KNOWLEDGE ORGANISER BOOKLET

YEAR 10 - Spring

CORE & HUMANITIES

Contents

CORE & HUMANITIES

Instructions for Use

For all of your subjects, there are certain **facts** that you **need** to know in order for you to best understand the content you study in lessons.

In this booklet are **Knowledge Organisers** for each subject, which contain the core concepts that you have to know to be successful in your lessons.

How to use this Knowledge Organiser:

Look: read a specific section of the *Knowledge Organiser*;

Cover: cover it over or put it to one side;

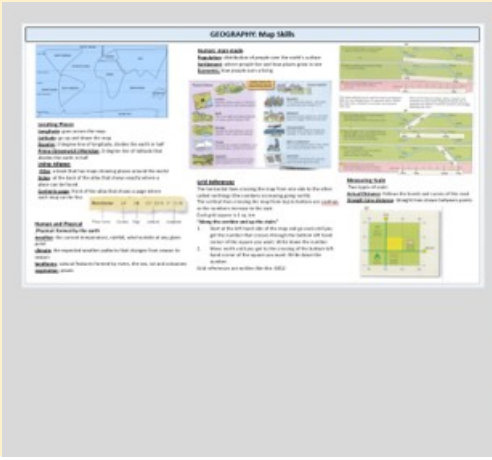
Write: from memory, write out as much of the information as you can remember for that section;

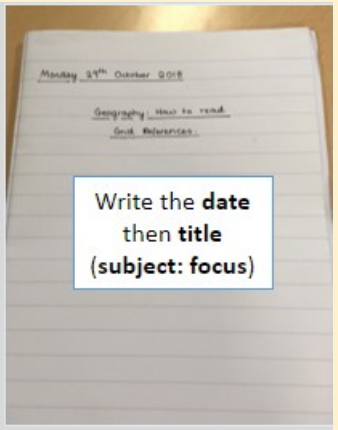
Check: check back with the *Knowledge Organiser*. Anything missing or incorrect, add in green pen:

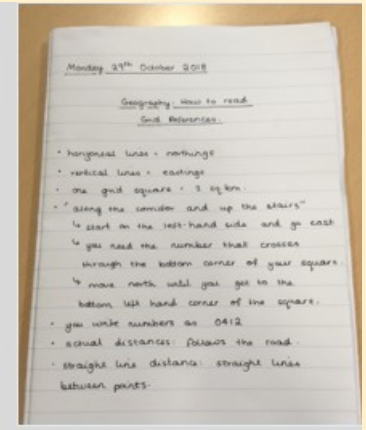
Review: information you didn't recall the first time by using different format, such as repeating the process or creating your own *flashcards* to revise from.

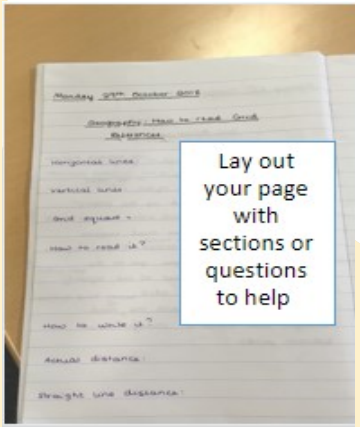
Instructions for Use: Example

1. **LOOK:** carefully read the section of the *Knowledge Organiser* which you are learning.
2. **COVER:** cover it over or put it to one side
3. **WRITE:** write out as many details as you can from memory.
4. **CHECK:** check back over your answer with the *KO*. Anything which is missing or incorrect, add in green pen.
5. **REVIEW:** if you had significant gaps or parts you didn't understand, repeat the process from Step 1.









Sparx Maths

We do not have a knowledge organiser for Maths. This is because the best way to remember and understand mathematics is to practice it. We use the **Sparx Maths** online platform to provide our students plenty of opportunities for practise and to develop their mathematical knowledge.

What should we do each week?

Complete all of your compulsory section of **Sparx** homework and get it 100% correct. Don't worry, there are videos to help if you get stuck.

How long should it take?

Sparx will adjust your homework, so it will take about 1 hour to complete. If you find yourself taking longer than this, you should ask your teacher for support on the topics you find most challenging.

What if I get stuck?

You can watch the videos, ask a friend or parent, or your teacher, in person or by email.

Why do I get different questions to my friends?

Sparx creates custom homework just for you - because you are an individual. This means your maths homework is designed around your ability and constantly challenges you to make improvements.

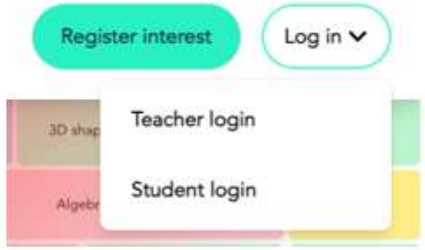
Why do I have to get 100%

We believe you deserve the chance to do really well in Maths. Students who complete all the questions on **Sparx** learn more and get better results. You can also earn rewards.

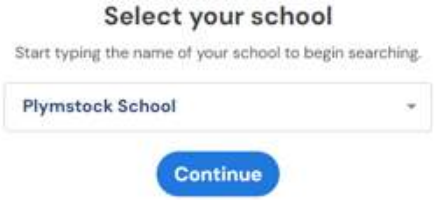
Sparx Maths

Logging into Sparx Maths

- Visit sparxmaths.com and click log in



- Select your school from the drop-down menu



- Log in using your Sparx Maths username and password

  Or

- Log into Sparx using Microsoft. This will give you option to use your usual school log in to Sparx Maths.

  Make sure you remember to add **@plymstockschool.org.uk** to your username

Discursive Writing– Knowledge Organiser

What does a hyperbolic introduction look like?

Picture this: you're sat in your dark, smelly bedroom, wedged into a chair that has long been too small for you. You like your chair. You like your room. Most of all, you like your 892 'friends'. Of course, you haven't actually met any of them and wouldn't know what to do if you had the chance. In fact, you're not very good at communicating at all, simply grunting occasionally at your parents when you want some food or when your internet stops working. Welcome to the hellish world of social media.

The simple fact is that so-called 'social' media has made the world a far worse place than it was before. One reason for this is that...

Key Vocabulary	Definition	Example
Viewpoint	A person's opinion about something.	My _____is that we need to stop using fossil fuels.
Genre conventions	The common 'ingredients' of a genre.	One of the c_____ of the gothic g_____ is a focus on supernatural forces.
Counter-argument	An argument against another argument, idea or suggestion.	She anticipated what they would say and prepared _____ in advance.
Tone	1. Something in the voice that expresses the speaker's feelings or thoughts. 2. Something in a piece of writing that expresses the writer's feelings or thoughts.	The angry _____ of this writing reveals her feelings about war.
Hyperbole	Exaggeration for the sake of emphasis.	I'm not normally one for _____, but that was the best thing I've ever eaten.

Adjective	Explanation of Tone
Accusatory	Suggesting that you think someone has done something bad (i.e. accusing them).
Apologetic	Showing that you feel sorry for something you have done.
Critical	Suggesting that you think something is bad or wrong.
Humorous	Amusing, funny.
Indignant	Angry because of something that is wrong or not fair.
Laudatory	Expressing praise.
Light-hearted	Not serious.
Nostalgic	Looking back on the past positively.
Scathing	Being very critical about something (sometimes in an unkind way).
Thoughtful	Carefully considering things.

Articles

A piece of writing on a particular subject in a newspaper or magazine, or on the internet.

Many different types e.g. news, advice, reviews etc.

Usually has a headline, image, strapline, byline, date.

How to Plan Discursive Writing (Opinion Articles)

Strapline = a subheading in a newspaper or magazine article or in any advertisement

Byline = a line at the top of a newspaper or magazine arti cle giving the writer's name

PERSONAL LEARNING CHECKLIST: Discursive Writing

For each item below, rate your current understanding. Red = not confident at all; Amber = some understanding; Green = good understanding. If you don't recognise or understand the knowledge being referred to, put a question mark.

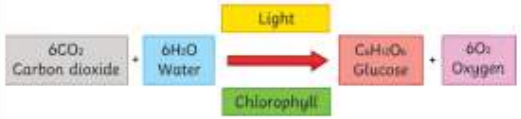
A) Technical Knowledge	RAG 1	RAG 2	RAG 3
1. I know how to use capital letters.			
2. I know how to use full stops (and how to avoid comma splices/run-on sentences).			
3. I know how to use commas.			
4. I know how to use exclamation marks and question marks.			
5. I know how to use apostrophes.			
6. I know how to use semicolons.			
7. I know how to use colons.			
8. I know how to use a hyphen.			
9. I know how to use dashes.			
10. I know how to use double dashes/double brackets/double commas.			
11. I know how to use ellipsis.			
12. I know how to spell accurately.			
13. I know how to show a new paragraph on the page.			
14. I know how to paragraph using TiP ToP.			
15. I know how to use single sentence paragraphs for impact.			
16. I know how to write with cohesion (the 'thread').			
17. I know how to plan writing.			
18. I know how to craft language for impact.			
19. I know how to craft structure for impact.			

AQA GCSE (Combined Science) Unit 4: Bioenergetics Higher

Photosynthesis

Photosynthesis is a chemical reaction which takes place in plants. It converts **carbon dioxide** and **water** into **glucose** and **oxygen**. It uses **light** energy to power the chemical reaction, which is absorbed by the green pigment **chlorophyll**. This means that photosynthesis is an example of an **endothermic** reaction. The whole reaction takes place inside the **chloroplasts** which are small organelles found in plant cells.

Plants acquire the carbon dioxide via diffusion through the **stomata** of their leaves. The water is absorbed from the soil through the **roots** and transported to the cells carrying out photosynthesis, via the **xylem**.



The glucose made in photosynthesis is used for respiration, stored as starch, fat or oils, used to produce cellulose or used to produce amino acids for protein synthesis.

The Rate of Photosynthesis and Limiting Factors

A **limiting factor** is something which stops the photosynthesis reaction from occurring at a faster rate. **Temperature**, **light intensity** and **carbon dioxide** level are all limiting factors.

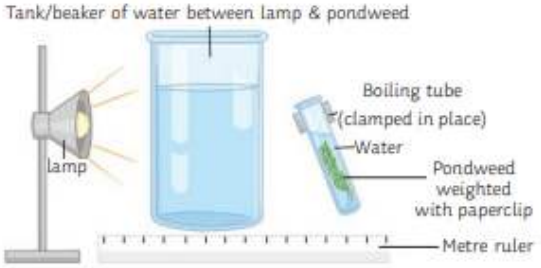
Increasing the temperature of the surroundings will increase the rate of reaction, but only up to around 45°C. At around this temperature, the enzymes which catalyse the reaction become denatured.

Increasing the light intensity will increase the rate of reaction because there is more energy to carry out more reactions.

Increasing the carbon dioxide concentration will also increase the rate of reaction because there are more reactants available.

The Effect of Light Intensity on the Rate of Photosynthesis (RPI)

The amount of light a plant receives affects the rate of photosynthesis. If a plant receives lots of light, lots of photosynthesis will occur. If there is very little or no light, photosynthesis will stop.



Method

1. Measure 20cm^3 of sodium hydrogen carbonate solution and pour into a boiling tube.
2. Collect a 10cm piece of pondweed and gently attach a paper clip to one end.
3. Clamp the boiling tube, ensuring you will be able to shine light onto the pondweed.
4. Place a metre rule next to the clamp stand.
5. Place the lamp 10cm away from the pondweed.
6. Wait two minutes, until the pondweed has started to produce bubbles.
7. Using the stopwatch, count the number of bubbles produced in a minute.
8. Repeat stages 5 to 7, moving the lamp 10cm further away from the pondweed each time until you have five different distances.
9. Now repeat the experiment twice more to ensure you have three readings for each distance.

The **independent** variable was the light intensity.

The **dependent** variable was the amount of bubbles produced. Counting the bubbles is a common method, but you could use a gas syringe instead to more accurately measure the volume of oxygen produced.

The **control** variables were same amount of time and same amount of pondweed. A bench lamp is used to control the light intensity and the water in the test tube containing the pondweed is monitored with a thermometer to monitor and control the temperature.

Interaction of Limiting Factors (HT only)

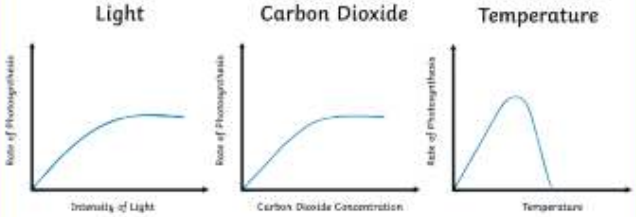
The limiting factor for the reaction will depend on the environmental conditions.

For example:

At night, light intensity is the limiting factor.

In winter, temperature is the limiting factor.

In other conditions, carbon dioxide is usually the limiting factor.



From the graph, you can see that increasing one of the factors will also increase the rate of reaction, but only for so long before it plateaus. This is because another factor will have then become the limiting factor. E.g. you could increase the supply of carbon dioxide, but if there is not enough chlorophyll to absorb the sunlight, then the sunlight will become the limiting factor instead.

Greenhouse Economics (HT only)

To grow plants in the most suitable conditions, a greenhouse can be used.

A greenhouse traps the sun's radiation as heat inside the greenhouse, so that temperature is not a limiting factor for the rate of photosynthesis.

Artificial lighting can be installed in the greenhouse to provide constant light energy and prevent light intensity being a limiting factor.

A paraffin heater can be used in the greenhouse to not only maintain a suitable temperature, but the by-product of the combustion off the paraffin is carbon dioxide.

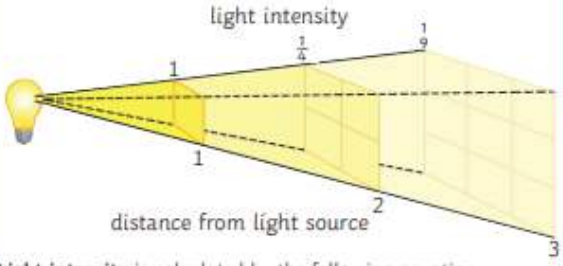
Enclosing the crops in a greenhouse and regulating all the conditions in this way can be expensive; however, it is often outweighed because the harvest of the crop is much healthier, faster-grown crops. Furthermore, the enclosed conditions mean that disease and pests can be easily controlled and prevented.

AQA GCSE (Combined Science) Unit 4: Bioenergetics Higher

Inverse Square Law and Light Intensity

The **inverse square law** is used to describe the light intensity at different distances from the source.

The inverse square law states that: **the intensity of light is inversely proportional to the square distance from the source.**



Light intensity is calculated by the following equation:

$$\text{light intensity} \propto \frac{1}{\text{distance}^2}$$

- The symbol, ∝, means 'is proportional to'.
- Distance is measured in metres, m.

In other words, if an object is moved twice as far away from the light source, the light intensity received is reduced to just one quarter.

Worked example:

If the light source is 10cm from a plant, calculate the light intensity reaching the plant.

1 ÷ (distance^2)
1 ÷ (0.10 × 0.10)
1 ÷ 0.01
= 100 arbitrary units

If the light source is moved 25cm from the plant, calculate the light intensity reaching the plant.

1 ÷ (distance^2)
1 ÷ (0.25 × 0.25)
1 ÷ 0.0625
= 16 arbitrary units

Respiration

Respiration is the chemical reaction which occurs inside the **mitochondria** of all living cells to release energy for living functions and processes, e.g. movement, warmth and building larger molecules for growth and repair. The reaction is **exothermic**, meaning that energy is released to the surroundings.

Respiration can be either **aerobic** (using oxygen) or **anaerobic** (without using oxygen).

glucose + oxygen → carbon dioxide + water + energy

$$C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + ATP$$

In anaerobic respiration, the glucose is not completely oxidised. This means that there is less energy released than in aerobic respiration.

glucose → lactic acid + energy

$$C_6H_{12}O_6 \rightarrow 2C_3H_6O_3 + ATP$$

In plants and yeast, anaerobic respiration makes some different products. The reaction is also called fermentation and is used in bread-making and beer-brewing.

glucose → ethanol + carbon dioxide + energy

$$C_6H_{12}O_6 \rightarrow C_2H_5OH + CO_2 + ATP$$

Effect of Exercise

When a person exercises, their body (specifically their **muscles**) need much more energy. To release more energy, the amount of respiration reactions occurring has to increase.

The **heart** pumps faster and the **breathing** rate and breath volume all increase to supply more **oxygen** to the muscles via the bloodstream.

If the muscles are not receiving enough oxygen to keep up the demand needed by the respiration reactions, then **anaerobic** respiration begins to occur. This incomplete oxidation of the glucose produces **lactic acid**, which can build up in the muscles and results in an **oxygen debt**.

After long periods of exercise, the muscles can become fatigued and stop contracting. You might experience a pain commonly called a **stitch**.

Metabolism

Metabolism is the combination of all the reactions in a cell or in the body.

Energy released during respiration is used during metabolic processes to synthesise new molecules:

- Glucose is converted to starch, glycogen and cellulose.
- Glycerol and three fatty acids are joined to form a lipid molecule.
- Glucose and nitrate ions are joined to form amino acids.
- Amino acids are joined to form proteins.
- Excess proteins are broken down and released as urea during excretion.

Respiration itself is also a process which is included in metabolism.

Oxygen Debt (HT only)

During vigorous exercise, the body can begin to carry out **anaerobic respiration** and produces **lactic acid**.

Lactic acid is transported via the bloodstream to the **liver**. The liver converts the lactic acid back into **glucose**. However, **oxygen** is needed to carry out this reaction.

The **oxygen debt** is the amount of the oxygen required by the body to convert the built-up lactic acid back into glucose and remove it from the respiring cells.

AQA GCSE Chemistry (Combined Science) Unit 5.3: Quantitative Chemistry Knowledge Organiser - Foundation

Conservation of Mass

No atoms can be created or made during a chemical reaction, so the mass of the reactants will equal the mass of the product.

Reactions can be shown as a word or symbol equation.

magnesium + oxygen → magnesium oxide

Mg + O → MgO

Symbol equations should also be balanced; they should have the same number of atoms on each side.

$2Mg + O_2 \rightarrow 2MgO$

Relative Formula Mass

The relative formulas mass is the sum of all the relative atomic masses of the atoms in the formula.

Examples:

HCl

A_r of H = 1

A_r of Cl = 35.5

1 + 35.5 = 36.5

H_2SO_4

A_r of H = 1

A_r of S = 32

A_r of O = 16

(1 × 2) + 32 + (16 × 4)

2 + 32 + 64 = 98

Calculating Percentage Mass of an Element in a Compound

percentage mass of an element in a compound =

$$A_r \times \frac{\text{number of atoms of that element}}{M_r \text{ of the compound}}$$

Find the percentage mass of magnesium in magnesium oxide.

A_r of magnesium = 24 A_r of oxygen = 16

M_r of MgO = 24 + 16

= 40

$$\% \text{ mass} = \frac{A_r}{M_r} = \frac{16}{40} = 0.4 \qquad 0.4 \times 100 = 40\%$$

Concentration of Solutions

Concentration is the amount of a substance in a specific volume of a solution. The more substance that is dissolved, then the more concentrated the solution is.

It is possible to calculate the concentration of a solution with the following equation:

concentration (g/dm³) = mass (g) ÷ volume of solvent (dm³)

The equation can be rearranged to find the mass of the dissolved substance:

mass (g) = concentration (g/dm³) × volume (dm³)

Conservation of Mass

Show that mass is conserved in a reaction.

$2Mg + O_2 \rightarrow 2MgO$

$(2 \times 24) + (2 \times 16) \rightarrow 2(24 + 16)$

$48 + 32 \rightarrow 2 \times 40$

$80 \rightarrow 80$

Total M_r on the left-hand side of the equation is the same as the M_r on the right-hand side.

Calculate the mass of the product.

8g of magnesium reacts with 6g of oxygen:

8 + 6 = 14g of magnesium oxide

During a reaction the mass can change. If one of the reactants is a gas, the mass can go up.

E.g.

magnesium + oxygen → magnesium oxide

Oxygen from the air is added to the magnesium (making the product) which will be heavier in mass.

If one of the products is a gas, the mass can go down.

E.g.

sodium carbonate → sodium oxide + carbon dioxide

When sodium carbonate is thermally decomposed, carbon dioxide gas is produced and released into the atmosphere.

AQA GCSE Chemistry (Combined Science) Unit 5.3: Quantitative Chemistry Knowledge Organiser - Higher

Conservation of Mass

No atoms can be created or made during a chemical reaction, so the mass of the reactants will equal the mass of the product.

Reactions can be shown as a word or symbol equation.

magnesium + oxygen → magnesium oxide

$Mg + O \rightarrow MgO$

Symbol equations should also be balanced; they should have the same number of atoms on each side.

$2Mg + O_2 \rightarrow 2MgO$

Relative Formula Mass

The relative formula mass (M_r) is the sum of all the relative atomic masses (A_r) of the atoms in the formula.

Examples:

HCl

A_r of H = 1

A_r of Cl = 35.5

M_r of HCl = 1 + 35.5 = 36.5

H_2SO_4

A_r of H = 1

A_r of S = 32

A_r of O = 16

M_r of H_2SO_4 = (1 × 2) + 32 + (16 × 4)

M_r of H_2SO_4 = 2 + 32 + 64

M_r of H_2SO_4 = 98

Concentration of Solutions

Concentration is the amount of a substance in a specific volume of a solution. The more substance that is dissolved, then the more concentrated the solution is.

It is possible to calculate the concentration of a solution with the following equation:

concentration (g/dm³) = mass (g) ÷ volume of solvent (dm³)

The equation can be rearranged to find the mass of the dissolved substance:

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Calculating Percentage Mass of an Element in a Compound

percentage mass of an element in a compound =

$$A_r \times \frac{\text{number of atoms of that element}}{M_r \text{ of the compound}}$$

Find the percentage mass of oxygen in magnesium oxide.

A_r of magnesium = 24 A_r of oxygen = 16

M_r of MgO = 24 + 16

= 40

$$\% \text{ mass} = \frac{A_r}{M_r} = \frac{16}{40} = 0.4 \quad 0.4 \times 100 = 40\%$$

Conservation of Mass

Show that mass is conserved in a reaction.

$2Mg + O_2 \rightarrow 2MgO$

$(2 \times 24) + (2 \times 16) \rightarrow 2(24 + 16)$

$48 + 32 \rightarrow 2 \times 40$

$80 \rightarrow 80$

Total M_r on the left-hand side of the equation is the same as the M_r on the right-hand side.

Calculate the mass of the product.

6g of magnesium reacts with 4g of oxygen:

6 + 4 = 10g of magnesium oxide

During a reaction the mass can change. If one of the reactants is a gas, the mass can go up.

E.g.

magnesium + oxygen → magnesium oxide

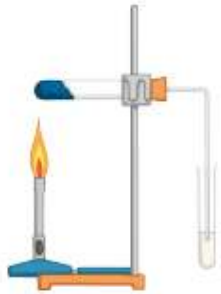
Oxygen from the air is added to the magnesium (making the product) which will be heavier in mass.

If one of the products is a gas, the mass can go down.

E.g.

sodium carbonate → sodium oxide + carbon dioxide

When sodium carbonate is thermally decomposed, carbon dioxide gas is produced and released into the atmosphere.



The Mole

The Avogadro constant, 6.02×10^{23}, is the number of molecules of a substance that make up one mole of that substance.

Iron has an A_r of 56, so 1 mole of iron has a mass of 56g.

Oxygen (O_2) gas has an M_r of 32, so 1 mole of oxygen has a mass of 32g.

Ammonia (NH_3) has an M_r of 17, so 1 mole of ammonia has a mass of 17g.

$$\text{number of moles} = \frac{\text{mass in g (of an element or compound)}}{M_r \text{ (of the element or compound)}}$$

Moles and Equations

Write a balanced symbol equation for the reaction in which 5.6g of iron reacts with 10.65g of chlorine to form iron chloride.

Work out the M_r of all the substances.

A_r of Fe = 56 and A_r of Cl = 35.5

Divide the mass of each substance by its M_r to calculate how many moles of each substance reacted or produced.

moles Fe = 5.6/56 = 0.1

moles Cl = 10.65/35.5 = 0.3

Divide by the smallest number of moles

$\text{Fe} = \frac{0.1}{0.1} = 1$ $\quad$ $\text{Cl} = \frac{0.3}{0.1} = 3$

Write down the balanced symbol equation.

Fe + 3Cl

Chlorine exists as Cl_2 so the whole thing must be multiplied by 2.

$2Fe + 3Cl_2 \rightarrow 2FeCl_3$

Limiting Reactions

If one reactant gets used up in a reaction before the other, then the reaction will stop. The reactant that has been used up is limiting.

If you halve the amount of reactant then the amount of product will also be halved.

AQA Combined Science: **Physics Topic 2 Electricity – Foundation and Higher**

Required Practical

Investigating Resistance in a Wire

Independent variable: length of the wire.

Dependent variable: resistance.

Control variables: type of metal, diameter of the wire.

Conclusion: As the length of the wire increases, the resistance of the wire also increases.

Investigating Series and Parallel Circuits with Resistors

Independent variable: circuit type (series, parallel).

Dependent variable: resistance.

Control variables: number of resistors, type of power source.

Conclusion: Adding resistors in series increases the total resistance of the circuit. In a parallel circuit, the more resistors you add, the smaller the resistance.

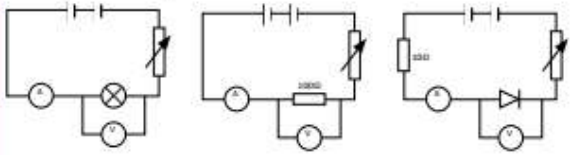
Investigating I-V Relationships in Circuits (Using a filament bulb, ohmic conductor, diode.)

Independent variable: potential difference/volts (V).

Dependent variable: current (A).

Control variable: number of components (e.g. 1 filament bulb, 1 resistor), type of power source.

Set up the circuits as shown below and measure the current and the potential difference.



Draw graphs of the results once collected.

Equations and Maths

Equations

Charge:	$Q = It$
Potential difference:	$V = IR$
Energy transferred:	$E = Pt$
Energy transferred:	$E = QV$
Power:	$P = VI$
Power:	$P = I^2R$

Maths

1kW = 1000W

0.5kW = 500W

Charge

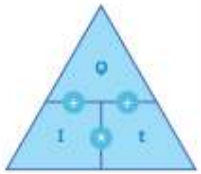
Electric current is the flow of electric charge. It only flows when the circuit is complete.

The **charge** is the current flowing past a point in a given time. Charge is measured in **coulombs (C)**.

Calculating Charge

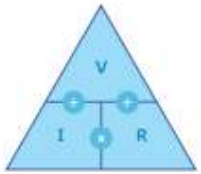
charge flow (C) = current (A) × time (s)

$Q = It$



potential difference = current x resistance

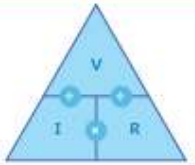
V (V) = I (A) × R (Ω)



Resistance

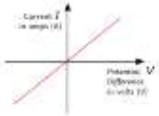
voltage (V) = current (A) × resistance (Ω)

V = IR



Graphs of I-V Characteristics for Components in a Circuit

1. **Ohmic conductor**: the current is directly proportional to the potential difference - it is a straight line (at a constant temperature).



2. **Filament lamp**: as the current increases, so does the temperature. This makes it harder for the current to flow. The graph becomes less steep.

3. **Diode**: current only flows in one direction. The resistance is very high in the other direction which means no current can flow.

Current and Circuit Symbols

Current: the flow of electrical charge.

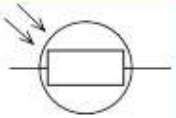
Potential difference (voltage): the push of electrical charge.

Resistance: slows down the flow of electricity.

cell		closed switch		fuse	
resistor		ammeter	A	LDR	
battery		voltmeter	V	LED	
variable resistor		bulb		thermistor	
open switch		diode			

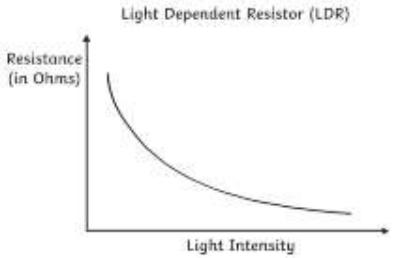
Circuit Devices

LDR – Light Dependent Resistor

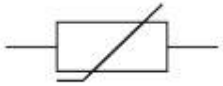


An LDR is dependent on light intensity. In bright light the resistance falls and at night the resistance is higher.

Uses of LDRs: outdoor night lights, burglar detectors.

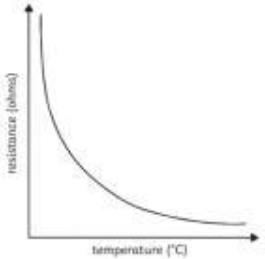


Thermistor



A thermistor is a temperature dependent resistor. If it is hot, then the resistance is less. If it becomes cold, then the resistance increases.

Uses of thermistors: temperature detectors.



Series and Parallel Circuits

Series Circuits

Once one of the components is broken then all the components will stop working.

Potential difference – the total p.d. of the supply is shared between all the components.

$V_{total} = V_1 + V_2$

Current – wherever the ammeter is placed in a series circuit the reading is the same.

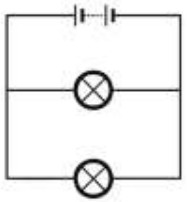
$I_1 = I_2 = I_3$

Resistance – In a series circuit, the resistance will add up to make the total resistance.

$R_{total} = R_1 + R_2$

Parallel Circuits

They are much more common - if one component stops working, it will not affect the others. This means they are more useful.



Potential Difference – this is the same for all components.

$V_1 = V_2$

Current – the total current is the total of all the currents through all the components.

$I_{total} = I_1 + I_2 + I_3$

Resistance – adding resistance reduces the total resistance.

Unit 1a
The Challenge of Natural Hazards

AQA

1. What are Natural Hazards?

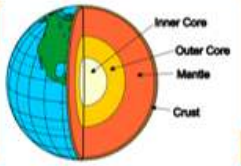
Natural hazards are physical events such as earthquakes and volcanoes that have the potential to do damage to humans and property. Hazards include tectonic hazards, tropical storms and forest fires.

What affects hazard risk?

Population growth
Global climate change
Deforestation
Wealth - LICs are particularly at risk as they do not have the money to protect themselves

2. Structure of the Earth

The earth has 4 layers
The core (divided into inner and outer), mantle and crust.

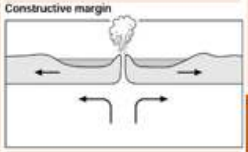


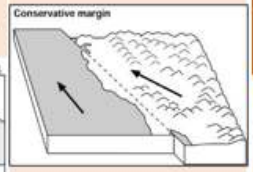
The crust is split into major sections called **tectonic plates.**

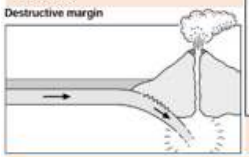
There are 2 types of crust: **Oceanic** (thin and younger but dense) and **Continental** (old and thicker but less dense).

These plates move due to convection currents in the mantle and, where they meet, tectonic activity (volcanoes and earthquakes) occurs..

Plates either move towards each other (**destructive** margin) away from each other (**constructive**) or past each other (**conservative**).







3. Earthquakes and Volcanoes

Volcanoes	Earthquakes
- **Constructive** margins – Hot magma rises between the plates e.g. Iceland. Forms Shield volcanoes. - **Destructive** margins – an oceanic plate subducts under a continental plate. Friction causes oceanic plate to melt and pressure forces magma up to form composite volcanoes e.g. the west coast of South America.	- **Constructive** margins – usually small earthquakes as plates pull apart. - **Destructive** margins – violent earthquakes as pressure builds and is then released. - **Conservative** margins – plates slide past each other. They catch and then as pressure builds it is released e.g. San Andreas fault.

4. Effects of Tectonic Hazards

Primary effects happen immediately. Secondary effects happen as a result of the primary effects and are therefore often later.

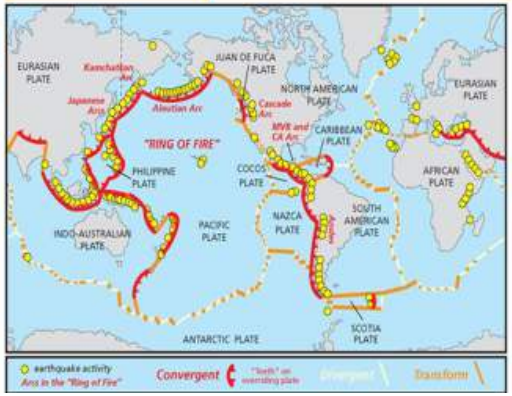
Primary - Earthquakes	Secondary - Earthquakes
- Property and buildings destroyed. - People injured or killed. - Ports, roads, railways damaged. - Pipes (water and gas) and electricity cables broken.	- Business reduced as money spent repairing property. - Blocked transport hinders emergency services. - Broken gas pipes cause fire. - Broken water pipes lead to a lack of fresh water.
Primary - Volcanoes	**Secondary - Volcanoes**
- Property and farm land destroyed. - People and animals killed or injured. - Air travel halted due to volcanic ash. - Water supplies contaminated.	- Economy slows down. Emergency services struggle to arrive. - Possible flooding if ice melts Tourism can increase as people come to watch. - Ash breaks down leading to fertile farm land.

5. Responses to Tectonic Hazards

Immediate (short term)	Long-term
- **Issue warnings if possible.** - **Rescue teams search for survivors.** - **Treat injured.** - **Provide food and shelter, food and drink.** - **Recover bodies.** - **Extinguish fires.**	- **Repair and re-build properties and infrastructure.** - **Improve building regulations** - **Restore utilities.** - **Resettle locals elsewhere.** - **Develop opportunities for recovery of economy.** - **Install monitoring technology.**

6. Distribution of tectonic activity

Along plate boundaries.
On the edge of continents.
Around the edge of the Pacific.



7. Reducing the impact of tectonic hazards

Monitoring	Prediction
Seismometers measure earth movement. Volcanoes give off gases.	**By observing monitoring data, this can allow evacuation before event.**
Protection	**Planning**
Reinforced buildings and making building foundations that absorb movement. Automatic shut offs for gas and electricity.	**Avoid building in at risk areas. Training for emergency services and planned evacuation routes and drills.**

8. Comparing Earthquakes – Nepal and Japan

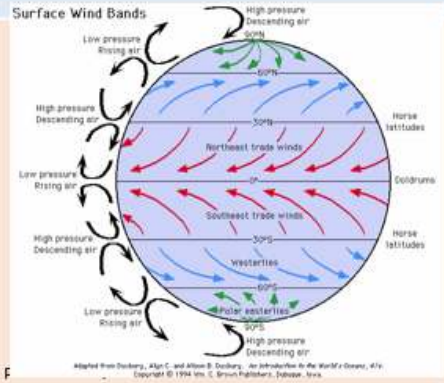
Nepal. 25 April 2015. Magnitude 7.8. | **New Zealand 22 Feb 2011 Magnitude 6.3**

Primary Effects	
• 8841 deaths • 23000 injured • Over 500,000 homes destroyed • Historic buildings including • Dharahara Tower fell • 26 hospitals and 50% of schools destroyed	• 181 deaths • 2000 people injured. • Roads and 180,000 buildings collapsed • 6 storey Canterbury TV building caught fire and collapsed
Secondary Effects	
• 3 million homeless • Avalanche on Mount Everest killing 19 people. • Loss of income from tourism (which was 8.9% of Nepal's GDP). • Rice seed stored in homes was ruined as homes collapsed. This caused food shortages.	• Landslides caused damage to homes • Liquefaction caused 400 00 tonnes of silt • Water and electricity supplies cut off to thousands of homes • $20 billion damage • 4000 people homeless
Immediate Responses	
• Nepal requested international help. • UK's DEC raised $126 million. • Red Cross- tents for 225,000 people. • UN and WHO distributed medical supplies to the worst districts. • Facebook launched a safety feature so people could indicate they were safe.	• Emergency response in place within 2 hours • Search and rescue teams sent from across the world • Bottled water and chemical toilets provided • Electricity was restored to 75% of the city within 3 days
Long term responses	
• Rebuilding with stricter building regulations • World Heritage Sites reopen June 2015. • Longer climbing season.	• Demolishing and rebuilding over 10 000 houses • All new buildings built as earthquake proof

LICs suffer more than HICs from natural disasters because they are not as prepared and struggle to react effectively.

9. Global atmospheric circulation

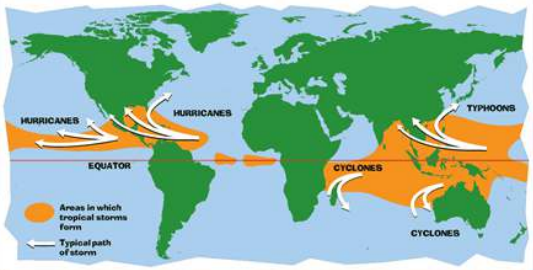
At the equator, the sun's rays are most concentrated. This means it is hotter. This one fact causes global atmospheric circulation at different latitudes.



High p
Low pressure = wet
As the air heats it rises – causing low pressure. As it cools, it sinks, causing high pressure. Winds move from high pressure to low pressure. They curve because of the **Coriolis** effect (the turning of the Earth)

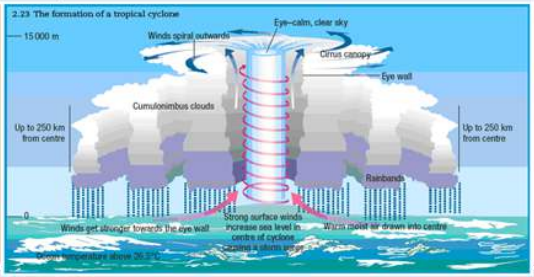
10. Tropical Storms

Occur in low latitudes between 5° and 30° north and south of the equator (in the tropics). Ocean temperature needs to be above 27° C. Happen between summer and autumn.



11. Sequence of a Tropical Storm

1. **Air is heated above warm tropical oceans.**
2. **Air rises under low pressure conditions.**
3. **Strong winds form as rising air draws in more air and moisture causing torrential rain.**
4. **Air spins due to Coriolis effect around a calm eye of the storm.**
5. **Cold air sinks in the eye so it is clear and dry.**
6. **Heat is given off as it cools powering the storm.**
7. **On meeting land, it loses source of heat and moisture so loses power.**



Climate change will affect tropical storms too. Warmer oceans will lead to more intense storms – but not necessarily more frequent ones.

18. Extreme weather in the UK

Rain – can cause flooding damaging homes and business.
Snow & Ice – causes injuries and disruption to schools and business. Destroys farm crops.
Hail – causes damage to property and crops.
Drought – limited water supply can damage crops.
Wind – damage to property and damage to trees potentially leading to injury.
Thunderstorms – lightening can cause fires or even death.
Heat waves – causes breathing difficulties and can disrupt travel.

UK weather is getting more extreme due to climate change. Temperatures are more extreme and rain is more frequent and intense leading to more flooding events. Since 1980 average temperature has increased 1 degree and winter rainfall has increased.

12. Typhoon Haiyan, Philippines, 2-11 November 2013

Primary Effects	Secondary Effects
• At least 6340 killed • 314 km/hr wind speeds. • 5m Storm Surge • 90% buildings in Tacloban destroyed - 130,000 houses • Habitats & crops destroyed	• $14 Billion of damage • Water supply polluted • 4.2 million homeless • Ports unusable for supplies • Looting meant army flown into Manila (capital) to restore order • Rice prices went up by 20%

Immediate Responses	Long-term Responses
• 1,069 emergency shelters set up in public buildings. • Disaster Emergency Committee helped • 3,316,500 people outside these centres by providing aid. • UK aid charities provided shelter, food and medical supplies.	• UN appeal raised $300 million. • Typhoon warning systems have been improved. • People are now better educated about how to respond.

Prediction	Planning	Protection
Monitoring wind patterns allows path to be predicted. Use of satellites to monitor path to allow evacuation	Avoid building in high risk areas Emergency drills Evacuation routes	Reinforced buildings and stilts to make safe Flood defences e.g. levees and sea walls Replanting Mangroves

Winter Storms of 2013-14

12 storms in one winter. Wettest winter since 1910. Rainfall 165% of UK average – 545mm. Lowest winter temp for 50 years (-7.7°c)

Social Effects

2 deaths in the South West of England
In Norfolk, 7 houses collapsed into the sea due to coastal erosion.
Over 100,000 homes in Scotland were without power for 5 days.

Economic Effects

Gatwick Airport closed on 23rd and 24th Dec due to the flooding of the River Mo
The railway line at Dawlish was damaged on 4th Feb 2014 and closed for 2 months.
Household bills soared as night-time temperatures plummeted.
Farmers reported a loss of £600 million worth of crops due to flooding
Scotland's ski industry boomed with a 150% increase in tourism.

Environmental impacts

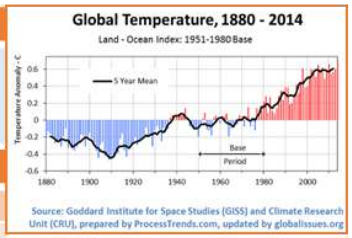
Over 4000 cattle had to be evacuated from flooded fields in Somerset.

Management strategies

Met Office issued weather warning
Environment agency issued flood warning
Soldiers took supplies to remote areas
Schools closed
Thames Barrier was closed to protect 200,000 homes.
M48 Severn Bridge was closed
Hospitals and emergency services were put on high alert.
Airports rerouted flights.

14. Climate Change – natural or human?

Evidence for climate change shows changes before humans were on the planet. So some of it must be natural. However, the **rate** of change since the 1970s is unprecedented. Humans are responsible – despite what Mr Trump says!



15. Causes

Natural	Human
- **Orbital changes** – The sun's energy on the Earth's surface changes as the Earth's orbit is elliptical its axis is tilted on an angle. - **Solar Output** – sunspots increase to a maximum every 11 years. - **Volcanic activity** – volcanic aerosols reflect sunlight away reducing global temperatures temporarily.	- **Fossil fuels** – release carbon dioxide with accounts for 50% of greenhouse gases. - **Agriculture** – accounts for around 20% of greenhouse gases due to methane production from cows etc. Larger populations and growing demand for met and rice increase contribution. - **Deforestation** – logging and clearing land for agriculture increases carbon dioxide in the atmosphere and reduces ability to planet to absorb carbon through photosynthesis.

17. Effects of Climate Change

Social	Environmental
- Increased disease eg. skin cancer and heat stroke. - Winter deaths decrease with milder winters. - Crop yields affected by up to 12% in South America but will increase in Northern Europe but will need more irrigation. - Less ice in Arctic Ocean increases shipping and extraction of oil and gas reserves. - Droughts reduce food and water supply in sub-Saharan Africa. Water scarcity in South and South East UK. - Increased flood risk. 70% of Asia is at risk of increased flooding - Declining fish in some areas affect diet and jobs. - Increased extreme weather - Skiing industry in Alps threatened.	- Increased drought in Mediterranean region. - Lower rainfall causes food shortages for orangutans in Borneo and Indonesia. - Sea level rise leads to flooding and coastal erosion. - Ice melts threaten habitats of polar bears. - Warmer rivers affect marine wildlife. - Forests in North America may experience more pests, disease and forest fires. - Coral bleaching and decline in biodiversity.

Managing Climate Change

Mitigation

- **Alternative energy production** will reduce CO_2 production.
- **Planting Trees** – helps to remove carbon dioxide.
- **Carbon Capture** – takes carbon dioxide from emission sources is stored underground.
- **International Agreements** e.g. the Paris Climate Agreement.

Adaption

- **Changes in agricultural systems** need to react to changing rainfall and temperature patterns and threat of disease and pests.
- **Managing water supplies** – eg. by installing water efficient devices and increasing supply through **desalination** plants.
- **Reducing risk** from rising sea levels would involve constructing defences such as the Thames Flood Barrier or restoring mangrove forests, or raising buildings on stilts.

16. Evidence for Climate Change

The Met Office has reliable climate evidence since 1914 – but we can tell what happened before that using several methods.

Ice and Sediment Cores

- Ice sheets are made up of layers of snow, one per year. Gases trapped in layers of ice can be analysed. Ice cores from Antarctica show changes over the last 400 000 years.
- Remains of organisms found in cores from the ocean floor can by traced back 5 million years.

Pollen Analysis

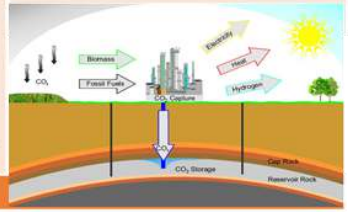
- Pollen is preserved in sediment. Different species need different climatic conditions.

Tree Rings

- A tree grows one new ring each year. Rings are thicker in warm, wet conditions
- This gives us reliable evidence for the last 10 000 years.

Temperature Records

- Historical records date back to the 1850s. Historical records also tell us about harvest and weather reports.



PAPER 3 WEIMAR AND NAZI GERMANY: KNOWLEDGE ORGANISER KEY TOPIC 2-HITLER'S RISE TO POWER, 1919-33

HITLER'S EARLY LIFE AND WORLD WAR ONE

- Hitler was originally from Austria
- He spent time in Vienna and was homeless
- Travelled to Munich in Germany and joined the German army
- Served as a messenger
- Won the Iron Cross during World War One
- Was gassed near the end of the war
- Spies on extremist parties for the army after the war. Meets Anton Drexler of the German Workers Party (DAP) and discovers a talent for public speaking. Forms the Nazi Party (NSDAP)

NAZI IDEAS (THE 25 POINT PROGRAM)

The Nazi party program originally had 25 key ideas. Some of the key Nazi ideas were

- Cancellation of the Treaty of Versailles
- Lebensraum
- No democracy-one strong Fuhrer or leader
- Nationalism
- A strong Germany
- End reparations
- Anti-Semitism
- Helping poor farmers and shopkeepers
- Anti-big business

THE MUNICH PUTSCH (1923)

Positives:	Negatives:
Hitler became famous Nazi ideas became well known Hitler received a lenient sentence of 5 years and only served 9 months Hitler realised he would need to present himself as a legal politician	The army stopped the putsch 16 Nazis were killed The Nazis party was leaderless once Hitler was imprisoned

THE BAMBERG CONFERENCE (1926)

- Hitler calls the meeting to unite the party
- The Nazi party is divided between the more socialist north and the more nationalist south
- Otto Strasser represents the north
- Hitler speaks at length and unites the party
- Hitler impresses Josef Goebbels who had originally sided with Strasser.
- The party is united after the Bamberg Conference.

WHY DID THE NAZI PARTY GROW AND SUPPORT INCREASE?

1929-Wall Street Crash. US loans are recalled and this plunges Germany into economic depression

Support for the Nazis increases during times of economic hardship

6 million Germans are unemployed

Nazi propaganda promises 'work, freedom and bread'

Middle class Germans are radicalised and begin to support extremist groups like the Nazis

HOW DID HITLER BECOME CHANCELLOR IN1933?

- Hitler was an excellent speaker
- The Nazis were skilled at propaganda and used posters, radio and slogans
- The SA intimidated political enemies liked the communists and used violence. The SA was led by Ernst Rohm and numbered 2 million men
- The Nazis targeted groups liked the young, unemployed and farmers
- Hitler was not voted into power. Von Papen persuaded President Hindenburg to make Hitler Chancellor hoping they could control Hitler

KEY INDIVIDUALS:

Person	Key details:
Anton Drexler 	Leader of the German Workers Party (DAP) which Hitler transformed into the Nazi Party.
Josef Goebbels 	Took Strasser's side but began supporting Hitler during the Bamberg Conference.
President Hindenburg 	President of Weimar Germany from 1926. Persuaded to allow Hitler to become Chancellor by Franz Von Papen.
Adolf Hitler 	Leader of the Nazi Party. Leader at the Munich Putsch. Imprisoned at Lansberg. Became Chancellor in 1933.
Ernst Rohm 	Leader of the Nazis paramilitary brown shirts known as the Stormtroopers or SA.
Otto Strasser 	Nazi who represented the north at the Bamberg Conference.
Franz Von Papen 	Weimar Chancellor. Came to an agreement with Hitler. Thought he could control Hitler. Persuaded Hindenburg to allow Hitler to become Chancellor in 1933.

KEYWORDS:

Keywords	Definition
Anti-Semitism	Very popular theory at the time blaming Jews for Germany and the world's problems.
Bamberg Conference	1926 meeting where Hitler united the Nazi party after coming out of prison.
Lebensraum	Key Nazi idea about expanding Germany and the need for 'living space' in the East.
Legal Hitler	Nickname given to Hitler after coming out of Landsberg prison. Hitler realised he would need to present himself as a legal and respectable politician.
Munich Putsch	Hitler's failed 1923 attempt to seize power.
Nationalism	Pride and love for your country. Nationalism was another key Nazi idea.
SA	Also known as the Stormtroopers or Brown Shirts. The 2 million strong Nazi army led by Ernst Rohm.
Wall Street Crash	Economic crash that happened in America and caused a world-wide Great Depression. Led to 6 million being unemployed by 1933 in Germany.

KNOWLEDGE CHECKER:

Required knowledge	R	A	G
Hitler's early career: joining the German Workers' Party and setting up the Nazi Party, 1919–20.			
The early growth and features of the Party. The Twenty-Five Point Programme. The role of the SA.			
The reasons for, events and consequences of the Munich Putsch.			
Reasons for limited support for the Nazi Party, 1924–28. Party reorganisation and Mein Kampf. The Bamberg Conference of 1926.			
The growth of unemployment – its causes and impact. The failure of successive Weimar governments to deal with unemployment from 1929 to January 1933. The growth of support for the Communist Party.			
Reasons for the growth in support for the Nazi Party, including the appeal of Hitler and the Nazis, the effects of propaganda and the work of the SA.			
Political developments in 1932. The roles of Hindenburg, Brüning, von Papen and von Schleicher.			
The part played by Hindenburg and von Papen in Hitler becoming Chancellor in 1933.			

Time phrases	verb	Food	
D'habitude *(Usually)* Normalement Le matin *(in the morning)* Le soir *(in the evening)*	je mange	du	pain (bread) beurre (butter) café (coffee) thé (tea) raisin (grapes) jambon (ham) riz (rice) thon (tuna) lait (milk) miel (honey)
À chaque repas *(at every meal)* Au petit-déjeuner, *(for breakfast)* Au déjeuner, *(for lunch)* Au goûter, *(at snack time)* Au dîner, *(for dinner)* Comme dessert, *(for pudding)*	je bois je prends	de la	confiture (jam) salade (lettuce) pizza
		de l'	eau
		des	abricots pommes (apples) biscuits céréales oeufs (eggs) champignons (mushrooms) pâtes (pasta) saucisses (sausages) fraises (strawberries)
		un	fruit yaourt

The partitive article ('some', 'any')

You use the partitive article (**de** + the definite article) to say 'some':

de + le → **du** *de + l'* → **de l'**
de + la → **de la** *de + les* → **des**

But after a negative, or with containers and quantities, just use **de/d'**:

Je ne mange pas **de** *viande.*
un kilo **de** *bananes/une bouteille* **d'***eau*

The irregular verbs boire and prendre Page 208

boire (*to drink*)	**prendre** (*to take*)*
je bois	je prends
tu bois	tu prends
il/elle/on boit	il/elle/on prend
nous buvons	nous prenons
vous buvez	vous prenez
ils/elles boivent	ils/elles prennent
(*perfect tense*) j'ai bu	(*perfect tense*) j'ai pris

* French people often use *prendre* with food or drink, to mean 'have':

Parfois, je **prends** *du pain grillé.* Sometimes, I **have** toast.

Verb form (past)	Complement
Je viens de fêter *(I have just celebrated)*	mon anniversaire *(my birthday)* le mariage *(wedding)* de ma sœur.
J'ai fêté *(I have celebrated)*	les noces d'argent *(25th wedding anniversary)* de mes grands-parents. les fiançailles *(engagement)* de mon frère.
Je vais fêter *(I am going to celebrate)*	la naissance *(birth)* de ma nièce.

Special Occasion	Verb	
	on mange *(we eat)*	des crêpes *(pancakes)*
À Noël *(at Christmas)*	on boit *(we drink)*	du champagne
Pour le réveillon *(for Xmas eve)*	on invite *(we invite)*	la famille/les amis/les voisins *(neighbours)*
Au Nouvel An *(for New Year's day)*	on fait *(we do)*	une fête *(a party)*
À Pâques *(at Easter)*	on prépare *(we prepare)*	un grand repas *(a big meal)*
Pour la Chandeleur *(at Candlemas)*	on décore *(we decorate)*	le sapin *(the Xmas tree)* la salle à manger *(the dining room)*
Pour le Mardi-gras	on écoute *(we listen)*	de la musique
Pour la fête des Rois *(for Twelfth night)*	on danse *(we dance)*	toute la nuit *(all night long)*
Pour la fête des mères/pères *(for Mothers'/Fathers' day)*	on chante *(we sing)*	des chants de Noël *(Xmas carols)* à l'église *(at church)*
	on joue *(we play)*	des jeux de société *(board games)*
Pour mon anniversaire *(for my birthday)*	on s'offre *(we offer each other)* on se donne *(we give each other)*	des cadeaux *(presents)*

Time expressions

Vocabulaire

jour (m)	day
journée (f)	(the whole) day
pendant	during/for
de bonne heure; tôt	early
soir (m)	evening
tous les jours	every day
de temps en temps	from time to time
heure (f)	hour /time
plus tard	later
maintenant	now
demain	tomorrow
semaine (f)	week

Time structure	Modal verb	Daily routine action
Les jours d'école *(on school days)*	je peux *(I can)* tu peux *(you can)* il peut *(he can)* elle peut *(she can)* on peut *(we can)* nous pouvons *(we can)* vous pouvez *(you can)* ils peuvent *(they can)* elles peuvent *(they can)*	(se) lever tôt/tard *(get up early/late)*
Le week-end *(at the weekend)*		rester au lit *(stay in bed)*
Le soir *(in the evening)*		faire la grasse matinée (have a lie-in)
Le samedi après-midi *(on Saturday afternoon)*		faire les devoirs *(do homework)*
Tous les jours *(everyday)*	je dois *(I must)* tu dois *(you must)* il doit *(he must)* elle doit *(she must)* on doit *(we must)* nous devons *(we must)* vous devez *(you must)* ils doivent *(they must)* elles doivent *(they must)*	(se) détendre *(to relax)*
Le dimanche *(on Sundays)*		sortir avec (les) copains (go out with friends)
Pendant la semaine *(during the week)*		aider (les) parents *(help parents)*
		retrouver (les) copains *(meet up with friends)*
		bavarder *(chat)*
		rigoler *(laugh)*
		(se) retrouver en ligne *(meet up online)*
		regarder la télé *(watch TV)*
		manger avec la famille *(eat with family)*
		faire du sport *(do sport)*

Noun
la plage *(the beach)*
le port *(the harbour)*
le centre commercial *(the shopping centre)*
le musée *(the museum)*
le marché *(the market)*
le stade *(the stadium)*
la piscine *(the swimming-pool)*
le centre sportif *(the sports centre)*
le centre nautique *(the water sports centre)*
la patinoire *(the ice-rink)*
la pharmacie *(the chemist)*
la boulangerie *(the bakery)*
la boîte de nuit *(the nightclub)*
la bibliothèque *(the library)*
le château *(the castle)*
le jardin public *(the park)*
le magasin *(the shop)*
la gare *(the train station)*
la gare routière *(the bus station)*
le commissariat *(the police station)*
l'hôtel de ville/la mairie *(the town hall)*
l'église *(the church)*

Prepositions

dans	in
derrière	behind
devant	in front of
entre	between
en face de	opposite
à côté de	next to
près de	near

de + le → ***du***, e.g. *en face **du** cinéma*
de + les → ***des***, e.g. *près **des** magasins*

Verbs (present)	
C'est	It is
Ils/elles sont	They are
Il y a	There is/are
Je suis	I am
J'ai	I have
Je vais	I am going/I go
Je fais	I am doing/I do
Je préfère	I prefer
On peut	You can

Verb	Noun	Modal verb/impersonal expression	Activity (infinitive)
	c'est l'été *(it is the summer)* c'est l'hiver *(it is the winter)*		nager *(swim)* faire les courses *(do shopping)* faire du patin à glace *(do ice-skating)* faire de la natation *(do swimming)* faire un pique-nique
Quand *(when)*	il fait beau *(it is nice weather)* il fait mauvais *(it is bad weather)* il fait chaud *(it is hot)* il fait froid *(it is cold)*	on peut *(you can)*	aller à la pêche *(go fishing)* faire des randonnées *(do hiking)* se baigner *(swim/bathe)* faire de la voile *(do sailing)* faire de la planche à voile *(go windsurfing)* se détendre *(relax)*
Si/s' *(if)*	il y a du soleil *(it is sunny)* il y a du vent *(it is windy)* il y a du brouillard *(it is foggy)* il pleut *(it rains)* il neige *(it snows)*	il est possible de/d' *(it is possible to)*	faire du vélo *(do cycling)* faire du VTT *(do mountain biking)* faire du cheval *(go horseriding)* faire de l'équitation *(go horseriding)* se bronzer *(sunbathe)* se promener *(go for a walk)* visiter les musées

(Dis)advantages expressions	Verb	Negatives/adverbs	Noun
L'inconvénient, c'est qu' *The disadvantage is that* Le pire, c'est qu' *The worst is that* Ce que j'aime le moins, c'est qu' *What I like the least is that*	il n'y a	pas de/d' *no* jamais de/d' *never* plus de/d' *no longer* aucun(e) *not a single* ni...(ni) *neither..nor* qu'un(e) *only*	magasin(s) *shop(s)* jardin(s) public(s) *park(s)* zone piétonne *pedestrian zone* aire de jeux *play area* cinéma piscine
	there is	personne. *Nobody*	pour les jeunes *for young people* pour les touristes pour les personnes âgées *for the elderly*
L'avantage, c'est qu' *The advantage is that* Le mieux, c'est qu' *The best is that* Ce que j'aime le plus, c'est qu' *What I like the most is that*		rien *nothing*	circulation/voitures *traffic/cars* monde/gens *people* bruit *noise*
	il y a	beaucoup de *a lot of* tellement de *so many* peu de *few* trop de *too much/many*	divertissement(s) *entertainment* chômage/travail *unemployment/work* déchets *litter* commerces *shops* transports en commun *public transport*

Verbs (reference to the past)		Verbs (reference to the future)	
C'était	It was	Ce sera	It will be
Il y avait	There was/were	Il y aura	There will be
J'étais	I was	Je serai	I will be
J'avais	I had	J'aurai	I will have
Je suis allé(e)	I went	J'irai	I will go
J'ai fait	I did	Je ferai	I will do
Je voulais	I wanted	Je voudrais	I would like
J'aimais	I loved	Je veux	I want

Opinions		Connectives	
À mon avis	In my opinion	Mais	But
Je pense que	I think that	Aussi	Also
Selon moi	According to me	Cependant	However
Personnellement	Personally	Parce que/car	Because
Adverbs		**Detail**	
très	very	Par exemple	For example
assez	quite	Surtout	Above all
trop	too much	Peut-être	Maybe
un peu	a bit	Souvent	Often

What would your ideal friend/ boyfriend/ girlfriend be like?

Meine ideale Freundin wäre My ideal (female) friend would be	**abenteuerlustig** *adventurous* **freundlich** *friendly* **sympathisch** *likable* **intelligent** **kreativ** *creative* **locker** *relaxed* **lustig** *funny* **modisch** *fashionable* **nett** *kind* **originell** *original* **selbstbewusst** *confident* **unterhaltsam** *entertaining* **sportlich** *sporty* **hilfsbereit** *helpful* **ehrlich** *honest*	**und sie hätte** *and she would have*	**viel Geduld.** *a lot of patience* **immer Zeit für mich.** *always time for me*

Mein idealer Freund würde My ideal (male) friend would	**mich immer zum Lachen bringen.** *always make me laugh.* **mich anrufen, wenn ich Probleme habe** *call me when I have problems.* **mich nie nerven.** *never annoy me.*

Das ist für mich *For me that is*	**total** totally **unglaublich** incredibly **sehr** very **ziemlich** quite **ein bisschen** a bit **nicht so** not so **nicht** not **gar nicht** not at all	**wichtig.** important **wichtiger.** more important **am wichtigsten.** most important

Describe yourself or a member of your family.

Ich bin I am **Du bist** you are **Er/sie/es ist** he/she/it is **Wir sind** we are **Ihr seid** you (all)are **Sie/sie sind** they/you (formal) are **Mein Vater ist** my father/dad is **Mein Stiefvater ist** my stepdad is **Mein (Halb)bruder ist** my (half)brother is **Mein Onkel ist** my uncle is **Mein Großvater ist** my grandad is **Mein Opa ist** my grandad is **Meine Mutter ist** my mother/mum is **Meine Stiefmutter ist** my stepmum is **Meine (Halb)schwester ist** my (half)sister is **Meine Tante ist** my aunt is **Meine Großmutter ist** my grandma is **Meine Oma ist** my grandma is	**total** totally **unglaublich** incredibly **sehr** very **ziemlich** quite **ganz** quite **ein bisschen** a bit **nicht so** not so **nicht** not **gar nicht** not at all	**fleißig** hard-working **freundlich** friendly **hilfsbereit** ready to help **höflich** polite **nett** nice **geduldig** patient **kreativ** creative **ruhig** calm **musikalisch** musical **sportlich** sporty **sympathisch** likeable **dumm** stupid **faul** lazy **langweilig** boring **launisch** moody **laut** loud **unfreundlich** unfriendly

Aussehen - looks

Ich bin **I am** Meine Mutter ist **My mother is** Mein Bruder ist **My brother is**	**total** totally **unglaublich** incredibly **sehr** very **ziemlich** quite **ganz** quite **ein bisschen** a bit **nicht so** not so **nicht** not **gar nicht** not at all	klein **small** groß **tall** weder klein, noch groß **neither small nor big**	und ich habe **and I have** und sie hat **and she has** und er hat **and he has**	blaue Augen **blue eyes** grüne Augen **green eyes** braune Augen **brown eyes** schwarze Haare **black hair** blonde Haare **blonde hair** lockige Haare **curly hair** glatte Haare **straight hair** lange Haare **long hair**

Who is your role model?

Ghandi/ **Meine Mutter** **(usw) ist mein grosses Vorbild** *X is my big role model* **Mein Vorbild ist X** *X is my role model* **Ich habe kein Vorbild** *I don't have a role model* **ich bewundere X** *I admire X*	**,weil/da er/sie** *because he/she* **,obwohl er/sie** *although he/she*	***gegen Gewalt*** *against violence* **sowohl berühmt als auch intelligent** *both famous and intelligent* **so ein toller Sportler** *such a great sportsperson* **oberflächlich** *superficial* **beeindrukend** *impressive* **eine Inspiration für uns** *an inspiration for us*	**ist.** *is.*
	,weil/da sie *because they* **,obwohl sie** *although they*		**sind.** *are.*
	,weil/da er/sie *because he/she* **,obwohl er/sie** *although he/she*	**mich inspiriert.** *inspires me.* **Menschen in Not unterstützt.** *supports people in need.* **für soziale Problem interessiert.** *is interested in social problems.*	
	,weil/da sie *because they* **,obwohl sie** *although they*	**mich inspirieren.** *inspires me.* **Menschen in Not unterstützen.** *supports people in need.* **für soziale Problem interessieren.** *is interested in social problems.*	

Ich finde ihn/sie/sie beeindruckend *I find him/her/them impressive*
Ich habe vor ihm/ihr/ihnen viel Respekt *I have a lot of respect for him/her/them*
ich bewundere ihn/sie/sie *I admire him/her/them*

Do you get on with your family?

Subject + verb	Direct object	quantifier	adjective
Ich finde I find	**meine Familie** my family **meinen Vater** my father/dad **meinen Stiefvater** my stepdad **meinen (Halb)bruder** my (half)brother **meinen Onkel** my uncle **meinen Großvater** my grandad **meinen Opa** my grandad **meine Mutter** my mother/mum **meine Stiefmutter** my stepmum **meine (Halb)schwester** my (half)sister **meine Tante** my aunt **meine Großmutter** my grandma **meine Oma** my grandma	**total** totally **unglaublich** incredibly **sehr** very **ziemlich** quite **ganz** quite **ein bisschen** a bit **nicht so** not so **nicht** not **gar nicht** not at all	**un/freundlich** un/ friendly **höflich** polite **nett** nice **geduldig** patient **interessant** interesting **kreativ** creative **ruhig** calm **musikalisch** musical **sportlich** sporty **sympathisch** likeable **dumm** stupid **egoistisch** egoistic **faul** lazy **langweilig** boring **launisch** moody **laut** loud

Ich komme gut mit meiner Familie aus/ Ich verstehe mich gut mit meiner Familie I get on well with my family **Ich komme nicht gut mit meiner Familie aus/ Ich verstehe mich nicht gut mit meiner Familie** I do not get on well with my family **Ich habe gestern mit meiner Familie gestritten** I argued with my family yesterday **Ich habe mit meinem Vater/Bruder gestritten** I argued with my father/ brother **Ich habe mit meiner Mutter/Schwester gestritten** I argued with my mother/ sister	**, weil** because	**ich sie lustig finde.** I find them funny. **ich sie nervig finde.** I find them annoying. **mein Bruder mich genervt hat.** my sister annoyed me. **mein Vater keine Geduld hat.** my father has no patience. **meine Schwester mein T-shirt gestohlen hat.** my sister stole my t-shirt.

What did you do last weekend?

Letztes Wochenende *Last weekend* **Neulich** *Recently* **In lezten Wochen** *In recent weeks*	**bin ich** *I (am)*	**Rad gefahren** *cycled* **spazieren gegangen** *went for a walk* **ins Freibad gegangen** *went to the outdoor pool* **in die Kirche gegangen** *went to church* **einkaufen gegangen** *went shopping*	**und es war** *and it was*	**unterhaltsam** *entertaining* **langweilig** *boring* **entspannend** *relaxing* **toll** *great* **eine Zeitverschwendung** *a waste of time*	**, weil** *because* **, da** *because* **, obwohl** *despite*	**ich sehr sportlich bin.** *I am very sporty.* **ich gern an der frischen Luft bin.** *I like being in the fresh air.* **es warm war.** *it was warm.* **wir jeden Sonntag in die Kirche gehen.** *we go to church every Sunday.* **weil ich ein neues Hemd brauche.** *because I need a new shirt.* **ich gern Zeit mit meiner Familie/ meinen Freunden verbringe.** *I like to spend time with my family/ my friends.* **wir viel zusammen lachen.** *we laugh a lot together.* **ich zu viele Hausaufgaben habe.** *I have too much homework.* **ich nichts zu tun hatte.** *I didn't have anything to do.*
	habe ich *I (have)*	**im Internet gesurft** *surfed the internet* **soziale Netzwerke benutzt** *used social media* **Hausaufgaben gemacht** *did homework* **Zeit mit meiner Familie verbracht** *spent time with my family* **gegrillt** *had a barbecue* **Musik gehört** *listened to music* **einen Film geguckt** *saw a film* **ferngesehen** *watched tv*	**und es hat** *and it (has)*	**viel Spaß gemacht** *(was) a lot of fun.* **nicht so viel Spaß gemacht** *(wasn't) so much fun*		

What are you going to do next weekend? Part 1

Nächstes Wochenende *Next weekend* ***Bald*** *Soon* **In kommenden Wochen** *In the coming weeks*	**werde ich** *I will*	**bestimmt** *definitely* **auf jeden Fall** *definitely* **wahrscheinlich** *probably* **vielleicht** *maybe* **nicht** *not*	**Rad fahren** *cycle* **spazieren gehen** *go on a walk* **ins Freibad gehen** *go to the outdoor pool* **im Internet surfen** *surf the internet* **soziale Netzwerke benutzen** *use social networks* **Hausaufgaben machen** *do homework* **in die Kirche gehen** *go to church* **einkaufen gehen** *go shopping* **Zeit mit Familie/Freunden verbringen** *spend time with family/friends* **grillen** *have a barbecue* **Musik hören** *listen to music* **einen Film gucken** *watch a film* **fernsehen** *watch tv*	**, weil ich das** *because I (find) that*	**unterhaltsam** *entertaining* **todlangweilig** *dead boring* **entspannend** *relaxing* **toll** *great* **eine Zeitverschwendung** *a waste of time* **aufregend** *Exciting* **enttäuschend** *disappointing*	**finde.** *find.*
	wird mein Bruder *my brother will*			**, weil er das** *because he (finds) that*		**findet** *finds.*

What are you going to do next weekend? Part 2

Ich würde gern *I would like to* **Ich würde lieber** *I would prefer to* **Ich würde am liebsten** *Most of all, I would like to* **Mein Bruder würde gern/lieber am liebsten** *My brother would like to/prefer to/most of all like to*	**Rad fahren** *cycle* **spazieren gehen** *go on a walk* **ins Freibad gehen** *go to the outdoor pool* **im Internet surfen** *surf the internet* **soziale Netzwerke benutzen** *use social networks* **Hausaufgaben machen** *do homework* **in die Kirche gehen** *go to church* **einkaufen gehen** *go shopping* **Zeit mit Familie/Freunden verbringen** *spend time with family/friends* **grillen** *have a barbecue* **Musik hören** *listen to music* **einen Film gucken** *watch a film* **fernsehen** *watch tv*	**, weil das** *because that*	**unterhaltsamer** *more entertaining* **nicht langweilig** *dead boring* **entspannend** *relaxing* **toll** *great* **keine Zeitverschwendung** *a waste of time* **aufregend** *exciting* **nicht enttäuschend** *not disappointing* **besser** *better*

What were you like when you were younger?

Als ich jünger war, *When I was younger* **Als ich ein Kind war,** *As a child* **Mit (sechs) Jahren,** *At six years old* **Früher,** *Earlier/in the past*	**war ich sehr lustig.** *I was very funny.* **war ich ziemlich schüchtern.** *I was quite shy.* **war ich ein bisschen frech.** *I was a bit cheeky.*	**aber jetzt** *but now*	**bin ich eher…[insert adjective].** *I am more…[insert adjective].*
	war das Leben ziemlich schwer. *Life was quite hard.* **war das Leben viel einfacher.** *ife was much easier.* **war meine Mutter oft krank.** *my mother was often ill.* **musste ich immer zu Hause helfen.** *I always had to help at home* **konnte ich immer/ nie Zeit mit Freunden verbringen.** *I was always/never able to spend time with friends.* **durfte ich niemanden nach Hause einladen.** *I was not allowed to invite anyone home.* **durfte ich nicht alleine (zur Schule) gehen.** *I wasn't allowed to go to school alone.* **durfte ich machen was ich wollte!** *I was allowed to do what I wanted!*	**Ich fand das** *I found that*	**schade.** *a shame.* **sehr schlecht.** *very bad.* **toll.** *great.* **nicht schlecht.** *not bad.*

Heutzutage *These days* **Jetzt** *Now* **Im Moment** *At the moment*	**ist es viel besser** *it is much better* **ist es nicht so gut** *it's not so good*	**,weil** *because*	**ich (nicht) mit meinen Freunden ausgehen darf.** *I'm not allowed to go out with my friends.* **ich um 21 Uhr nach Hause kommen muss.** *I have to come home at 9pm.* **ich zu viele Hausaufgaben bekomme.** *I get too much homework.* **ich viel für meine Klassenarbeiten lernen muss.** *I have to learn a lot for my exams.*

PERSONAL DEVELOPMENT KNOWLEDGE ORGANISER YEAR 10

UNIT 3: RELATIONSHIPS AND SEX EDUCATION

LESSON 8: RELATIONSHIPS AND SEX EXPECTATIONS

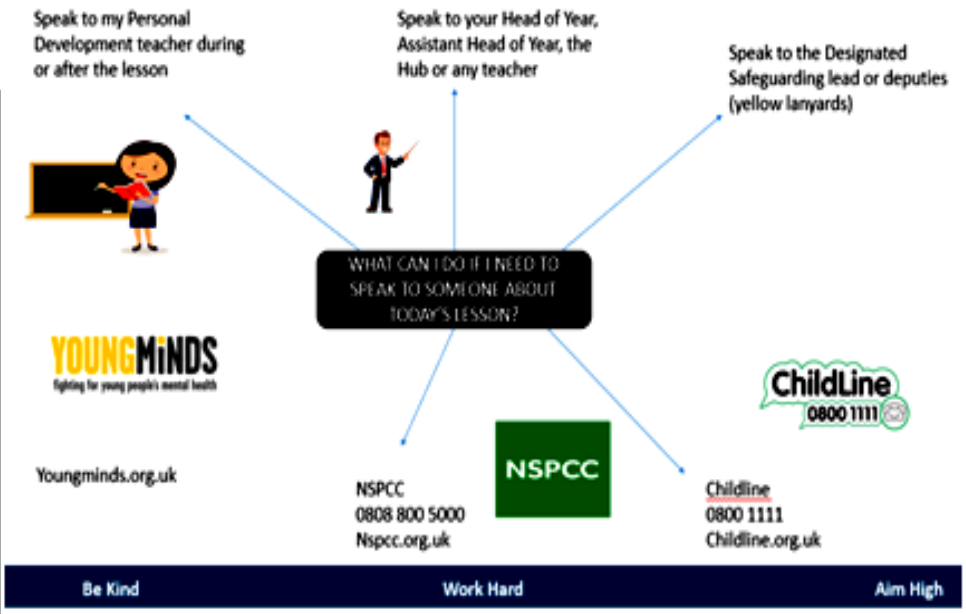
- Harassment means aggressive pressure or intimidation.
- Sexual harassment means behaviour characterized by the making of unwelcome and inappropriate sexual remarks or physical advances in a workplace or other professional or social situation.
- In this lesson we watched a documentary called 'Is this sexual harassment'? and looked at evidence for and against by watching a scenario involving a man and women working together in a bar
- What relationships behaviours are acceptable?
- What relationship behaviours might constitute sexual harassment?

LESSON 9: RELATIONSHIPS MYTHS

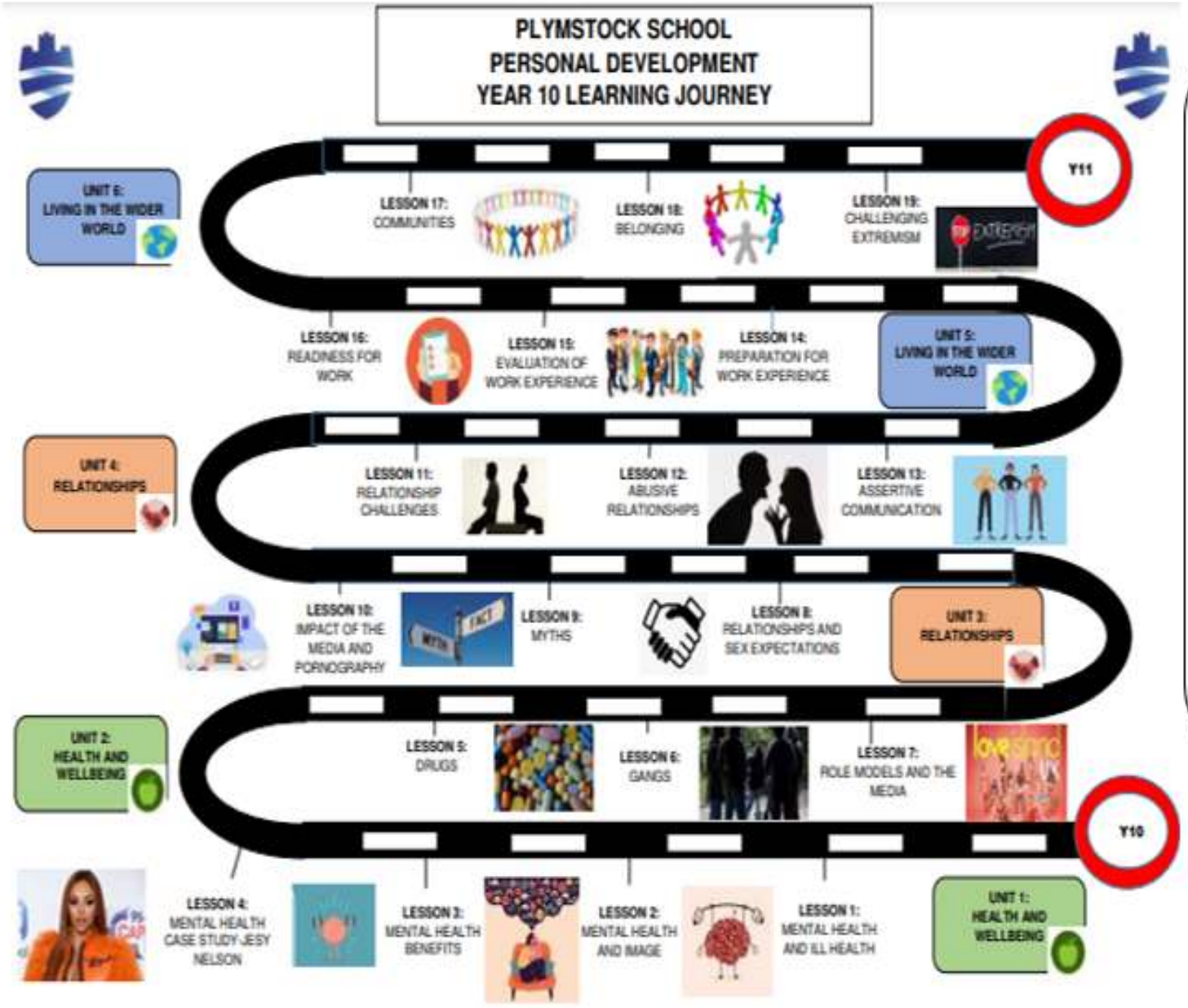
- A relationship myth is the belief that certain behaviours may be acceptable when perhaps they are not.
- As we get older and develop relationships we are learning about what is and isn't acceptable all the time.
- What one person is comfortable with in a relationship may be different to another person.
- Would you agree with these relationship values? There shouldn't be any secrets in a committed relationship? It's best to keep things casual? There shouldn't be any arguments in a committed relationship?

LESSON 10: IMPACT OF THE MEDIA AND PORNOGRAPHY

- Pornography is defined as visual material containing the explicit description or display of sexual organs or activity, intended to stimulate sexual excitement.
- Many young people begin to watch pornography and often discover is online by accident.
- 46% of young people had seen online pornography for the first time because it "just popped up"
- Studies suggest that people who watch pornography feel pressure to do things during sex they don't enjoy; engage in risky sex; believe that male pleasure is the main goal of sex and find intimate and romantic relationships more difficult to maintain.



PLYMSTOCK SCHOOL PERSONAL DEVELOPMENT YEAR 10 LEARNING JOURNEY



KEY TERMS:

KEY TERM:	DEFINITION:
Harassment	Aggressive pressure or intimidation
Pornography	Visual material containing the explicit description or display of sexual organs or activity, intended to stimulate sexual excitement.
Relationship Myths	Falsehoods about relationships that can be hard for young people to work out.
Sexual Harassment	behaviour characterized by the making of unwelcome and inappropriate sexual remarks or physical advances in a workplace or other professional or social situation.

Plymstock School

Be Kind | Work Hard | Aim High

For more activities visit the remote curriculum page of the Plymstock school website under the curriculum heading.

Year 10 Remote Curriculum

PHILOSOPHY OF RELIGION KNOWLEDGE ORGANISER

The Problem of Evil

Evil in the form of suffering, whether intentional or not, is seen in the world all around us. Many consider the existence of evil to be at odds with the existence of God.

The Problem of Evil is an argument often used by atheists in an attempt to prove that the Christian God doesn't exist. **David Hume**, a notable atheist philosopher, described it as 'the rock of atheism'. It presents the following argument:

If God is **omnipotent** (all-powerful) then he would be able to remove evil from the world, if God is **benevolent** (all-loving) then he would want to remove evil from the world. Yet, evil exists in the form of **natural and moral evil**. Therefore, the Christian God does not exist. Atheists also point to the EXTENT of evil that is found in the world and also evidence of PURPOSELESS evil and suffering where nothing is learnt or gained.

Christians have responded to the problem in a number of ways;

1. Evil is the result of human **FREE WILL**. It is important for humans to have free will so that their actions can be judged and good actions can be rewarded after death.
2. Evil and suffering can gave **GOOD EFFECTS** on people e.g. can allow them to develop good qualities like **compassion**, bravery and loyalty.
3. The **DEVIL** is responsible for evil as he tempts humans into wrong actions, as seen in the story of Adam and Eve in Genesis.

Religious Experience

Some Christians claim to have experienced God directly. To those who have had a religious experience, this is **the greatest proof that God exists**. Religious experiences can come in many different forms;

Mystical: A oneness and union with the divine
Numinous: Feelings of inner-peace, love and insignificance
Conversion: Dramatic change in a person's life
Nature: A sense of awe and power behind nature
Vision: Seeing a direct image of God or a divine representative
Corporate: A group of people share the same experience (e.g. the Toronto Blessing)

This may be a persuasive argument for those who have had a religious experience, but such a personal experience is **unlikely to convince an atheist**. Many atheists argue these experiences have alternative explanations.

The Design Argument

Some Christians believe that it is possible to prove the existence of God by **observing the nature of the world we live in**. The world shows signs of ORDER and things working to achieve a PURPOSE. This, they believe, is evidence of DESIGN. In other words, God is the DESIGNER of an ordered and purposeful world.

William Paley supported this argument by way of ANALOGY. He drew a similarity between the world and an old-fashioned pocket watch. He argued that if you went for a walk and stumbled across a pocket watch in a field you would know that;

a) The watch could not have appeared by itself
b) It has been made for the purpose of telling the time
c) A skilful watchmaker must have designed it

Similarly he believed that:

d) **The world shows evidence of order and purpose** e.g. gravity, reproduction of plants, rotation of the planets
d) Therefore the world must be designed
e) **God must have designed the world**

Paley believed that lots of nature demonstrates ORDER and PURPOSE and that this is EVIDENCE of design in the world.

Problem: If the world is designed by an omnipotent God, then why is there so much evil and suffering in the world?

Keywords

Atheist: someone who has no belief in God or gods
Natural Evil: evil and suffering caused by natural forces
Moral Evil: evil and suffering caused by human action
Analogy: drawing a similarity between two things to make one or both things easier to understand
Religious Experience: an encounter with the divine that leaves the person with knowledge of God's existence
Free Will: the ability to make a choice between good and evil

Can we prove God exists?

PHILOSOPHY OF RELIGION KNOWLEDGE ORGANISER

The Problem of Evil

The Problem of Evil is an argument often used by atheists to prove that God doesn't exist.

The argument is:

1. If God is **omnipotent** (all-powerful) then he would be able to remove evil from the world because he is stronger than evil.
2. If God is **benevolent** (all-loving) then he would want to remove evil because he doesn't anyone to suffer.
3. Yet, evil still exists in the world therefore, God cannot not exist.

Christians have responded to the problem in a number of ways;

1. Evil is the result of human **FREE WILL**. It is important for humans to have free will so that their actions can be judged by God.
2. Evil and suffering can gave **GOOD EFFECTS** on people e.g it can make you more understanding towards other
3. The **DEVIL** is responsible for evil as he tempts humans into wrong actions, as seen in the story of Adam and Eve in Genesis.

Religious Experience

Some Christians believe they have experienced God. To those who have had a religious experience, this is **the greatest proof that God exists**.

Religious experiences can come in many different forms;
Numinous: Feelings of peaceful
Conversion: Amazing change in a person's life
Vision: seeing a direct image of God
Corporate: A group of people have the same experience (e.g. the Toronto Blessing)

Although some people may believe this is evidence that God exists, atheists do not believed that this is 'evidence'. The argue that these experiences can be explained using science.

The Design Argument

Some Christians believe that it is possible to prove the existence of God by **looking at the world we live in**. The world shows signs of ORDER and PURPOSE and therefore it much have been DESIGNED (made) this way by God.

William Paley supported this argument using an ANALOGY about a pocket watch. He argued that if you went for a walk and stumbled across a pocket watch in a field you would know that;

a) The watch **could not** have appeared by itself
b) It has been made for the **purpose** of telling the time
c) A skilful watchmaker must have designed it
This pocket clock is similar to the world:
d) **The world shows evidence of order and purpose** e.g. gravity,
d) Therefore the world must be designed
e) **God must have designed the world**

Problem: If the world is designed by an omnipotent God, then why is there so much evil and suffering in the world?

Keywords

Atheist: someone who does not believe in God
Natural Evil: evil caused by nature e.g. earthquakes
Moral Evil: evil caused by humans e.g. murder
Analogy: making a comparison between two things to something easier to understand
Free Will: the ability to make a choice between good and evil

Can we prove God exists?

Notes