



Year 8

Knowledge
Organiser

Term 1: 2019

Year 8 Knowledge Organiser- Topic 1
Map skills and Ecosystems

The continents and oceans of the world.

Make sure you are able to label and name these.



KPI 1- Continents and Oceans

A continent is a large landmass

A country is a nation with boundaries

An ocean is a large expanse of water

There are 7 continents in the world

There are 5 oceans

There are 196 countries.

KPI 3- Atlas Skills

Using an Atlas is easy... as long as you follow the rules.

1. Look up the place using the Index at the back of the book.
2. The number in bold is the page number and the letter and number after it is the grid reference.
3. Turn to the page and look up the grid reference.
4. Somewhere in that box you will find your place.

KPI 3- Grid References

FOUR AND SIX FIGURE GRID REFERENCES

Maps have grid lines on them—we use them to pinpoint locations by using grid reference. A four-figure grid reference is a handy way of identifying any square on a map, six-figure grid references are best for giving exact locations. Grid references are easy, as long as you remember that you always go along the corridor before you go up the stairs.

Step 1: Go along the bottom of the map until you reach the easting which forms

Step 2: Then, go up the side of the map until you reach the northing that forms the bottom side of the square you're trying to locate e.g. 33

Step 3: Now put your two answers together e.g. 47 33. There is no need to add brackets, commas, dashes etc.

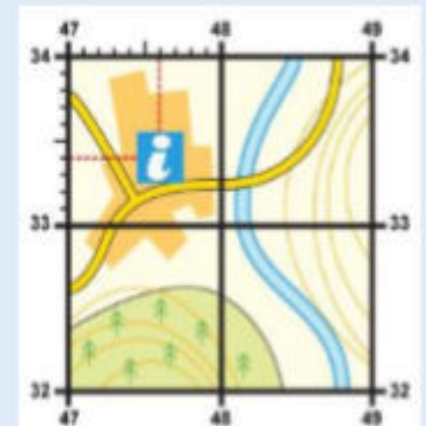
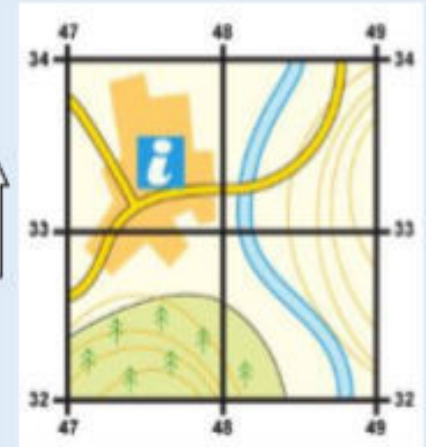
SIX FIGURE GRID REFERENCES...

To pinpoint an exact place on a map, such as a church or farm building, then you will need to use a six-figure grid reference.

Step 1: Find the four-figure reference.

Step 2: Imagine this square is divided up into 100 tiny squares, 10 along the bottom and 10 up the side.

Step 3: Still remembering to go along the corridor and then up the stairs, estimate how far across and then up the square the feature is. 476 334



Key terms

Food chains- show simple relationships between different organisms (what eats what)

Food web -shows more complex interrelationships between organisms (more than one food chain together).

Producer- plants which create their own food using the sun's energy

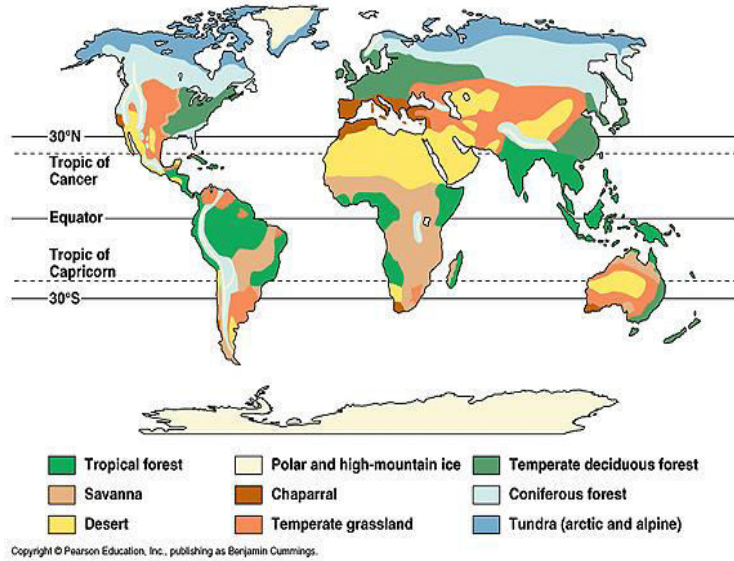
Consumer- are species which eat other species

Herbivore - an animal that feeds on plants

Omnivore- feeds on both plants and animals

Carnivore- eats other animals

Decomposer- break down the remains of dead plants and animals to return nutrients back in to the soil



KPI 6- Food Chains and Webs

Any changes to the one step of a food web or chain can affect the whole ecosystem. For example if a producer was removed then there would be a shortage of food for the consumers.

KPI 7- living in cold environments

Animal adaptations

Polar bears- white fur to camouflage, excellent swimmers, sense of smell which can travel 20 miles.

Arctic Fox- follow polar bears to find food, bundle together for warmth

Seal- thick blubber to keep in heat

Krill- survive through long periods of starvation (up to 200 days). They have the most developed eyes of any animals in the world, which help them to see their food in the dark. Their organs glow in the dark so that they can see each other

KPI 8- threats to cold environments

Threats

Over fishing- loss of krill supplies affect other animals up the food chain

Tourism- pollutants from ships and aircraft, the possibility of oil spills and the effects of lots of people on the wildlife

Loss of wildlife (biodiversity)- melting ice sheets making hunting difficult for some animals e.g. polar bears

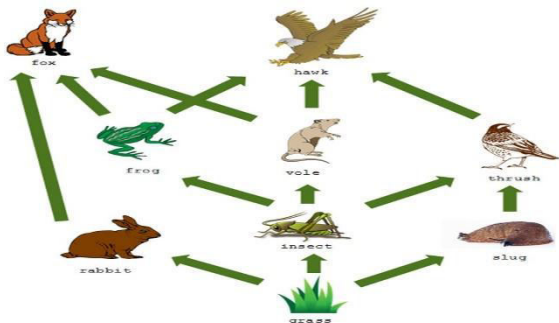
Oil spills- An oil spill is the worst environmental disaster for cold environments. The damage to the rivers and other natural ecosystems from oil spills is long lasting. Trees are killed, risk of fire, death of river wildlife, habitats on land near the river will become polluted and the vegetation may never recover.

KPI 9- managing cold environments

International Agreements- countries come together to protect the environment e.g. banning Whaling, reducing CO2

Conservation Groups- e.g. Greenpeace, put pressure on Governments to protect the environment

Use of technology- providing environmentally friendly solutions e.g. insulating the oil pipeline to prevent melting the permafrost.



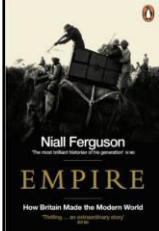
Y8 History Knowledge Organiser: The British Empire

The British Empire in 1914



TIMELINE	
1606	Virginia Company founds Jamestown
1620	Pilgrim Fathers leave England
1773	Boston Tea Party
1775	American War of Independence starts
1776	American Declaration of Independence
1790	Slave rebellion in Saint Domingue
1807	Abolition of the Slave Trade
1833	Abolition of slavery in the British Empire
1857	The Indian Rebellion
1876	The Great Famine hits India
1919	Amritsar Massacre
1947	British rule in India ends
2003	Niall Ferguson publishes <i>Empire</i>

KPI 1 Niall Ferguson






Niall Ferguson is a British historian. In 2003 he published a history book called *Empire: How Britain Made the Modern World*. He claimed:

'The British Empire enhanced global welfare. In other words, it was a good thing.'




KPI 2 The British Empire in North America

From the early 17th Century, British colonists began to settle in North America, often removing Native Americans from their land by force. They did this for three main reasons:

RELIGION		In 1620, the Pilgrim Fathers left England and colonised a northern region of America that would become Massachusetts. The Pilgrim Fathers were Puritans who were not allowed to practice their religion in England. They sailed for America in search of religious freedom.
MONEY		Most colonists were motivated by money. In 1606, the Virginia Company set up the town of Jamestown and created the colony of Virginia. They wanted to grow tobacco to sell in England. Other colonists were interested in hunting animals for furs or importing slaves to work on cotton plantations.
RIVALRY		Britain was not the only country setting up colonies. The colony of Georgia was founded to protect against the Spanish, who controlled territory near Florida. The British also expanded in western New York and Pennsylvania to stop French expansion. The French controlled much of Canada and were also seeking to expand their American empire.


KPI 3 The American War of Independence


In 1775, the 13 American colonies rebelled against British rule. With French support, the Americans defeated the British and won their independence in 1783. There were several reasons why the colonies wanted to become independent:


TAXATION	BRITISH OPPRESSION	LIBERTY
		
Britain spent a lot of money defending the 13 colonies and the national debt grew.	As the colonists protested against new taxes, their relationship with Britain deteriorated.	The colonists were influenced by the idea of individual liberty which was very popular in the Enlightenment.
Parliament asked for new taxes. This angered the colonists because they had no voice in Parliament. Their slogan was: 'no taxation without representation.'	In 1770, British soldiers killed several American protestors in the Boston Massacre.	The Americans felt that the British were taking away their liberty. In 1776, Thomas Jefferson wrote the American Declaration of Independence, which stated: 'All men are created equal'
	In 1773, colonists tipped \$1 million of tea into Boston harbour to protest a new tea tax. This was known as the Boston Tea Party. The British responded closing Boston harbour and took away some of the colonists' freedoms.	

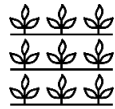
KPI 4 The Slave Trade

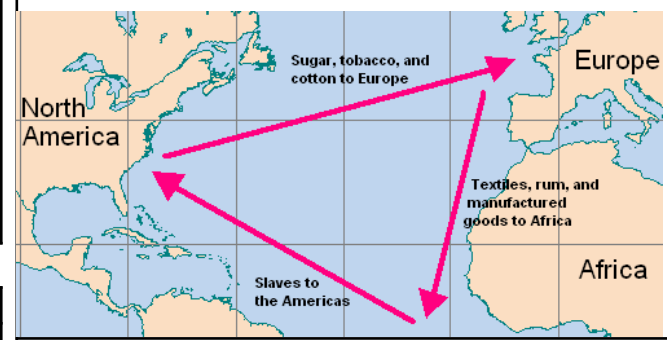
Britain became the leading nation in the so-called triangular trade. By 1760, 42,000 Africans were carried by British ships every year.

 African kingdoms such as Dahomey took other Africans as slaves after a battle


 British merchants exchanged goods such as guns and cloth for enslaved people in West Africa, encouraging kingdoms such as Dahomey to capture more slaves


 British ships transported the enslaved people to colonies in the Caribbean and America, where they worked on farms in terrible conditions, receiving no pay


 The rice, tobacco, and sugar produced on the slave plantations was sold back to Europe for huge profits. None of this money reached the enslaved Africans




The Middle Passage

 Historians estimate that around 11 million Africans were forced to make the journey from Africa to America known as the Middle Passage. The journey took over a month.

 Enslaved people were chained together in tight conditions below deck and were fed one meal a day.

 Disease spread quickly in the confined conditions. Some slaves attempted to resist by jumping overboard or organising rebellions.

 Around 15% of those involved in the Middle Passage lost their lives.

Y8 History Knowledge Organiser: The British Empire

KPI 5 Abolition of the Slave Trade

In 1833 slavery was abolished in the British Empire. There was because:

ABOLITIONISTS Abolitionists were British people committed to ending slavery.



Olaudah Equiano, an ex-slave, toured the country giving speeches about the terrible things he had seen.

William Wilberforce, an MP, persuaded Parliament to abolish the slave trade in 1807 and slavery itself in 1833.

ECONOMICS



By the early 19th Century, slavery was not as profitable as it had been before.

Sugar prices dropped and British merchants could get it more cheaply from other colonies, like India. They did not need slaves to continue making money.

RESISTANCE



In the 1790s, enslaved people in the French colony of Haiti rose up and killed their white masters before setting up an independent country.

The British wanted to avoid the same thing happening to them in colonies such as Jamaica.

KPI 6 The East India Company and the 1857 Rebellion



In the 17th Century, a British company called the **East India Company** began to set up a network of trading posts in India. The **East India Company** ran India for the British government and the company had it's own army of Indian soldiers to defend the colony.

However, in 1857, thousands of Indians rebelled against British rule. They did this for several reasons:

ANNEXATION



The **East India Company** continued to expand their control of India by annexing new territories.

In 1849, they took control of the **Punjab**.

In 1856, for example, the Company annexed the kingdom of **Awadh**, claiming the Indian ruler was corrupt

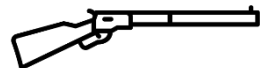
BRITISH REFORMS



The East India Company made the **Hindu** practice of sati (burning a widow with her husbands' corpse) illegal.

Female **infanticide** was also banned. Some Indians grew angry at this because it affected their traditional religious practices.

ENFIELD RIFLES



Sepoys refused to use the new British Enfield rifle because it's bullet cartridges were greased with a combination of beef and pig fat.

This offended both **Hindus** (who worshipped the cow) and **Muslims** (who are forbidden from eating pork).

KPI 7 The British Raj

The 1857 rebellion was brutally defeated. The British government decided that the **East India Company** could not be trusted and took over the running of India.

From 1857 until 1947, about 8,000 British officials ruled over 300 million Indians. This period was known as the **Raj**.

However, historians disagree about the impact of **British rule on India** itself:

POSITIVE IMPACT	NEGATIVE IMPACT
<p>Railways</p> <p>The British built over 24,000 miles of railways in India. This allowed Indians to travel and trade.</p>	<p>Famines</p> <p>Famine hit the British Raj on several occasions. For example, during the Great Famine of 1876-8 over 5 million Indians died.</p>
<p>Health</p> <p>The British introduced medicines such as quinine to stop malaria and started a vaccination programme against small pox. Indian life expectancy increased by 11 years during the Raj</p>	<p>The British could have provided food, but they didn't. The Viceroy, Lord Lytton, believed in Social Darwinism: the idea that the human race grew stronger when weak people died out, allowing the strong to survive.</p>
<p>Education</p> <p>The British built schools and universities across India. Some Indians were able to continue their education in England.</p>	<p>Self-Government</p> <p>The British promised the Indians that they would eventually allow them to control their own country, but they kept breaking that promise. Mahatma Gandhi campaigned peacefully for Indian independence but the British responded brutally, gunning down 400 of Gandhi's followers in the 1919 Amritsar Massacre.</p>
<p>Irrigation</p> <p>Most Indians lived as farmers. The British introduced irrigation systems which meant that more land could be farmed. There was eight times as much irrigated land in 1947 as in 1857.</p>	

VOCABULARY

Abolition	Getting rid of slavery
Abolished	Got rid of
Amritsar Massacre	When the British army killed 400 Indian protestors in 1919
Annexation	Taking control of land
Caribbean	Islands to the South of America, including Jamaica and Cuba
Colony	An area of land controlled by an Empire
Colonised	Took over
Colonist	Someone who takes over land and lives in it
Dahomey	A powerful African kingdom
Deteriorated	Got worse
Empire	When a powerful country takes over other areas of land
Enlightenment	A period of new ideas, rejecting religion and old thinking
Enslaved People	Slaves (but his term suggests that they were people, firstly)
Famine	A period of hunger caused by a lack of food
Hindu	The largest religion in India
Irrigation	Using water from rivers to water fields for farming
Independence	When a colony becomes free from an Empire
Independent	Free from an empire
Infanticide	Killing children
Liberty	Freedom
Merchants	People who trade goods
Modernise	To make something more modern
Native Americans	People who lived in America before Europeans arrived
MP	A member of Parliament
Mutiny	When a soldier refuses to follow orders
National debt	The money a country owes to other people
Parliament	Part of the British government that votes on new laws
Plantations	Farms
Profitable	Something that makes money
Puritans	Extreme Protestants
Raj	The British Empire in India
Reforms	Changes
Sepoys	Indian soldiers fighting in the British army
Social Darwinism	The belief that it was natural for the weak to die
Territory	Land
Vaccination	An injection that protects you against a disease in future
Viceroy	Leader of British Raj

Y8 History Knowledge Organiser: Interpretations of Medieval Africa

TIMELINE	
c. 1075	Kingdom of Mapungubwe begins to develop
1200s	Golden Rhino created
1700	European settlers arrive in Southern Africa
1884	Pear's Soap advert produced
1893	Cecil Rhodes takes control of Rhodesia
1932	Golden Rhino discovered
1948	Apartheid begins in South Africa
1956	Ghana wins independence from British Empire
1980	Rhodesia (Zimbabwe) wins independence
1994	Apartheid ends

KPI 1 Mapungubwe



The Kingdom of **Mapungubwe** was a Medieval kingdom of the **Bantu** people located in southern Africa.

It was most powerful between 1075 and 1220.



The centre of the kingdom was on **Mapungubwe Hill**, where the leaders of the kingdom lived and were buried.

KPI 2 Archaeological Evidence from Mapungubwe



1. The **Golden Rhino of Mapungubwe** was created in the 13th Century. It is about 20 cm long and it made of thin gold sheet held together by gold pins. It was discovered in the grave of a leader of the kingdom.

The **Golden Rhino** shows that the **Bantu** people:

- Were skilled **craftsmen**
- Were **wealthy**
- Had time to spend creating decorative items

2. **Glass beads** from places as far away as India, China, and Egypt have been discovered. This shows that the **Bantu** people:

- Had trading links with other peoples
- Had valuable items to trade for the beads



3. **Board games** have been discovered. Animal herders dug hollows in the rock that could be filled with pebbles. This shows that the **Bantu** people:

- Had free time to spend on entertainment
- Herded animals



4. **Rock art** is visible in caves all around **Mapungubwe**. These paintings show that the **Bantu** people:

- Saw animals as very important
- Had different roles for men and women

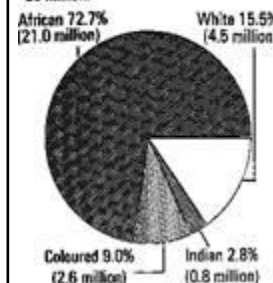


5. **Other gold items**, such as a necklace and sceptre, were also discovered in the graves on top of **Mapungubwe Hill**. This shows that the **Bantu** people:

- Were very **wealthy**
- Were skilled **craftsmen**

KPI 4 Apartheid in South Africa

The total population of South Africa in 1980 was estimated to be just under 29 million.



In 1910, South Africa gained **independence**, although the country was still controlled by white **settlers** who made up just 15% of the population.

In 1948, the white government introduced the policy of **Apartheid**, which was based on the idea that Europeans were naturally **superior** to black Africans.



Apartheid Laws removed black rights. Black people couldn't vote or marry white people.



Segregation Black Africans lived in separate **homelands** and could not attend white schools.



Opposition **Nelson Mandela**, an **anti-apartheid** leader, was in put prison for 27 years for resisting

KPI 3 European views of Africa in the 19th Century

Europeans had begun to settle in parts of Africa from 1700. However, during the late nineteenth-century, the whole continent was divided up between the European **empires** who wanted to get their hands on **natural resources** like gold and diamonds.



Cecil Rhodes was a British **imperialist**. He wrote that "we are the first race in the world...and the more of the world we *inhabit*, the better it shall be for the world."

In 1893 Rhodes took over an area of southern Africa called **Matabeleland** because he heard there was gold there. His soldiers killed thousands of **Matabele** warriors with machine guns.

He named the **territory** he had conquered after himself: **Rhodesia**.

Europeans **justified** taking over Africa by explaining that Africans were **uncivilised** and **backwards**. Europeans argued that European rule was good for Africans because they could be civilised by the European **master race**.

This view is clear in this Pears' Soap advert from 1884.



The advert shows African soldiers in Sudan dressed in a **backwards** and **uncivilised** way.

They are praying to the Europeans' soap, suggesting that they need the Europeans to make them **civilised**.

Ideas like this helped justify **imperialism**.

Y8 History Knowledge Organiser: Interpretations of Medieval Africa

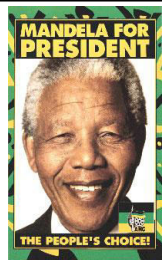
KPI 6 Change in the 20th Century

Decolonisation

In 1956, Ghana became the first African colony to claim independence from the British Empire.

One by one, the colonies became independent. Rhodesia won independence in 1980.

This process was known as decolonisation.



The End of Apartheid

Following protests and pressure from other European countries, Nelson Mandela was released from prison in 1993 and voting rights were granted to black Africans.

In 1994, Mandela was elected President of South Africa and apartheid ended.



Changing Ideas about Race

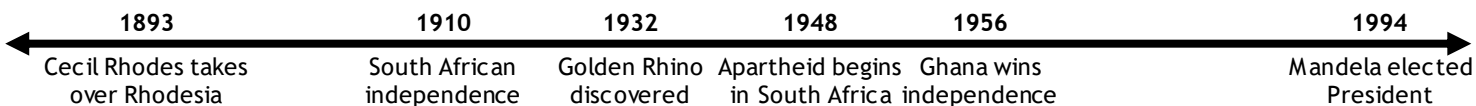
After World War II, European ideas about race began to change.

American anthropologists such as Margaret Mead showed that there are very few relevant differences between people from different races.

VOCABULARY

Anthropologist	Someone who studies people
Apartheid	South African government policy to separate white and black
Archaeology	The study of historical objects
Backwards	Not modern, not having technology, not intelligent
Bantu people	A southern African black ethnic group
Cecil Rhodes	A British imperialist
Craftsmen	People who make things
Curfew	A time when everyone has to be in their home in the evening
Decolonisation	When countries become independent from an empire
Empire	When a powerful country takes over other areas of land
Funding	Money
Ghana	A former British colony in West Africa
Granite	Hard, heavy stone
Homelands	Areas where black Africans were forced to live under apartheid
Imperialism	The belief that expanding European empires is a good thing
Imperialist	Someone who expands European empires
Independence	When a colony becomes free from an Empire
Independent	Free from an empire
Inhabit	Live in
Interracial	Between white and black people
Interpretation	One persons' view of history
Justify	To explain something and make it seem fair
Kingdom	A people ruled by a King
Mapungubwe	A medieval African kingdom
Master race	The view that one race (white) was superior to all others
Matabeleland	An area of southern Africa
Nelson Mandela	Anti-apartheid leader in South Africa
Rhodesia	British colony, named after Cecil Rhodes
Rock art	Paintings drawn on rock
Segregation	Separation
Settlers	White Europeans who made their homes in other areas
Superior	Better than
Territory	Land
Uncivilised	Not modern, backwards

KPI 7 Interpretations of Medieval Africa



Interpretation 1 - an advert for Pear's Soap, displayed in Britain in 1884



Interpretation 2 - a History textbook produced by the South African government in 1955

"Southern Africa began to be settled by White Europeans at the same time as Black Africans. Around 1700, as Europeans were travelling north, tribes of Black Africans began to migrate South. The two groups struggled to dominate this empty land."

Interpretation 3 - an extract from a speech given by Sian Tiley-Nel, a South African museum manager, in 2016.

"the Golden Rhino...gives us evidence of a powerful and sophisticated kingdom that existed in Africa hundreds of years before white settlement"



Year 8 Physics – The Universe

The Solar System

There are 8 planets in our Solar System. At the centre of the Solar System is the Sun, which is a star.

In order from the Sun the eight planets are:

- Mercury
 - Venus
 - Earth
 - Mars
 - Jupiter
 - Saturn
 - Uranus
 - Neptune
- These are the **inner** planets, they are made of rocks.
- These are the **outer** planets, they are mostly made of gas.

The solar system is part of a Galaxy called the Milky Way.

The Milky Way contains millions of solar systems.

The Universe is made of billions of galaxies.

Eclipses

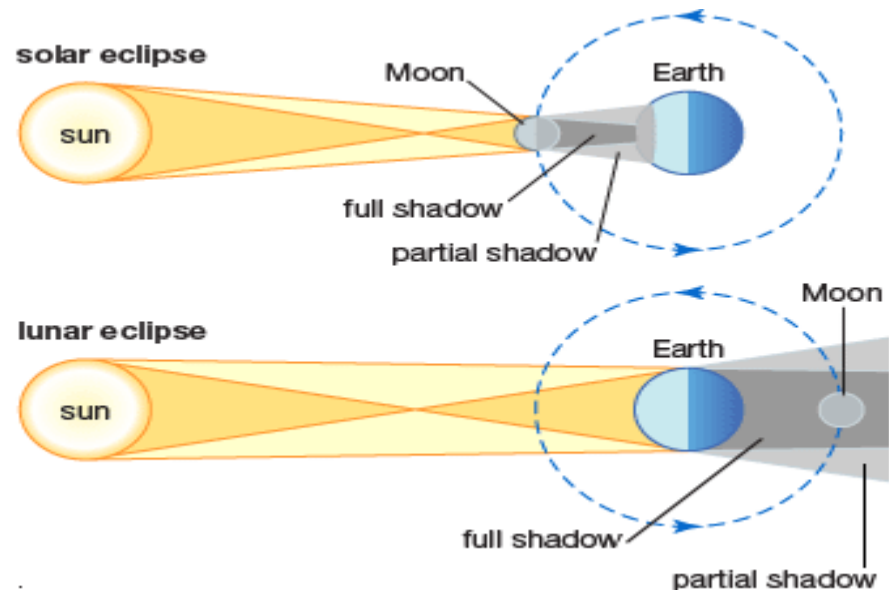
Objects in the solar system are constantly moving in **orbits**. This orbital path never changes.

The Earth orbits the Sun. The moon orbits the Earth.

Sometimes, for a short period of time, the moon is positioned between the Sun and the Earth. Then moon blocks the Sun's light from reaching the Earth, causing a shadow on the Earth. This is called a **solar eclipse**.

Sometimes the Earth is positioned between the Sun and the moon, causing a shadow on the moon. This is called a **lunar eclipse**.

Key Terms	Definitions
Solar System	The sun and all of the planets in orbit around it
Galaxy	A system of millions or billions of stars held together by gravitational attraction.
Star	A huge ball of gas which can transfer thermal energy as light.
Planet	A large, circular object which orbits a star.
Dwarf Planet	A much smaller, circular object which orbits a star.
Comet	An object made of ice and dust which travels through the solar system. When near the sun, it gets a 'tail' of gas and dust particles pointing away from the sun.
Satellite	An object which orbits a planet or a dwarf planet.
The Moon	The satellite which orbits our Earth.
Orbit	The curved path an object takes around a star, planet or moon.



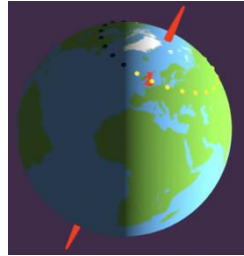
Year 8 Physics – The Universe

Seasons

The Earth spins on its axis every day (24 hours), and takes a year to orbit the Sun (365.25 days).

The Earth's axis is tilted. This means that at different times of the year some parts of the Earth are closer to the Sun than other parts.

Your location on Earth determines what season you experience.



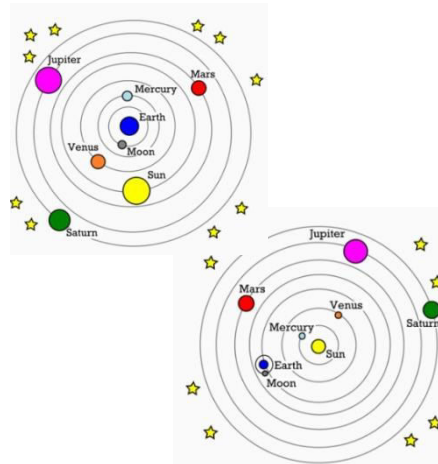
In the UK, when it is winter, we are tilted away from the Sun and have less daylight and heat. In the summer, we are tilted towards the Sun and have more daylight and heat.

Understanding the Universe

The way people think about the Solar System has changed many times throughout history.

Before the development of the telescope, these ideas were based on what could be seen with the naked eye. This limited the details that could be gathered about the Solar System, as asteroids, most of the satellites of other planets, and the most distant planets are not visible to the naked eye.

Originally, people believed in the **geocentric model** and thought that the Earth was at the centre of the Universe.



Now we have better technology we have observed that the Universe is **heliocentric** – and that everything orbits the Sun.

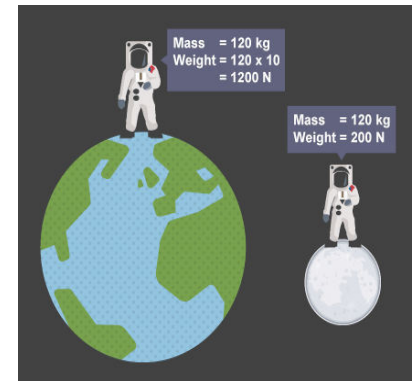
Key Terms	Definitions
Season	The four periods into which a year can be divided:
Axis	A real or imaginary line on which something rotates
Equator	An imaginary line drawn around the middle of the Earth that is equidistant from each of the poles.
Gravity	A force that exists between two objects with mass
Weight	The amount of downwards force acting on an object.
Mass	The amount of matter in an object, measured in grams or kilograms.
Geocentric Model	An out-dated idea about the universe in which the Sun, Moon, stars, and planets all orbited Earth.
Heliocentric Model	The new idea of the universe in which the Earth, Moon, stars, and planets all orbit the Sun.
Equation	Meaning of terms in equation
$W = m g$	Weight = mass x gravity

Gravity

Gravity is a force that exists between any two objects with mass. The more mass an object has, and the closer two objects are together, the greater the force of gravity between them.

Gravity is different on different planets, because different planets have different masses. Gravity on Earth is 9.8 N / Kg .

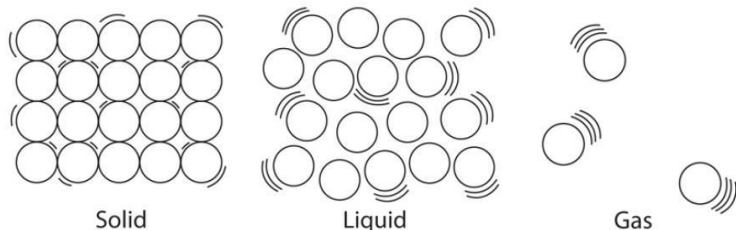
An object which is on or close to a planet will experience a force of gravity which we call **weight**. The weight of an object will vary, because gravity varies, but mass will always remain the same.



Year 8 Chemistry Knowledge Organiser – Elements and Compounds

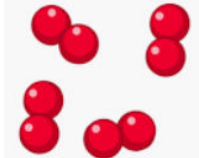
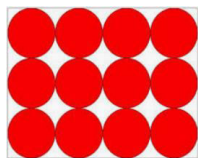
Atoms, Elements and Compounds

Atoms are the smallest units of matter that have the properties of an element. All substances that exist are made of atoms. The arrangement of the atoms changes depending on whether the substance is a solid, a liquid or a gas.



Elements are substances made of one type of atom. Elements are the different types of atom found in the periodic table. Most elements are either solid or gas at room temperature, only bromine and mercury are liquid at room temperature.

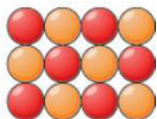
The diagram shows a solid element, such as sodium, carbon or copper.



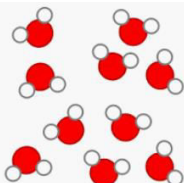
The diagram shows a gaseous element, such as oxygen, nitrogen or chlorine.

The atoms in the diagram are all the same **colour** and **size**, showing that they are the same type of element.

Compounds are substances made of two or more different elements chemically bonded together.



Both diagrams show compounds because the atoms are different **colours** and, on the lower diagram, different **sizes**. The upper diagram shows a solid compound. The lower diagram shows a gas.



Using circles to illustrate elements and compounds is an example of a **scientific model**. A model is useful as a way of understanding a concept, but it is a **simplification**.

→ This type of particle diagram has limitations: they don't show the movement of particles, the three-dimensional nature of matter, the correct relative sizes of the atoms, or the colour of the atoms.

Key Terms	Definitions
Atom	Atoms are the smallest units of matter that have the properties of an element.
Element	<ul style="list-style-type: none"> - Elements are substances made of one type of atom. - Elements are the different types of atom found in the periodic table.
Compound	Compounds are substances made of two or more different elements chemically bonded together.
Particle diagram	A diagram used to show that substances are made of particles. They illustrate the arrangement of particles, whether the substance is a solid, liquid or a gas, whether a substance is an element or a compound, the relative sizes of atoms,
Scientific model	A way of understanding a scientific concept that usually involves simplifying the concept. Simplifying a concept means scientific models have limitations.
Simplification	Explaining something complex in a simpler way. Sometimes, when an explanation is simplified it has limitations.
Limitation	<ul style="list-style-type: none"> - A weakness in an explanation/scientific model. - An area a scientific model can't explain.
Relative size (of atoms)	The size of something compared to something else (how big one atom is compared to another)

Year 8 Chemistry Knowledge Organiser – The Periodic table

The Periodic Table

All the elements that exist are displayed in the periodic table, arranged according to their **properties** and their **atomic number**.

Metal elements are found on the left-hand side and in the middle of the periodic table.

Non-metal elements occur in the top right-hand corner of the periodic table.

The properties of metals are:

- High melting point
- Conductor of electricity and heat
- Malleable

Non-metals do not have these properties, with exceptions.

1	2											3	4	5	6	7	0	
		Key											Non-metal elements					
		relative atomic mass atomic symbol name atomic (proton) number																
		Metal elements																
7 Li lithium 3	9 Be beryllium 4																	
23 Na sodium 11	24 Mg magnesium 12																	
39 K potassium 19	40 Ca calcium 20	45 Sc scandium 21	48 Ti titanium 22	51 V vanadium 23	52 Cr chromium 24	55 Mn manganese 25	56 Fe iron 26	59 Co cobalt 27	59 Ni nickel 28	63.5 Cu copper 29	65 Zn zinc 30	70 Ga gallium 31	73 Ge germanium 32	75 As arsenic 33	79 Se selenium 34	80 Br bromine 35	84 Kr krypton 36	
85 Rb rubidium 37	88 Sr strontium 38	89 Y yttrium 39	91 Zr zirconium 40	93 Nb niobium 41	96 Mo molybdenum 42	[98] Tc technetium 43	101 Ru ruthenium 44	103 Rh rhodium 45	106 Pd palladium 46	108 Ag silver 47	112 Cd cadmium 48	115 In indium 49	119 Sn tin 50	122 Sb antimony 51	128 Te tellurium 52	127 I iodine 53	131 Xe xenon 54	
133 Cs caesium 55	137 Ba barium 56	139 La* lanthanum 57	178 Hf hafnium 72	181 Ta tantalum 73	184 W tungsten 74	186 Re rhenium 75	190 Os osmium 76	192 Ir iridium 77	195 Pt platinum 78	197 Au gold 79	201 Hg mercury 80	204 Tl thallium 81	207 Pb lead 82	209 Bi bismuth 83	[209] Po polonium 84	[210] At astatine 85	[222] Rn radon 86	
[223] Fr francium 87	[226] Ra radium 88	[227] Ac* actinium 89	[261] Rf rutherfordium 104	[262] Db dubnium 105	[266] Sg seaborgium 106	[264] Bh bohrium 107	[277] Hs hassium 108	[268] Mt meitnerium 109	[271] Ds darmstadtium 110	[272] Rg roentgenium 111	[285] Cn copernicium 112	[286] Nh nihonium 113	[289] Fl flerovium 114	[289] Mc moscovium 115	[293] Lv livermorium 116	[294] Ts tennessine 117	[294] Og oganesson 118	

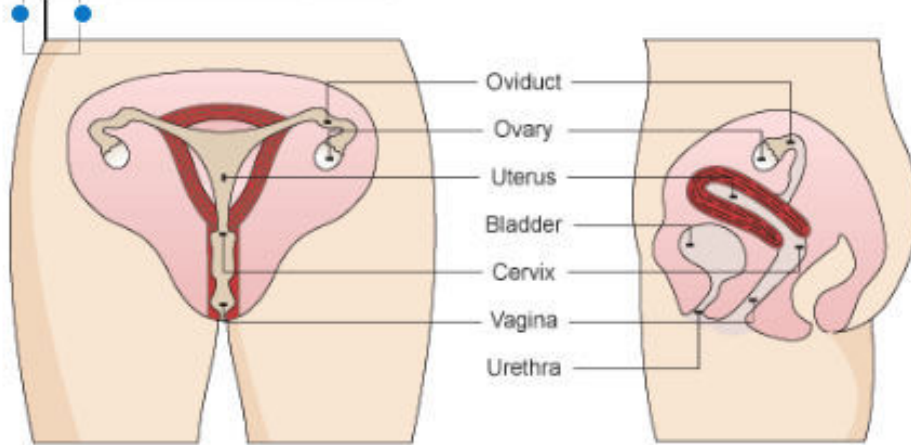
The development of the Periodic Table

- Early models of the periodic table arranged elements in order according to their atomic weight.
- This approach was flawed because some elements were positioned incorrectly according to their properties.
- Dmitri Mendeleev was the scientist who managed to create a periodic table that positioned elements both in order of their atomic weight and with other elements of similar properties.
- Mendeleev realised that some elements had not yet been discovered. He left gaps for these elements where he predicted they must go and predicted their properties with a high level of accuracy.
- Today, the periodic table is arranged according to atomic number, rather than atomic weight. The development of the periodic table is an example of the Scientific Process – the use of evidence to develop theories, and adjusting theories as more discoveries are made.

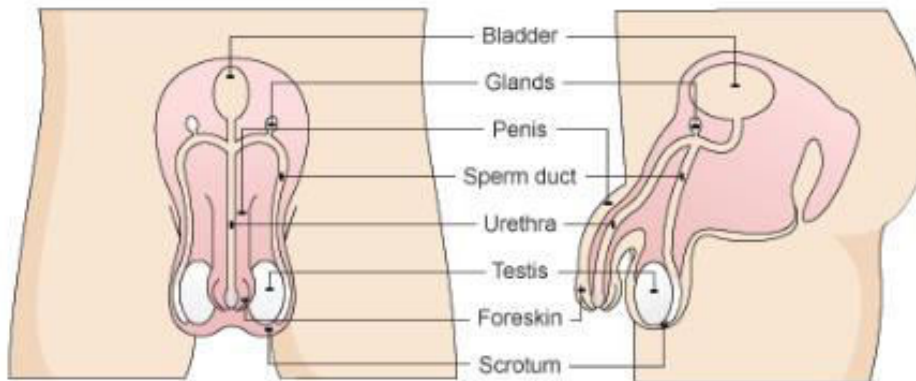
Key Terms	Definitions
Property	A way of describing how a chemical acts or behaves.
Malleable	Can be hammered or pressed into shape without breaking or cracking.
Conductor	Allow electricity or heat to pass through.
Atomic weight	The mass of an atom. Each element has a different mass. It is determined by the number of protons and neutrons in the nucleus.
Atomic (proton) number	The positive charge of the nucleus, indicates the number of protons in the nucleus.

Year 8 Biology Knowledge Organiser- Reproduction

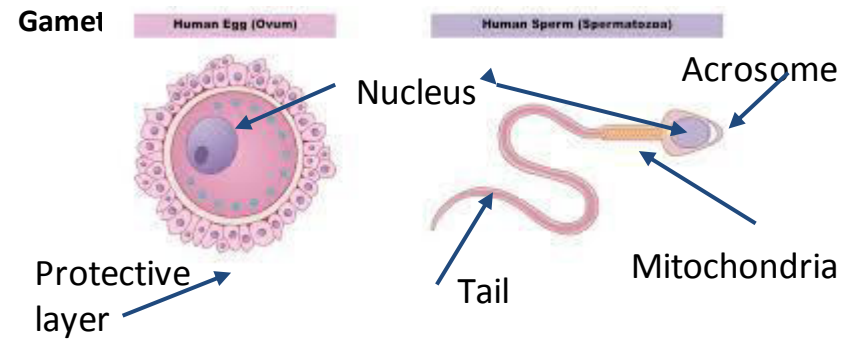
Female reproductive system



Male reproductive system



Key Terms	Definitions
Reproductive system	All the male and female organs involved in reproduction.
Ovary	Organ which contains eggs.
Testicle	Organ where sperm are produced.
Penis	Organ which carries sperm out of the male
Scrotum	The skin that holds the testes
Urethra	The tube that carries either urine or semen out of the body through the penis
Vagina	Where the penis enters the female sperm is received. This is also called the birth canal.
Oviduct, or fallopian tube	Carries an egg from the ovary to the uterus and is where fertilisation occurs.
Uterus	Where an embryo develops into a foetus and eventually into a baby.
Cervix	A muscular ring that helps keep a foetus in place in the uterus during pregnancy. During birth it dilates to 10cm
Gamete	The male gamete (sex cell) in males is sperm, the female an egg.



Year 8 Biology Knowledge Organiser- Reproduction

Adolescence

- Involves both emotional and physical changes.
- These can cause you to become moody, self-conscious and angry.
- During adolescence your body goes through physical changes, this is called puberty.
- Takes place between the ages of 9-14 in most people.
- Most of the changes happen in the reproductive system – your body needs to develop so you can have children if you choose to when you're older.

What happens to girls during puberty?

- Breasts develop
- Ovaries start to release egg cells
- Periods start
- Hips widen

What happens to boys during puberty?

- Voice breaks – gets deeper
- Testicles and penis get bigger
- Testicles start to produce sperm
- Shoulders widen
- Hair grows on the face and chest.

What happens during puberty?

- Your pubic hair and underarm hair grows
- Your body smell becomes stronger – this is often called body odour.
- You experience emotional changes
- You have a growth spurt (get taller)

What causes puberty?

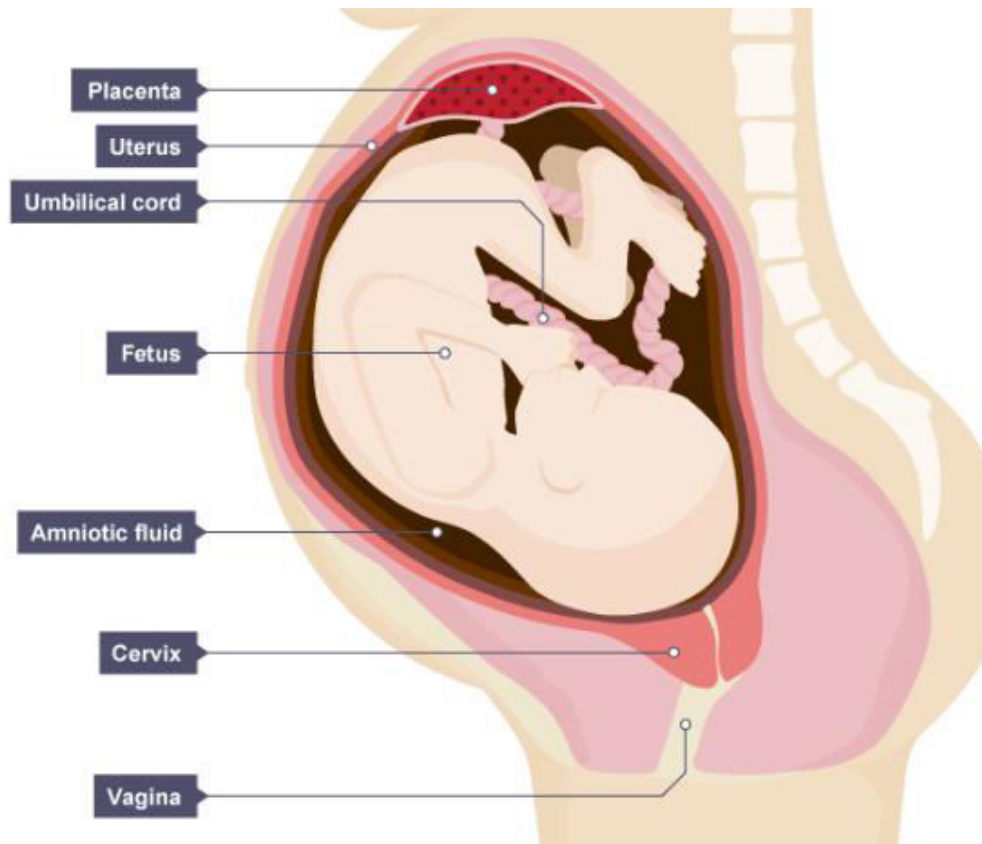
- All the changes that happen in your body during puberty are caused by sex hormones.
- These are chemical messengers that travel around your body in the blood.
- Female sex hormones are made in ovaries.
- Male sex hormones are made in the testicles
- These chemicals trigger different processes, such as egg release in females and pubic-hair growth in both males and females.

Year 8 Biology Knowledge Organiser- Reproduction

How does a baby develop?

What happens during birth?

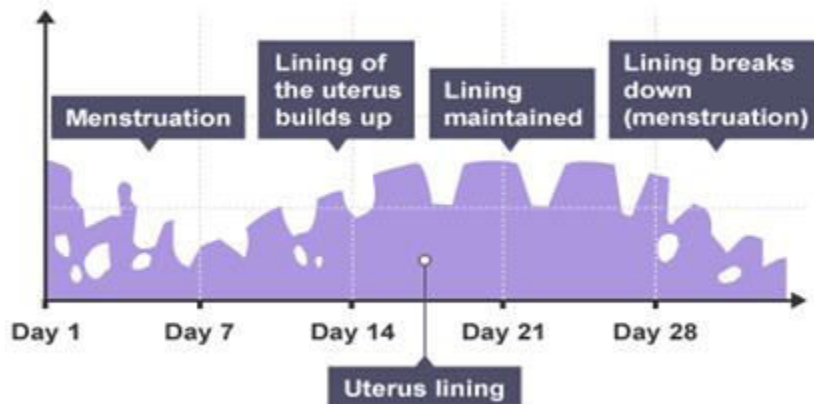
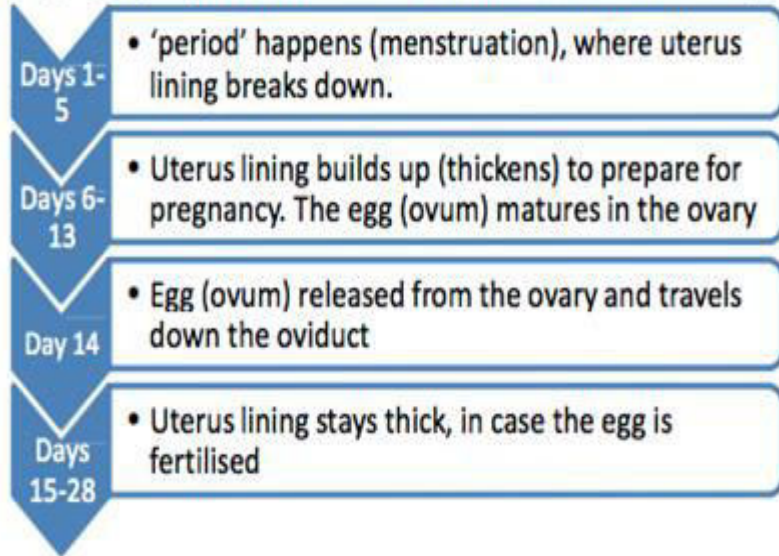
- After around 40 weeks the baby is ready to be born.
- The mother's cervix relaxes and muscles in the wall of the uterus contract.
- This gradually pushes the bay out through the vagina.
- When the baby is born it is still joined to the mother by its umbilical cord.
- This needs to be cut. The placenta is then pushed out.



Year 8 Biology Knowledge Organiser- Reproduction

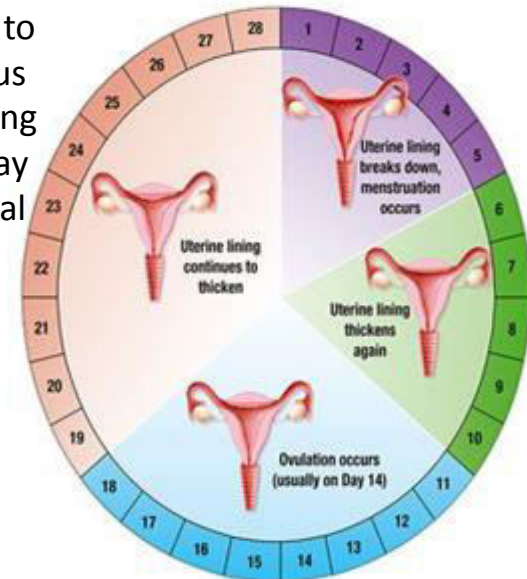
The menstrual cycle

The menstrual cycle prepares the female body for pregnancy by causing eggs (ova) to mature and be released. It lasts for 28 days.



Key Terms	Definitions
Ovulation	Release of an egg cell during the menstrual cycle, which may be met by a sperm.
Menstruation	Loss of the lining of the uterus during the menstrual cycle.
Puberty	The process of physical changes in a child's body matures into an adult that is capable of sexual reproduction.
Adolescence	The period of time, following puberty during which children mature into adults.
Secondary sexual characteristics	Features, such as pubic hair or breasts developing, that appear during puberty.

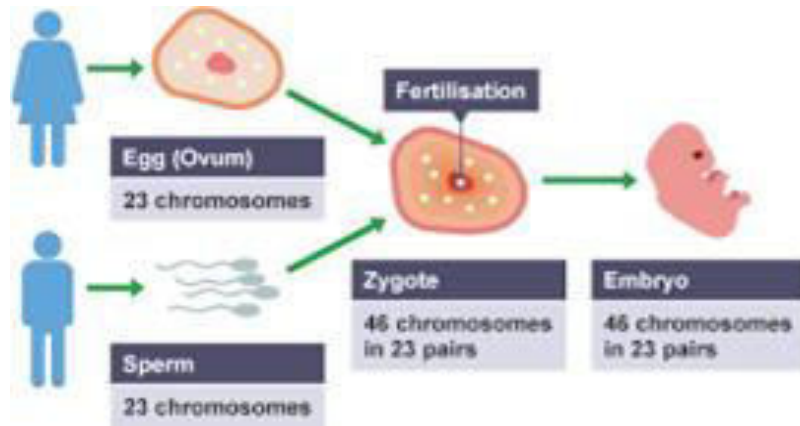
Changes to the uterus wall during the 28 day Menstrual cycle



Year 8 Biology Knowledge Organiser-

Reproduction

Fertilisation



Gestation

After fertilisation the **zygote** begins to divide into a ball of cells called an **embryo**. The embryo grows as cells continue to divide and travels to the uterus. Ciliated cells in the oviduct help it to move to the uterus.

The embryo **implants** into the uterus wall. The woman is now **pregnant**.

The embryo gets oxygen and nutrients from the mother's blood.

From **12 weeks**, we call the growing embryo a **foetus**. It now looks like a tiny human baby and has many specialised cells.

A **placenta** grows. This is a special organ that acts as a barrier between the foetus' and mother's blood. The placenta makes sure that their blood does NOT mix.

Oxygen, nutrients and other substances (including drugs and alcohol) pass from the mother's blood to the foetus.

Carbon dioxide and other waste products from the foetus travel down the umbilical cord to the placenta where they diffuse into the mother's blood.

Key Terms	Definitions
Fertilisation	Joining of a nucleus from a male and female sex cell (gamete)
Implantation	When the growing embryo becomes embedded in the thick, spongy uterus lining.
Gestation	Process where the baby develops during pregnancy. In humans it takes around 40 weeks.
Placenta	Organ that provides the foetus with oxygen and nutrients and removes waste substances.
Amniotic fluid	Liquid that surrounds and protects the foetus.
Amniotic sac	A thick membrane that encloses the amniotic fluid (and developing foetus)
Umbilical cord	Connects the foetus to the placenta.
Embryo	The developing baby from fertilisation to 12 weeks.
Foetus	The developing 'baby' from 12 weeks until it is ready to be born.

Birth

After about 40 weeks of pregnancy, the foetus is ready to be born.

- The muscles in the wall of the uterus contract (**contraction**)
- The cervix **dilates** (gets bigger) to **10cm**. This is big enough for the foetus's head to pass through.
- These contractions get stronger and faster (this is **labour**)
- After some time of labour, the **amniotic sac** breaks, which releases the fluid (this is the **waters breaking**)
- Contractions push the baby headfirst through the **cervix** and then through the **birth canal** - vagina.
- The foetus is now called a **baby**.

Year 8 Physics Knowledge Organiser

Sound and light

Oscillations produce Waves

Oscillations, for example vibrations, cause waves. Waves travel through matter when the matter continues to oscillate. Waves transfer energy without transferring matter.

There are two ways for matter to oscillate in a wave:

- **Longitudinally**: parallel to the direction of the wave.
- **Transversely**: perpendicular to the direction of the wave.

Longitudinal Waves

The features of longitudinal waves:

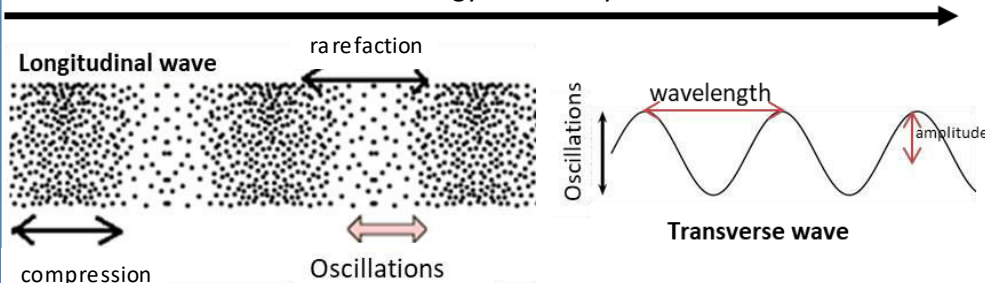
- The oscillations of the wave are **parallel** to the direction of movement of the wave (see diagram)
- These waves involve oscillations of the particles in a solid, liquid, or gas.
- There are areas of compression and areas of rarefaction.
- One wavelength can be measured from the centre of an area of compression to the centre of the next area of compression.

Transverse Waves

The features of transverse waves:

- The oscillations of the wave are at **right angles** to the direction of the wave.
- The oscillations can be in matter, like longitudinal waves, or in the **electromagnetic field** (these oscillations form electromagnetic waves).
- Transverse waves have peaks and troughs.
- The **amplitude** of a transverse wave is the maximum distance of the wave from the centre.

Direction of energy transfer by both waves



Key Terms	Definitions
oscillation	A rhythmic, back and forth or up and down movement (e.g. vibration).
wave	A whole series of oscillations that allows transfer of energy.
medium	The matter that is oscillating to produce a wave.
longitudinal wave	A wave made from oscillations parallel to the direction of the wave.
compression	A part of a wave where matter is made more dense by the oscillations of the wave.
rarefaction	A part of a wave where matter is made less dense by the oscillations of the wave.
sound	A type of wave caused by vibrations of matter.
pitch	The highness/lowness of a sound.
intensity	The volume of a sound.
frequency	The number of oscillations in a wave per second. This is also the number of waves passing a point per second.
transverse wave	A wave made from oscillations at right angles to the direction of the wave.
wavelength	The length of one complete wave – from one point on one wave to the equivalent point on the next wave.

Sound compared to light waves

Sound	Light Waves
Requires a medium to travel	Does not require a medium – can travel in a vacuum
Involves longitudinal oscillations (vibrations) of particles in matter	Involves transverse oscillations of the electromagnetic field
Travels faster in more dense media	Travels slower in more dense media

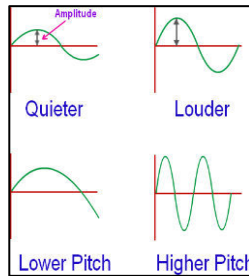
Both sound and EM waves show all the behaviours on the next page.

Year 8 Physics Knowledge Organiser

Sound and Light

Sound Waves

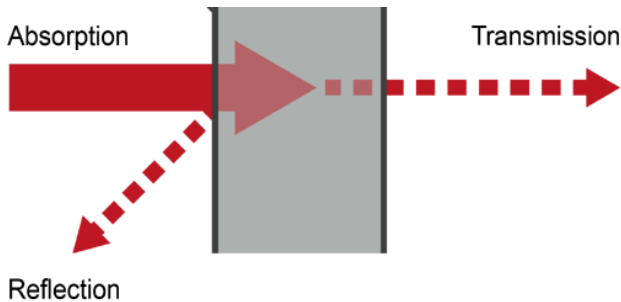
- Sounds travel as waves.
- Sound waves can travel through any **medium** that contains particles – solid, liquid or gas. Sound waves cannot travel in a vacuum.
- The amplitude, wavelength and frequency of sound waves links to the sound.
- **Louder sounds** have larger **amplitudes**.
- Sounds with a **higher pitch** have a **shorter wavelength** and **higher frequency**.
- The diagram shows how the waveform is affected by the sound.



Sound Waves

When sound waves interact with a medium one of three things can happen

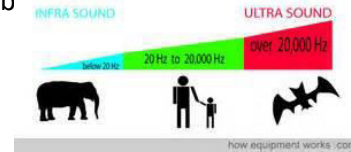
1. The sound can be **absorbed** by the surface
2. The sound can be **reflected** by the surface
3. The sound can be **transmitted** (sound passes through)



Key Terms	Definitions
Auditory Range	The range of frequencies that an animal can hear
Ultrasound	A sound with a frequency above 20,000 Hz
Infrasound	A sound with a frequency below 20Hz

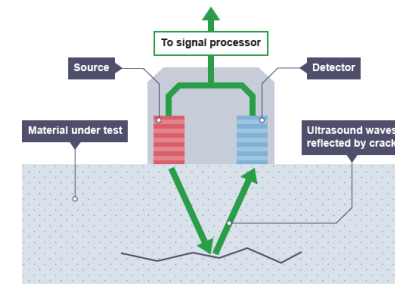
Auditory Range

- Different animals have different auditory ranges, this is the range of frequencies that you can hear
- Humans can hear sounds with frequencies between **20Hz** and about **20,000Hz**.
- Sound that is above 20,000 Hz is known as **ultrasound**
- Sound that is below 20 Hz is known as **infrasound**



Uses of Sound Waves

- Humans can hear sounds with frequencies between **20Hz** and about **20,000Hz**.
- Sound that is too high for humans to hear is called **ultrasound**.
- Ultrasound can be useful, for instance:
 - Scanning during pregnancy to check the health of the foetus
 - Checking objects for cracks for example concrete
 - Cleaning objects for example jewellery
 - Breaking down kidney stones



Year 8 Physics Knowledge Organiser

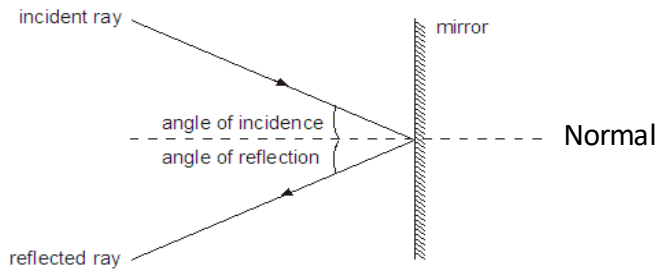
Sound and Light

Light

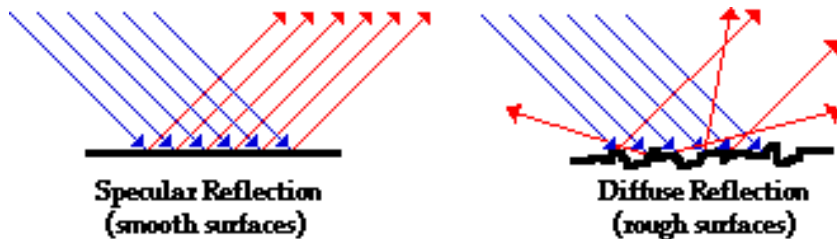
- Objects that give out light are described as luminous
- Most objects are non luminous, you see them as they reflect light into your eyes

Reflection of Light

- When light interacts with some surfaces it will reflect.
- When light hits a smooth surface, it will reflect in one direction. This is called **specular reflection**
- When light is reflected from a mirror, the angle of incidence is equal to the angle of reflection. This is the **law of reflection**.



- When light hits a rough surface each ray of light will reflect in a different direction
- This is known as **diffuse scattering or diffuse reflection**



Key Terms	Definitions
Incident ray	The ray of light that hits the mirror or glass block from the ray box
Reflected ray	The ray of light that reflects off the mirror
Normal line	Imaginary line at 90 degrees to the mirror or glass block. Used to measure angles.
Angle of reflection	The angle between the normal and reflected ray
Angle of incidence	The angle between the normal and the incident ray
Refraction	When a wave changes speed and direction on passing through a material with a different density
Normal	A line at right angles to the surface the wave hits

Ray Diagrams

- To show how light passes through objects we draw ray diagrams.
- Ray diagrams are drawn with straight lines representing the light ray
- An arrowhead pointing in the direction light is travelling in

Refraction

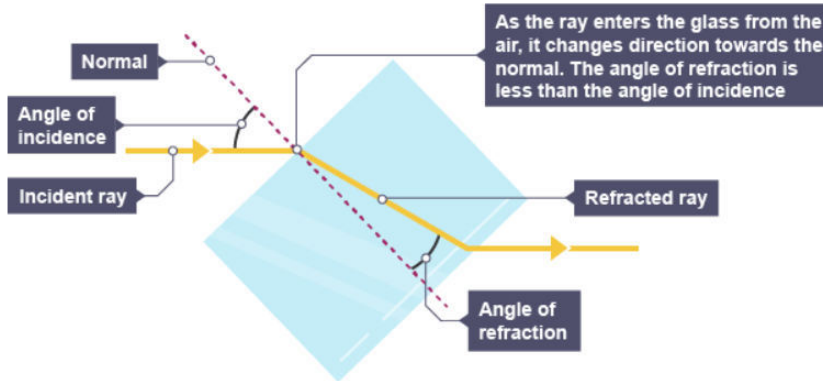
- As light passes through a medium of different density it will cause them to change speed and direction. This process is known as **refraction**.
- If light passes into a more dense medium, for example from air to glass it will refract towards the normal.
- If light passes into a less dense medium for example from glass to air then it will **bend away from the normal**

Year 8 Physics Knowledge Organiser

Sound and Light

Refraction Continued

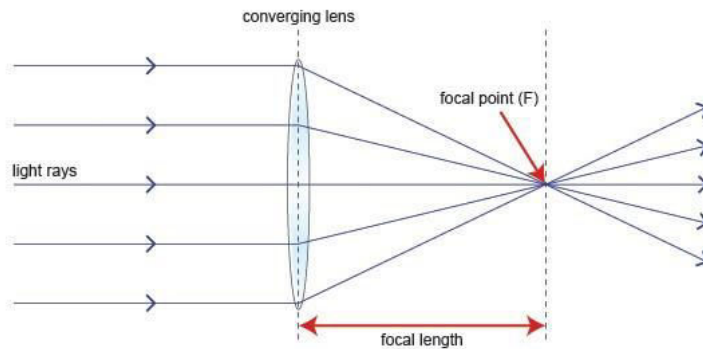
- The diagram below shows how light refracts through a Perspex block



Key Terms	Definitions
Convex Lens	A lens which refracts the light rays to a focal point behind the lens
Focal Point	The point where the refracted light rays meet after passing through a lens
Focal Length	The distance between the lens and the focal point
Lens	The part of the eye which refract the light, it's size is adjusted by muscles
Cornea	The transparent part at the front of the eye' it is also responsible for refracting some of the light that passes through it
Retina	The part of the eye that the light is focussed onto it has special cells which detect light

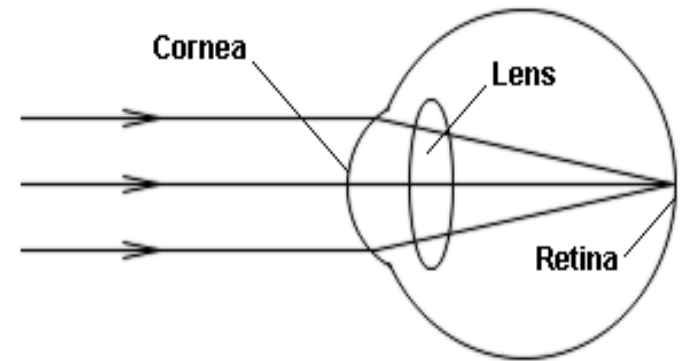
Lenses

- There are two types of lenses, **convex** and **concave**
- In a convex lens, light is refracted as it goes into the lens and as it comes out, causing the light rays to converge (meet up).
- The point where the light rays converge is called the **focal point**.



The eye

- The human contains a convex lens. This convex lens is adjusted by muscles so that you can focus on objects at different distances.
- The cornea also refracts the light that passes through it
- For the image to be in focus the focal point should be on the retina
- The retina is the part of the eye which converts the



Keywords

Minimalist- a musical style which uses limited or minimal (little) musical material

Cell- a short musical idea

Ostinato – repeated rhythm or melody (tune)

Phasing – 2 identical parts which gradually go out of sync (out of time) as they are played together

Layering – adding more parts to the music to create more complex texture

Texture- lots of instruments= thick texture; few instruments= thin texture; interweaving parts (like spaghetti on a plate)= polyphonic texture

Addition- when cell is repeated and new notes are added to the cell pattern

Subtraction – when cell is repeated and notes are removed

Augmentation – when note lengths are doubled

Diminution – when note lengths are halved

Minimalist Music



Suggested Listening

You can listen to Minimalist music by searching for the following composers and their pieces on YouTube:

Philip Glass- Metamorphosis / Prophecies

Steve Reich- Clapping Music/ Music for 18 Musicians

Ludovico Einaudi- The Crane Dance / lady Labyrinth

John Adams – The Chairman Dances / China Gates

Arvo Part- Summa/ Mein Weg

Michael Nyman- The Promise

Craig Armstrong- Soft Patterns

Year 8 new PD curriculum 2019-2020

Cycle 1 Lessons 1-10 - drugs

<p>L1: Drugs: An introduction L.O.: To understand what they are and why people take them</p>	<p>22. factual information about legal and illegal substances, including alcohol, volatile substances, tobacco and cannabis and the law relating to their supply, use and misuse 23. to recognise and manage different influences on their decisions about the use of substances, (including clarifying and challenging their own perceptions values and beliefs) including managing peer influence 25. the safe use of prescribed and over the counter medicines 26. the risks and consequences of 'experimental' and 'occasional' substance use and the terms 'dependence' and 'addiction'</p>
<p>L2: Drugs and the law L.O.: To know the law relating to the supply and possession of illegal substances</p>	<p>H28. The personal and social risks and consequences of substance use Statutory curriculum – 'the law relating to the supply and possession of illegal drugs'</p>
<p>L3. Peer pressure L.O.: To understand how peer pressure can influence your decisions and how to say no</p>	<p>H14. to recognise when they need help and to develop the skills to ask for help; to use basic techniques for resisting pressure to do something dangerous, unhealthy, that makes them uncomfortable or anxious or that they think is wrong R30. to recognise peer pressure and have strategies to manage it; to recognise 'group think' (where the cohesion of the group becomes more important than the choices or actions of the group) and to develop strategies for managing it R31. to understand the feelings and pressure that the need for peer approval can generate, including in relation to the purchase and use of tobacco and alcohol (including cheap/illicit alcohol and cigarettes), drugs and other risky behaviours</p>
<p>L4: What is alcohol? L.O.: To understand what alcohol is and the effects of drinking</p>	<p>22. factual information about legal and illegal substances, including alcohol, volatile substances, tobacco and cannabis and the law relating to their supply, use and misuse</p>
<p>L5: What is binge drinking? L.O.: To understand what binge drinking is and the effects it can have</p>	<p>22. factual information about legal and illegal substances, including alcohol, volatile substances, tobacco and cannabis and the law relating to their supply, use and misuse</p>

<p>L6: What are the risks of smoking? L.O.: To know both the health and financial risks of smoking</p>	<p>22. factual information about legal and illegal substances, including alcohol, volatile substances, tobacco and cannabis and the law relating to their supply, use and misuse</p>
<p>L7. e-cigarettes L.O.: To know what e-cigarettes are and the risks of using it</p>	<p>H25. factual information about legal and illegal substances, including alcohol (including current government recommendations for consumption), volatile substances, new psychoactive substances, tobacco, e-cigarettes, shisha, e-shisha and cannabis</p>
<p>L8: What is cannabis? L.O.: To know what cannabis is and how people take it</p>	<p>22. factual information about legal and illegal substances, including alcohol, volatile substances, tobacco and cannabis and the law relating to their supply, use and misuse</p>
<p>L9. Shisha and e-shisha L.O.: To know what shisha and e-shisha is and the risks of using it</p>	<p>H25. factual information about legal and illegal substances, including alcohol (including current government recommendations for consumption), volatile substances, new psychoactive substances, tobacco, e-cigarettes, shisha, e-shisha and cannabis</p>
<p>L10. Psychoactive substances L.O.: To know what psychoactive substances are and the risks involved</p>	<p>H25. factual information about legal and illegal substances, including alcohol (including current government recommendations for consumption), volatile substances, new psychoactive substances, tobacco, e-cigarettes, shisha, e-shisha and cannabis</p>
<p>L11. Prescribed drugs L.O.: To know the risks of taking prescribed drugs</p>	<p>STATUTORY – Awareness of the dangers of drugs which are prescribed but still present serious health risks</p>

ASSESSMENT – Multiple choice

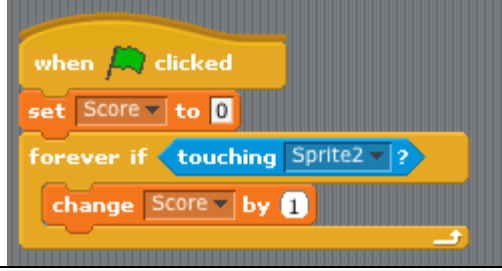
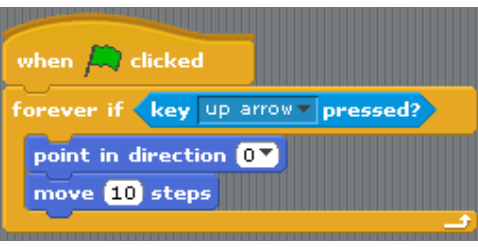
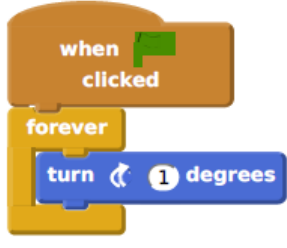
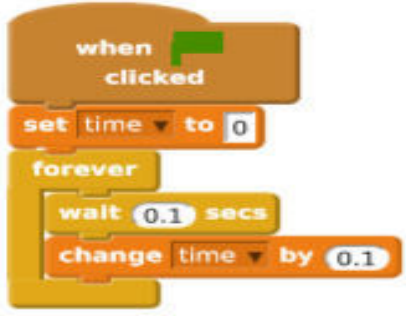

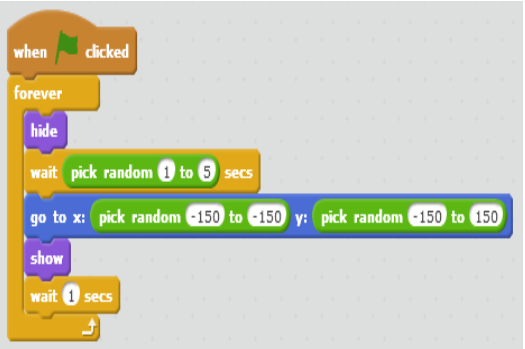
Year 8 Computer Technology

Term 1.1 and 1.2

Unit: Information Technology 2

Keyword	Definition	Keyword	Definition
Photoshop Software			
Photoshop	Image editing software that allows you to manipulate, crop, size and correct colours on photos.	Pixels	The individual units (dots) that make up an image.
Layer tool	The different levels that you place an image. Each image will form a different layer.	Magic wand tool	A tool to remove backgrounds to make them transparent.
Dodge tool	Lighten the pixels.	Burn tool	Darken the pixels
Sponge tool	Makes the colour brighter	Rotate and crop	Rotate: move the image around so it is facing a different direction. Crop: cut part of the image off.
Computers and The Law			
Laws	Laws exist to protect users. They include: <ul style="list-style-type: none"> • Computer Misuse Act • Copyright, Design and Patents Act • Data Protection 	Computer Misuse Act	Purpose: Discourage people from using computers for illegal purposes. Rules: <ul style="list-style-type: none"> • It is illegal to access data unless you have permission to do so. Unauthorised access is called hacking. • It is illegal to access data if it will be used to commit a crime. • It is illegal to make changes or store data (or install viruses) without permission • The maximum punishment for breaking this law is a £5000 fine or several years' Imprisonment.
Copyright, Design and Patents Act	Purpose: When anyone creates something, they own it. This includes a picture, drawing, video, film, text or a game. Rules: <ul style="list-style-type: none"> • Copyright gives the copyright holder exclusive rights to publish, copy, distribute and sell their creation. • No one else can use the work without permission. • When you buy something e.g. a film, you are buying a license for only use to use. • When using computers, it is illegal to make or sell copies. • If you download a music track, film, game or programme without the copyright holder's permission, you are breaking the law. 	GDPR (General Data Protection Regulation)	Purpose: This law means that our data is properly looked after by organisations. It covers personal details such as name, address, date of birth. Rules: Data should be. <ul style="list-style-type: none"> • Collected only for specific purposes. • Adequate, relevant and limited to what is necessary. • Kept up to date • Stored as long as needed. • Stored securely.

Unit: Algorithms 2

Keyword	Definition	Keyword	Definition
Scratch	Scratch is a visual programming language based on blocks of code.	Algorithm	A set of step by step instructions to solve a problem.
Variable	Data stored in memory that can change. For example if the sprite is touching sprite 2, the score will increase by 1. 	Programming Constructs	When programming, we use three programming constructs. Sequence: Set by step instructions to complete a task. Selection: Making a decision based on the condition that is met. It uses IF or ELSE. Iteration: Repeating in a loop.
Iteration Example:	Forever if loop with key controlled movement (using keyboard keys)  Forever loop moving automatically. 	Iteration Example:	Forever if loop where the time variable will increase by 0.1 every 0.1 seconds. 
Selection example:	If touching yellow, say YEAH for 1 second. If touching white, move three steps. 	Find and correct errors.	For example, the x and y coordinates are not random. 
Using IF for make a decision in the program			

Drama Knowledge Organiser – Year 8- 1.1 Devising Skills (The Titanic)

Learning Aims: To learn devising skills and use them to create an emotional piece of drama about The Titanic that highlights the differences between the passengers in

Key Skills	Definition
Facial Expression	Using your face to communicate emotion
Body Language	Using your body and movement to communicate attitudes and feelings

different classes.

Performance skills for this topic	Definition
Communication	The ability to share ideas with your classmates and listen to there's in order to create a collaborative performance.
Mannerism	Performing a habitual gesture or way of speaking or behaving to communicate character
Posture	A position in which someone holds their body when sitting or standing.
Projection	Voice projection is the strength of speaking or singing whereby the voice is used loudly and clearly. It is a technique employed to command respect and attention but is also important to ensure a performer can be heard by the audience.
Clarity and articulation	Speaking in a way which is clear and easy to understand.
Accent	a distinctive way of pronouncing a language, especially one associated with a particular country, area, or social class.
Status	relative social or professional position; standing. Status also refers to how important a person is. Levels on stage can show status.
Voice	Speaking in a way that is suitable to your character and changing your voice to communicate emotion.

Devising Skills/ Drama techniques	Definition
Still Image	A still image is where a performer or performers use their bodies to create a frozen picture. The picture should communicate a story or emotions without the need for movement or dialogue. It is important to use strong facial expression and body language in a still image.
Thought Tracking	Thought Tracking is a drama technique in which a character will step out of the scene and say their thoughts to the audience. Whilst they are doing this the rest of the performers freeze and cannot hear. This allows the character to give the audience more information that the other character might not know, and also allows the audience to hear the feelings of a character. This can create dramatic irony and deepen the drama.
Split Stage	Split stage is when there are two sides of the stage showing two different scenes or locations. Whilst one side performs, the other side is frozen. This allows performers to show to things happening at once, without performers talking over each other. This can also help to highlight contrast between different characters.
Narration	A narrator will come onto the stage to tell the story or to give the audience more information about the story. They may be a separate performer, or they may be one of the characters stepping out of character and speaking impartially.
Blocking	Blocking is when the performers decide where on the stage each piece of the piece will happen. Blocking is essential, without blocking each moment of the performance, performers may face the back, stand in front other performers, or hide at the back of the stage. Blocking can also help the audience to understand where they should be looking at any moment.
Levels	Levels refers to how high or low a performer is on the stage. For example, sat on the floor, on a chair, stood up, or stood on a platform/chair/ table. A high level can suggest a higher status or importance and a lower level can suggest a less important character.
Communication of intention	Intention refers to the message or idea a practitioner wants to communicate to the audience, or the reason they created the piece of drama. These could include to entertain, to communicate a political message, to inform, to educate etc. For this topic, the intention of the work you devise may be to inform the audience about the horror of the disaster of the titanic, or to educate the audience on the implications of the class system on The Titanic.

The Titanic key facts/context	
What year did The Titanic sink?	April 15 th 1912
What was life like for different classes at this time?	The upper and middle-class people were brought up to believe the lower classes were dirty and inferior, although they were prepared to employ them as servants. There were over two million servants in Britain at the turn of the century (80% of the population). The different classes would not socialise or work together.
How many people died in the disaster?	Around 1500 total, 537 third-class, 168 second-class and 123 first-class. Around 685 crew members died.
Why did more men and third-class people die than women and first-class passengers?	The ship followed the tradition on seating women and children on life boats first, and they also sat first and second class before third class, meaning that the majority of third class men on board died, and you most likely to survive if you were a female first class passenger.



In Food technology you are assessed on everything you do in class. There are 2 assessment objectives.

Assessment one (L01 + L02) Healthy living - Understand the importance of nutrition when planning menus

You will be looking at the functions of both Macro and Micro nutrients in the body. You will compare the nutritional needs of specific groups. You will demonstrate the ability to modify recipes to make healthier dishes, centred on the Eatwell guide message of a balanced diet.

Assessment two (L03) Be able to cook dishes safely and hygienically

You will continue to practice and learn new techniques of preparation and cooking. Examples include the creaming method, the rubbing-in method and simmering, etc. You will demonstrate high expectations of safety and hygienic practices at all times. You will be able to explain the differences between Personal, Food and Kitchen hygiene.

KEYWORDS AND KEY TERMS

- | | | |
|---|--|--|
| <input type="checkbox"/> Balanced diet | <input type="checkbox"/> Calcium | <input type="checkbox"/> Fridge temp 0-4°C |
| <input type="checkbox"/> Healthy living | <input type="checkbox"/> Fibre | <input type="checkbox"/> Freezer temp -18°C |
| <input type="checkbox"/> Eatwell Guide | <input type="checkbox"/> 5 a day | <input type="checkbox"/> Kitchen Hygiene |
| <input type="checkbox"/> Dietary needs | <input type="checkbox"/> Simmering | <input type="checkbox"/> Sanitise |
| <input type="checkbox"/> Vegetarian | <input type="checkbox"/> Rubbing-in method | <input type="checkbox"/> Cross-contamination |
| <input type="checkbox"/> Vegan | <input type="checkbox"/> Creaming method | <input type="checkbox"/> Food poisoning |
| <input type="checkbox"/> Lactose intolerant | <input type="checkbox"/> Rolling | <input type="checkbox"/> Temperature probe |
| <input type="checkbox"/> Macro Nutrients | <input type="checkbox"/> Shaping | <input type="checkbox"/> Kitchen safety |
| <input type="checkbox"/> Micro Nutrients | <input type="checkbox"/> Modification | <input type="checkbox"/> Bridge & claw |
| <input type="checkbox"/> Minerals | <input type="checkbox"/> Personal Hygiene | <input type="checkbox"/> Sensory words |
| <input type="checkbox"/> Iron | <input type="checkbox"/> Food Hygiene | <input type="checkbox"/> Evaluation |

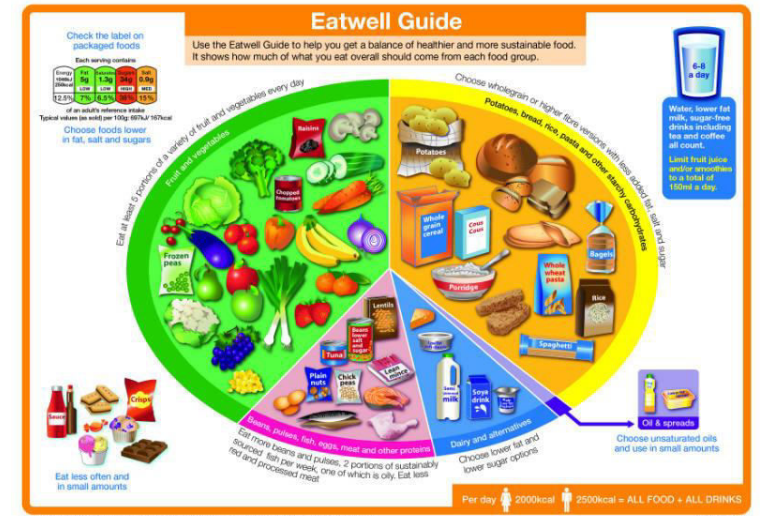
Recipes:

- | | |
|-----------------|-----------|
| Rock Cakes | Pizza |
| Risotto | Fajitas |
| Fairy Cakes | Flapjacks |
| Beef burgers | Chilli |
| Fruit Crumble | |
| Bolognese sauce | |



Useful websites to embed learning

- <https://www.nhs.uk/live-well/eat-well/healthy-eating-for-teens/>
- <https://www.nutrition.org.uk/healthyliving.html>
- <https://www.nhs.uk/live-well/eat-well/eight-tips-for-healthy-eating/>
- <https://www.bbc.com/teach/class-clips-video/design-and-technology-gcse-eight-tips-for-healthy-eating/zby76v4>



Family and pets

mère mother
belle-mère step-mother
père father
beau-père step-father
un frère a brother
un demi-frère a step-brother
une sœur sister
une demi-sœur step-sister
parents parents
grands-parents grandparents

un animal an animal
une araignée a spider
un chat a cat
un cheval a horse
un chien a dog
un cochon d'Inde a Guinea pig
un lapin a rabbit
un lézard a lizard
un oiseau a bird
un phasme a stick insect
une souris mouse
un serpent a snake
une tortue a tortoise

**Yr 8 FRENCH TERM 1
MOI Vocabulary**

Physical descriptions

les yeux... ..eyes
bleus blue gris grey
marron brown noisette hazel
verts green
les cheveux... .hair
blonds blonde bruns brown
noirs black roux red
courts short
mi-longs medium-length
bouclés curly
nattés braided
raides straight

grand tall
gros(se) fat
joli pretty
mignon cute
mince thin/slim
petit small

Adverbs

de temps en temps
from time to time
(mal)heureusement
(un)fortunately
souvent often
toujours always

Character descriptions

actif active
amusant funny
bavard chatty
courageux brave
créatif creative
fidèle faithful
généreux generous
gentil kind
heureux happy
intelligent intelligent
méchant horrible
sociable sociable
sportif sporty
sympa nice
timide shy
travailleur hard-working

School subjects

l'anglais English
le dessin art
l'EPS PE
l'espagnol Spanish
le français French
la géographie geography
l'histoire history
la musique music
la religion RE
les sciences/SVT science
la technologie technology
le théâtre drama

Opinions and reasons

Je préfère I prefer
J'adore I love
J'aime (bien) I (quite) like
Je n'aime pas I don't like
Je déteste I hate
Selon moi in my opinion
A mon avis in my opinion
c'est it is
créatif creative
difficile difficult
ennuyeux boring
facile easy
intéressant interesting
inutile pointless
passionnant exciting
nul rubbish
relaxant relaxing
utile useful
Ce que je déteste, c'est...
What I hate is...
Je me passionne pour... I'm
passionate about...
J'ai horreur de ça! I hate it!

House and rooms

une chambre a bedroom
une cuisine a kitchen
une salle à manger
a dining room
une salle de bains a bathroom
un salon a living room
un jardin a garden

un appartement a flat
une maison a house

au rez-de-chaussée
on the ground floor
au premier étage
on the first floor

Conditional phrases

Si j'étais riche If I were rich...
je voudrais habiter
I'd like to live
j'aimerais avoir...
I'd like to have...
Je voudrais faire de la natation
I'd like to swim

Places

au bord de la mer at the seaside
à la campagne in the countryside
à la montagne in the mountains
un village a village
une ville a town
dans in
l'est the east
l'ouest the west
le nord the north
le sud the south
le centre the centre

Adjectives

amusant fun
animé lively
beau/belle beautiful
ennuyeux boring
grand big
intéressant interesting
joli pretty
moderne modern
petit small
pittoresque pretty
touristique touristy
tranquille quiet/peaceful
vieux old

Places in town

Qu'est-ce qu'il y a dans/à?...What is there in/at...?
Il y a... there is/there are
Il n'y a pas there isn't/ there aren't
un bowling a bowling alley
un centre commercial a shopping centre
un centre sportif a sports centre
un château a castle
un cinéma a cinema
un collège a school
une église a church
un fast-food a fast food restaurant
une gare routière a bus station
un jardin publique a park
un magasin a shop
une maison des jeunes a youth club
un musée a museum
un parc a park
un parc d'attractions a theme park
une patinoire an ice rink
une piscine a swimming pool
une place a square
une plage a beach
un restaurant a restaurant
un stade a stadium
un supermarché a supermarket
un terrain de sport a playing field

Activities

Qu'est-ce qu'on peut faire? What can you do?
On peut... You can
acheter des vêtements buy clothes
bronzer sunbathe
faire de la natation go swimming
faire du bowling go bowling
faire du patin à glace go ice skating
faire du skate go skateboarding
faire des courses go shopping
faire une pique-nique to have a picnic
jouer au foot play football
manger eat
nager swim
prendre le bus take the bus
regarder un film watch a film
retrouver mes copains meet my friends

Conditional phrases

ma ville de rêve my dream town
je voudrais habiter I'd like to live
il y aurait .. There would be...
il n'y aurait pas... There wouldn't be...
ça serait... It would be...
on pourrait... You could...
j'aimerais... I'd like...

Sequencing connectives

d'abord *first of all*
puis *then*
ensuite *next/then*
après *after*
Pour finir *finally*

Intensifiers

un peu a little bit
assez quite
plus more
très very
trop too
vraiment really

Conjunctions

aussi also
car because
cependant however
et and
mais but
où where
ou or
parce que because
qui which

Yr 8 FRENCH TERM 2
LÀ OÙ J'HABITE Vocabulary

être to be
Je suis <i>I am</i>
Tu es <i>You are</i>
Il est <i>He is</i>
Elle est <i>She is</i>
On est <i>One/we are</i>
Nous sommes <i>We are</i>
Vous êtes <i>You are</i>
Ils sont <i>They are</i>
Elles sont <i>They are</i>

Infinitive phrases

Infinitives are verbs which in English translate to 'to' do something or 'doing' something.

e.g. manger – to eat

The infinitive will always end in either **-er, -ir or -re**

You can use the infinitive in lots of different ways by putting it **after** another verb.

Eg. J'aime aller... I like to go/ I like going...

On peut nager You can swim

On peut You can	aller to go
Je vais I'm going	faire – to do
Je voudrais I'd like to	jouer – to play
J'aime I like	manger – to eat
Je n'aime pas I don't like	regarder - to watch

Possessive adjectives

	Masc.	Fem.	Plural
my	mon	ma	mes
your	ton	ta	tes
his/her	son	sa	ses

ma mère – my mum
ton père
ses parents

Indefinite articles

e.g. un magasin – a shop
des magasins – some shops

une tortue – a tortoise
des tortues – some tortoises

Masc words	Feminine words	Plural words
un	une	des
a	a	some

Remember !

After il n'y a pas you use **de** instead of **un/une/des**

e.g. il y a **une** piscine there is a pool

But

il n'y a pas **de** piscine there isn't a pool

Adjectives

In French, most adjectives come **after** the thing they describe.

e.g. un musée intéressant.
– an interesting museum

If you are describing a feminine word (une, la) you need to add 'e' onto your adjective (unless there is one there already!)

e.g. une matière intéressante – an interesting subject

If you are describing a plural word (des, les) you need to add 's' onto your adjective

e.g. deux musées intéressants – two interesting museums

Some adjectives come **before** the noun.

grand, petit, joli

e.g. un **grand** stade – a big stadium
un **joli** lapin – a pretty rabbit

Pronouns

le, la, les mean him, her or it. They come before the verb.

Je l'aime I like it

Je la trouve I find her

Je les adore

I love them

Avoir to have
J'ai <i>I have</i>
Tu as <i>You have</i>
Il a <i>He has</i>
Elle a <i>She has</i>
On a <i>One/we have</i>
Nous avons <i>We have</i>
Vous avez <i>You have</i>
Ils ont <i>They have</i>
Elles ont <i>They have</i>

Yr 8 FRENCH Terms 1 & 2
Grammar and structures

Key terms:

Makkah, prophet, Qur'an. Hijrah, Allah, shahadah, salt, sawm, zakat, Hajj, Ramadan, Eid ul-Fitr, mosque, imam, surahs, wudu, pilgrimage, Ka'bah

KPI- To explain why the prophet Muhammad (pbuh) is important to Islam

Muslims believe that Islam is a faith that has always existed and that it was gradually revealed to humanity by a number of prophets, but the final and complete revelation of the faith was made through the Prophet **Muhammad** in the 7th century CE.

• Muhammad was born in **Mecca** in Saudi Arabia in 570. He was a deeply spiritual man, and often spent time in meditation on **Mount Hira**.

• The traditional story of the **Qur'an** tells how one night in 610 he was meditating in a cave on the mountain when he was visited by the **angel Jibreel** who ordered him to recite.

Once Jibreel mentioned the name of Allah, Muhammad began to recite words which he came to believe were the words of God.

• During the rest of his life Muhammad continued to receive these **revelations**. The words were remembered and recorded, and form the text of the Holy Qur'an, the Muslim scripture.

• Muhammad's popularity was seen as threatening by the people in power in Mecca, and Muhammad took his followers on a journey from Mecca to Medina in 622. This journey is called the **Hijrah** (migration) which the Islamic calendar begins.

Year 8 Term 1 What is it like to be a Muslim today?

KPI: To explain the importance on prayer for a Muslim.

• **Salat** is the obligatory Muslim prayers, performed five times each day by Muslims. It is the second Pillar of Islam. God ordered Muslims to pray at five set times of day:

• Praying five times a day is seen as an opportunity to stand before Allah, to praise and thank him and ask for **guidance**. It is a way of keeping Allah continually in mind throughout the day. It **deepens** a Muslim's faith and dependence on Allah for all their needs, and helps them love and trust their creator.

• Before worshipping Allah, Muslims perform ritual washing called **wudu**, to prepare for prayer.

KPI: To investigate the reasons for making pilgrimage to Makkah.

• **Hajj** is the fifth pillar of Islam. Once a year, Muslims of every ethnic group, colour, social status, and culture gather together in Mecca and stand before the **Ka'bah** praising Allah together.

• Muslims are to go on Hajj at least one in a lifetime. The Hajj makes Muslims feel real importance of life here on earth, and the afterlife. In the Hajj all are truly equal.

KPI: To understand the importance of shahadah in the worship of Allah

• "There is no God but Allah, and Muhammad is his messenger." This is the basic statement of the Islamic faith: anyone who cannot recite this wholeheartedly is not a Muslim.

• When a Muslim recites this they proclaim: That Allah is the only God, and that Muhammad is his prophet, that they personally accept this as true, that they will obey all the commitments of Islam in their life.

KPI: To investigate the importance of fasting in the lives of a Muslim

• **Sawm** is fasting. It's the fourth of the Five Pillars of Islam.

• Muslims are required to fast during **Ramadan**, the ninth month of the Islamic calendar. During the 29/30 days of Ramadan all adult Muslims must give up food etc.

• When daylight is over, most Muslims will break or open the fast with dates or water, following the example of the Prophet Muhammad, before having a proper meal later.

• **Eid ul-Fitr**. The month of Ramadan ends with the festival of Eid ul-Fitr. This is marked by dressing up and visiting the mosque for prayer, and have a celebratory meal.

KPI- To explore what the five pillars of Islam are.

- The most important Muslim practices are the Five Pillars of Islam.
- The Five Pillars of Islam are the five **obligations** that every Muslim must satisfy in order to live a good and responsible life according to Islam.
- The Five Pillars consist of: • **Shahadah**: • **Salat**: • **Zakat**: • **Sawm**: • **Hajj**:
- Why are they important? Carrying out these obligations provides the framework of a Muslim's life, and weaves their everyday activities and their beliefs into a single cloth of **religious devotion**.

KPI- To describe the Muslim place of worship

- Public worship takes place in the **mosque**. The muezzin (mu'adhhdhin) calls the people to prayer, sometimes from a minaret.
- When they enter the mosque, Muslims remove their shoes and sit on the floor facing the **Qiblah** or prayer wall which orients them in the direction of **Makkah** (Mecca).
- The **Imam** leads the people in the rak'ahs. At Friday prayers, also called Jumu'ah, he preaches a sermon using words from the Qur'an.

KPI- To investigate Muslim belief

- Islam is the second largest religion in the world with over 1 billion followers. There are around 2 million Muslims in Britain, around 2.7% of the population.
- The word '**Islam**' in Arabic means **submission** to the will of God. Followers of Islam are called **Muslims**. Muslims believe there is one true God **Allah** (the Arabic word for God the Qur'an. and the Sunnah).

Family and pets

el abuelo grandfather
la abuela grandmother
los abuelos grandparents
mi padre my father
mi madre my mother
mis padres my parents
el hermano brother
la hermana sister
el tío uncle
la tía aunt
el primo cousin (m)
la prima cousin (f)
el hermanastro stepbrother
la hermanastra stepsister
el padrastro stepfather
la madrastra stepmother

mis mascotas my pets
un ratón a mouse
un pájaro a bird
un gato a cat
una rata a rat
una tortuga a tortoise/ turtl
un perro a dog
una araña a spider
un pez a fish
un conejo a rabbit
un caballo a horse
una cobaya a guinea pig
una serpiente a snake

Physical descriptions

el pelo hair
largo long
corto short
liso straight
rizado curly
ondulado wavy
de punta spiky
los ojos eyes
bigote moustache
barba beard
pecas freckles
llevo gafas I wear glasses
alto/a tall
bajo/a short
delgado/a slim
gordo fat
de talla mediana medium size

Adverbs

a veces sometimes
a menudo often
de vez en cuando from time to time
normalmente usually
siempre always

Character descriptions

ordenado/a tidy
desordenado/a untidy
simpático/a friendly
antipático/a unfriendly
paciente patient
impaciente impatient
estudioso/a studious
perezoso/a lazy
testarudo/a stubborn
extrovertido/a outgoing
timido/a shy
inteligente intelligent
bobo/a silly
maduro/a mature
inmaduro/a immature

School subjects

mis asignaturas my subjects
la educación física PE
el español Spanish
el inglés English
la geografía geography
la historia history
la informática ICT
la tecnología design and technology
las ciencias science
las matemáticas maths

Opinions and reasons

Prefiero I prefer
Me encanta(n) I love
Me gusta(n) I like
No me gusta(n) I don't like
Odio I hate
para mí for me
es it is
fácil easy
difícil difficult
útil useful
aburrido/a boring
divertido/a fun, amusing
interesante interesting
Me chifla(n) I love
Me mola(n) I'm crazy about
Me interesa(n) I'm interested in

House and rooms

una cocina a kitchen
un salón a living room
un comedor a dining room
un dormitorio a bedroom
un cuarto de baño a bathroom
un aseo a toilet
un garaje a garage
un jardín a garden
un sótano a basement
la planta baja ground floor
la primera planta first floor
el ático an attic
una granja a farm
una casa a house
un piso a flat

Conditional phrases

Si sea rico/a...If I were rich...
Quisiera vivir
I'd like to live
Me gustaría tener... I'd like to have
Me gustaría nadar
I'd like to swim

Yr 8 SPANISH TERM 1
ME PRESENTO
Vocabulary

Places

está en ... it is in
el este east
el noreste northeast
el noroeste northwest
el norte north
el oeste west
el sur south
el sureste southeast
el suroeste southwest
el campo countryside
el centro centre
la costa coast
la montaña mountains
una aldea village
una ciudad; the town
un pueblo; a village
un barrio: a neighbourhood
las afueras outskirts

Adjectives

antiguo/a old
bonito/a pretty/ attractive
cómodo/a comfortable
feo/a ugly
grande big
histórico/a *historic*
moderno/a *modern*
pequeño/a small
sucio/a *dirty*
tranquilo/a *quiet, peaceful*

Places in town

hay... there is/are...
un ayuntamiento a town hall
un banco a bank
una biblioteca a library
una bolero a bowling
una calle a street
una catedral a cathedral
un colegio a school
un cine a cinema
una discoteca a nightclub
una estación de tren a train station
un estadio a stadium
un hospital a hospital
un hotel a hotel
una iglesia a church
un instituto a school
una mezquita a mosque
un museo a museum
un parque a park
un parque de atracciones a theme park
una plaza de toros a bullring
una playa a beach
un polideportivo a leisure centre
un restaurante a restaurant
un supermercado a supermarket
una tienda (de ropa) a (clothes) shop

Yr 8 SPANISH TERM 2 DONDE VIVO Vocabulary

Activities

bailar en la discoteca to dance in a club
cantar en el coro to sing in the choir
chatear en el móvil to chat on the phone
descansar en casa to relax at home
escuchar música to listen to music
ir a un concierto to go to a concert
ir de compras to go shopping
jugar a la videoconsola to play on the games console
jugar al fútbol to play football
leer libros to read books
montar a caballo to go horse riding
nadar en el mar to swim in the sea
practicar deportes to practise sport
salir con amigos to go out with friends
ver la tele to watch TV
viajar en tren to travel by train

Conditional phrases

me gustaría vivir I'd like to live
habría there would be...
tendría I would have/ it would have
sería... it would be...
estaría It would be

Sequencing connectives

primero first of all
entonces then
luego next/then
después after
por último finally

Intensifiers

un poco a little
bastante fairly, quite
tan so
muy very
demasiado too (much)

Conjunctions

donde where
o or
pero but
porque because
que which
sin embargo however
también also
y and
ya que as

Tener to have		
yo	tengo	I have
tú	tienes	You have
él/ella/Ud	tiene	He/she/it has
nosotros	tenemos	We have
vosotros	tenéis	You have
ellos/Uds	tienen	They have

Ser to be		
yo	soy	I am
tú	eres	You are
él/ella/Ud	es	He/she/it is
nosotros	somos	We are
vosotros	sois	You are
ellos/Uds	son	They are

Possessive adjectives		
	Singular	Plural
my	mi	mis
your	tu	tus
his/her	su	sus

	Sing.masculine	Sing. feminine		Plural masculine	Plural feminine
a,an	un	una	some	unos	unas
the	el	la		los	las

The infinitive

The infinitive of a verb is very useful. Not only can you use it with opinions, you can also transform it into new words by changing its ending. Infinitives belong to 3 different families. They either end in **-ar, -er** or **-ir**

Formation

Me gusta...I like	jugar to play
No me gusta... I don't like	visitar to visit
Prefiero... I prefer	leer to read
Me encanta...I love...	comprar to buy
Detesto/odio... I hate	comer to eat
Para...to/in order to	ir to go
Quiero.... I want...	hacer to do
Voy a... I'm going to	

Yr 8 SPANISH Terms 1 & 2 Grammar and structures

Pronouns

lo, la, las mean him, her, it or them. They come before the verb.
 Lo odio I hate it
 La encuentro agradable I find her friendly
 Los amo
 I love them

In Spanish adjectives usually comes after the noun and has to agree with it in gender and in number.

Masculine singular	Feminine singular
moderno	moderna
grande	grande

Masculine plural	Feminine plural
modernos	modernas
grandes	grandes

e.g. un piso moderno
una casa moderna

dos pisos modernos
dos casas modernas

YR 8 TEXTILES *KNOWLEDGE ORGANISER*

Day of the Dead Sugar Skulls



During this project you will be assessed on how you can refine and develop all the new Textiles skills you learnt in year 7 and you will be introduced to a series of new stitch techniques. You will have the opportunity to stitch using binca, paper and fabric. You will learn techniques in **Applique**, **Reverse Applique** and various ways to **Embellish** your work. Your final product will be a DOTD sugar skull.

KEYWORDS AND KEY TERMS FOR THIS PROJECT

TYPES OF STITCH

RUNNING →

BACK →

HALF CROSS →

CROSS STITCH →

2 COLOUR CROSS →



EXAMPLE OF FINAL PRODUCT

Definitions

APPLIQUE

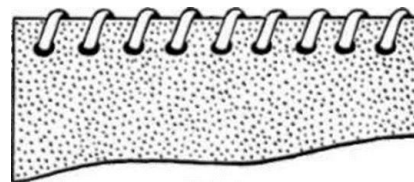
Applique is a sewing technique that involves stitching a small piece of fabric onto a larger one to make a pattern or design.

EMBELLISH

To make something more attractive by the addition of decorative details or features. You could use buttons, beads or embroidery techniques such as a back stitch or satin stitch.

REVERSE APPLIQUE

A sewing craft in which an outline is cut from a top layer of fabric and the raw edges are turned under and stitched to expose one or more layers of fabric underneath.



Example of an **OVERSTITCH** used to attach the front face to the back

EMBROIDERY

Embroidery is the craft of decorating fabric or other materials using a needle to apply thread or yarn.

YR 8 GRAPHICS *KNOWLEDGE ORGANISER*



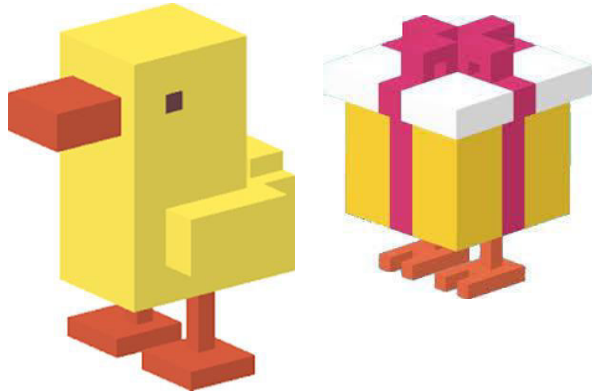
Crossy Road 3D characters

During this project you will be introduced to a series of 3D drawing techniques. You will learn the rules of ISOMETRIC drawing and apply them when drawing shapes, blocks, lettering and objects. You will also learn how to RENDER the shapes so they look like a specific material.

KEYWORDS AND KEY TERMS FOR THIS PROJECT

DEFINITION ISOMETRIC

A pictorial representation of an object in which all three dimensions are **drawn** at full scale rather than foreshortening them to the true **projection**.



THE RULES OF ISOMETRIC DRAWING

ALL lines are parallel

ALL angles are 30 degrees

There are **NO** horizontal lines

DEFINITION RENDERING

Rendering in visual art and technical **drawing** means the process of formulating, adding colour, shading, and texturing of an image. Example: I rendered the block to look like wood.

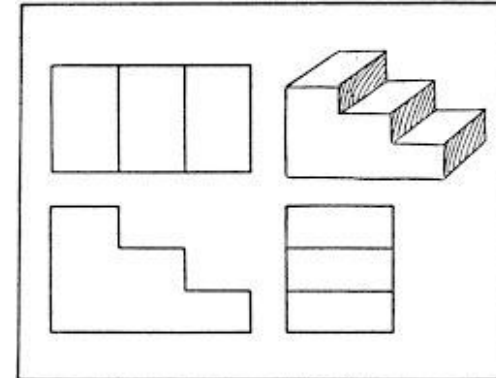


During this project you will learn

- 1 How to draw isometric shapes and lettering
- 2 How to draw isometric CHARACTERS
- 3 How to render and shade for a 3D effect
- 4 How to research and answer a brief for a client

DEFINITION ORTHOGRAPHIC

The **definition** of an **orthographic projection** is a two-dimensional **drawing** of a three-dimensional object, using two or more additional **drawings** to show additional views of the object.



DEFINITION

SINGLE AND 2 POINT PERSPECTIVE

Perspective is what gives a three-dimensional feeling to a flat image such as a **drawing** or a painting.

YR 8 DT KNOWLEDGE ORGANISER

Memphis and Product Design Design



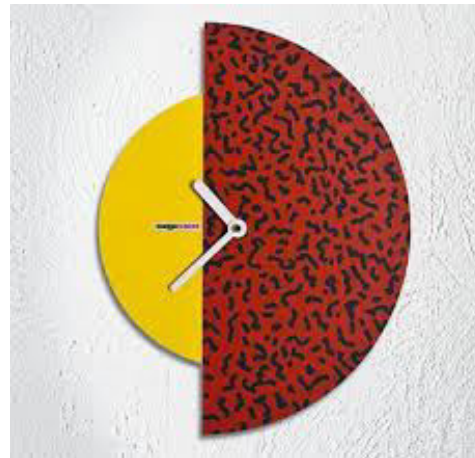
During this project you will research the Italian Memphis Design movement. In particular, you will look at the work of Ettore Sotsass who founded the movement. You will learn a range of Skills in the workshop and respond to a brief by designing your own product based on your research.



KEYWORDS AND KEY TERMS FOR THIS PROJECT

MATERIALS

Plastics, Thermoset and thermoplastic
Softwood (coniferous) and Hardwood (deciduous)
Manufactured Boards (plywood, MDF)



Definitions

THERMOSET

A **thermosetting plastic** is a **polymer** that irreversibly becomes rigid when heated. Such a material is also known as a **thermoset** or **thermosetting polymer**.

THERMOPLASTIC

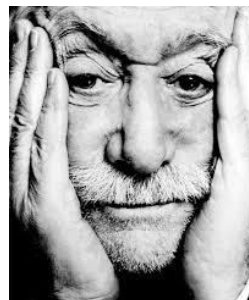
Denoting substances (especially synthetic resins) that become plastic on heating and harden on cooling, and are able to repeat these processes.

SKILLS AND TECHNIQUES

Marking out - Measuring and accurately using a try square and ruler

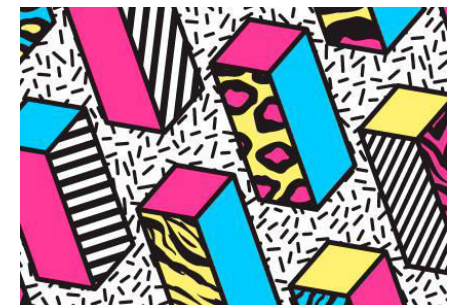
Modifying - Cutting, shaping and drilling

Finishing (draw filing, wet and dry) line bending, drilling countersinking



ETTORE SOTSASS

(1917 – 2007)
Was a furniture designer and architect who founded the Memphis group.



YR 8 ART AND DESIGN *KNOWLEDGE ORGANISER Gaudi*

In Art and Design you are assessed on everything you do in class. There are 4 assessment objectives.

A01 LOOKING AT THE WORK OF ARTISTS - RESEARCH

In each project you will look at and analyse the work of an artist or art movement. In project one you will look at Antonio Gaudi. This research will help you produce your own work.

A02 EXPERIMENTING WITH MATERIALS

You will be given the opportunity to experiment with materials and techniques such as collage, relief and understand how to create a successful pattern with a focus on repetition and regularity.

A03 DRAWING AND RECORDING

You will learn how to refine your observational skills and focus on creating a wider tonal range within your drawing to create contrast and achieve a more three dimensional drawing.

A04 PRODUCING A FINAL PIECE

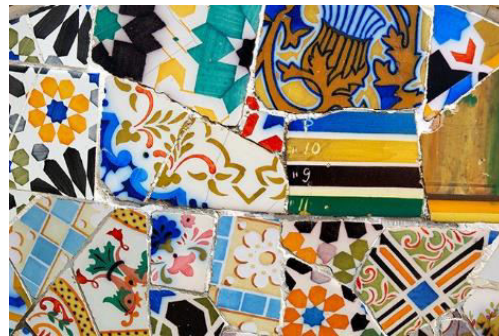
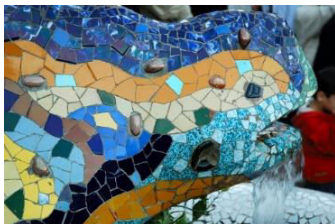
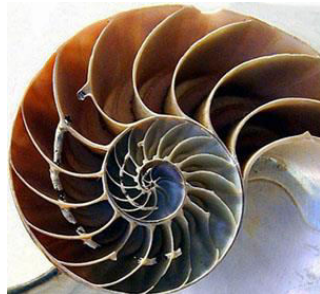
At the end of the project you will present a final piece of work using a range of materials with a focus on natural forms.

KEYWORDS AND KEY TERMS FOR THIS PROJECT

Antoni Gaudi - Spanish Architect whose work was inspired by **natural forms**.



Barcelona – Sagrada Família



Mosaic - a picture or pattern produced by arranging together small pieces of stone, tile, glass, etc.



MIXED MEDIA TECHNIQUES

These techniques help to improve your understanding of Gaudi's work.

Observe - to look or watch carefully.

Collage - a piece of art made by sticking various different materials such as photographs and pieces of paper or fabric on to a backing.

Pattern making – creating a repeated decorative design.

Relief - a method of moulding, carving, or building up in which the design stands out from the surface.



Knowledge Organiser: Year 8 Dance



Unit title: What is a stimulus?

Big Picture: To create a piece of choreography using a chosen stimulus

The four components to create and evaluate a dance

Actions

WHAT the body is doing

A movement

Six categories:

- Jump
- Turn
- Balance/stillness
- Gesture
- Weight transference
- Travel

Dynamics

HOW the body is moving

The force and speed of a movement

Examples of different dynamics:

- Fast
- Slow
- Sharp
- Mechanical
- Explosive

Space

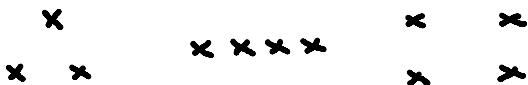
WHERE the body is moving

The area around a dancer. This could be personal or general space

Examples of space:

LEVELS: The height of the action. E.g. High, medium and low

FORMATIONS: Where the dancers stand in a shape.



DIRECTIONS: Where the dancers go. E.g. forwards, backwards, right, left, up, down and diagonally

PATHWAYS: The patterns created on the floor.



Relationships

WITH WHOM you are dancing with

The interaction between a group of dancers

Examples of relationships:

UNISON: Dancing the same action at the same time

CANON: Dancing one after the other, creating an overlap or ripple effect

ACTION AND REACTION - a direct physical response/reaction to other dancers

RETROGRADE- dancers perform a phrase backwards

REPETITION - perform the original motif again

Performance skills

TECHNICAL SKILLS (to do with the body)

POSTURE	The way the body is held when sitting, standing or lying.
FLEXIBILITY	The range of movement around the joints
CONTROL	Performing the movements with strength to hold positions and not fall out of them
CO-ORDINATION	Moving two different body parts at the same time in opposite directions
MOVEMENT MEMORY	Remembering the order of the movements
SPATIAL AWARENESS	Knowing where you are in the space and not colliding with anyone
STAMINA	Being able to keep high energy throughout without tiring
STRENGTH	The force your muscles exert to hold a position for a long time
BALANCE	Put weight on a specific part of the body without falling or wobbling

EXPRESSIVE SKILLS (how you perform it)

FOCUS	Use of the eyes looking in a specific direction
PROJECTION	Extending the movement with energy
MUSICALITY	Being in time with the beat in the music and the other dancers
FLUIDITY	Smooth transitions from one movement to another to allow them to flow effectively together

Key words

Choreography - the making of a dance. The dance

Choreographer - the creator of the dance

Motif - A series of dance actions put together to create a phrase

Improvisation - Making movements up on the spot

Chance - A method of choreography created by Merce Cunningham, where the components of a dance are determined by the roll of a dice.

Stimulus - The starting point for the dance idea. It is something that inspires you to create a piece of dance. It can be a piece of music, a topic, a photograph or even a prop.

Transitions - These should link the sections of your dance together and correspond to the overall movement content.

What is Gothic: *writing that employs dark and picturesque scenery, startling and melodramatic narrative devices, and an overall atmosphere of exoticism, mystery, fear, and dread.*

Author	Text	Key quote	Historical/social context
Emily Bronte	Wuthering Heights	'A few mildewed books piled up in one corner; and it was covered with writing scratched on the paint.'	<ul style="list-style-type: none"> The term 'gothic' comes from the Germanic tribe 'the Goths', who played a part in the fall of the Roman Empire. Medieval Europe (C3-14) is sometimes referred to as the 'Dark Ages' (although this can be contested for a number of reasons.) Some believe that people lived in fear due to superstition and ignorance. Castles with gargoyles were built to ward off evil spirits, this architecture is known as 'gothic' e.g. Notre Dame. Figures from The Age of Enlightenment (C18-19) believed that scientific progress was the only way to advance society, and great discoveries were made in this time. They tried to rid Europe of superstition and ignorance through promoting reason and logic. Gothic writers are preoccupied with the supernatural because they believe that not everything has a scientific explanation. The gothic genre first emerged from the Romantic movement. It used art and ideas from the Dark Ages, wild emotion and nature to contrast modern ideas about science and logic. They challenged society's expectations about propriety and emotion. To show wild emotion was seen as crass and uncouth, but not to the gothic writers, who often depicted passion and rage. They explored the role of the female characters: often in gothic texts, there are powerful female roles, which contrasted the contemporary society. Today, we use the term 'gothic' widely to describe art, style, clothing (e.g. Alexander McQueen couture) music and film (e.g. Tim Burton films). The style and genre is very much still alive. American Gothic fiction generally takes place in a distinctly American setting and tends to be characterised by themes and anxieties that were especially important to American writing, such as religion, racial tension, nature and wilderness, and rationalism vs. the irrational They were very interested in the psychological exploration of characters, particularly in relation to themes of madness.
Mary Shelley	Frankenstein	'I ought to be thy Adam, but I am rather the fallen angel'	
Edgar Allan Poe	The Oval Portrait, The Tell Tale Heart, Fall of the House of Usher	The gray sedge, and the ghastly tree-stems, and the vacant and eye-like windows.' 'Sat meekly for many weeks in the dark, high turret-chamber where the light dripped upon the pale canvas '	
Charlotte Bronte	Jane Eyre	'The strange little figure there gazing at me, with a white face and arms specking the gloom, and glittering eyes of fear'	
Horace Walpole	Castle of Otranto	'The door was clapped to with violence by an invisible hand'	
Robert Louis Stevenson	Jekyll and Hyde	'I compounded the elements, watched them boil and smoke together in the glass, and when the ebullition had subsided, with a strong glow of courage, drank off the potion.'	
Nathaniel Hawthorne	The Scarlett Letter	'The grey twilight of a dungeon, or other darksome apartment of the prison'	
William Blake	The Tyger	'And when thy heart began to beat, What dread hand? & what dread feet?'	
Arthur Conan-Doyle	Sherlock Holmes	'The roof floated like a strange ship upon a shadowy sea'	
Bram Stoker	Dracula	'fixed and rather cruel-looking, with peculiarly sharp white teeth.'	
Anne Rice	Interview with a Vampire	'Two brilliant green eyes that looked down at the boy intently like flames in a skull.'	
Angela Carter	Bloody chamber	'On moonless nights, her keeper lets her out into the garden. This garden, an exceedingly sombre place, bears a strong resemblance to a burial ground.'	
Daphne du Maurier	Rebecca	'In her stealthy, insidious way had encroached upon the drive with long, tenacious fingers.'	
Susan Hill	Woman in Black	'It was a yellow fog, a filthy, evil-smelling fog, a fog that choked and blinded, smeared and stained'	

Typical genre features:	Typical characters:	Typical settings:
<ol style="list-style-type: none"> 1. Death and darkness 2. Supernatural 3. Curses or prophecies 4. Madness/intense emotions 5. Mystery/terror/suspense 	<ol style="list-style-type: none"> 1. Mysterious characters with high social status e.g. Princes, counts 2. Female or feminine characters that are threatened by powerful men 3. Threatening women who are monsters or vampires 4. Powerful, tyrannical male figures 5. Villains, vampires, ghosts, werewolves, giants 	<ol style="list-style-type: none"> 1. Wild landscapes 2. Medieval style castles, churches or abbeys 3. Gloomy, decayed and ruined environments 4. Remote, uninhabited places (older gothic) or monsters intermingling in every day life (newer gothic) 5. Volatile and threatening weather (symbolism)

Pathetic Fallacy	Sensory language	Foreshadowing	Delayed action	Tension	Metaphor	Personification	Narrative voice
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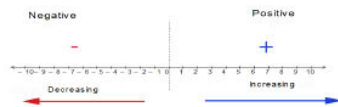
Operations with Integers and Decimals - (Hegarty 13-16, 18-20, 45, 46)

Order of Operations - (Hegarty 24 & 120)

B Brackets	$10 \times (4 + 2) = 10 \times 6 = 60$
I Indices	$5 + 2^2 = 5 + 4 = 9$
D Division	$10 + 6 \div 2 = 10 + 3 = 13$
M Multiplication	$10 - 4 \times 2 = 10 - 8 = 2$
A Addition	$10 \times 4 + 7 = 40 + 7 = 47$
S Subtraction	$10 \div 2 - 3 = 5 - 3 = 2$

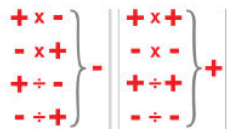
Inequalities & Negative Numbers – (Hegarty 37-44)

- > Greater than
- ≥ Greater than or equal to
- < Less than
- ≤ Less than or equal to
- ≠ Not equal to
- = Equals

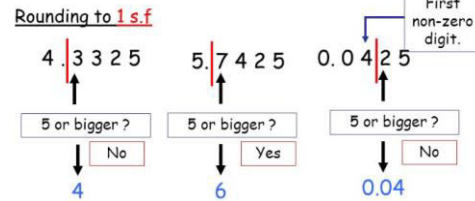


Adding & Subtracting Negative numbers

Question	Working	Simplified
① $5 + 2$	$5 + 2 = 7$	$5 + 2 = 7$
② $5 + -2$	$5 - 2 = 3$	$5 - 2 = 3$
③ $5 - -2$	$5 + 2 = 7$	$5 + 2 = 7$
④ $-5 + 2$	$-5 + 2 = -3$	$-5 + 2 = -3$
⑤ $-5 - -2$	$-5 - 2 = -7$	$-5 - 2 = -7$



Rounding - (Hegarty 17, 56, 130)



Powers roots and index laws - (Hegarty 99 – 103)

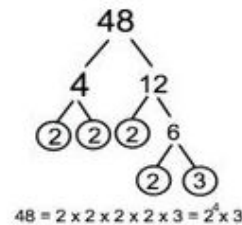
$2^5 = 2 \times 2 \times 2 \times 2 \times 2 = 32$

Prime Numbers	2, 3, 5, 7, 11, 13, 17, 19
Square Numbers	1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225
Cube Numbers	1, 8, 27, 64, 125

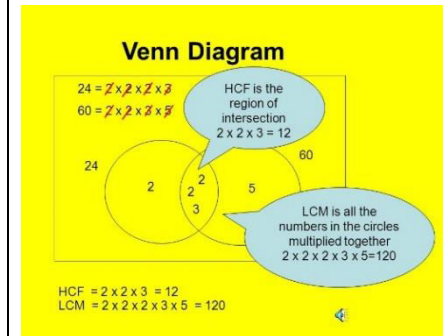
Multiplying	$y^a \times y^b = y^{a+b}$
Dividing	$y^a \div y^b = y^{a-b}$
Raising the power	$(y^a)^b = y^{ab}$
Power of zero	$y^0 = 1$
Square root	$\sqrt{\quad}$
Cube root	$\sqrt[3]{\quad}$

Prime Factor Decomposition - (Hegarty 29,30)

48 as a product of its prime factors:



HCF & LCM - (Hegarty 31 – 35)



Fractions - (Hegarty 57-72)

Fraction is numerator ÷ denominator

→ $\frac{5}{8} = 5 \div 8 = 0.625$

Use place values to change decimals to fractions. Simplify where possible.

→ $0.45 = \frac{45}{100} = \frac{9}{20}$

Learn the most frequently used ones:

$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{3}{4}$
0.5	0.25	0.1	0.2	0.75
50%	25%	10%	20%	75%

Adding or subtracting fractions; use a common denominator...

→ $\frac{4}{5} - \frac{1}{3} = \frac{12}{15} - \frac{5}{15} = \frac{7}{15}$

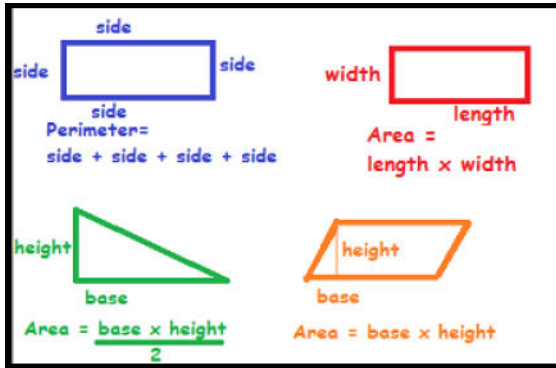
Multiplying fractions; multiply numerators and denominators...

→ $\frac{4}{7} \times \frac{2}{3} = \frac{8}{21}$

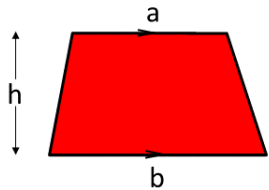
Dividing fractions; "flip" the second fraction, then multiply...

→ $\frac{2}{7} \div \frac{5}{6} = \frac{2}{7} \times \frac{6}{5} = \frac{12}{35}$

Perimeter and Area - (Hegarty 548,549, 553-559)



Area of a Trapezium



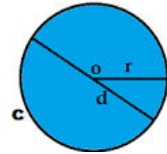
$$\text{Area} = \frac{1}{2}(a + b) \times h$$

Time - (Hegarty 709)

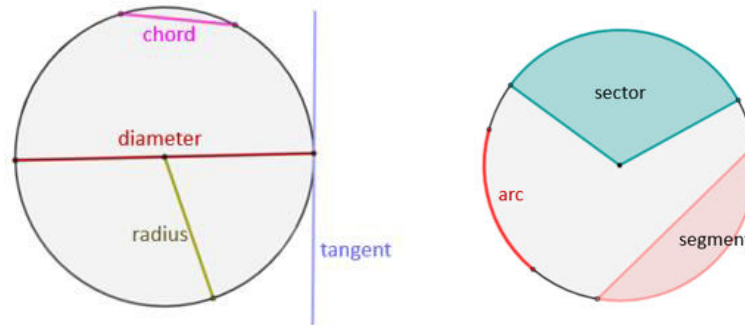
Station	Departure	Arrival	
Lincoln Bus Station	1015	1115	1215
Saxilby High St	1030	1130	1230
Sturton by Stow A1500	1035	1135	1235
Bransby Horses	1045	1145	1245

Circles - (Hegarty 534, 539, 592)

Circle & Formulas



Area of a circle = πr^2
Circumference of a circle = πd or $2\pi r$



Measure - (Hegarty 716, 725, 691-693)

1cm = 10mm
1m = 100cm
1km = 1000m

1kg = 1000g
1 litre = 1000cm³

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

$$\text{density} = \frac{\text{mass}}{\text{volume}}$$