a tie) **une** jupe (a skirt) **une** veste (a blazer)	
		des gants (some gloves)-m pl	
		des baskets (some trainers) f pl **des** chaussettes (some socks) **des** chaussures (some shoes)	

Don't forget to add an opinion. J'aime le/la/les [clothing] car c'est + adjective
e.g. j'aime la cravate car c'est pratique

French HT3 Vocabulary:

Week 1:

a matière préférée, c'est [l'anglais]	my favourite subject is [English]
j'adore	I love
je déteste	I hate
je préfère	I prefer
les maths	maths
la géographie	geography
le français	french
l'informatique	I.T.
j'aime	*I like*
je n'aime pas	*I don't like*

https://quizlet.com/_auvjlm?x=1qqt&i=1xg9z8

Week 3:

j'étudie	I study
nous étudions	we study
je commence	I begin
nous commençons	we begin
je quitte	I leave
nous quittons	we leave
je retrouve	I meet
nous retrouvons	we meet
car	*because*
c'est	*it is*

https://quizlet.com/_auvlvx?x=1qqt&i=1xg9z8

Week 5:

sur la photo	in the photo
il y a	there is /are
(dix) personnes	(10) people
un professeur (un prof)	a teacher
un garçon / une fille	a boy/a girl
la photo a été prise…	the photo was taken…
…dans un collège	…in a school
…dans une salle de classe	…in a classroom
il est	*he is*
elle est	*she is*

https://quizlet.com/_auvocx?x=1qqt&i=1xg9z8

Week 6:

All of the above !

Week 2:

car	because
c'est	it is
utile	useful
facile	easy
difficile	difficult
ennuyeux	boring
le prof est [sévère]	the teacher is [strict]
mais	but
ma matière préférée, c'est [l'anglais]	*my favourite subject is [English]*
je préfère	*I prefer*

https://quizlet.com/_auvkzi?x=1qqt&i=1xg9z8

Week 4:

à	at
une heure	1 O'clock
deux heures	2 O'clock
deux heures et quart	quarter past two
deux heures et demie	half past two
deux heures dix	ten past two
deux heures moins le quart	quarter to two
deux heures moins dix	*ten to two*
je commence *nous commençons*	*I begin* *we begin*

MFL – German

Sentence Builder 1 – **Hast du Geschwister?** Do you have siblings?

Ich habe I have **Er hat** He has **Sie hat** She has	**einen Bruder** *a brother* **einen Stiefbruder** *a stepbrother* **einen Halbbruder** *a half brother* **einen Zwillingsbruder** *a twin brother*
	eine Schwester *a sister* **eine Stiefschwester** *a stepsister* **eine Halbschwester** *a half sister.* **eine Zwillingsschwester**, *a twin sister*
	zwei Brüder *two brothers* **drei Schwestern** *three sisters* **vier Stiefbrüder** *four stepbrothers* **zwei Halbschwestern** *two half sisters* **keine Geschwister** *no siblings*
Ich bin I am **Er ist** He is **Sie ist** She is	**Einzelkind** *an only child*

Es gibt sechs Personen in meiner Familie
There are 6 people in my family.

Hast du Geschwister?
Do you have any brothers or sisters?

Sentence Builder 2 – **Beschreib deine Familie** Describe your family.

noun	Subject and verb
Mein Vater *my father* **Mein Bruder** *my brother* **Mein Stiefbruder** *my stepbrother* **Mein Halbbruder** *my halfbrother* **Mein Opa** *my grandpa* **Mein Onkel** *my uncle* **Mein Cousin** *my cousin male* **mein Neffe** *my nephew*	**heißt Boris** *is called Boris* **ist X Jahre alt** *is X years old* **wohnt in Bristol** *lives in Bristol*
meine Mutter *my mother* **meine Schwester** *my sister* **meine Stiefschwester** *my stepsister* **meine Halbschwester** *my half sister* **meine Oma** *my grandma* **meine Tante** *my aunt* **meine Cousine** *my cousin female* **meine Nichte** *my niece*	**heißt Carrie** *is called Carrie* **ist X Jahre alt** *is X years old* **wohnt in London** *lives in London*
Meine Eltern *my parents* **Meine Großeltern** *my grandparents* **meine Cousinen** *my cousins*	**heißen Elizabeth und Philip** *are called Elizabeth and Philip* **sind X Jahre alt** *are X years old* **wohnen in Cardiff** *live in Cardiff*

Sentence Builder 3 – **Wie sehen sie aus?** What do they look like?

subject and verb	Adjective and noun		
Ich habe I have **Er hat** He has **Sie hat** She has **Sie haben** They have	**kurze** short **lange** long **mittellange** mid length **lockige** curly **glatte** straight **wellige** wavy	**schwarze** black **braune** brown **blonde** blonde **rote** red **weiße** white **graue** grey	**Haare** hair
	blaue blue **braune** brown **grüne** green **graue** grey **hellgrüne** light green **dunkelblaue** dark blue		**Augen** eyes
Ich trage I wear **Er trägt** He wears **Sie trägt** She wears **Sie tragen** They wear	**eine Brille** glasses		
Ich bin I am **Er ist** He is **Sie ist** She is **Sie sind** they are	**groß** tall / big **mittelgroß** medium **schlank** slim **kräftig** strong **dick** fat **klein** small		

Sentence Builder 4 – **Wie sind sie?** What are they like?

Relative	Verb	Intensifier	Adjective	Conn.	Adverb of Freq	Adjective
Mein Vater My father			**intelligent** intelligent		**immer** always	**schüchtern** shy
Mein Bruder My brother				**aber** but	**oft** often	**launisch** moody
Mein Onkel My uncle		**total** totally	**sportlich** sporty		**häufig** frequently	**frech** cheeky
Mein Großvater My grandfather	**ist** is	**sehr** very	**musikalisch** musical	**und** and	**regelmäßig** regularly	**gemein** mean
Mein Cousin My male cousin		**ziemlich** quite	**kreativ** creative		**manchmal** sometimes	**streng** strict
Meine Mutter My mother					**ab und zu** now & again	
Meine Schwester My sister		**ein bisschen** a bit	**freundlich** friendly		**selten** rarely	**laut** loud
Meine Tante My aunt			**lustig** funny		**nie** never	
Meine Großmutter My grandmother			**nett** nice			**ungeduldig** impatient
Meine Kusine My female cousin			**faul** lazy			**gemein** mean
Meine Eltern My parents			**unpünktlich** late	**oder** or		**nervig** annoying
Meine Großeltern My grandparents	**sind** are	**nicht** not	**jung** young			
Meine Geschwister My siblings			**alt** old			
Meine Brüder My brothers						
Meine Schwestern My sisters						

subject and verb	noun	Subject and verb
Ich habe _I have_ **Ich hatte** _I had_ **Ich möchte** _I would like_	**einen Hund** _a dog_ **einen Goldfisch** _a goldfish_ **einen Hamster** _a hamster_	**Er heißt Bob** _He/it's called Bob_
	eine Katze _a cat_ **eine Maus** _a mouse_ **eine Schlange** _a snake_	**Sie heißt Mitzi** _She/it's called Mitzi_
	ein Kaninchen _a rabbit_ **ein Pferd** _a horse_ **ein Meerschweinchen** _a guinea pig_	**Es heißt Nudel** _It's called Nudel_
	zwei Hunde _two dogs_ **zwei Goldfische** _two goldfish_ **zwei Hamster** _two hamsters_ **zwei Katzen** _two cats_ **zwei Mäuse** _two mice_ **zwei Schlangen** _two snakes_ **zwei Kaninchen** _two rabbits_ **zwei Pferde** _two horses_ **zwei Meerschweinchen** _two guinea pigs_	**Sie heißen..** _they are called_

Wie ist er/sie/es? _What is he/she/it like?_	
Er ist _He is_ **Sie ist** _She is_ **Es ist** _It is_ **Sie sind** _They are_	**cool** _cool_ **gemein** _mean_ **kräftig** _strong_ **schlau** _cunning_ **schnell** _fast_ **superintelligent** _highly intelligent_ **superlustig** _really funny_ **süß** _cute/sweet_
Er kann _He can_ **Sie kann** _She can_ **Es kann** _It can_ **Sie können** _They can_	**springen** _jump_ **Fußball spielen** _play football_ **fliegen** _fly_ **Flöte spielen** _play the flute_ **Xbox spielen** _play the xbox_ **lesen** _read_ **Italienisch sprechen** _speak Italian_ **singen** _sing_ **Rad fahren** _cycle_ **schnell laufen** _run fast_ **tanzen** _dance_ **schwimmen** _swim_

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German HT3 Vocabulary:

Week 1:

Ich habe	I have
einen Bruder	a brother
einen Vater	a father
einen Onkel	an uncle
eine Schwester	a sister
eine Mutter	a mum
eine Tante	an aunt
zwei Br**ü**der/Schweste**rn**	two brother**s**/sister**s**
Ich heiße	I am called
Ich bin (Einzelkind)	I am (an only child)

Week 2:

braune Augen	brown eyes
blaue Augen	blue eyes
graue Augen	grey eyes
blonde Haare	blonde hair
kurze Haare	short hair
lange Haare	long hair
glatte Haare	straight hair
lockige Haare	curly hair
Ich habe	*I have*
Ich bin	*I am*

Week 3: size and height + intensifiers

Ich bin	I am
Du bist	You are
Er ist	He is
Sie ist	She is
ganz	quite
ziemlich	rather
groß	tall
klein	short
ich habe	*I have*
ich heiße	*I am called*

Week 4:

sehr	very
ziemlich	quite
nicht	not
schüchtern	shy
launisch	moody
sportlich	sporty
musikalisch	musical
freundlich	*friendly*
ich bin	*I am*
er/sie ist	*he/she is*

Week 5 :

ich hatte	I had
ich möchte	I would like
einen Hund	a dog
eine Katze	a cat
ein Kaninchen	a rabbit
ein Pferd	a horse
ein Meerschweinchen	a guinea pig
er/sie heißt	he/she is called
ich habe	*I have*
ich heiße	*I am called*

MFL – Mandarin

wǒ jiā yǒu wǔ kǒu rén bà bà mā mā dì dì mèi mèi hé wǒ
我家有五口人：爸爸、妈妈、弟弟、妹妹和我。 <u>My</u> family has <u>5</u> people: <u>Dad</u>, <u>Mum</u>, <u>younger brother</u>, <u>younger sister</u> and <u>me</u>.

Subject	family	to have	number	measure word	person people	family members	and	pronoun
我 I 你 You 他 He 她 She 老师 Teacher Lily	家 jiā	有 yǒu	一 二 èr 三 sān 四 sì 五 wǔ 六 liù 七 qī 八 bā 九 jiǔ 十 shí	口 kǒu	人 rén	爸爸 bà bà Dad 妈妈 mā mā Mum 哥哥 gē gē older brother 弟弟 dì dì younger brother 姐姐 jiě jiě older sister 妹妹 mèi mèi younger sister	和 hé	我 me 你 you 他 him 她 her
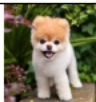
wǒ yǒu yī gè dì dì hé yī gè mèi mèi
我有一个弟弟和一个妹妹。 I have a younger brother and a younger sister.

Subject	to have	number	measure word	family members	and	number	measure word	family members
我 I 你 You 他 He 她 She 老师 Teacher	有 yǒu	一 二 èr 三 sān 四 sì 五 wǔ 六 liù 七 qī 八 bā 九 jiǔ 十 shí	个 gè	哥哥 gē gē older brother 弟弟 dì dì younger brother 姐姐 jiě jiě older sister 妹妹 mèi mèi younger sister	和 hé	一 二 èr 三 sān 四 sì 五 wǔ 六 liù 七 qī 八 bā 九 jiǔ 十 shí	个 gè	哥哥 gē gē older brother 弟弟 dì dì younger brother 姐姐 jiě jiě older sister 妹妹 mèi mèi younger sister

wǒ méi yǒu dì dì
我没有弟弟。 I don't have a <u>younger brother</u>.

Subject	not have	family members
我 wǒ I 你 nǐ You 他 tā He 她 tā She 老师 lǎo shī Teacher 爸爸 bà bà Dad 妈妈 mā mā Mum Lily	没有 méi yǒu	哥哥 gē gē older brother 弟弟 dì dì younger brother 姐姐 jiě jiě older sister 妹妹 mèi mèi younger sister

wǒ yǒu yì zhǐ xiǎo gǒu
我有一只小狗。 I have a small dog.

Subject	verb	number	measure word	adjective	pet
我 wǒ I 爸爸 bà bà Dad 妈妈 mā mā Mum 哥哥 gē gē older brother 弟弟 dì dì younger brother 姐姐 jiě jiě older sister 妹妹 mèi mèi younger sister 朋友 péng yǒu friend	有 yǒu has have	一 yī 1 两 liǎng 2 三 sān 3 四 sì 4 五 wǔ 5 六 liù 6 七 qī 7 八 bā 8 九 jiǔ 9 十 shí 10	只 zhǐ 条 tiáo	大 dà big 小 xiǎo small	狗 gǒu 猫 māo 鸟 niǎo 兔子 tù zi 鱼 yú 蛇 shé

My birthday is December 25th. 我的生日是<u>十二月二十五日</u>。

who	的 de	birthday	is	number	month	number	day
我 wǒ I 爸爸 bà bà Dad 妈妈 mā mā Mum 哥哥 gē gē older brother 弟弟 dì dì younger brother 姐姐 jiě jiě older sister 妹妹 mèi mèi younger sister 老师 lǎo shī teacher	的 de Possessive form	生日 shēng rì	是 shì	一 yī 1 二 èr 2 三 sān 3 四 sì 4 五 wǔ 5 六 liù 6 七 qī 7 八 bā 8 九 jiǔ 9 十 shí 10 十一 shí yī 11 十二 shí èr 12	月 yuè	十三 shí sān 13 十四 shí sì 14 十五 shí wǔ 15 十六 shí liù 16 十七 shí qī 17 十八 shí bā 18 十九 shí jiǔ 19 二十 èr shí 20 二十一 èr shí yī 21 二十九 èr shí jiǔ 22 三十 sān shí 30 三十一 sān shí yī 31	日 rì

Week 2

爸爸	Father
哥哥	Older brother
弟弟	Younger brother
妈妈	Mother
姐姐	Older sister
妹妹	Younger sister
家	Home; family
有	To have
口	Measure word
和	and

Week 3

狗	Dog
猫	Cat
鸟	Bird
兔子	Rabbit
鱼	Fish
蛇	Snake
没有	Don't have
只	Measure word for animal
条	Measure word for animal
小	small

Week 4

喜欢	To like
因为	because
可爱	lovely
很好	Very good
不好	Not good
大	Big
的	Possessive form
吗	Question word
几	How many
什么	What

Week 5

的	Possessive form
生日	Birthday
是	To be
月	Month
日	Day
今天	Today
爷爷	Father's father
奶奶	Father's mother
犭	Animal radical
岁	…years old

Week 6

石	Stone
火	Fire
舌	Tongue
讠	Speech radical
车	Vehicle
饣	Food radical
犭	Animal radical
的	Possessive form
吗	Question word
大	big

MFL – Spanish

INTRODUCING	NOUN	VERB	NOUN	CONNEC	VERB		NOUN
						1- un	año *(year old)*
En mi familia tengo a (In my family I have…)	mi abuelo *(my grandfather)* mi padre *(my father)* mi padrastro *(my step-father)* mi tío *(my uncle)* mi hermano mayor *(my older brother)* mi hermano menor *(my younger brother)* mi hermanastro *(my step-brother)* mi primo *(my male cousin)*	que se llama _ *(who is called _)*	Paloma Ismael	y *(and)*	tiene *(he/she is)*	2- dos 3- tres 4- cuatro 5- cinco 6- seis 7- siete 8- ocho 9-nueve 10-diez 15- quince 20- veinte 21- veintiuno 30- treinta 40- cuarenta 50- cincuenta 60- sesenta 70- setenta 80- ochenta 90- noventa 100- cien	años *(years old)*
Me llevo bien con… *(I get along well with)* **Me llevo mal con…** *(I get along badly with)*	mi abuela *(my grandmother)* mi madre *(my mother)* mi madrastra *(my step-mother)* mi tía *(my aunt)* mi hermana mayor *(my older sister)* mi hermana menor *(my younger sister)* mi hermanastra *(my step-sister)* mi prima *(my female cousin)*						

En mi familia hay "cuatro" personas =In my family There are "4" people

OPINION P'	NOUN- family	VERB	QUANTIFIER	ADJECTIVE	CONNECTIVE
	Yo *(I)*	soy *(…am)*			
Pienso que *(I think that)* **Creo que** *(I believe that)* **En mi opinión** *(In my opinion)*	mi abuelo mi padre mi padrastro mi tío mi hermano mayor mi hermano menor mi hermanastro mi primo	es *(is)*	demasiado *(too)* muy *(very)* bastante *(quite)* un poco *(a bit)*	alto/a *(tall)* bajo /a *(short)* delgado/a *(slim)* gordo /a *(fat)* guapo/a *(handsome)* feo /a *(ugly)* musculoso/a *(muscular)* divertido/a *(fun)* aburrido /a *(boring)* simpático/a *(nice)* antipático /a *(mean)* generoso/a *(generous)* trabajador/a *(hard-working)* perezoso /a *(lazy)* terco /a *(stubborn)* tonto /a *(silly)* bueno/a *(good)* malo/a *(bad)* amable *(kind)* fuerte *(strong)* inteligente *(intelligent)* paciente *(patient)*	pero *(but)* sin embargo *(however)* y *(and)* también *(also)*
	mi abuela mi madre mi madrastra mi tía mi hermana mayor mi hermana menor mi hermanastra mi prima				

VERB	NOUN	ADJECTIVE	ADJECTIVE	CONN'	ADJECTIVE
Tengo *(I have)* **Tiene** *(He/She has)*	**el pelo** *(hair)*	**castaño** *(brown)* **moreno** *(dark brown)* **negro** *(black)* **pelirrojo** *(ginger)* **rubio** *(blonde)*	**en punta** *(spiky)* **liso** *(straight)* **rizado** *(curly)* **ondulado** *(wavy)*	**y** *(and)*	**largo** *(long)* **a media melena** *(medium length)* **corto** *(short)* **rapado** *(very short / shaved)*
	los ojos *(eyes)*	**azules** *(blue)* **marrones** *(brown)* **verdes** *(green)* **negros** *(black)*			
[No] llevo *I [don't] wear* **[No] lleva** *He/She [doesn't] wear*	**gafas** *(glasses)* **bigote** *(a moustache)* **barba** *(a beard)*				

OPINION PHRASES	NOUN- family	CONN'	VERB	QUANTIFIER	ADJECTIVE
Prefiero - *I prefer* **Me encanta** - *I love* **Me flipa** - *I'm crazy about* **Me gusta mucho** - *I really like* **Me gusta** - *I like* **No me gusta** - *I don't like* **Odio** - *I hate* **Me llevo bien con…** *(I get along well with)* **Me llevo mal con…** *(I get along badly with)*	mi abuelo mi padre mi padrastro mi tío mi hermano mayor mi hermano menor mi hermanastro mi primo mi abuela mi madre mi madrastra mi tía mi hermana mayor mi hermana menor mi hermanastra mi prima	**Porque** *(because)*	**es** *(she/he is)*	**demasiado** *(too)* **muy** *(very)* **bastante** *(quite)* **un poco** *(a bit)*	**alto/a** *(tall)* **bajo /a** *(short)* **delgado/a** *(slim)* **gordo /a** *(fat)* **guapo /a** *(handsome)* **feo /a** *(ugly)* **musculoso/a** *(muscular)* **divertido/a** *(fun)* **aburrido /a** *(boring)* **simpático/a** *(nice)* **antipático /a** *(mean)* **generoso/a** *(generous)* **trabajador/a** *(hard-working)* **perezoso /a** *(lazy)* **terco /a** *(stubborn)* **tonto /a** *(silly)* **amable** *(kind)* **fuerte** *(strong)* **inteligente** *(intelligent)* **paciente** *(patient)*

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Spanish HT3 Vocabulary:

Week 1:

En mi familia hay	In my family there are
En mi familia tengo	In my family I have
Mi abuelo	My grandad
Mi padre	My dad
Mi tío	My uncle
Mi hermano mayor	My older brother
Mi hermano menor	My younger brother
Mi hermanastro	My step brother
Mi primo	My male cousin
¿Cuántas personas hay en tu familia?	How many people are there in your family?

Week 2:

En mi familia hay	In my family there are
En mi familia tengo	In my family I have
Mi abuela	My grandmother
Mi madre	My mum
Mi tía	My aunt
Mi hermana mayor	My older sister
Mi hermana menor	My younger sister
Mi hermanastra	My step sister
Mi prima	My female cousin
¿Cuántas personas hay en tu familia?	How many people are there in your family?

Week 3:

Pienso que	I think that
Creo que	I believe that
En mi opinión	In my opinion
Demasiado	Too
Muy	Very
Bastante	Quite
Poco	A bit
Ella es/ él es	She is / He is
Sin embargo	However
También	Also

Week 4:

Alto	Tall
Bajo	Short
Delgado	Slim
Gordo	Fat
Guapo	Handsome
Feo	Ugly
Musculoso	Muscular
Divertido	Fun
Aburrido	Boring
Simpático	Nice

Week 5:

Antipático	Mean
Generoso	Generous
Trabajador	Hardworking
Perezoso	Lazy
Terco	Stubborn
Tonto	Silly
Amable	kind
Fuerte	Strong
Inteligente	Intelligent
Paciente	Patient

Week 6:

yo tengo	I have
El pelo	Hair
Castaño	Light brown
Moreno	Dark brown
Rubio	Blonde
Pelirrojo	Ginger
Negro	Black
En punta	Spiky
Liso	Straight
Rizado	Curly

Music

A Journey Through Space Knowledge Organiser

Written between 1914-1916 by British composer Gustav Holst, 'The Planets' represents all the known planets of the Solar System seen from Earth at the time, and their astrological character, including Mars the Bringer of War and Venus the Bringer of Peace


Melody – Pentatonic Scale

C major pentatonic scale

C D E G A C

Harmony

I ii iii IV V(7) vi vii° I
C Dmin Emin F G(7) Amin Bdim (C)

F major   A minor

Task: Compose an 8-bar melody using the C major pentatonic scale. Balance is important: your melody should usually be 8 bars long, so you should break it down into two parts or "phrases", (this is called *binary form*). The first phrase will be bars 1-4, and the second phrase will be bars 5-8. If you like, you can then divide each phrase into 2, giving you four short 2-bar phrases. We can call these four phrases 1a, 1b, 2a and 2b.

woodwind family   brass family   percussion instruments   violin family
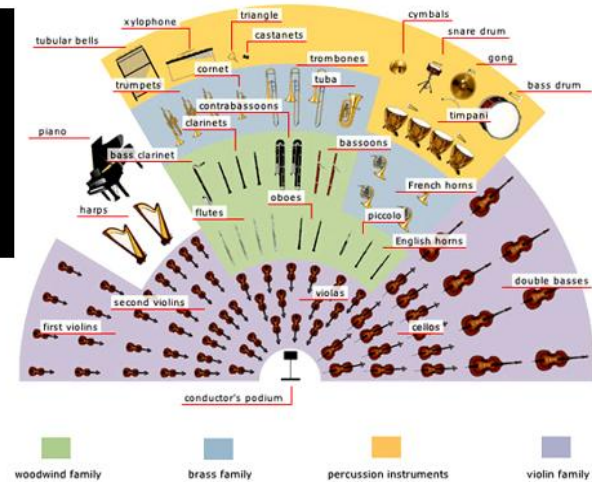
Scan to Listen

Venus, The Bringer of Peace

Uranus, The Magician

Mercury, The Winged Messenger

Mars, The Bringer of War

Jupiter, The Bringer of Jollity

Neptune, The Mystic

Saturn, The Bringer of Old Age

Essential Key Words:

Ostinato – Repeated Pattern
Drone – Long continuous note
Time Signature, Metre, - How many beats in the bar and what type of beat
5/4 – 5 crotchet beats in every bar
Composer – Person that writes a piece of music
crescendo – Dynamics, gradually getting louder
triplet – 3 notes squashed in to the time it usually takes to play 2
crotchet – note with a duration of 1 beat
quaver – note with a duration of ½ a beat
Dynamics – gradually getting louder
Volume Automation – programming instruments volume in music software
Texture – layers of music
Synthesizer – electric usually keyboard instruments
Chords – playing more than 1 note at the same time
Suite – A collection of pieces of music intended on being played one after the other.

Danse Macabre – Knowledge Organiser

Programme Music – What is it? Scan here to find out and listen to more examples

"Danse Macabre" by Saint-Saëns, composed in 1874 and premiered in 1875, features a solo violin, xylophone, and full orchestra. **Inspired by a poem**, it depicts Death summoning skeletons to dance at midnight. The piece opens with twelve harp notes, symbolizing the twelve strokes of midnight
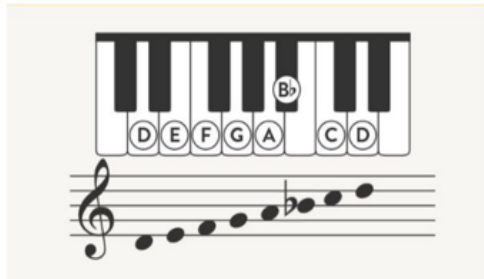
Melody: D minor scale

Harmony (Chords)- Accompaniment

- **Key Words**
- Chromatic scales (going up or down in semitones)
- Dissonance – notes that 'clash' when played together
- Tritone – a dissonant sound of 2 notes that are 3 tones apart
- Drones (held notes/rhythms on one pitch)
- Ostinato (repeated pattern)
- Tremolo (alternating on same note/octaves)
- D minor: see melody image for notes
- Metre - 3/4 Time signature – 3 crotchets in a bar
- Waltz – dance with 3 beats in a bar
- Timbre – The sonic quality of the sound that makes it different from other sounds e.g. the big gong cymbal sounds dark and warm. The small cymbal sounds bright and splashy
- Tone poem, also known as a symphonic poem - A piece of orchestral music that illustrates or evokes a non-musical source, such as a poem, painting, or landscape
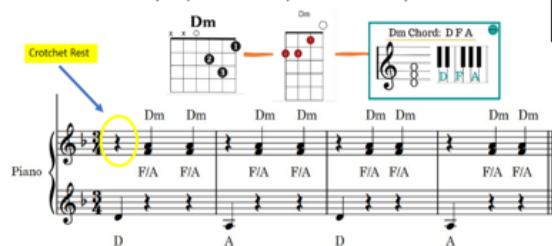
- **Other relevant Key Words**
- Crotchet – note with a duration of 1 beat
- Quaver – note with a duration of ½ a beat
- Dynamics crescendo - gradually getting louder
- Texture – layers of music
- Harmony and Chords – playing more than 1 note at the same time (see harmony image).

Dance Macabre – scan and click to listen

Listening Guide
- **Introduction:** Harp strikes twelve times, representing the clock striking midnight.
- **Death's Call:** Solo violin enters with the eerie tritone.
- **Dance Begins:** The orchestra joins in, creating a lively and macabre dance
- **Climax:** The music becomes more intense, with the full orchestra playing energetically
- **Coda (ending):** The piece ends quietly as the cock crows, signalling dawn and the return of the skeletons to their graves.

Key Words

- Chromatic scales (going up or down in semitones)

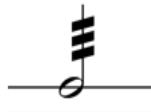C C♯ D D♯ E F F♯ G G♯ A A♯ B C

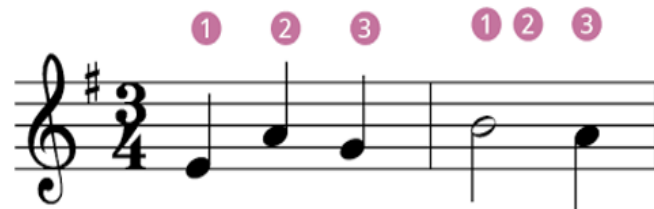- Tritone – a dissonant sound of 2 notes that are 3 tones apart

- Ostinato (repeated pattern) scan here for explanation

- Tremolo (alternating on same note/octaves)

- Metre - 3/4 Time signature – 3 crotchets in a bar

1 2 3   1 2 3

The Castle School
ACHIEVE | BELONG | PARTICIPATE

10 Mental Health Tips

Exercise | Relaxation | Time Outdoors | Good Diet | Sleep

Gratitude | Routines | Socializing | Avoid Drugs | Get Help

Common Sleep Deprivation Effects

fatigue | mood changes

difficulty concentrating | memory problems

paranoia

verywell

8 tips to stay safe online

1 Be nice to people online.

2 Take care with what you share.

3 Keep personal information private.

4 Check your privacy settings.

5 Know how to report posts.

6 Keep your passwords safe.

7 Never meet anyone in person you've only met online.

8 If you see anything online that you don't like or you find upsetting, tell someone you trust.

Who can see your posts?
Only me
Friends
Public
Report this comment
Username Ashley.Smith21 Password ••••••
Meet me?

Diversity

The Holocaust

The Holocaust was the genocide of European Jews during World War II. Between 1941 and 1945, Nazi Germany and its collaborators systematically murdered some six million Jews across German-occupied Europe, around two-thirds of Europe's Jewish population.

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ELECTIONS
government voting
POLITICS
Democracy
citizens education
PEOPLE
equality government PEOPLE POLITICS

Religion and Worldviews

Week 1

The Origins of Hinduism

Hinduism is the main religion of India and Nepal. It includes the worship of one or more gods and the belief in reincarnation, which means being born again after death. Hinduism is connected to the eastern part of the world, which is to the east of Europe.

The roots of Hinduism go back to an ancient civilization called the Indus Valley Civilisation. This civilization existed a very long time ago, between 3500 and 1500 BCE. The people of this civilization lived in what is now modern-day India and Pakistan.

Hindus do not call their religion "Hinduism." Instead, they refer to it as **Sanatana dharma**, which means "eternal teaching," "eternal law," or "eternal truths." This name reflects the belief that the teachings of Hinduism are timeless and have always existed.

Understanding the origins of Hinduism helps us learn about the history and culture of India. The ancient Indus Valley Civilization played a significant role in shaping the religion and its practices. By studying this civilization, we can see how Hinduism developed and became an important part of Indian life.

India is known for its vibrant culture and the use of many colours. Each colour has a special meaning and is used in festivals, clothing, art, and daily life. For example, red is often worn by brides at weddings and symbolises love and passion. Yellow represents knowledge and learning, while green stands for life and happiness. Saffron, a sacred colour, symbolizes purity and religious devotion. These colours help to make Indian culture rich and lively, reflecting the diverse traditions and customs of the country.

Week 3

One of the Hindu Creation stories.

A long time ago, before there was anything in the world, there was a vast, dark ocean. In this ocean, a giant snake named Ananta floated peacefully. On top of this snake lay Lord Vishnu, a powerful god. Vishnu was resting, and everything was calm and quiet.

One day, Vishnu heard a sound, "Om," which woke him up. As he woke, a beautiful lotus flower began to grow from his belly button. This lotus flower was huge and pink, and it floated on the water. From the petals of this lotus flower, another god named Brahma was born.

Brahma looked around and saw only darkness. He did not know what to do, so he prayed to Vishnu for guidance. Vishnu, who was also inside Brahma's heart, told him how to create the world. Brahma listened carefully and began his work.

First, Brahma created the gods who would help run the universe. He made Chandra, the moon god, and Surya, the sun god, and placed them in the sky to bring night and day. He also made the stars and scattered them across the night sky like glittering diamonds. Brahma created the planets, such as Mercury, Venus, Earth, Mars, Jupiter, and Saturn, and sent them spinning into space.
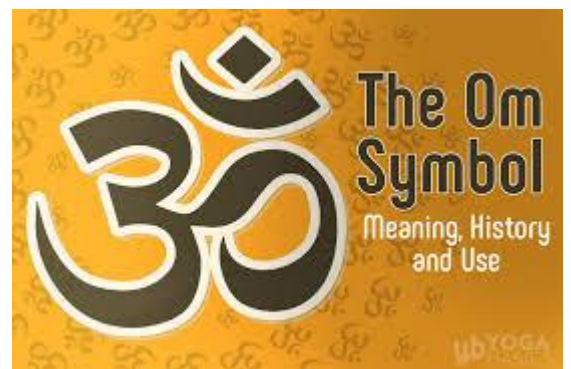
Next, Brahma created other gods like Vayu, the god of wind, Agni, the god of fire, and Varuna, the god of water. These gods and goddesses were given the task of filling the universe with living beings. The goddesses gave birth to different types of creatures. First came humans, some of whom lived in heavenly worlds, while others, like us, lived on Earth. Then came the animals, followed by birds, insects, reptiles, fish, and finally, all kinds of plants.

As the gods and goddesses created these living beings, another god named Shiva breathed life into each one, giving them souls. These souls would move from one body to another, seeking happiness in the world. Some souls, when in human bodies, would search for God and eventually return to the spiritual world. This return is called moksha, or liberation.

This creation story shows how the world and everything in it came to be, according to Hindu beliefs. It also explains the roles of different gods and the cycle of life and rebirth that is central to Hinduism. By understanding this story, we can learn more about the rich traditions and beliefs that are part of Hindu culture.

Week 5

The Importance of Gods and Goddesses in Hinduism

In Hinduism, gods, and goddesses, also known as deities, are very important. A deity is a supernatural being with powers greater than that of ordinary humans. They are revered as divine or sacred. Each deity has unique characteristics and roles that help guide Hindus in their daily lives. Here are examples of three gods and three goddesses and why they are so important:

Gods

Vishnu – The Sustainer

Role and Importance: Vishnu is known as the Sustainer because he preserves and protects the universe. Whenever there is trouble, Vishnu comes to help restore balance and order. He is very important to Hindus because he ensures that the world remains safe and harmonious. **Example**: One of Vishnu's most famous avatars is Krishna, who played a key role in the epic story of the Mahabharata. Krishna's teachings in the Bhagavad Gita are very important to Hindus.

Shiva – The Destroyer

Role and Importance: Shiva is known as the Destroyer, but this does not mean he is evil. Instead, he destroys the old to make way for the new. This destruction is a necessary part of the cycle of life, death, and rebirth. Shiva helps Hindus understand that change is a natural part of life. **Example**: Shiva is often depicted meditating on Mount Kailash, showing his deep connection to spirituality and inner peace.

Brahma – The Creator

Role and Importance: Brahma is the Creator of the universe. He created all living beings and the world itself. Although he is not worshipped as much as Vishnu and Shiva, his role in creation is crucial. **Example**: Brahma is often shown with four faces, each looking in a different direction, symbolizing his all-seeing nature.

Goddesses

Saraswati – Goddess of Learning

Role and Importance: Saraswati is the Goddess of Learning, music, and the arts. She is very important to students and artists who pray to her for wisdom and success in their studies and creative endeavours. **Example**: During the festival of Vasant Panchami, Hindus celebrate Saraswati and seek her blessings for knowledge and learning.

Lakshmi – Goddess of Wealth

Role and Importance: Lakshmi is the Goddess of Wealth and prosperity. She is very important to Hindus who pray to her for financial success and well-being. Lakshmi brings good fortune and is often worshipped during the festival of Diwali. **Example**: Lakshmi is often depicted sitting on a lotus flower, symbolizing purity, and beauty.

**Kali – Goddess of Time and Death**

Role and Importance: Kali is the Goddess of Time and Death. She represents the end of things and the power of time. Kali helps Hindus understand that everything has an end, and that death is a natural part of life. **Example**: Kali is often shown with a fierce appearance, symbolizing her power to destroy evil and protect the good.

All Hindu stories have deep meaning behind them. They relate to both the physical and spiritual world teaching Hindus lessons about both.

Science - Chemistry

Week 1	Sedimentary rock formation:	Transportation Deposition Sedimentation Fossil

Sedimentary rock formation:
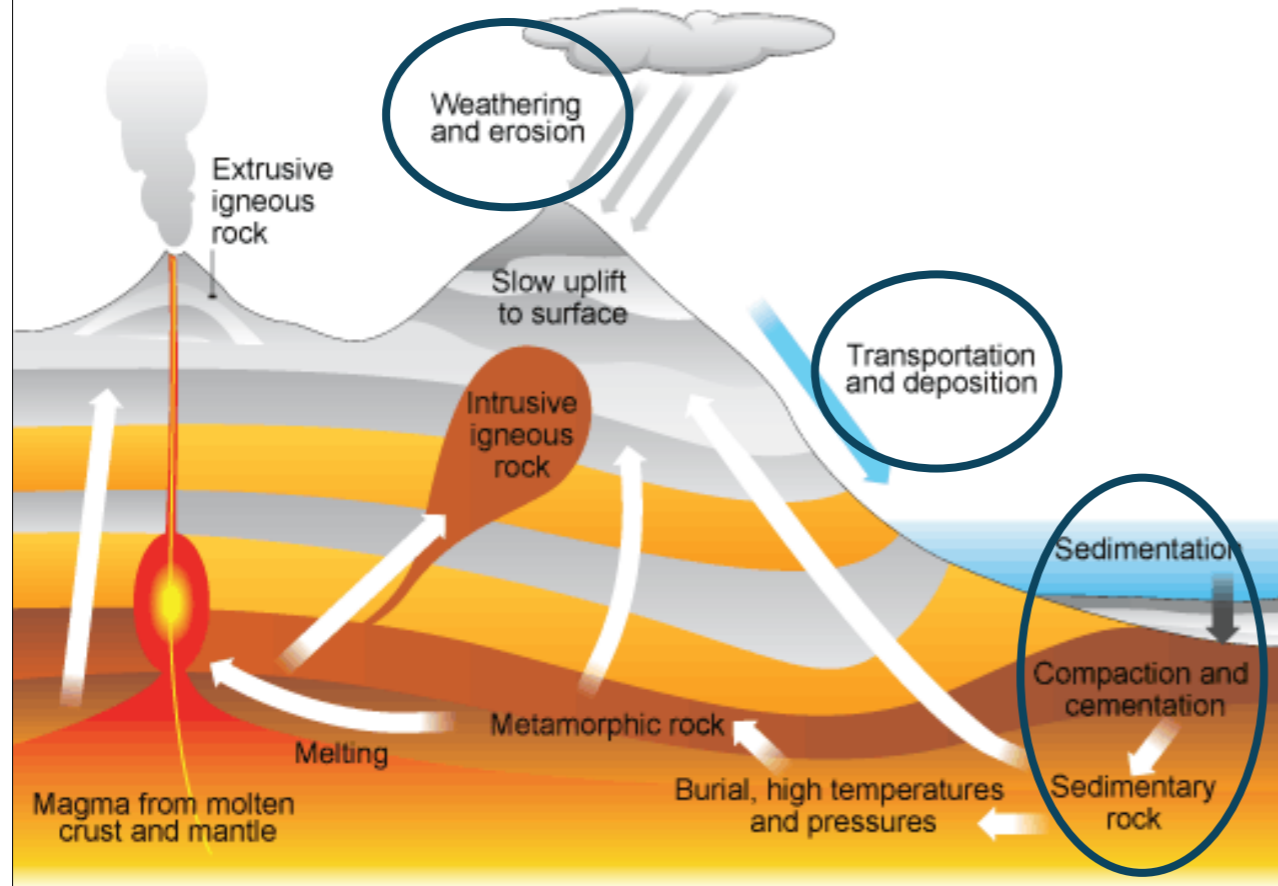
Weathering and erosion – bits of rock are broken off. This can be through chemical, physical or biological weathering.

Transportation and deposition – small parts of rocks (sediment) are transported away and deposited into the ocean

Sedimentation – sediment settles to the bottom of the ocean

Compaction and cementation – over many years the sediment gets compacted under the high pressure.

Fossils as the 'remains of once living animals or plants.' They are found in sedimentary rocks
Two main types of fossil:
Body fossil - fossilised remains of a plant or animal e.g. a bones, shell, leaves.
Trace fossil - record an activity of an animal e.g. footprints, trackways, coprolites.

Science - Chemistry

Body fossils show us what a plant or animal looked like. They are the fossilised remains of an animal or plant, like bones, shells and leaves.

The fossilised dinosaur skeletons and big bones we see, petrified wood and whole body fossils (mammoths caught in ice or insects trapped in amber) are all body fossils.

Fossils can give information about how long ago a plant/animal lived.

Fossil records can show how an organism has evolved over time

The fossil record is not complete!

Trace fossils record the activity of an animal. These include footprints, trackways, and coprolites (fossil poo!).

People who study fossils are called palaeontologists.

Week 2	The three fossil fuels are crude oil, coal and natural gas.	Crude oil Fuel Energy Global Warming

The three fossil fuels are crude oil, coal and natural gas.

Fossil fuels are non-renewable because they are being used quicker than they are being replaced. This means they are running out.

Crude oil formation: Formed from ancient dead animals and plants which have been buried in sediment and compressed over many years.
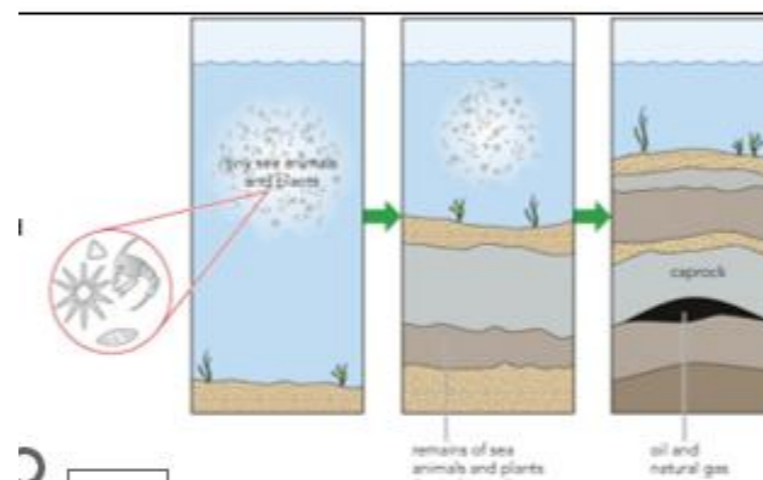
Uses of fossil fuels:
Crude oil can be used in cooking, to fuel cars, to fuel ships and even to make tarmac.

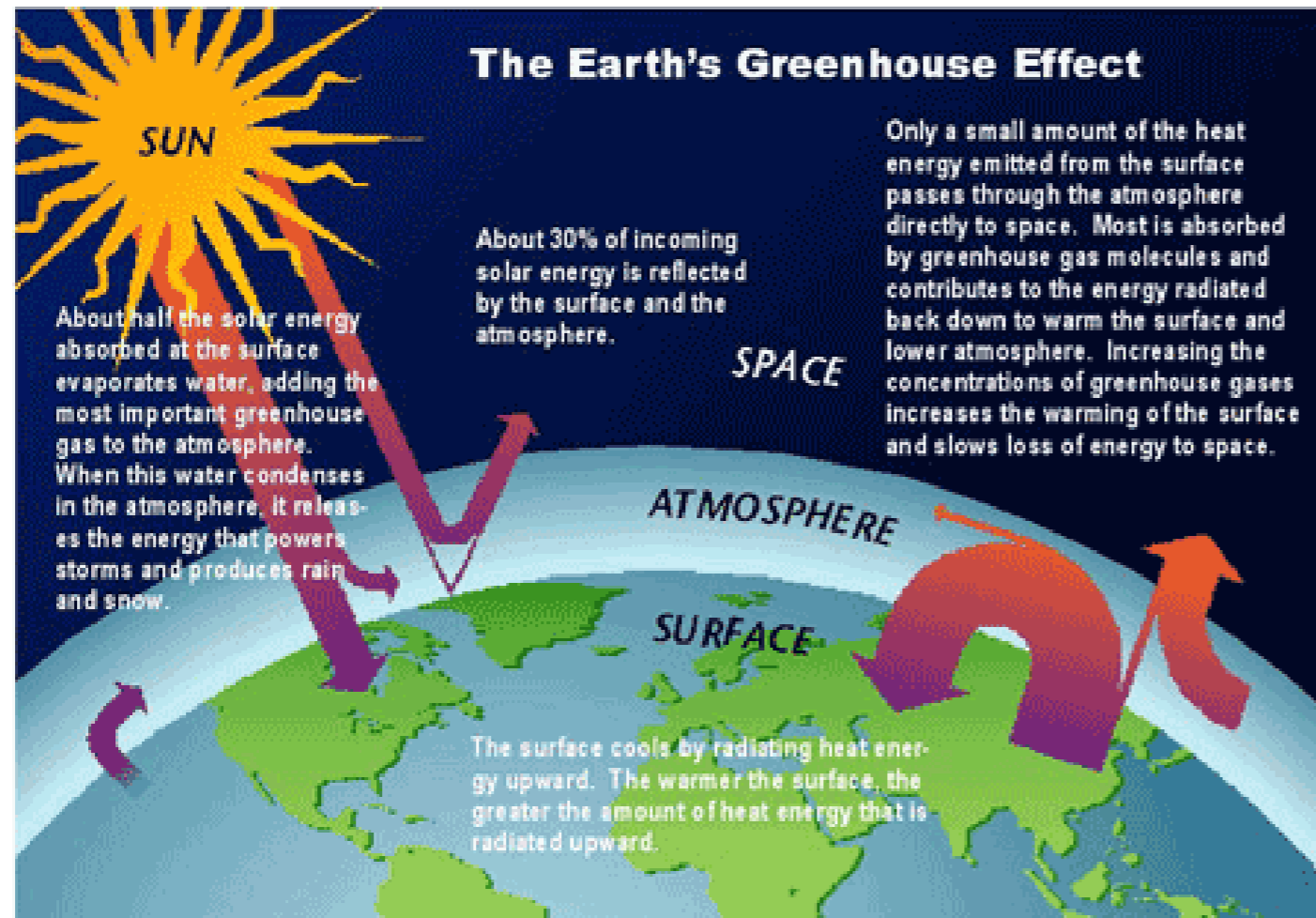Energy is released when we burn fossil fuels (combustion)

Fuel (hydrocarbon) + Oxygen → Carbon Dioxide + Water (+ Energy)

Problems with burning fossil fuels including the release of carbon dioxide (a greenhouse can) that contributes to global warming.

Science - Chemistry

The Earth's Greenhouse Effect

SUN

About 30% of incoming solar energy is reflected by the surface and the atmosphere.

About half the solar energy absorbed at the surface evaporates water, adding the most important greenhouse gas to the atmosphere. When this water condenses in the atmosphere, it releases the energy that powers storms and produces rain and snow.

Only a small amount of the heat energy emitted from the surface passes through the atmosphere directly to space. Most is absorbed by greenhouse gas molecules and contributes to the energy radiated back down to warm the surface and lower atmosphere. Increasing the concentrations of greenhouse gases increases the warming of the surface and slows loss of energy to space.

SPACE

ATMOSPHERE

SURFACE

The surface cools by radiating heat energy upward. The warmer the surface, the greater the amount of heat energy that is radiated upward.

Burning fossil fuels also produces acid rain. This causes lakes and soil to become more acidic. Crops can fail to grow and aquatic organisms can die.

Global warming can lead to ice caps melting, sea levels rising, more extreme weather, loss of land and habitats.

Week 3	Finite resources are substances that can only be used once and are in limited supply. e.g. oil, metals, rocks		Finite Infinite Renewable Non-renewable Recycling

There are a number of reasons why recycling is so important:

At home we can recycle:
- Glass
- Metals
- Paper
- Card
- Plastic

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Reduces litter and mess

Uses less energy than making from scratch

Preserves wildlife

Things can be re-used again and again

Why is recycling important?

Keeps habitats safe

Reduces waste

Saves space

Saves money

Finite = Can only be used once and is in limited supply

Infinite = Can be used more than once or is in unlimited supply

Sustainable = Able to be maintained at a certain rate or level

Renewable = Will not run out in the foreseeable future

Science - Chemistry

Recycling methods:

Resource	How?	Advantages	Disadvantages
Glass	It can be melted, remoulded and reused	The energy needed to do this is less than the energy needed to make new glass from raw materials	Need to sort different coloured glass ready for recycling and transport to the plant.
Metal	It can be melted, remoulded and reused	The energy needed to do this is less than the energy needed to extract new metal from ores	Melting down metals uses energy, producing pollution
Paper	It can be broken up into small pieces and reformed to make new sheets of paper	This takes less energy than making new paper from trees. Less need to cut down trees	Paper can only be recycled a few times before its fibres become too short to be useful
Plastic	It can be melted, remoulded and reused	We use less crude oil and recycling prevents plastic ending up in landfill sites	Different types of plastics have to be sorted

Week 4	The atmosphere is the layer of gas which surrounds a Planet! The layers of the atmosphere to include: • Troposphere • Stratosphere • Mesosphere • Thermosphere • Ionosphere • Exosphere	Troposphere Mesosphere Ionosphere Exosphere Atmosphere Composition

Ionosphere isn't always included in diagrams because it overlaps with many layers.

The troposphere is the first layer!
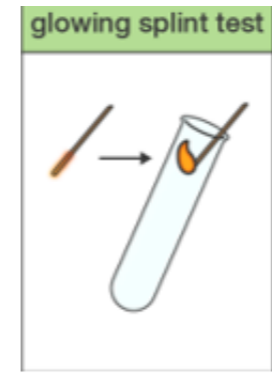(The layer we live in)

The air in the troposphere consists of...

78% Nitrogen

21% Oxygen

1% Argon

0.04% Carbon dioxide

Science - Chemistry

ATMOSPHERE'S LAYERS

10.000 km

EXOSPHERE — The outermost layer. Has a very low density.

500 km

IONOSPHERE. — In this layer appear the Northern Lights. Its high temperature (1.500 deegres) destroys the meteorites.

80 km

MESOSPHERE. — it is the coolest layer of the atmosphere (-80° deegres).

50 km

STRATOSPHERE — It's contains the ozone layer that protects Earth from ultraviolet rays.

12 km

TROPOSPHERE — In this layer appears metereological and climatic phenomena.

Test for oxygen gas:

Place a glowing splint over the gas. If it relights the split it is oxygen!

glowing splint test

Week 5	The carbon cycle involves the following processes:		Photosynthesis Respiration Decomposition Decomposers Carbon Cycle Interactions

The carbon cycle involves the following processes:

- Photosynthesis - a chemical reaction uses carbon dioxide from the atmosphere.
- Combustion - a chemical reaction which reacts carbon (in fuels) with oxygen and releases it as carbon dioxide into the atmosphere.
- Respiration - a chemical reaction which releases carbon dioxide into the atmosphere
- Decomposition – when an organism is broken down by microorganisms
- Feeding – when one organism eats another
- Fossilisation – turning into a fossil over thousands of years.
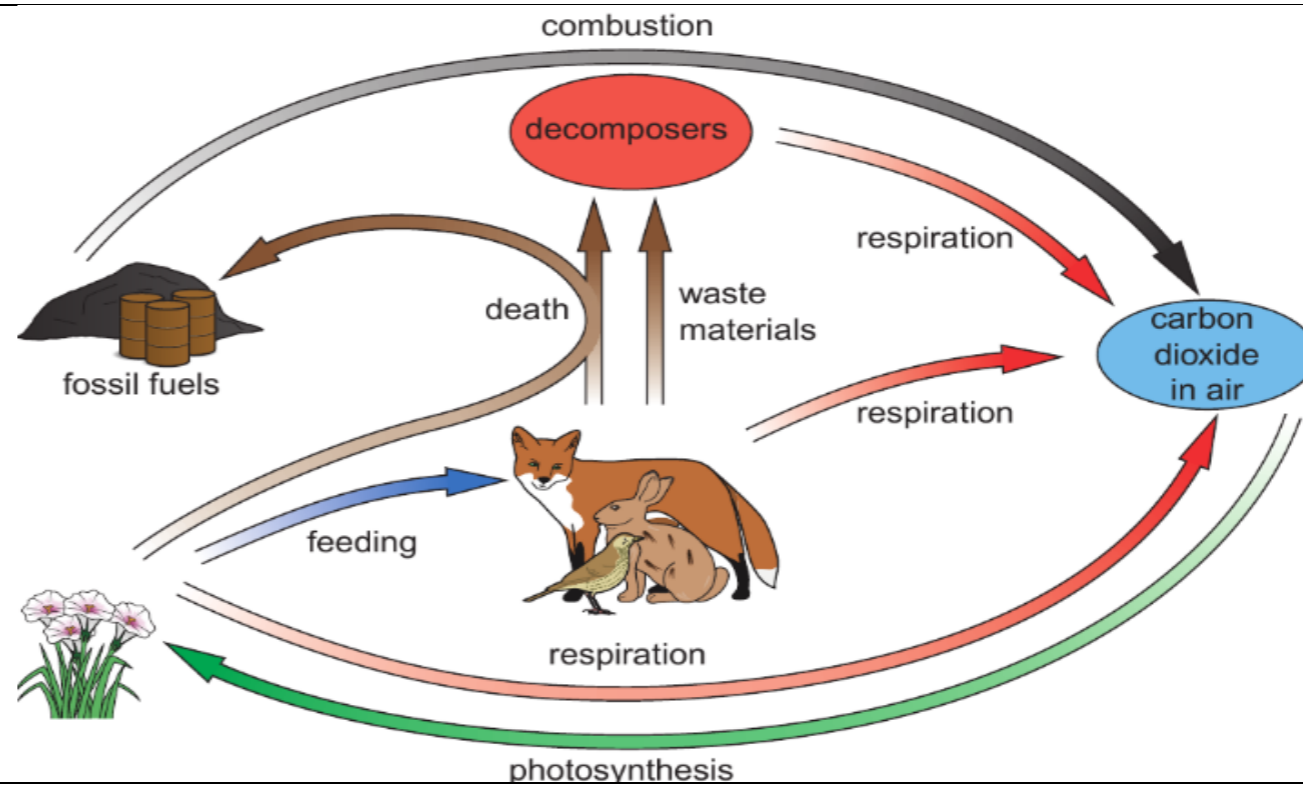
Photosynthesis
Respiration
Decomposition
Decomposers
Carbon Cycle
Interactions

Science - Chemistry

| Week 6 | • Composite materials are made from 2 different types of materials.
• They are different in their chemical or physical properties and are merged to create a new type of material.
• Examples of composite materials:

Plywood flooring   Metal roofing   MDF kitchen cabinets   Concrete bathroom floor   PVC windows   Polythene bags

How do we choose which materials to use for different jobs?
• Abundance of raw material
• Extraction method and cost
• Physical properties
• Manufacturing cost and energy
• Environmental impact including carbon footprint.

We have to look at the whole life cycle of a product to know if it is sustainable for use. This might include:
• How raw materials are extracted
• How different materials work together
• How materials can be disposed effectively | Composite Material Life-cycle Raw materials |