

100% book - Year 10 Grammar

Aim to memorise 100% of the knowledge on these Knowledge Organisers.

Term 2



Swindon Academy 2025-26

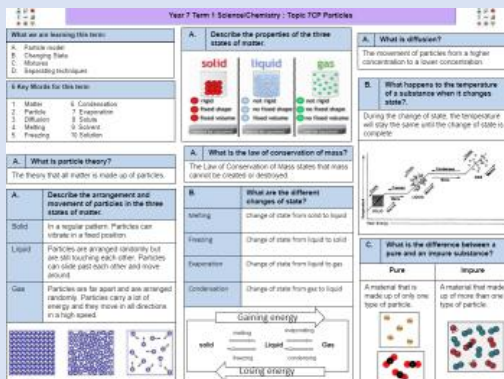
Name:	
Tutor Group:	
Tutor & Room:	

"If you are not willing to learn, no one can help you.

If you are determined to learn, no one can stop you."

How to use your 100% book of Knowledge Organisers and Quizzable Organisers

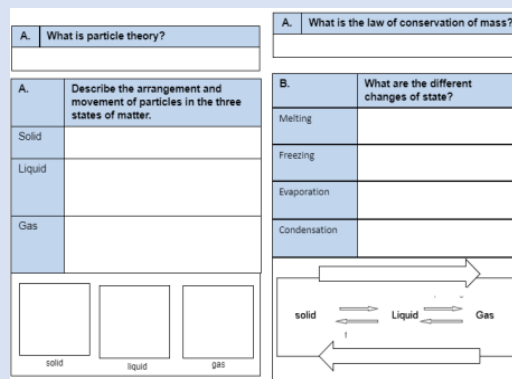
Knowledge Organisers



Knowledge Organisers contain the essential knowledge that you **MUST** know in order to be successful this year and in all subsequent years.

They will help you learn, revise and retain what you have learnt in lessons in order to move the knowledge from your short-term memory to long-term memory.

Quizzable Knowledge Organisers



These are designed to help you quiz yourself on the essential Knowledge.

Use them to test yourself or get someone else to test you, until you are confident you can recall the information from memory.

Expectations for Prep and for using your Knowledge Organisers

1. Complete all prep work set in your subject prep book.
2. Bring your prep book to every lesson and ensure that you have completed all work by the deadline.
3. Take pride in your prep book – keep it neat and tidy.
4. Present work in your prep book to the same standard you are expected to do in class.
5. Ensure that your use of SPAG is accurate.
6. Write in blue or black pen and sketch in pencil.
7. Ensure every piece of work has a title and date.
8. Use a ruler for straight lines.
9. If you are unsure about the prep, speak to your teacher.
10. Review your prep work in green pen using the mark scheme.

Top Tip

Don't write on your Quizzable Knowledge Organisers! Quiz yourself by writing the missing words in your prep book. That way you can quiz yourself again and again!

How do I complete Knowledge Organiser Prep?

Step 1

Check Epraise and identify what words /definitions/facts you have been asked to learn.
Find the Knowledge Organiser you need to use.

Step 2

Write today's date and the title from your Knowledge Organiser in your Prep Book.

Step 3

Write out the keywords/definitions/facts from your Knowledge Organiser in FULL.

Step 4

Read the keywords/definitions/facts out loud to yourself again and again and write the keywords/definitions/facts at least 3 times.

Step 5

Open your quizzable Knowledge Organiser.
Write the missing words from your quizzable Knowledge organiser in your prep book.

Step 6

Check your answers using your Knowledge Organiser. Repeat Steps 3 to 5 with any questions you got wrong until you are confident.

Make sure you bring in your completed Prep notes to demonstrate that you have completed your prep.

1. Context	
Writer: Charles Dickens (1812-1870) Dates: First published in 1843 Genre: Allegorical; a ghost story. Era: Victorian Set: Victorian London Structure: The novella is divided into 5 staves (chapters).	Biography of Dickens - Born in Portsmouth in 1812 - When Dickens was 12, his father was sent to debtors' prison as he was unable to pay his bills. - His mother and youngest siblings were sent with him, whilst Dickens stayed with a family friend. In order to help his family, Dickens had to leave school and work in a factory sticking labels on bottles. - Dickens dedicated his life to writing works that revealed the horrors of life in Victorian London for those living in poverty.
Christmas: Dickens grew concerned that, due to capitalism, society had lost sight of traditional values (Christian morals, forgiveness, charity). He felt that Christmas was the perfect time to reconnect with these values and used his novella to do this. He also knew that Christmas would be a popular topic so it would sell well – therefore enabling his message to reach a wider audience.	London and inequality: Dickens juxtaposes scenes of middle-class comfort and poverty to emphasise the close proximity and contrast of the different classes. It highlights the Christian concept of ‘love thy neighbour’. The urban setting allows Dickens to exercise his fondness for hyperbole, with the exaggerated extremes of poverty adding to the effect of the ‘plight of the poor’.
The Poor Law, 1834 In order to deter poor people from claiming financial help, the government made claimants live in workhouses: essentially, prisons for the poor. Dickens hated this law. He spent 1843 touring factories and mines in England and wished to highlight the situation facing poor people. A Christmas Carol was published soon after – in December 1843.	Malthusian Theory The reformation of The Poor Law was partially informed by the writings of Thomas Malthus. Malthus argued that if living standards increased, population would increase and eventually the number of people would be too great for the food that could be produced. As a result, Malthus argued it was important not to support the poor or improve their standards of living, but to allow them to die if they couldn't support themselves because charity would only prolong their suffering.
The Supernatural: Victorian society was fascinated by the supernatural, including mediums, ghosts, and spiritualism. However, this belief in the supernatural was also heavily influenced by the church, with the belief that ghosts were souls who were trapped in purgatory (a place of suffering where the souls of sinners were trapped).	

ENGLISH –A Christmas Carol- Grammar	
2. Key Characters	
Ebenezer Scrooge: The protagonist is initially established as an archetypal villain who dismisses the goodwill and generosity associated with Christmas. After being forced to transform, he feels remorse for his avarice and becomes a symbol of Christmas spirit. Scrooge embodies the relentless capitalist spirit of the time, but also demonstrates that everyone has the capacity to reform.	
Bob Cratchit: Bob is Scrooge's downtrodden but loyal employee. His family are a symbol of Victorian poverty, cheerfulness in adversity, togetherness and Christmas Spirit. Bob shows pity for Scrooge, and provides a contrast to Scrooge's isolation and meanness. His son, Tiny Tim, is an emblem for noble poverty; he accepts his disability without complaint.	
Fred: Fred juxtaposes the character of Scrooge and epitomises the concept of goodwill and forgiveness, refusing to be discouraged by his uncle's misery. People speak highly of Fred and his generosity, in contrast to how they speak of Scrooge. Fred shows that Scrooge has chosen isolation and shows forgiveness to Scrooge, welcoming him in Stave Five.	
Marley's Ghost: Marley's ghost is the spiritual representation of Scrooge's potential fate. The chains that drag him down symbolize the guilt caused by his failure to help people in need. Marley's ghost warns Scrooge that he too will experience the same guilt if he continues to deny people help.	
The ghosts: The Ghost of Christmas Past is a symbol of childhood, truth and enlightenment. The Ghost of Christmas Present represents goodwill, plenty and the festival of Christmas. The Ghost of Christmas Yet to Come symbolises a catastrophic future for mankind.	
Belle: The woman that Scrooge was engaged to when he was a young man. Belle's role is crucial in Scrooge's transformation, as the scenes show Scrooge what he might have had in his life if he had not been so avaricious. Through the character of Belle, Dickens sets emotional love directly against Scrooge's love of money and suggests that avarice can lead to a deprivation of kindness, love and empathy.	
3. Central Themes	
Social injustice	Dickens highlights the unfairness within society through the juxtaposition of the poor and wealthy. Through Scrooge's refusal to give to charity and his exclamation that the poor should be in workhouses or die, Dickens illustrates the selfishness of the higher classes and the injustice of wealth distribution in Victorian society. The children, Ignorance and Want, personify the dangerous consequences of allowing poverty to continue.
Transformation and redemption	By establishing Scrooge as an archetypal villain, Dickens is able to emphasise the idea that everyone is capable of transformation and redemption. From starting as a greedy, avaricious miser, Scrooge is able to reflect upon his actions and to understand that he must live his life helping others to avoid Marley's fate.
Social responsibility	Dickens felt that every individual had a responsibility for those around them. Marley's Ghost conveys the message of the novella when he cries, 'Mankind was my business' demonstrating that the proper 'business' of life is not about seeking financial reward but having concern for others. Dickens highlights the importance of trying to make a difference- whether that be large financial contributions (Scrooge), smaller contributions (Fezziwig) or simply showing compassion and kindness to one another.

4. Key Vocabulary	
Avarice	Extreme greed of possessions or money
Salvation	Saving someone from harm or destruction
Miserly	someone who is greedy and does not like spending money
Callous	Mean or cruel
Antithesis	The exact opposite of something
Epiphany	A moment of sudden understanding
Redemption	The act of being saved or freed from sin or error
Benevolence	Kind and helpful towards others
Philanthropic	Showing concern for others by being charitable
Misanthropic	Someone who has a hatred for other people
Penitence	sincere regret for wrong or evil things that you have done
Remorse	a strong feeling of sadness and regret about something wrong that you have done
Deprivation	When someone is unable to have the things they need or want
Despotism	exercising power in a cruel and controlling way
Capitalism	A political system in which property, business, and industry are owned by private individuals and not by the government
5. Key Terminology, Symbols and Devices	
Stave	Chapters in the novella, but we normally associate staves with music, as if the book is a Christmas carol, and each chapter is part of the song. As Christmas carols are repetitive and easy to remember, it links to how Dicken's wishes his message to be remembered.
Intrusive Narrator	A narrator who interrupts the story to provide a commentary to the reader on some aspect of the story or on a more general topic. In 'A Christmas Carol' the narrator helps to shape our impressions of Scrooge.
Circular structure	Circular narratives cycle through the story one event at a time to end back where the story originated.
Allegory	A story that can be interpreted to reveal a hidden meaning, typically a moral or political one.
Allegorical figures	An allegorical figure is a character that serves two purposes: first, they are an important person in the story in their own right, and, second, they represent abstract meanings or ideas.
Foreshadowing	Foreshadowing is a literary device in which a writer gives an advance hint of what is to come later in the story.
Didactic	A type of literature that is written to inform or instruct the reader, especially in moral or political lessons.
Semantic Field	A set of words that are related in meaning. Dickens frequently uses semantic fields of warmth and coldness that are associated with the characters.

The Big Ideas	Notes
Dickens promotes a social responsibility in which he argues that everyone must contribute.	
Dickens suggests that change is possible, and that everyone has capacity to redeem themselves and reform.	
Dickens illustrates the injustice of wealth distribution in Victorian society and highlights the dangerous consequences of allowing poverty to continue	
Dickens uses contrasting characterisation to demonstrate how we must be generous and socially responsible.	
Dickens uses contrasts in setting to highlight social injustice	

10GS – Homeostasis and Response

The nervous system

Job is to **detect** stimuli (changes in environment) and **respond** if needed.
Consists of:

Receptors



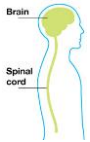
Specialised cells that detect stimuli, found in sense organs and internally

Neurones



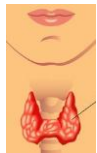
3 types – sensory, relay and motor
Carry **impulses** joining all parts of the nervous system

Co-ordination Centres



Brain, spinal cord, pancreas.
Coordinates the response

Effectors



Organs that bring about a response

muscle or gland

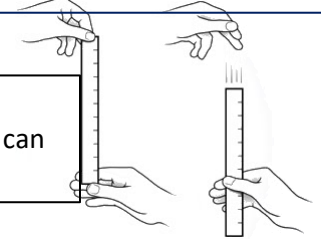
RP 6 - Investigation into the effect of a factor on human reaction time.

1. Person A holds out hand with a gap between thumb and finger.
2. Person B holds ruler with the zero at the top of person A's thumb.
3. Person B drops ruler without telling Person A and Person A must catch it.
4. The distance on the ruler level with the top of person A's thumb is recorded
5. Repeat this ten times.
6. Repeat steps 1-5 after a factor has been changed
7. Use conversion table to convert ruler measurements into reaction time.

The 'factor' could be...

- Caffeine consumption
- Hours of sleep
- Alcohol consumption
- Amount of practice

A computer reaction test can also be used.



Control variables : distance above the hand, distance between finger and thumb, hand used (dominant or non-dominant, all other factors listed in the box above except the one being changed.

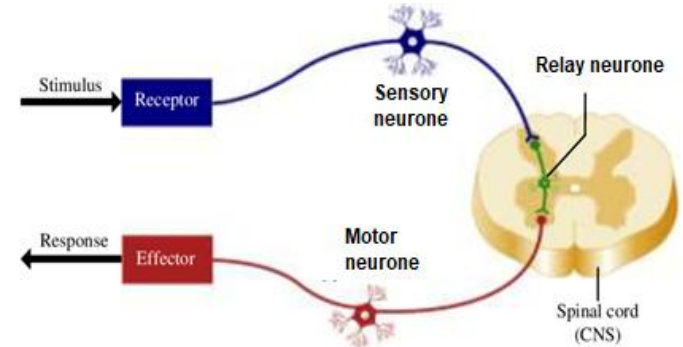
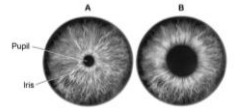
Reflexes

A reflex is an automatic, rapid response

Reflexes do not involve the conscious part of the brain, so cannot be overridden

The response might be brought about by:

- muscle - e.g. pupil being constricted with bright light or knee jerk response
- gland - e.g. mouth watering or tears being released when something gets in your eye



Reflex Arc

stimulus → receptor → **sensory neurone** → **relay neurone** → **motor neurone** → effector → response

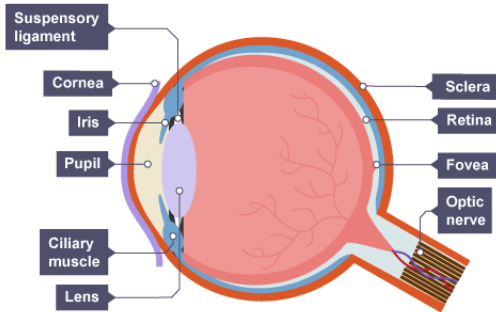
Example

Hot pan → pain receptors → **sensory neurone** → **relay neurone** → **motor neurone** → hand muscles → release pan

10GS – Homeostasis and Response

The eye

The eye is a sense organ containing **receptors** sensitive to light intensity and colour.



Structure	Function
Cornea	Refracts light - bends it as it enters the eye
Iris	Controls how much light enters the pupil
Lens	Further refracts light to focus it onto the retina
Retina	Contains the light receptors
Optic nerve	Carries impulses between the eye and the brain
Sclera	Tough white outer layer of the eye. It helps protect the eye from injury

To focus on a near object – the lens becomes thicker, this allows the light rays to refract (bend) more strongly.

To focus on a distant object – the lens is pulled thin, this allows the light rays to refract slightly.

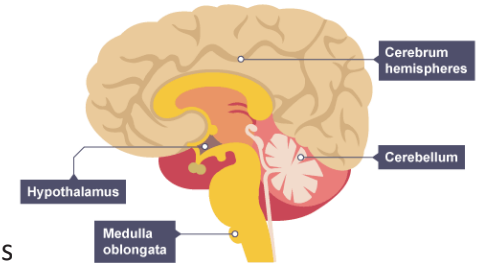
The amount of light entering the eye is controlled by a reflex action. The size of the pupil changes in response to bright or dim light. This is controlled by the muscles of the iris.

The brain

The brain controls complex behaviour. It is made of billions of interconnected neurones and has different regions that carry out different functions.

There are four main areas in the brain:

- The **cerebrum** (the outer layer is called the cerebral cortex). It controls thought and high-level functions, such as language and verbal memory.
- The **cerebellum**, which controls balance, co-ordination of movement and muscular activity.
- The **medulla**, which controls unconscious activities such as heart rate and breathing rate,
- The **hypothalamus**, which is the regulating centre for temperature and water balance within the body.



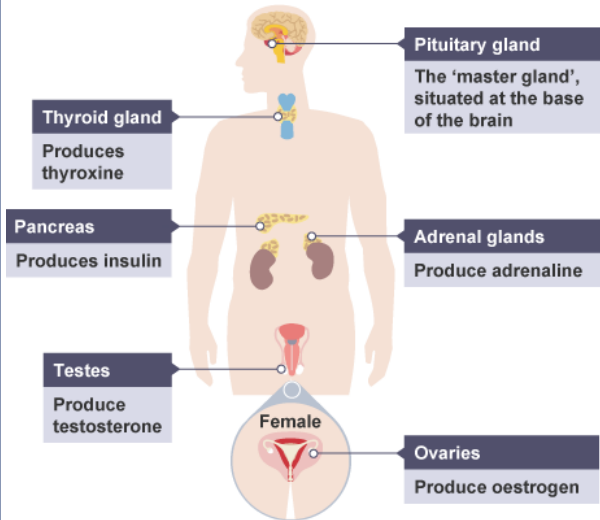
Neuroscientists have been able to map various regions of the brain to particular functions by studying patients with brain damage, electrically stimulating different parts of the brain and using **MRI**. They use strong magnetic fields and radio waves to show details of brain structure and function.

Scientists have stimulated different parts of the brain with a weak electrical current and asked patients to describe what they experienced. If the motor area is stimulated, the patient makes an involuntary movement.

10GS – Homeostasis and Response

Hormonal responses

Hormones are chemicals released by glands
They are carried in the bloodstream.
Hormonal responses are slower than nervous responses but they last longer.



Homeostasis

This means keeping internal conditions (of the body or a cell) constant to ensure optimum functioning.

In humans, this includes regulating:

- temperature
- water levels
- blood glucose concentration

Homeostasis can involve nervous or hormonal responses.

Receptors detect changes in the body

Coordination centres (brain, pancreas, spinal cord etc) receive and process information

Effectors carry out responses to return to normal

Blood glucose concentration

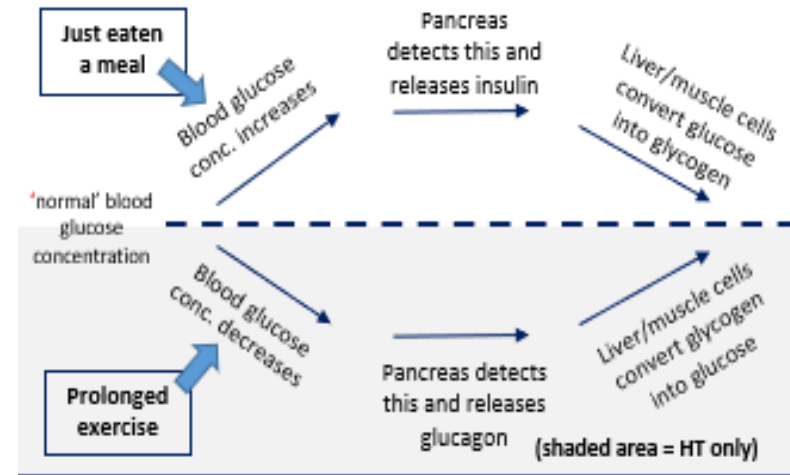
Blood glucose is monitored by the **pancreas**.

If glucose levels rise, the pancreas releases **insulin** into the blood.

This is a message to the liver to remove glucose and store it as **glycogen**.

If blood glucose is too low, **glucagon** is released.

The liver responds by breaking down glycogen into glucose and releasing it into the blood.



Diabetes

There are two types – Type 1 and Type 2

Both result in a lack of control over blood glucose levels

	Type 1	Type 2
Cause	No insulin is made by the pancreas	Insulin is made, but the liver and muscle cells do not respond
Treatment	Injections of insulin Pancreatic transplant	Controlling carbohydrate intake Losing weight

HT only

Negative feedback is when the release of something brings the levels back towards acceptable levels, it maintains a steady state.

E.g. if blood glucose increases, insulin is released to bring blood glucose back towards the normal range.

10GS – Homeostasis and Response

Adrenaline and thyroxine (HT only)

Adrenaline is produced by the **adrenal glands**.

It is produced in times of fear or stress.

It **increases heart rate** to ensure **more oxygen and glucose** to the cells to prepare for the 'fight or flight' response.

Thyroxine is produced by the **thyroid gland**.

It is involved in regulating **metabolic rate** and growth and development.

Puberty

Females – **Oestrogen** is the main female reproductive hormone produced in the ovary. At puberty, eggs begin to mature, and one is released approximately every 28 days. This is called ovulation.

Males – **Testosterone** is the main male reproductive hormone produced by the testes and it stimulates sperm production.

Name of contraception	Description	+	–
Condoms/diaphragm	Barrier	Very effective, condom protects against STIs	Unreliable if not used properly
Oral Contraception (pill)	Hormonal (oestrogen or progesterone, stops FSH so no eggs mature)	Very effective	Must remember to take everyday, can have side effects
Injection/implant/skin patch	Slow-releasing hormone	Long lasting	Side effects such as heavy periods
Intrauterine Device (IUD or Coil)	Barrier method. Can also contain hormones	Long lasting (up to 5 years)	Side effects such as heavy periods
Surgical Sterilisation	Tying or cutting of sperm ducts/ oviducts.	Almost 100% effective	Difficult or impossible to reverse

Menstrual Cycle

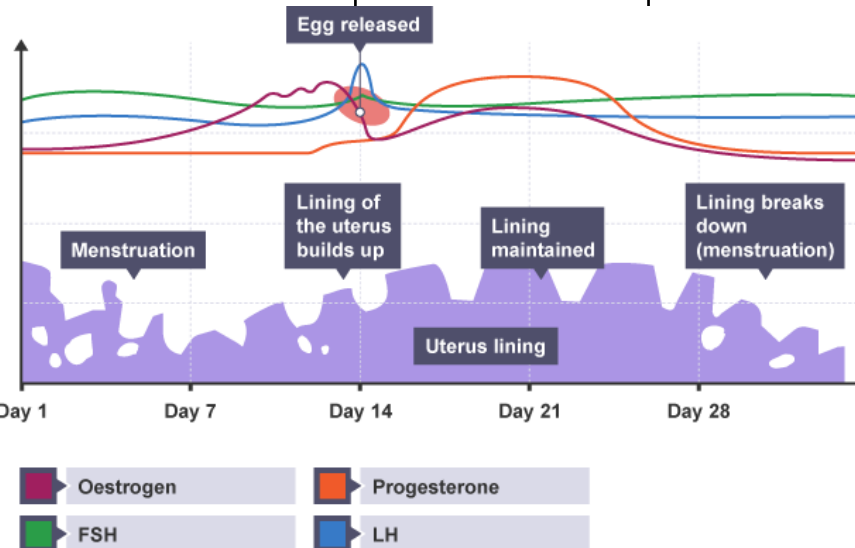
The menstrual cycle is controlled by several hormones:

FSH – from the pituitary. Causes an egg to mature in the ovary

LH – from the pituitary. Causes ovulation

Oestrogen and progesterone are involved in maintaining the lining of the womb.

HT – Oestrogen also feeds back to the pituitary to stop producing FSH.



Infertility (HT only)

Fertility drugs LH and FSH can be given to increase the number of eggs released and increase the chance of fertilisation. .

IVF

- Woman takes a dose of FSH and LH - stimulates the maturation of several eggs.
- Eggs are collected and fertilised by sperm from the male
- Fertilised eggs develop into embryos.
- One or two embryos inserted into the female's uterus.

Negatives;

- very emotionally/ physically stressful
- success rates are not high
- can lead to multiple births (twins, etc.)
- Many embryos are not used & destroyed

C2.7 – Energy Changes

Exothermic Reactions

- Energy transferred to the surroundings
- Temperature of the reaction mixture **increases**
- This energy is transferred **to** the surroundings

Examples include:

- Hand warmers
- Combustion reactions
- Respiration
- Neutralisation reactions
- Self-heating cans.



Exothermic

Endothermic Reactions

- Energy absorbed from the surroundings
- Temperature of reaction mixture often **decreases**
- Energy is transferred **from** the surroundings

Examples include:

- Ice packs (injuries)
- Reaction of citric acid and sodium hydrogen carbonate
- Thermal decomposition of calcium carbonate

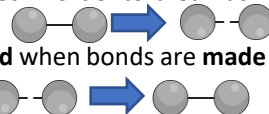


Endothermic

Energy change of reactions (HT)

During a reaction:

- Energy is **absorbed** in order to **break** bonds in the reactants
- Energy is **released** when bonds are **made** in the products.



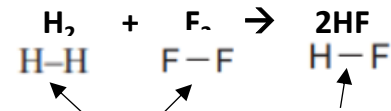
Bond energy = the amount of energy that is released when a bond is made or that is needed to break a bond

Calculating energy changes (HT)

Overall energy change = difference between energy needed to break bonds and the energy released when bonds formed.

To calculate energy change :

Energy change = bonds broken – bonds formed



bonds broken

bonds formed

Bond	Bond Energy / kJ mol^{-1}
F—F	158
H—H	436
H—F	568

Bonds broken =
436 + 158
593

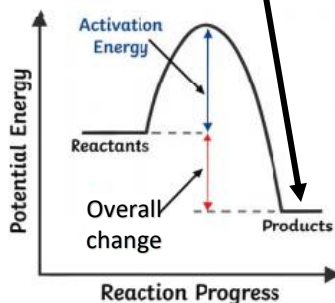
Bonds formed
2 x 568
1136

**Overall energy change = 593 – 1136
= -543 kJ/mol Exothermic**

More energy is released in bond making than is required for bond breaking.

Reaction Profiles – Exothermic

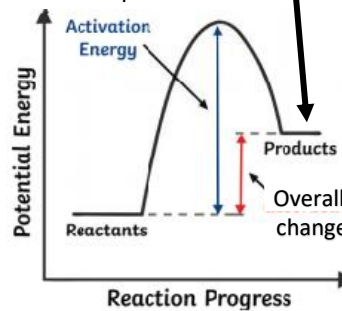
- Energy level diagrams show **difference in energy** between reactants and products.
- Exothermic = Energy of products is **lower than** reactants (energy is released)
- **Activation Energy** = minimum amount of energy needed to start the reaction.
- **Energy change** = the difference in energy between reactants and products.



You may need to draw and label this in the exam!

Reaction Profiles – Endothermic

- Energy level diagrams show **difference in energy** between reactants and products.
- Endothermic = Energy of products is **higher than** reactants (energy is absorbed)
- **Activation Energy** = minimum amount of energy needed to start the reaction
- **Energy change** = the difference in energy between reactants and products.



You may need to draw and label this in the exam!

C2.7 – Energy Changes

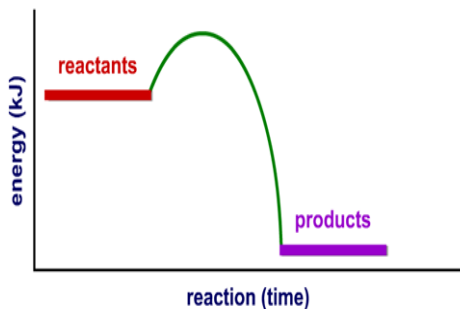
1. Which way is energy transferred in an exothermic reaction?
2. What happens to the temperature of the reaction mixture in an exothermic reaction?
3. State two examples of exothermic reactions.

1. Which way is energy transferred in an endothermic reaction?
2. What generally happens to the temperature of the reaction mixture of an endothermic reaction?
3. State two examples of endothermic reactions.

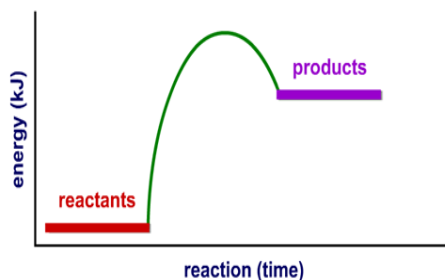
Higher Tier only

1. In terms of energy, what happens for bonds to be broken?
2. In terms of energy, what happens when bonds are formed?

1. Define activation energy.
2. On the graph below, draw and label the :
 - overall energy change
 - activation energy



1. What does an energy level diagram show?
2. On the graph below, draw and label the :
 - overall energy change
 - activation energy



Higher Tier only

1. Define overall energy change.
2. How do you calculate energy change?
3. Why, in terms of bond breaking and making, is a reaction exothermic?
4. Why, in terms of bond making and breaking, is a reaction endothermic?

C2.7 – Energy Changes – Required Practical – Temperature Changes

Hypothesis

The energy change in the reaction between acid and alkali depends on the volume of alkali added.

Equipment

- Polystyrene cup and lid
- Thermometer
- 250cm³ beaker
- Measuring cylinder
- Liquid reactants



Method (example for hydrochloric acid and sodium hydroxide)

1. Using measuring cylinder to measure 30cm³ hydrochloric acid and put in polystyrene cup
2. Stand cup inside beaker to make stable.
3. Use a thermometer to measure the temperature of acid and record.
4. Using measuring cylinder – 5cm³ sodium hydroxide → polystyrene cup
5. Fit the lid and gently stir with thermometer through hole.
6. When reading stops on thermometer, record temperature in table.
7. Repeat, each time adding 5cm³ more sodium hydroxide up to a maximum of 40cm³.
8. Calculate the temperature change on each attempt.
9. Repeat the experiment 3 times and calculate a mean temperature change for each volume of sodium hydroxide.

Variables

Independent – Volume of sodium hydroxide

Dependent – Temperature change

Control – Volume of hydrochloric acid, concentration of acid, concentration of sodium hydroxide

Common questions

Q1) Why do you use a polystyrene cup and lid?

A1) Because polystyrene cups are insulators, which reduces heat loss in the experiment, making the results more accurate.

Q2) Why should you calculate the temperature change, instead of just using the final temperature?

A2) Because the initial (starting) temperature of the acid may have been different.

Q3) Why is it important to stir the mixture?

A3) To make sure all of the reactants have reacted and to get a uniform temperature.

Q4) Why is the experiment conducted 3 times?

A4) So that anomalies can be seen and removed and a mean calculated

Energy changes could also be investigated using:

1. Changing the **mass of metal** added to acid and measuring the **temperature increase**
2. Changing the **type of metal** added to acid and measuring the **temperature increase**
3. Dissolving different **masses of potassium nitrate** into water and observing the **temperature decrease**.

C2.7 – Energy Changes

Required Practical – Temperature Changes

1. Write a method to investigate how the volume of sodium hydroxide affects the change in temperature when reacting with hydrochloric acid (6 marks)

2. For the investigation above, name the :
Independent variable :
Dependent variable :
2 control variables :

3. Why do you use a polystyrene cup and lid instead of a beaker?

4. Why should you calculate the temperature change, instead of just using the final temperature?

5. Why is it important to stir the mixture?

6. Why do we do repeat readings?

C2.7 – Energy Changes (chemistry only)

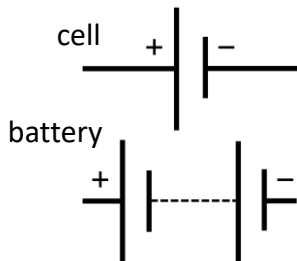
Cells and batteries

Cells contain chemicals which react to produce electricity.

The voltage produced by a cell is dependent upon a number of factors including the type of electrode and electrolyte.

A simple cell can be made by connecting two different metals in contact with an electrolyte.

Batteries consist of two or more cells connected together in series to provide a greater voltage.



Non-rechargeable cells and batteries

The chemical reactions stop when one of the reactants has been used up. Alkaline batteries are non-rechargeable.

Rechargeable cells and batteries

Rechargeable cells and batteries can be recharged because the chemical reactions are reversed when an external electrical current is supplied.

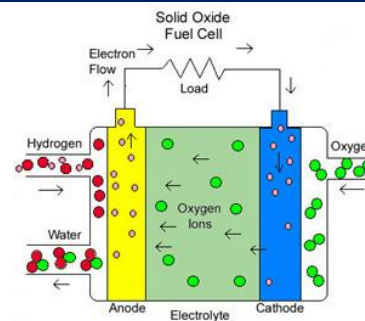
Fuel cells

Fuel cells are supplied by an external source of fuel (eg hydrogen) and oxygen or air.

The fuel is oxidised electrochemically within the fuel cell to produce a potential difference.

The overall reaction in a hydrogen fuel cell involves the oxidation of hydrogen to produce water.

Hydrogen fuel cells offer a potential alternative to rechargeable cells and batteries.



Half equation for electrode reactions in hydrogen fuel cells

At the negative electrode: $2\text{H}_2 + 4\text{OH}^- \rightarrow 4\text{H}_2\text{O} + 4\text{e}^-$

At the positive electrode: $\text{O}_2 + 2\text{H}_2\text{O} + 4\text{e}^- \rightarrow 4\text{OH}^-$

When you add these two half equations together, you get the following overall equation:

$2\text{H}_2 + 4\text{OH}^- + \text{O}_2 + 2\text{H}_2\text{O} + 4\text{e}^- \rightarrow 4\text{H}_2\text{O} + 4\text{e}^- + 4\text{OH}^-$

The hydroxide ions, electrons and two H_2O molecules will now cancel because they are on both sides, leaving the overall equation:

$2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$

Fuel cells vs rechargeable cells and batteries

Fuel cells can provide electrical energy for a much longer duration, whereas rechargeable batteries can only provide energy in an intermittent schedule. ... Fuel cells are able to generate a large amount of electrical energy, much greater than that produced by rechargeable batteries

C2.7 – Energy Changes**Chemistry only**

1. What is the difference between a cell and a battery?
2. What is a cell?
3. What is a non-rechargeable battery?
4. Why are rechargeable batteries rechargeable?

4. What is a fuel cell?

5. How does a fuel cells compare to rechargeable cells and batteries?

6. What is the half equation for electrode reactions in hydrogen fuel cells?

P5 – Forces

Scalar and Vector Quantities

Scalar quantities – have **magnitude** only
e.g. temperature, mass and speed.

Vector quantities – have both **magnitude** and **direction**
e.g. velocity, displacement.

Vectors can be shown using **arrows**:

Size of arrow = magnitude of the quantity

Direction of arrow = direction of quantity

Contact and Non-Contact Forces

Force = a push or pull that acts on an object due to interaction with another object.

All forces are either:

- **Contact forces** – objects are physically touching
e.g. friction, air resistance, tension and normal contact force.
- **Non-Contact forces** – objects are physically separated
e.g. gravitational force, electrostatic force and magnetic force.

- Forces are **vectors** – shown by arrows.



Gravity

Weight = the **force** acting on an object due to gravity.

- Gravity close to Earth is due to the gravitational field.

- Weight of an object depends on the gravitational field strength at the point where the object is.

Weight can be calculated using:

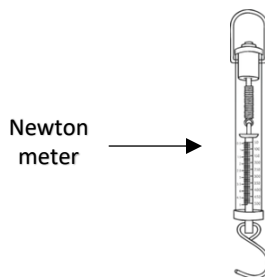
weight = mass x gravitational field strength

$$W = m \times g$$

Diagram showing the units for the equation $W = m \times g$:

- W (Newtons, N)
- m (Kilograms, kg)
- g (Newtons per kilogram, N/kg)

- Earth's gravitational field strength = 9.8 N/kg
- Weight of an object can be considered to act at a single point = object's '**centre of mass**'
- Weight can be measured using a **newton meter**.



Resultant Forces

Resultant force = The sum of all forces or overall force acting on an object



Bike is being pushed forward with a force of 13N but there are resistive forces of 13N backwards.

Resultant force = 0N

What happens to the motion depends on what the bike was doing before these forces were applied:

- If the bike was stationary, it will stay stationary
- if the bike was moving, it will continue to move at a constant velocity



Car is being pushed to the left by a force of 350N. It is also pushed to the right by 500N.

Resultant force is: 500N – 350N = 150N

What happens to the motion depends on what the car was doing before these forces were applied:

- If the car was stationary, it will **accelerate** to the right
- If the car was already moving to the right, it will move faster (**accelerate**)
- If the car was moving to the left (ie reversing), it will slow down (**decelerate**)

P5 – Forces

1. What is a scalar quantity?
2. Give 2 examples of a scalar quantity.
3. Give 2 examples of a vector quantity.

1. What is a force?
2. Describe what is meant by a 'contact force'
3. Give 2 examples of contact forces.
4. Give 2 examples of non-contact forces.
5. Are forces scalar or vectors?

1. Define weight.
2. What does the weight of an object depend on?
3. Give the equation which links gravitational field strength, mass and weight?
4. What is 'centre of mass'?
5. How can weight be measured?
6. What is the value for Earth's gravitational field strength?

1. What is a resultant force?
2. What happens to a moving object if the forces are balanced?
3. What does 'decelerate' mean?
4. If an object is stationary and there is a 0N resultant force, what happens to the object?
5. What is needed to make an object accelerate?

P5 – Forces

Vector Diagrams (HT only)

- Used to calculate resultant forces that are not acting directly opposite each other, on a straight line.

Rules ('tip to tail'):

- Draw first vector to scale, in the direction stated
- Draw second vector, from the tip of the first one in the direction stated.
- Join the two lines in a triangle and measure the resulting line
- Convert length to force using your scale – this is the resultant force

Example:

Two forces act on an toy boat - 40N acting north, 60N acting East. Calculate the resultant force and state the direction.

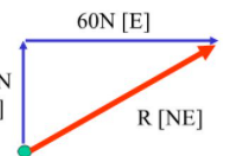
1. Draw the first vector to scale



2. Draw 2nd vector from tip of the first one. Again, to scale.



3. Join the two lines. Measure the resulting line.



Resultant force = 72N NE

Work done and Energy Transfer

- When a force acts on an object and makes it move – **work is done**.

Work done = energy transferred

Work done is calculated by:

$$\text{work done} = \text{force} \times \text{distance}$$

$$W = F \times s$$

Joules (J) Newtons (N) Metres (m)

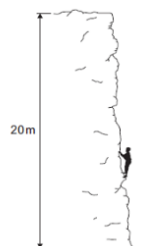
- One joule of work is done when a force of one newton causes a displacement of one metre.
- 1 joule = 1 newton-metre

e.g A climber and his gear weigh 750N Calculate the energy transferred top of the cliff

$$W = F s$$

$$W = 750 \times 20\text{m}$$

$$W = 15000\text{J}$$



- Work done against the frictional forces acting on an object causes a rise in the temperature.



Forces and Elasticity

- When work is done on an elastic object (e.g. stretching or compressing a spring), energy is stored as elastic potential energy.

Elastic deformation:

- When force is applied, object changes shape and stretches.
- When the force is no longer applied, object returns to original shape.

Inelastic deformation = stretched beyond limit – will not return to original shape and size.

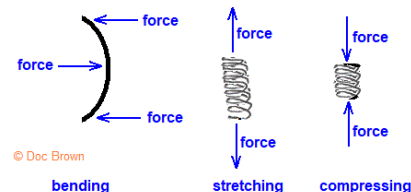
Force = spring constant x extension

$$F = k \times e$$

Newtons (N) Newtons per metre (N/m) Metres (m)

Two forces are needed to stretch or compress

Forces acting on an elastic material (steel strip, spring)



Work done in stretching (or compressing) a spring:

elastic

$$\text{potential} = 0.5 \times \text{spring constant} \times (\text{extension})^2$$

energy

$$E_e = \frac{1}{2} \times k \times e^2$$

P5 – Forces

1. What are vector diagrams used to calculate?

2. Where do you draw the second force from?

3. Two forces act on a boat, pulling it along. The first force is 3N North and the second is 4N East. Follow the rules and draw the forces acting from the point of origin below:



4. What is the resultant force on the boat?

1. When is work done?

2. Give the equation which links distance, force and work done?

3. What is work done the same as?

4. Complete this sentence: One joule of work is done when...

5. What is the relationship between joules and newton-metres?

6. What does work done against the frictional forces acting on an object cause?

1. When an elastic object is stretched or compressed, which energy store is filled?

2. What is 'elastic deformation'?

3. What is 'inelastic deformation'?

4. What happens to a stretched spring when the force is removed?

5. What is the equation linking extension, force and spring constant

6. How many forces are needed to stretch or compress an object?

P5 – Forces

Required Practical

Aim: Investigate the relationship between force and extension for a spring (or any elastic object, eg elastic band)

Method

1. Hang a spring from a clamp and stand
2. Measure original length of the spring and record this.
3. Attach a 100g mass – record the new length of the spring.
4. Continue adding 100g masses recording the length each time, up to a total of 500g.
5. Work out the extension for each mass using:

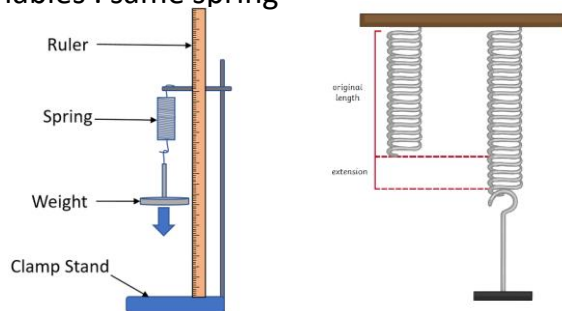
$$\text{final length} - \text{original length}$$

6. Repeat steps 1-5 twice and calculate a mean
7. Plot a line graph with extension (m) on the x-axis and force (N) on the y-axis.

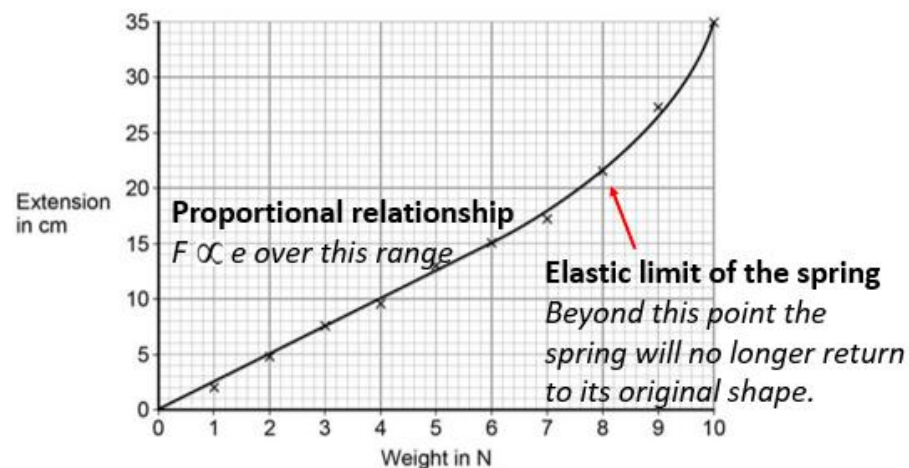
Independent variable : mass on the spring

Dependent variable : extension of the spring

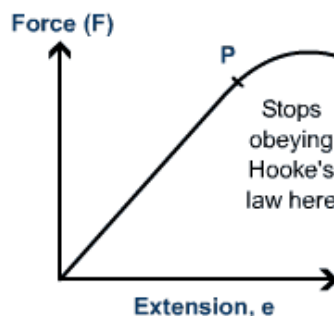
Control variables : same spring



Results :



- There is a proportional relationship (shown by a straight line through the origin) at first.
- This means: **Force $\propto$ Extension** ($F \propto E$)
- However, there comes a point when the 'elastic limit' of the spring is reached. This is also known as the **limit of proportionality**.
- If more force is applied after this, relationship is **no longer proportional**.
- After this point, the spring will not return to its original shape and size when the force is removed.

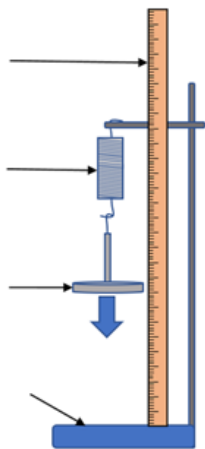


You may see the graphs with the axes switched – with extension on X and force on Y.

gradient of linear part = spring constant, k, for the spring being used.

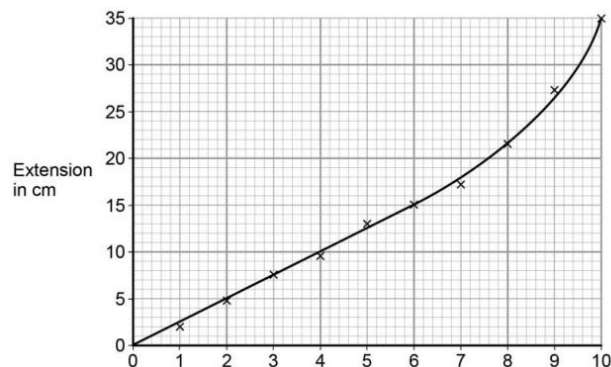
P5 – Forces

1. What is the independent variable in the investigation into the effect of force on extension of a spring?
2. What is the dependent variable?
3. How is the dependent variable measured?
4. What range of masses could be used?
5. Label the equipment used to investigate the stretching of a spring below:

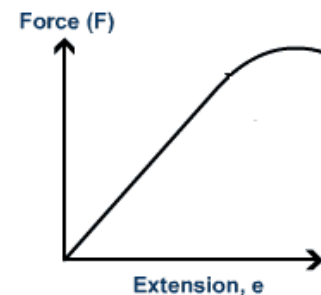


6. Why are repeated readings taken for each mass?

1. Label the X axis for the graph below, including units



2. Label the part of the graph that shows force is directly proportional to extension
3. Label the limit of proportionality for this spring
4. What is the symbol for 'proportional'?
5. How could you use a graph like this to calculate the spring constant of this spring?





1. Global pattern of urban change

The world's population is growing rapidly; currently 50% of us live in urban areas.

Urbanisation	An increasing percentage of a country's population living in towns and cities.
HICs	Very slow rate of urbanisation. Already have high urban populations. Urbanisation happened earlier (during the industrial revolution).
NEEs	Fast rate of urbanisation due to industrialisation. Urban population is increasing rapidly.
LICs	Fast rate of urbanisation. Urban population is low as many still work in farming.

2. Factors affecting urbanisation

Rural-Urban migration	The movement of people from a rural area (countryside) to an urban area (towns and cities).
Push factors	Negative factors that make people leave an area e.g. drought, famine, war, few services.
Pull factors	Positive factors that attract people to an area e.g. better access to services, better paid jobs, access to electricity.
Natural Increase	When the birth rate is higher than death rate; the population grows. High in NEE cities as migrants are often young and health care is improving.

3. Megacities

Megacity	A city of more than 10 million people living there.
How many?	There are now 34. Rapidly increasing.
Where?	Most are in Africa and Asia.

4. Key terms

Social deprivation	The extent an individual or an area lacks services, decent housing, adequate income and employment.
Dereliction	Abandoned buildings and wasteland.
Urban Greening	Process of increasing and preserving open space in urban areas i.e. parks.
Urban sprawl	Unplanned growth of urban areas into surrounding rural areas.
Integrated Transport System	Different forms of transport are linked together to make it easy to transfer from one to another.
Brownfield	Land that has been used, abandoned and now awaits reuse; they are often found in urban areas.
Greenfield	A plot of land, often in rural areas or on the edges of urban areas that has not been built on before.
Commuter settlements	A place where people live but travel elsewhere for work e.g. Yate → Bristol.

5. Sustainable urban living

Sustainable urban living	Where people living, now, have the things they need, without reducing the ability of people in future to meet their needs.
Water conservation	Recycling grey water. ½ flush toilets. Rainwater harvesting on roofs. Permeable pavements- filters pollutants.
Energy conservation	Energy efficient appliances. Energy saving (south facing windows). Use of renewable energy sources.
Waste recycling	Recycling boxes in houses. Recycling facilities nearby. Encourage websites like 'Freecycle'.
Creating green space	Maintain green spaces around towns- Cools area, encourage exercise, happy.

6. Urban transport strategies used to reduce traffic congestion

Problems with congestion	air pollution (global warming). Late for work, deliveries delayed. accidents, stress, asthma. In Bristol, 200 people die as a result of air pollution each year.
Beryl Bikes	Shared bikes in Bournemouth + Poole.
Oyster Cards	Quick and easy to pay for more than one type of public transport (London).
Park and ride	Car parks on the outskirts of a town, with buses into the city centre.
Congestion charge	Charge for entering the city centre at peak times.
Bus lanes	Stop buses being held in traffic.



1. Global pattern of urban change

The world's population is growing rapidly; currently 50% of us live in urban areas.

Urbanisation	
HICs	
NEEs	
LICs	

2. Factors affecting urbanisation

Rural-Urban migration	
Push factors	
Pull factors	
Natural Increase	

3. Megacities

Megacity	
How many?	
Where?	

4. Key terms

Social deprivation	
Dereliction	
Urban Greening	
Urban sprawl	
Integrated Transport System	
Brownfield	
Greenfield	
Commuter settlements	

5. Sustainable urban living

Sustainable urban living	
Water conservation	
Energy conservation	
Waste recycling	
Creating green space	

6. Urban transport strategies used to reduce traffic congestion

Problems with congestion	
Beryl Bikes	
Oyster Cards	
Park and ride	
Congestion charge	
Bus lanes	



7. Distribution of population and major cities in the UK

Population	66 million. Distribution is very uneven. 82% live in urban areas. Upland areas are sparsely populated.
Cities	Most in lowland areas and on coasts. London is the biggest city and the capital. It has 10% of the population. Cities reflect our industrial past (near raw materials e.g. Leeds near coal). Counter-urbanisation is a recent trend.

8. Location and importance of Bristol

Location	South west of the UK, on Bristol Channel. Near to junction of M4 & M5.
Importance within the UK	Largest city in the southwest. 8 th most popular city for foreign tourists. 2 universities and 2 cathedrals.
Importance to wider world	Largest concentration of silicon chip manufacturing outside of California. International airport (links to Europe). Many TNCs located there (AirBus, BMW)

9. Impacts of migration on the growth and character of the city

National migration	1851 - 1891 population doubled as people arrived looking for work.
International migration	Now international migration accounts for half of its growth. 50 countries. Many from Europe (Poland, Spain).
Impact on	Many cultural opportunities. Afro-Caribbean- strong community

10. Urban change in Bristol

- Population is growing rapidly.
- Population is more ethnically diverse.
- More under 16-year olds than of pensionable age.
- Electrification of railway to London (<70 minutes).
- Become more accessible (road, rail, air).

11. Opportunities created by urban change

Cultural mix	50 countries represented (food, art). St Paul's Carnival (attracts 40,000).
Recreation and entertainment	Underground music scene -Colston Hall. Entertainment (The Bristol Old Vic). 2 football teams (City, Rovers). Shopping Cribbs Causeway, Cabot Circus.
Employment	Highly tech. industries = jobs. 50 silicon businesses. Many TNCs. £100 million improved broadband.
Integrated transport system	Links different types of public transport Reduces congestion in the city. ↗ % people walking and cycling (57%).
Urban greening	> 90% live within 350m of park/water. 300 parks. 1/3 Bristol is open space. 2015 European Green Capital status.

12. An example of an urban regeneration project

Example	Why did it need regeneration?	What are the main features?	Successful?
Temple Quarter, Bristol	- Bristol surrounded by a green belt. - Brownfield site- rundown, ugly. - By Bristol Temple Meads Station- poor impression for new visitors. - Previously an industrial area.	- Enterprise Zone e.g. low rents. - Improve access e.g. ITS. - New bridge across River Avon (access to planned Bristol Arena). - Maintain historical features, cobbled streets- gives character - Brunel's Engine Shed £1.7mill.	✓ 4,000 new jobs by 2020 (17,000 by 2037) ✓ Attracts tourists. ✓ Redeveloped brownfield site ✗ Arena still not built

13. Challenges created by urban change

Urban deprivation	Some areas face social deprivation. 1/3 of people in Filwood are in very-low income households. Problems of crime, drug use, low quality housing, lack of transport.
Inequality in housing	Filwood- 50% in council housing. Stoke Bishop- millionaires (large villas)
Inequality in education	Filwood- 36% get top GCSE grades. Stoke Bishop- 94%.
Inequality in health	Filwood- Life expectancy 78 years. Stoke Bishop- 83 years.
Employment	Filwood- 1/3 16-24-year olds. Stoke Bishop- Just 3%.
Dereliction	Industrial buildings derelict (inner-city). Stokes Croft (many squatters).
Building on brown and greenfield	2006-13 94% housing on brownfield. Plan for 30,000 homes on brownfield. Temple Meads built on brownfield.
Waste disposal	>1/2 million tonnes of waste/year. (23% lower per head than UK average) ↗ recycling by 50%. Teach it in schools.
Urban sprawl	Greenbelt to prevent merge with Bath City extended to NW (Bradley Stoke). Led to destruction of greenfield sites. Yate- Commuter settlement.

**7. Distribution of population and major cities in the UK**

Population	
Cities	

8. Location and importance of Bristol

Location	
Importance within the UK	
Importance to wider world	

9. Impacts of migration on the growth and character of the city

National migration	
International migration	
Impact on character	

10. Urban change in Bristol

--

11. Opportunities created by urban change

Cultural mix	
Recreation and entertainment	
Employment	
Integrated transport system	
Urban greening	

12. An example of an urban regeneration project

Example	Why did it need regeneration?	What are the main features?	Successful?
Temple Quarter, Bristol			

13. Challenges created by urban change

Urban deprivation	
Inequality in housing	
Inequality in education	
Inequality in health	
Employment	
Dereliction	
Building on brown and greenfield	
Waste disposal	
Urban sprawl	

GCSE History : Medicine in 18th and 19th Century Britain

What we are learning this term:

- 3.1 Ideas about the cause of disease and illness
- 3.2 Approaches to treatment and prevention
- 3.3 Key Individuals and fighting cholera in London, 1854

B. Change and continuity in ideas about disease and illness in the 18th and 19th Century. (3.1-3.2)

Causes

Religion – People no longer believed that God was responsible for illnesses and world events

Prevention

Vaccinations – the work of Edward Jenner in the 18th century led to the first vaccination being created for smallpox. This led the way to other vaccinations being produced

Treatments

Continuance – despite the new ideas about the cause of disease and illness in the 18th century, treatments to remove germs took longer to find

Miasma – people still believed in the theory that disease and illness was caused by harmful fumes in the air. BUT it was becoming less popular

Public Health Act 1875 – in the 18th Century the government did not care much about public health.

Hospitals – Florence Nightingale helped to change hospitals and nursing.

This changed when more men could vote. The government realised changes were needed and passed the Public Health Act.

Nightingale changed the way that hospitals were designed to having separate wards and more ventilation.

This Act stated that clean water, sewage system, public parks and street lighting had to be provided

Also set up a training school for nurses to give better care

Spontaneous Generation – this theory stated that rotting matter caused bacteria to form, causing people to get ill

Role of the government – Took a more active role in preventing disease, making smallpox vaccinations compulsory

Anaesthetics – one of the big problems in the 18th and 19th centuries was pain during surgery.

Ether and laughing gas had been used but they were not good enough.

John Simpson discovered that chloroform could be used as a pain relief – this led to more complex surgeries being performed

Germ Theory – this correct theory put forward by Louis Pasteur was that germs caused matter to rot. He linked this to disease and illness, stating that germs caused people to get ill

Antiseptics – another big problem with surgery was infections.

Joseph Lister built on Pasteur's work and discovered that carbolic acid could be used to prevent infections.

Used on wounds and Sterilised equipment, but some surgeons did not like the change

D. Key People (3.3)

Edward Jenner

Country doctor who realised that milkmaids who got cowpox did not catch smallpox – decided they must be connected. Tested his theory by infecting a local boy with cowpox and then tried to infect him with smallpox but he did not get ill.

Had successfully developed the first vaccine, which was supported by the government.

John Snow

Used scientific methods to prove that cholera was a water borne disease in the 1850's.

Snow presented his findings to the government, recommending that the sewer systems were improved, which they were eventually.

Edwin Chadwick

Published his *Report on the Sanitary Conditions of the Labouring Classes* in 1842.

He spent time researching the poor in cities and discovered that people living in cities had a lower life expectancy than people living in the countryside. Asked for boards of health to be set up to make cities cleaner.

C.

Fighting cholera in London , 1854 (3.3)

What is Cholera? Cholera was a terrible water borne disease that spread quickly across England from 1831. There were lots of cases in slum dwellings.

Attempts to prevent it Some steps were taken to clean up the filthiest areas of the city. Idea that it was caused by miasma was widespread, so local councils focused on cleaning up the mess in which they were living

John Snow John Snow was surgeon who investigated the 1854 epidemic. He created a spot map to show the deaths and noticed they were concentrated around a water pump in Broad Street, SoHo. Clear the water pump was the source of the outbreak

Impact of Snows work In the short-term Snow removed the handle from the Broad Street pump and the deaths in that area went away. Long-term Snow presented his work to the government arguing clean water needed to be supplied. Many rejected his work and clung to the idea of miasma causing cholera

GCSE History : Medicine in 18th and 19th Century Britain

What we are learning this term:	
3.1 Ideas about the cause of disease and illness 3.2 Approaches to treatment and prevention 3.3 Key Individuals and fighting cholera in London, 1854	
A.	Can you define these key words?
microbes	Any living organism that is too small to see _____. Microbes include _____
vaccination	Treatment with a vaccine to _____ against a _____
spontaneous generation	Claimed _____ created microbes.
bacteriology	The study of _____.
inoculate	Deliberately _____ yourself with a disease to avoid a _____ case later on.
C.	Fighting cholera in London , 1854 (3.3)
What is Cholera ?	Cholera was a terrible _____ disease that spread quickly across England from _____. There were lots of cases in _____ dwellings.
Attempts to prevent it	Some steps were taken to clean up the _____ areas of the city. Idea that it was caused by _____ was widespread, so local councils focused on _____ up the mess in which they were living
John Snow	John Snow was _____ who investigated the 1854 epidemic. He created a _____ to show the deaths and noticed they were concentrated around a water pump in _____, SoHo. Clear the water pump was the source of the outbreak
Impact of Snows work	In the short-term Snow removed the _____ from the Broad Street pump and the deaths in that area _____. Long-term Snow presented his work to the government arguing _____ needed to be supplied. Many _____ his work and clung to the idea of _____ causing cholera

B. Change and continuity in ideas about disease and illness in the 18 th and 19 th Century. (3.1-3.2)		
Causes	Prevention	Treatments
Religion – _____	Vaccinations – the work of _____ in the 18 th century led to the first vaccination being created for _____. This led the way to other vaccinations being produced	Continuance – despite the new ideas about the cause of disease and illness in the 18 th century, _____ took longer to find
Miasma – people still believed in the theory that _____ was caused by harmful fumes in the air. BUT it was becoming _____	Public Health Act 1875 – in the 18 th Century the government did not care much about _____. This changed when more men could vote. The government realised changes were needed and passed the _____. This Act stated that clean _____, _____, public parks and street lighting had to be provided	Hospitals – _____ helped to change hospitals and nursing. Nightingale changed the way that hospitals were _____ to having separate wards and more _____. Also set up a _____ for nurses to give better care
Spontaneous Generation – this theory stated that _____, causing people to get ill	Role of the government – Took a more _____ in preventing disease, making smallpox vaccinations _____	Anaesthetics – one of the big problems in the 18 th and 19 th centuries was _____ during surgery. Ether and laughing gas had been used but they were _____ John _____ discovered that chloroform could be used as a _____ – this led to more complex surgeries being performed
Germ Theory – this correct theory put forward by _____ was that germs caused matter to rot. He linked this to _____ and illness, stating that germs _____		Antiseptics – another big problem with surgery was _____ Joseph _____ built on Pasteur's work and discovered that _____ could be used to prevent infections. Used on wounds and Sterilised _____, but some surgeons did not like the change
D. Key People (3.3)		
Edward Jenner	John Snow	Edwin Chadwick
Country doctor who realised that _____ who got _____ did not catch smallpox – decided they must be connected. Tested his _____ by infecting a local boy with cowpox and then tried to infect him with smallpox but he _____. Had successfully developed the first _____, which was supported by the government.	Used _____ to prove that cholera was a _____ disease in the 1850's. Snow presented his findings to the _____, recommending that the sewer systems were _____, which they were eventually.	Published his <i>Report on the Sanitary Conditions of the Labouring Classes</i> in _____. He spent time researching the _____ and discovered that people living in cities had a _____ expectancy than people living in the countryside. Asked for boards of health to be set up to make cities _____.



Keywords		What we are learning in this unit		B.	The 5 Pillars - Salah
Tawalla	Showing love for God and for those who follow Him	A. The 5 Pillars and 10 Obligatory Acts B. Salah C. Sawm D. Zakah E. Hajj F. Jihad G. Id-ul-Adha H. Id-ul-Fitr		What is it?	“Salah is a prescribed duty that has to be performed at the given time by the Qur’an” Muslims pray 5 times per day and this allows them to communicate with Allah. - The prayers are done at dawn (fajr), afternoon (zuhr), late afternoon (asr), dusk (maghrib) and night (isha) - Muslims face the holy city of Makkah when paying.
Tabarra	Disassociation with God’s enemies			Wuzu	- The washing process to purify the mind and body for prayer - Muhammad said the key to Salah is cleanliness - Hands, arms, nose, mouth, head, neck and ears are cleaned as well as both feet up to the ankle.
Khums	The obligation to pay one-fifth of acquired wealth			Rak’ahs and recitations	- These are the movements that Muslims make during prayer - Takbir – raise hands to ears and say 'Allahu Akbar' - Qiyam – Standing, Muslims recite Surah - Then bow to the waist saying "Glory be to my Great Lord and praise be to Him" - Then sink to their knees saying "Glory be to my Lord, The Most Supreme...."
Lesser jihad	The physical struggle or holy war in defence of Islam			Salah at home	- Salah is a big part of family life - Meals and other activities are usually scheduled to fit around prayer times - Families pray all together and might have a room set aside for prayer
Greater jihad	The daily struggle and inner spiritual striving to live as a Muslim	Salah in the mosque	- All mosques have a qiblah wall which is to show where to face Makkah - Men and women pray in separate rooms at the Mosque	Jummah	- Jummah is congregational prayer held on a Friday at the mosque where the imam leads the prayer - Praying together as a community develops the feeling of unity amongst Muslims - Men are obliged to attend unless they are sick or too old - Women do not have to go – they may pray at home instead
Sunni	Muslims who believe in the successorship of Abu Bakr, Umar, Uthman and Ali as leaders after the Prophet Muhammad	What are the 10 obligatory acts	- There are 10 obligations for a Muslim according to the Shi’a branch of Islam. - These include prayer, fasting, almsgiving, pilgrimage, jihad, khums, directing others towards good, forbidding evil, tawalla and tabarra	Differences between Sunni and Shi’a	- Shi’a Muslims combine some prayers so they may only pray 3x a day - Shi’a use natural elements e.g. clay where their head rests
Shi’a	Muslims who believe in the Imamah, leadership of Ali and his descendants	Shahadah	- Shahadah is the first of the 5 pillars - It is the Muslim declaration of faith “there is no God but Allah, and Muhammad is His messenger” - This is a statement that Muslims reject anything but Allah as their focus of belief - It also recognises that Muhammad has an important role and his life is an example to follow		
Niyyah	Intention during prayer - having the right intention to worship God				
Du’a	A personal prayer that is done in addition to Salah e.g. asking Allah for help				
		Jihad			
Lesser Jihad		- Originated when Prophet Muhammad and early Muslims were being attacked and oppressed by the Meccans and had no choice but to engage “Fight in the way of God those who fight against you but do not transgress” - Conditions for declaration - self-defense - proportionate - legitimate authority - no harm to civilians			
Greater Jihad		- A struggle within oneself to follow the teachings of Islam and be a better person - e.g. perform the Five Pillars, follow Sunnah and avoid temptation “encourage what is right and forbid what is wrong”			



	Keywords		What we are learning in this unit		B.	The 5 Pillars - Salah	
Tawalla			A. The 5 Pillars and 10 Obligatory Acts B. Salah C. Sawm D. Zakah E. Hajj F. Jihad G. Id-ul-Adha H. Id-ul-Fitr		What is it?		
Tabarra							
Khums							
Lesser jihad							
Greater jihad				A.	5 Pillars of Islam and 10 obligatory acts		
				What are the 5 pillars			
Sunni				What are the 10 obligatory acts			
Shi'a				Shahadah			
Niyyah							
Du'a							
			Jihad				
Lesser Jihad						Jummah	
Greater Jihad						Differences between Sunni and Shi'a	



Year 10 GCSE Religious Education KO - Islam Practices



	<i>The 5 Pillars - Zakah</i>
The role of giving alms	• Muslims believe it is their duty to ensure Allah's wealth has been distributed equally as everyone is the same • The Qur'an commands to give to those in need
The significance of giving alms	• Giving 2.5% of savings/wealth to charity • Wealth can cause greed which is evil, so Zakah purifies wealth – wealth is given by God and must be shared • The Prophet Muhammad practiced Zakah as a practice in Medina • Given to the poor, needy and travellers • Sadaqah is giving from the heart out of generosity and compassion
Khums	• Shi'a Islam – one of the 10 obligatory acts • 20% of any profit earned by Shi'a Muslims paid as a tax • Split between charities that support Islamic education and anyone who is in need • "know that whatever of a thing you acquire, a fifth of it is for Allah, for the Messenger, for the near relative, and the orphans, the needy, and the wayfarer"

	<i>The 5 Pillars - Sawm</i>
The role of fasting	• Fasting during Ramadan (9th month in Muslim calendar) • Muslims give up food, drink, smoking and sexual activity in daylight hours • Pregnant people, children under 12, travellers and elderly people are exempt from fasting.
The significance of fasting	• Ramadan is believed to be the month that Prophet Muhammad began to receive revelations of the Qur'an • Helps Muslims to become spiritually stronger
Reasons for fasting	• Obeying God and exercising self-discipline • Develops empathy for the poor • Appreciation of God's gifts • Giving thanks for the Qur'an • Sharing fellowship and community with other Muslims
Night of power	• The night when the Angel Jibril first appeared to Muhammad and began revealing the Qur'an. • The most important event in history – "better than a thousand months" [Surah 97:3] • Laylat Al-Qadr is the holiest night of the year. Muslims try to stay awake for the whole night to pray and study for the Qur'an

	<i>The 5 Pillars - Hajj</i>
The role of pilgrimage	• A pilgrimage to Makkah which is compulsory for Muslims to take at least once as long as they can afford it and are healthy
The significance of pilgrimage	• God told Ibrahim to take his wife and son on a journey and leave them without food or water • Hajira ran up and down two hills in search of water, could not find any and prayed to God. Then water sprung from the ground. This is the Zamzam well • When Ibrahim returned he was commanded to build the Ka'ba as a shrine dedicated to Allah • Hajj is performed in the month of Dhu'l-Hijja
Actions	• Ihram – dressing in two pieces of white cloth • Circling the Ka'aba 7 times (tawaf) • Drinking water from the Zamzam well like Hajar • walking between Al-Safa and Al-Marwa hills seven times • Throwing stones at 3 pillars (jamarat) to represent casting out the devil and remembering Ibrahim throwing stones at the devil to drive him away • Asking Allah for forgiveness at Mt Arafat • Collecting pebbles at Muzdalifah

	<i>Id-ul-Adha, Id-ul-Fitr, Ashura</i>
Id-ul-Adha	• Festival of sacrifice • Marks the end of Hajj and is a chance for whole Ummah to celebrate • Origins – Ibrahim's commitment to God in being willing to sacrifice his son, Ishmael. God was testing Ibrahim • Key events – new clothes, sacrificing an animal, visiting the Mosque. • People ask a butcher to slaughter a sheep for them and share the meat with the community
Id-ul-Fitr	• Festival of fast-breaking • Marks the end of Ramadan • Key events – Decorate homes with colourful light and banners, dress in new clothes, gather in Mosques, give gifts and money, give to the poor • Zakah ul-Fitr – donation to the poor so that everyone can eat a generous meal at the end of Ramadan.
Ashura	• Sunni celebration – many fast on this day which was established by Prophet Muhammad • Shi'a mourning – Husayn was murdered and beheaded. Muslims remember his death and betrayal • Key events – public displays of grief, day of sorrow, wear black, re-enactments of martyrdom, not a public holiday in Britain but Muslims may have day off school



Year 10 GCSE Religious Education KO - Islam Practices



	<i>The 5 Pillars - Zakah</i>
The role of giving alms	
The significance of giving alms	
Khums	

	<i>The 5 Pillars - Sawm</i>
The role of fasting	
The significance of fasting	
Reasons for fasting	
Night of power	

	<i>The 5 Pillars - Hajj</i>
The role of pilgrimage	
The significance of pilgrimage	
Actions	

	<i>Id-ul-Adha, Id-ul-Fitr, Ashura</i>
Id-ul-Adha Not an official holiday in UK	
Id-ul-Fitr Public holiday in Muslim majority countries, not UK	
Ashura	

Year 10 Spanish Knowledge Organiser Term 2



My Personal World



This is some of the vocabulary that you will learn / come across in **Term 2**. Use this knowledge organiser to revise / go over vocabulary. These words have been added in by the exam board (Edexcel) so the more you learn, the better your grade!

Techniques for learning vocab:

- Look / cover / write / check – ask your teacher for a sheet and to show you how.
- Mind maps
- Post it notes / flash cards
- Record yourself saying them
- Get a family member to quiz you – they say the English, you say the Spanish
- Write the word in a sentence – put it into context

Spare copies of this kept in class. Just ask your teacher if you need one.

¿A quién sigues? (pages 60–61):

¿A quién sigues en las redes sociales?	Who do you follow on social media?
Sigo ...	I follow ...
a artistas / cantantes latinos	artists / Latin singers
canales de cocina/*videojuegos	cooking/videogames channels
*vlogs de ...	... vlogs
*rutinas / estilo de vida / moda	routines / lifestyle / fashion

¿Desde hace cuánto tiempo?

Desde hace ...	For ...
un mes/año	a month/year
meses / (mucho) tiempo	months / a long time

¿Por qué te gusta?

Me gusta porque ...	I like it because ...
aprendo mucho	I learn a lot
quiero aprender más	I want to learn more
la música es mi vida	music is my life
los vídeos son divertidos/útiles/*virales	the videos are fun/useful/viral
soy aficionado/a al deporte	I am a fan ... of sport
a la música latina	of Latin music

¿A quién admiras?

*Admiro a ...	Who do you admire?
Lo/La sigo / *admiro porque ...	I admire ...
apoya a otras personas	I follow / admire him/her because ...
es un buen modelo de conducta	he/she supports other people
es una *inspiración para otros	he/she is a good role model
Lucha / Luchó por ...	he/she is an inspiration to others
los derechos de las personas transgénero	He/She fights/fought for ...
la igualdad de oportunidades	transgender rights
Fue ...	equal opportunities
la primera persona en ...	He/She was ...
participar / ganar ...	the first person to ...
El año pasado / Hace dos años ...	participate / win ...
participó en / ganó ...	Last year / Two years ago ...
	he/she participated in / won ...

¡Amigos para siempre! (pages 62–63):

¿Cómo es tu relación con tus amigos?	What is your relationship with your friends like?
¿Te llevas bien con tus amigos?	Do you get on well with your friends?
(No) Me llevo bien con ...	I (don't) get on well with ...
Me divierto mucho con ...	I have lots of fun with ...
Mi mejor amigo/a y yo ...	My best friend and I ...
Mis amigos/as y yo ...	My friends and I ...
nos llevamos *genial	get on really well/great
nos divertimos mucho juntos/as	have lots of fun together
porque ...	because ...
hacemos muchas cosas juntos/as	we do lots of things together
me hace(n) reír	he/she/they make(s) me laugh
me conoce(n) bien	he/she/they know(s) me well
puedo confiar en él/ella totalmente	I can trust him/her totally
siempre estamos juntos	we are always together
casi nunca nos peleamos	we hardly ever fight
puedo contar con él/ella/ellos/ellas (para todo)	I can count on him/her/them (for everything)
tenemos los mismos intereses	we have the same interests

¿Cómo es un buen amigo?

¿Cómo te ayuda tu mejor amigo/a?	What is a good friend like?
Mi mejor amigo/a ...	How does your best friend help you?
Un buen amigo / Una buena amiga ...	My best friend ...
te comprende	A good friend ...
te conoce bien	understands you
te hace reír	knows you well
te respeta	makes you laugh
me acepta como soy	respects you
te acepta como eres	accepts me as I am
te ayuda cuando tienes problemas	accepts you as you are
te apoya en lo bueno y en lo malo	helps you when you have problems
te da buenos consejos	supports you in the good and the bad
no te critica	gives you good advice
es fiel	does not criticise you
puede guardar un *secreto	is loyal
	can keep a secret

Así soy yo (pages 64–65):

¿Cómo eres?

¿Qué es **lo** más importante para ti?

Para mí, **lo** más importante es / son ...

mi familia / mi educación
mi cultura / mis derechos
mis amigos / **la amistad**
mi religión / mi **fe**

¿Qué cosas te interesan/
preocupan?

Las cosas que me interesan/
preocupan son ...

el amor / la **paz** / el planeta
la **justicia** / el futuro del
mundo

¿Cuáles son tus sueños?

Mi **objetivo**/sueño es ...

En el futuro voy a ...

ser jefe/a (de una compañía)
ser rico/a / tener éxito
luchar por un mundo mejor

What are you like?

What is the most important thing to you?

For me, the most important thing is ...

*my family / my education
my culture / my rights
my friends / friendship
my religion / my faith*

What things interest/worry you?

The things that interest/worry me are ...

*love / peace / the planet
justice / the future of the world*

What are your dreams?

My objective/dream is to ...

In the future I am going to ...

*be a/the boss (of a company)
be wealthy / be successful
fight for a better world*

¿Qué piensas de las redes sociales?

¿Qué es **lo** bueno/**lo** malo de las redes sociales?

Lo bueno/malo es que ...

causan *adicción/**presión**/
*acoso

causan problemas para dormir

son una gran *distracción

son buenas/útiles para ...

compartir fotos/vídeos/ideas
buscar información sobre ...

estar en contacto con tus
amigos

participar en la comunidad

expresarse

chatear con ...

escuchar / ver ...

What do you think about social media?

What is the good/bad thing about social media?

The good/bad thing is that ...

*it (social media) causes
addiction/pressure/bullying*

*it (social media) causes
sleeping problems*

*it (social media) is a big
distraction*

*it (social media) is good/
useful for...*

*sharing photos/videos/ideas
searching for information
about ...*

*being in touch with your
friends*

*participating in the community
expressing yourself*

chatting with ..

listening to / watching ...

Necesito ayuda, ¿qué puedo hacer? (pages 66–67):

¿Qué puedo hacer?

Mi problema es que ...

me siento / estoy ...

diferente / triste

solo/a / muy mal

no **me relaciono** con nadie

ignora todos mis mensajes

es muy negativo/a

me peleo mucho con él/ella

se ríen de mí

siempre me **critica**

What can I do?

My problem is that ...

I feel / I am ...

different / sad

alone/ very bad

I don't interact with anyone

*he/she ignores all my
messages*

he/she is very negative

I fight with him/her a lot

they laugh at me

he/she is always criticising me

Deberías ...

Podrías ...

Es importante/necesario ...

limitar el tiempo en línea

organizar actividades

apoyar a tu familia

buscar ayuda **profesional**

explicarles cómo **te sientes**

expresar tus **sentimientos**

hablar con él/ella/ellos/
ellas cara a cara

crear nuevas *rutinas

Tienes que ser fuerte.

You should ...

You could ...

It is important/necessary to ...

limit your time online

organise activities

support your family

seek professional help

*explain to them how you
feel*

express your feelings

*speak to him/her/them face
to face*

create new routines

You have to be strong.

Some verbs for describing relationships are **reflexive** in Spanish. Watch out for those that are also stem-changing in the present tense, such as **sentirse**.

Present tense	pelearse (to argue/fight)	sentirse → ie (to feel)
(yo)	me peleo	me <u>s</u> iento
(tú)	te peleas	te <u>s</u> ientes
(él/ella/usted)	se pelea	se <u>s</u> iente
(nosotros/as)	nos peleamos	nos sentimos
(vosotros/as)	os peleáis	os sentís
(ellos/ellas/ustedes)	se pelean	se <u>s</u> ienten

Other reflexive verbs include:

relajarse (to relax)

llevarse (to get on)

relacionarse (con) (to relate to / interact with)

casarse (con) (to get married to)

separarse (to split up)

reírse → **i** (to laugh)

divertirse → **ie** (to have fun)

Escribir

1

Translate these sentences into Spanish.

Example: 1 Mi padrastro y yo no nos ...

- 1 My stepdad and I don't get on well and we argue a lot.
- 2 I get on very well with my best friend. We never argue.
- 3 I relax with my family when I go on holiday.
- 4 I feel good when I'm with my friends because we have a lot of fun.
- 5 Friendship is important for me and I relate well to all my friends.
- 6 I have a lot of fun with my friends because we laugh a lot when we are together.

9. Customer Needs

For a business to be successful, it must understand what customers need. There are six main areas to consider.

Area of Consideration	Why?
Price	For most consumers, most of the time, price is a crucial factor when considering purchasing a product. Pricing a product too high will put consumers off, pricing a product too low may lead the consumers to question the quality of the product and look to competitors.
Quality	Consumers will always consider the quality of a product when purchasing it. Products that lack quality and durability may be rejected by consumers for more reliable products
Choice	Consumers love choice, even though it can sometimes be hard to make decisions in the face of 'too much' choice.
Convenience	Consumers want easy access and to not travel <u>to</u> far. Businesses will need a full range of stock, short ques at checkouts and a clearly laid out store/website to give the customers a convenient experience.
Being efficient and reliable	Customers expect consistently good value for their own time and good customer service. Consumers expect high standards to meet every time they use the goods/services provided.
Providing great design	Many customers value design and style above price. They want clothes that make them look and feel great, cosmetics that make them look older – or younger – and cars that make them feel successful. Product design can be one way that businesses meet the needs of their customers.

10. Customer Needs

Term	Definition
Choice	Giving customers options and increasing the chance that the product will be perfect for the tastes/habits of one type of customer.
Convenience	Making life easier for customers, perhaps by a great location or a product that saves time in preparation or consumption.
Identifying Customers	Finding out who they are: their age, gender, incomes, where they live and what they want
Quality	to a customer quality means getting what they want at a good standard of manufacture or perhaps better than expected; some companies use the term 'customer delight'.
Understanding Customers	Learning why customers do what they do, making it easier to see how to make a product that better suits them.

11. Market Research

There are four main areas where market research can prove useful:

Area	Why?
To identify and understand customer needs	For any Business, understanding the needs of customers is important. Employing market research to finds is well worth the time of a business
To identify gaps in the market	Market research along with market maps show which customer requirements are covered and which are not.
To reduce risks	Market research reduces risk in two ways: • Market research clarifies whether there is demand for a product • Whether the market needs new products

9. Customer Needs

For a business to be successful, it must understand what customers need. There are six main areas to consider.

Area of Consideration	Why?
Price	
Quality	
Choice	
Convenience	
Being efficient and reliable	
Providing great design	

10. Customer Needs

Term	Definition
Choice	
Convenience	
Identifying Customers	
Quality	
Understanding Customers	

11. Market Research

There are four main areas where market research can prove useful:

Area	Why?
To identify and understand customer needs	
To identify gaps in the market	
To reduce risks	

12. Market Research – Methods of Research

Term	Definition
Focus Group	A group discussion among people selected from the target market; it draws on psychology to provide qualitative insights into consumer attitudes
Primary Research	Research conducted first-hand; it is tailored to a company's specific need, for example a quantitative sales estimate for a brand-new chocolate bar.
Qualitative Data	In depth research into the opinions and views of a small group of potential or actual customers; it is non-numerical and can provide useful insight into why consumers buy what they buy.
Quantitative Data	Factual and numerical research to provide statistically reliable results, for example a survey of 500 people aged 15-24 years.
Secondary Research	When a company uses research that has already been carried out by another organisation.

13. Market Segmentation – How is the market segmented

Ways the market is segmented	Explanation
Location	Customers located in the same area will share tastes and habits. The menu for McDonalds is different in every country considering national tastes
Income	Customers with different incomes will have different tastes and desires. Customers with high incomes are more likely to purchase more luxury items
Lifestyle	Whether rich or poor, young or old some people are simply different. Different lifestyles manifest different needs.
Age	People of different ages have different preferences and different desires.
Demographic Factors	Demographics are the characteristics of a population – different parts of a population have different needs e.g. gender, race and religion etc.

14. Market Mapping (Key Terms)

Term	Definition
Competition	Rival businesses operating in your market or market sector.
Gap in the market	An area on a market map where few or no existing brands operate, implying a business opportunity to fill an unmet consumer need
Market Map	Measuring where existing brands sit on a two-factor grid, for example young/old compared with high price/low price.

15. Why Map a Market?

Why?	Explanation
Helps you find a gap in the market	A market map can help a potential entrepreneur find an area within a market to exploit
Helps you find where you competitors are placed with a market	A market map can help a potential entrepreneur see where competitors are positioned within a market and furthermore ensure their own product is sufficiently unique.

16. The Competitive Environment

Why is competition good for markets?
Firms will need to provide good products and good services
Keeps prices competitive.
The market will provide more innovative products or services to break away from fierce competition from other firms

12. Market Research – Methods of Research

Term	Definition
Focus Group	
Primary Research	
Qualitative Data	
Quantitative Data	
Secondary Research	

13. Market Segmentation – How is the market segmented

Ways the market is segmented	Explanation
Location	
Income	
Lifestyle	
Age	
Demographic Factors	

14. Market Mapping (Key Terms)

Term	Definition
Competition	
Gap in the market	
Market Map	

15. Why Map a Market?

Why?	Explanation
Helps you find a gap in the market	
Helps you find where you competitors are placed with a market	

16. The Competitive Environment

Why is competition good for markets?

1. Product (Part of the Marketing Mix)

When designing a new product, the key is to design a product that matches the needs or wants of your chosen target market.

Every product needs the right balance between:

Product strategy	Explanation
Economic Manufacture	Making sure that the design of the product to be made cost effectively. A complex or expensive design can lead to increased costs.
Function	The design of the product is crucial. The product must work/function effectively
Aesthetics	How much does the design of the product appeal to the senses. When designing a <u>product</u> it is crucial to consider the way it looks

2. Product (Key Terms)

At the heart of the marketing mix is the product

Term:	Definition:
Product Differentiation	The extent to which consumers see your product as being different from its rivals
Product Life Cycle	The theory that every product goes through the same four stages of introduction, growth, maturity and design

4. Ways to extend the Product Life Cycle of a Product

Idea:	Explanation
Find new uses for the product	If a product can be used for multiple purposes, ensure that your target audience is aware of this
Change the appearance, format or packaging	Changing the appearance of a product can give it a new lease of life and allow the customer is perceive it as new again.
Encourage use of the product on more occasions	If a product can be used for multiples different <u>occasions</u> make sure the customer base is aware of this
Adapt the Product	Continue to make small adaptations to products to improve the quality of the product on offer.

**3. Stages of the Product Life Cycle**

Term:	Explanation:
Introduction	First a company needs to spend time researching the product and the marketplace. The product will be developed, tested, and launched.
Growth	At this stage the product becomes known in the market. At this stage customer awareness increases, prices will still be high.
Maturity	At this point the market may become saturated as 'me too' products are launched into the market. Advertising is increasing to remind consumers about the quality of the product. Brand image needs reinforcing with its customers. The market is highly competitive, and prices are lower as a result
Decline	The product's sales and profit's start to fall. The product is no longer offering what customers want or new technology has made the product obsolete.

1. Product (Part of the Marketing Mix)

When designing a new product, the key is to design a product that matches the needs or wants of your chosen target market.
Every product needs the right balance between:

Product strategy	Explanation
Economic Manufacture	
Function	
Aesthetics	

2. Product (Key Terms)

At the heart of the marketing mix is the product

Term:	Definition:
Product Differentiation	
Product Life Cycle	

3. Stages of the Product Life Cycle

Term:	Explanation:
Introduction	
Growth	
Maturity	
Decline	

4. Ways to extend the Product Life Cycle of a Product

Idea:	Explanation
Find new uses for the product	
Change the appearance, format or packaging	
Encourage use of the product on more occasions	
Adapt the Product	



5. Promotional Strategy (Part of the marketing mix)

Promotional strategy is the plan for how to communicate effectively with customers in order to meet sales revenue targets.

Promotional Strategy:	Explanation:
Advertising	Advertising is how a business promotes its products and communicates with its customers.
Sponsorship	Sponsorship is where a business pays to have a brand or company name attached to an activity that has credibility with its customers.
Branding	Branding is a way that businesses can give their products an identity that appeals to its target audience.
Product Trials	A product trial means giving potential customers a free taste of a new product. This may entice new customers.
Special Offers	Businesses can use special offers such as 'buy one get one free' to entice customers to purchase their products.
Using Technology	In recent years, online advertising through social media and other platform such as websites and e-newsletters has become commonplace for firms.

6. Pricing Strategy

Pricing strategy is vital for any business – pricing your products can be the difference between business success and business failure.

Market Segment:	Pricing Strategy
Mass Market	In mass markets where both competition and customer consumption are high. These markets are generally characterised by low prices and very similar products.
Niche Markets	A niche market is based on a type of customer needs or wants something different to the majority. <u>Generally</u> these markets have few competitors but high prices.

Pricing at each stage of the Product Life Cycle

Introduction	Pricing at the introduction phase of the product life cycle in some cases will be low to entice new customers to sample the product.
Growth	Once a product is established within a market and has a customer base, businesses will sometimes increase prices to increase revenue.
Maturity	When product growth is at an end, new pricing decisions may be needed. Business will ensure that pricing is competitive to ensure continuous revenue, other firms may decide that the brand may be in irreversible decline and will keep prices high to make a short-term profit.
Decline	When sales have made a decisive step downwards, firms tend to lower prices to ensure a steady stream of revenue. <u>However</u> some firms with a loyal customer base may decide to increase prices <u>in an attempt to gain short term profits</u> .

5. Promotional Strategy (Part of the marketing mix)

Promotional strategy is the plan for how to communicate effectively with customers in order to meet sales revenue targets.

Promotional Strategy:	Explanation:
Advertising	
Sponsorship	
Branding	
Product Trials	
Special Offers	
Using Technology	

6. Pricing Strategy

Pricing strategy is vital for any business – pricing your products can be the difference between business success and business failure.

Market Segment:	Pricing Strategy
Mass Market	
Niche Markets	

Pricing at each stage of the Product Life Cycle

Introduction	
Growth	
Maturity	
Decline	

GCSE Business. Paper 2.

7. Placing Strategy

This element of the marketing mix is about how to get the product from the producer to the customer. There are three main distribution channels – traditional, modern and direct.

Type of Distribution	Explanation:
Direct Distribution	This is where a product is distributed directly from the producer to the consumers. An example of this is buying things directly from firms on the internet.
Modern Distribution	This method is common in the grocery sector, where producers will deliver to distribution depots and then the products will be taken to stores to be sold. This method became popular when supermarkets became common place in the 1980s
Traditional Distribution	This method, in the first instance involves a wholesaler buying goods directly from the producers. From <u>their</u> the wholesaler will sell the products directly to firms who will then sell onto the consumers.

8. Placing Strategy – Key Terms

Term	Definition
Distribution	How ownership changes as a product goes from producer to customer
E-Tailer	An electronic retailer; in other <u>words</u> selling products electronically, either by e-commerce or, more likely these days, mobile commerce.
Retailer	A shop or chain of shops, usually selling from a building in a high street or shopping centre

9. Marketing mix and Business Decisions – Key Terms

Business decisions are always about the future. So, when the marketing mix is being used to inform and carry out business decisions.

Term	Definition
Budget	A ceiling on the amount of money that can be spent; a marketing budget of £1 million means the marketing manager can spend up to that figure, but no more.
Informed Decisions	Evidence that can be used to make a better decision; a company can gain a better understanding of <u>it's</u> customers through the 4p's, which helps in decision making

GCSE Business. Paper 2.

7. Placing Strategy

This element of the marketing mix is about how to get the product from the producer to the customer. There are three main distribution channels – traditional, modern and direct.

Type of Distribution	Explanation:
Direct Distribution	
Modern Distribution	
Traditional Distribution	

8. Placing Strategy – Key Terms

Term	Definition
Distribution	
E-Tailer	
Retailer	

9. Marketing mix and Business Decisions – Key Terms

Business decisions are always about the future. So, when the marketing mix is being used to inform and carry out business decisions.

Term	Definition
Budget	
Informed Decisions	



Year 10 Food & Nutrition Term 2



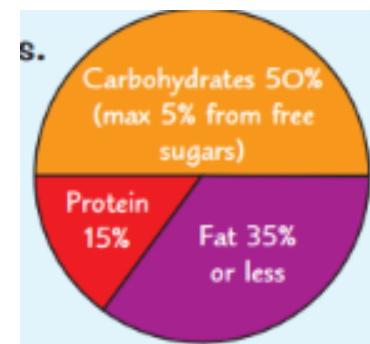
What we are learning this term:

A. Healthy Eating Guidelines B. Nutritional Needs of Different Age Groups C. Energy Needs and Portion Sizes D. Diet-Related Health Problems

A. Healthy Eating Guidelines		B. Nutritional Needs of Different Age Groups		C. Energy Needs & Portion Sizes	
	5 portions of fruit and vegetables a day – making up 1/3 of daily food intake		- Still growing so need a lot of energy Young children need small and frequent meals - Lots of calcium Stress during teenage years can affect eating habits	BMR	Basal Metabolic Rate is the amount of energy needed to live e.g. breathing . It's affected by many factors; age, sex, weight, exercise
	Using unsaturated oils and spreads , and not often		Stop growing and nutritional needs don't vary much - Should focus on maintaining a balanced and healthy diet	PAL	Physical Activity Level measures how active you are. A higher PAL means more active .
	Protein: lean cuts and unprocessed meat best, plus 2 portions of fish per week (1 oily)		- Muscle decreases and exercising is harder – diet may change Taste and smell changing can affect the enjoyment of food	Daily energy requirement (kcal) = BMR x PAL	
	Having some dairy or alternatives and trying lower fat options		- Males usually bigger/taller = more daily kcal needed Iron is lost during menstruation = higher iron requirements Bone density can be lost after the menopause = important to get lots of calcium and Vitamin D - Towards the end of pregnancy, the body needs 200 more kcal per day to support baby's growth Active humans will need more kcal and protein	To maintain a healthy weight, energy intake must be balanced:	
	1/3 of daily food intake being starchy carbs . Go for higher fibre/wholegrain options			Energy in > energy out = weight gain Energy in < energy out = weight loss	
	6-8 glasses of fluids a day (but no more than 1 being fruit juice)			Portion size: prepare the right amount e.g.	
	Eat less sugary, salty and fatty foods.				

D. Diet-Related Health Problems		
	Example of cause	Health Problems
Obesity	Eating lots of sugary and fatty foods	High blood pressure and cholesterol
Coronary Heart Disease	Eating lots of saturated fats	Blood clots and heart attacks
Anaemia	Not eating enough iron-rich food	Tiredness, heart palpitations
Type 2 Diabetes	Being overweight or obese / too much sugar	Kidney failure, poor eyesight
Rickets (children)	Not enough Vitamin D or Calcium	Soft bones may lead to bowed legs
Osteoporosis (old age)	Malnutrition and not enough Calcium	Loss of bone density, brittle bones break easily
Tooth Decay	Plaque build-up from eating too many sugary foods	Fillers, loss of teeth

Recommended ratio for energy sources:





Year 10 Food & Nutrition Term 2



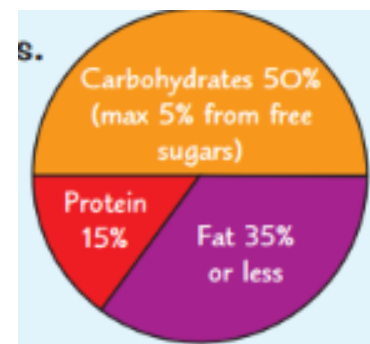
What we are learning this term:

A. Healthy Eating Guidelines B. Nutritional Needs of Different Age Groups C. Energy Needs and Portion Sizes D. Diet-Related Health Problems

A.		B.	Nutritional Needs of Different Age Groups	C.	Energy Needs & Portion Sizes
		Children & Teens		BMR	
				PAL	
		Adults		Daily energy requirement (kcal) = BMR x PAL	
				To maintain a healthy weight, energy intake must be balanced:	
		Elderly Adults		Energy in > energy out = weight gain	
				Energy in < energy out = weight loss	
		Other Factors		Portion size: prepare the right amount e.g.	

D.	Diet-Related Health Problems		
	Example of cause	Health Problems	
Obesity	Eating lots of sugary and fatty foods	High blood pressure and cholesterol	
Coronary Heart Disease	Eating lots of saturated fats	Blood clots and heart attacks	
Anaemia	Not eating enough iron-rich food	Tiredness, heart palpitations	
Type 2 Diabetes	Being overweight or obese / too much sugar	Kidney failure, poor eyesight	
Rickets (children)	Not enough Vitamin D or Calcium	Soft bones may lead to bowed legs	
Osteoporosis (old age)	Malnutrition and not enough Calcium	Loss of bone density, brittle bones break easily	
Tooth Decay	Plaque build-up from eating too many sugary foods	Fillers, loss of teeth	

Recommended ratio for energy sources:





Year 10 PRODUCT DESIGN Term 2



What we are learning this term:

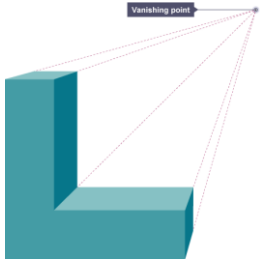
A. One-Point Perspective B. Two-point Perspective C. Isometric Drawing
D. Exploded Drawing E. Oblique Drawing F. CAD G. Orthographic Drawing

Design Strategies Introduction.

Design strategies are used to create technical drawings, to show an object in 3D on a 2D page. Perspective drawings show an object getting smaller in the distance. The rest are done to scale.

A. One-point Perspective Drawing

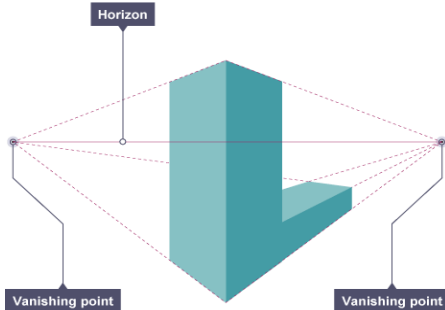
Single-point perspective shows an object from the front in a realistic way. The front view goes back towards a vanishing point on the horizon.



Commonly used by interior designers to show a view into a room.

B. Two-point Perspective Drawing

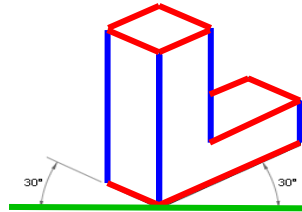
Two-point perspective shows an object from the side with two vanishing points. It gives the most realistic view of a product as it shows the item edge on, as we would see it. It is often used to produce realistic drawings of an object.



Commonly used by architects to show realistic building ideas.

C. Isometric Technical Drawing

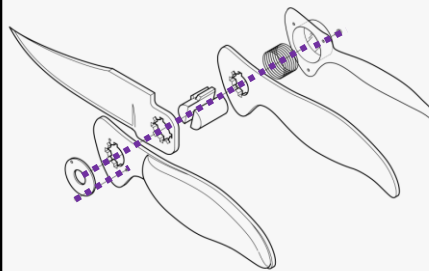
Made up of a series of parallel **vertical lines** and parallel **30-degree lines**. But no **horizontal lines**.



Used by architects and engineers to communicate their ideas to the client and manufacturer.

D. Exploded Technical Drawing

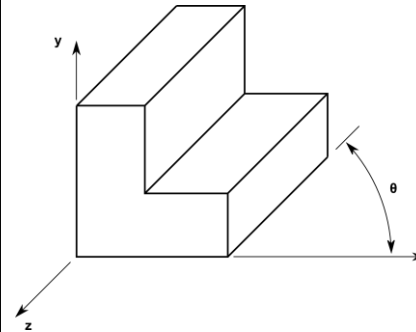
Exploded technical drawing is an Isometric drawing of all the parts and components of an object.



All parts are shown separately so you can see all aspects. **Dashed lines** indicate where everything goes and in what order.

E. Oblique Technical Drawing

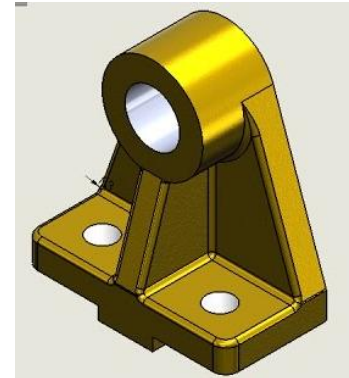
Consists of an object where the front view is drawn flat with height and width of the object drawn to the correct lengths. Diagonal lines are drawn at 45-degrees.



Commonly used by engineers for drafting ideas.

F. CAD (Computer Aided Design)

This is designing using a computer using a software such as 2D Design or Solidworks.



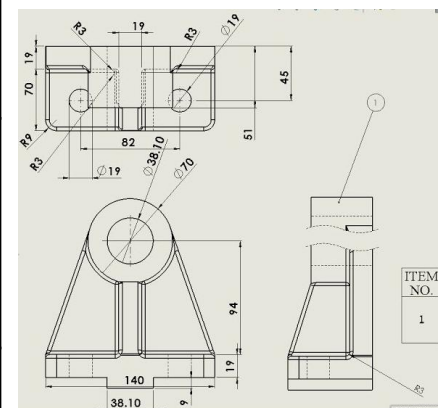
Commonly used to model, test and develop an idea before manufacture.

G. Orthographic Projection – 2D NOT 3D Drawing Strategy!

This shows 2D views of a 3D object from different angles – front, plan and end. Lines are dimensions have specific meaning to avoid confusion.

— Object Line
--- Hidden Line
- - - Center Line
= Dimension Line
--- Construction Line

Commonly used in industry to help the manufacturer understand the design.





Year 10 PRODUCT DESIGN Term 2



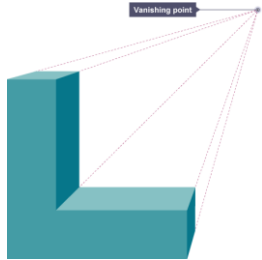
What we are learning this term:

- A. One-Point Perspective B. Two-point Perspective C. Isometric Drawing
D. Exploded Drawing E. Oblique Drawing F. CAD G. Orthographic Drawing

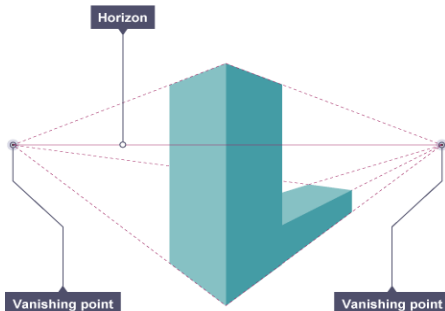
Design Strategies Introduction.

Design strategies are used to create technical drawings, to show an object in 3D on a 2D page. Perspective drawings show an object getting smaller in the distance. The rest are done to scale.

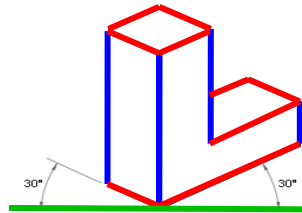
A. One-point Perspective Drawing



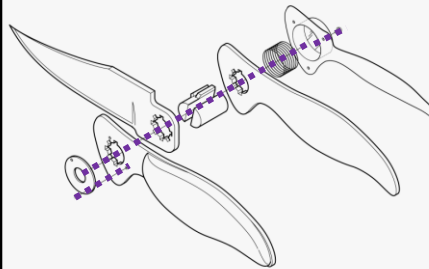
B. Two-point Perspective Drawing



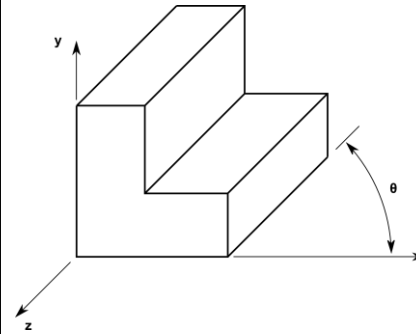
C. Isometric Technical Drawing



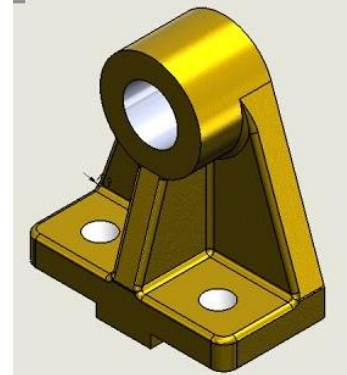
D. Exploded Technical Drawing



E. Oblique Technical Drawing

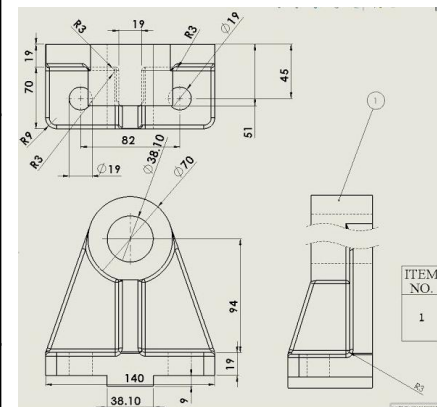


F. CAD (Computer Aided Design)



G. Orthographic Projection – 2D NOT 3D Drawing Strategy!

- Object Line
- - - Hidden Line
- · - Center Line
- ← Dimension Line
- Construction Line





What we are learning this term:

A. Health & Safety

B. Manufacturing processes

C. reading technical drawings

D. Tools & Equipment

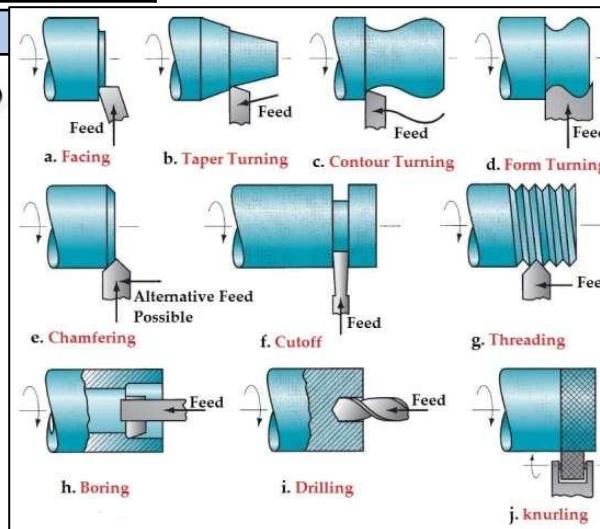
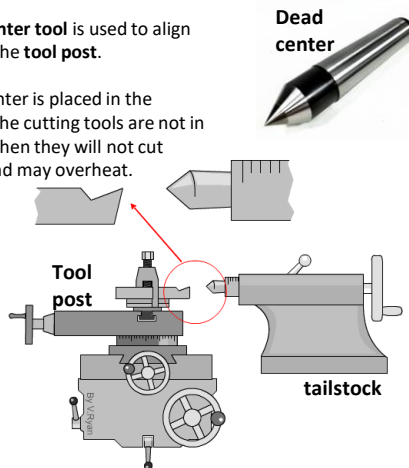


A.	Health & Safety
Risk Assessment	A risk assessment is the analysis of the risks involved when using equipment or performing a process.
Hazard – something that may harm someone. Risk – how likely a hazard is to happen. Control measure – actions taken to reduce the risk of harm	
Ejection hazard – material being thrown out of the machine toward the user	Entrapment hazard – the user being caught and pulled into the moving parts of the machine
Inhalation hazard – people in the vicinity of the hazard breathe in harmful dust or chemicals	Sharp force hazard – the user is cut, stabbed or scraped by the sharp material.
Slip, trip and fall hazards – common hazards caused by unclean or cluttered workspaces.	Blunt force hazard – a victim is crushed, hit or bruised by the blunt object. Major blunt trauma can cause fractures or internal bleeding.

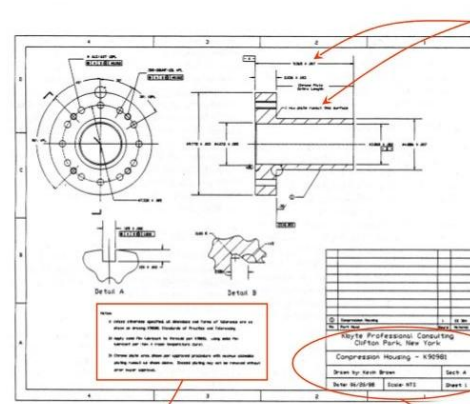
B. Manufacturing processes

The **dead center tool** is used to align the tools in the **tool post**.

The dead center is placed in the **tailstock**. If the cutting tools are not in line with it, then they will not cut efficiently and may overheat.



C. Reading technical drawings



Dimension & Notes

Technical drawings always include a border and title block to identify them and give the reader important information. You may also write notes on a technical drawing, if relevant.

The scale factor shows how big the real product is compared to the drawing.

TITLE WHEEL BEARING	
NAME John Smith	CHECKED [Signature]
VERSION 1.1	DATE 16/10/98
NO NEED TO MEASURE - ALL MEASUREMENTS IN MM	SCALE 1:1
ITI ENGINEERING	

The type of orthographic drawing is shown by this symbol.

D. Tools & Equipment

	External calliper – used for measuring the external dimensions of a workpiece
	Lathe tools – cutting tools for a range of functions. From left to right; Parting tool, right-hand cutting tool, threading tool, left-hand cutting tool
	Knurling tool - an attachment for the lathe that allows you to impress a diamond pattern into the material. Example shown here.
	Tap and die set – these tools are attached to wrenches and allow you to cut an internal or external thread (spiral) in a hole. The hole must be pre-drilled 0.5mm smaller than the intended size of the final hole.



What we are learning this term:

A. Health & Safety

B. Manufacturing processes

C. reading technical drawings

D. Tools & Equipment



A. Health & Safety

Risk Assessment

A risk assessment is the analysis of the risks involved when?

Hazard –
Risk –
Control measure –

Give an example of an Ejection hazard –

Give an example of an Entrapment hazard –

Give an example of an Inhalation hazard –

Give an example of a Sharp force hazard –

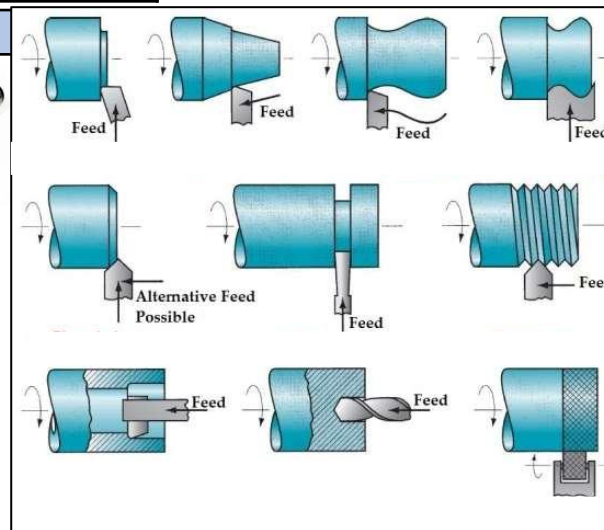
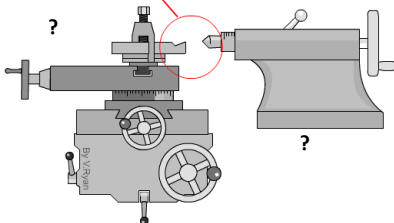
Give an example of Slip, trip and fall hazards –

Give an example of a Blunt force hazard –

B. Manufacturing processes

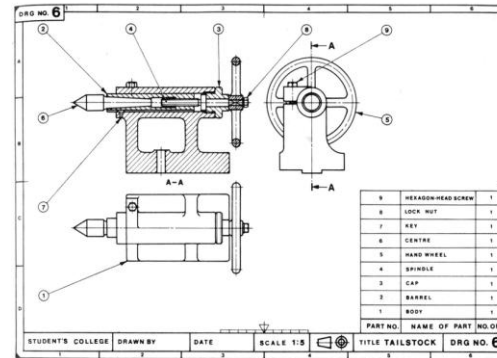
The tools in the

The dead center is placed in the . If the cutting tools are not then they will not cut efficiently and may



C.

Reading technical drawings



Task -Annotate this technical drawing

D. Tools & Equipment



– used for measuring the external dimensions of a workpiece



– cutting tools for a range of functions.
From left to right; tool, cutting tool, tool, cutting tool



- an attachment for the lathe that allows you to impress a pattern into the material. Example shown here.



– these tools are attached to wrenches and allow you to cut an internal or external (spiral) in a hole. The hole must be pre-drilled smaller than the intended size of the final hole.

What we are learning this term:	
A. Key words B. What are the main life stages C. What are the 4 areas of growth and development (PIES)? D. How do Humans develop physically (P)?	
A.	Key words for this Unit
Characteristics	Something that is typical of people at a particular life stage.
Life stages	Distinct phases of life that each person passes through.
Growth	Increased body size such as height, weight.
Development	Involves gaining new skills and abilities such as riding a bike.
Gross motor development (G)	Refers to the development of large muscles in the body e.g. Legs
Fine motor development (F)	Refers to the development of small muscles in the body e.g. Fingers
Language development	Think through and express ideas
Contentment	An emotional state when people feel happy in their environment, are cared for and well loved
Self-image	How individuals see themselves or how they think others see them
Self-esteem	How good or bad an individual feels about themselves and how much they value their abilities.
Informal relationships	Relationships formed between family members
Friendships	Relationships formed with people we meet in the home or in situations such as schools, work or clubs
Formal relationships	relationships formed with non-family/friends – such as teachers and doctors.
Intimate relationships	romantic relationships.

B	What are the main life stages?		C	What are the 4 areas of growth and development (PIES)?
Age Group	Life Stage	Developmental Characteristics and Progress		
0-2 years	Infancy	Sill dependent on parents but growing quickly and developing physical skills.	Physical Development (P) 	P = growth patterns and changes in the mobility of the large and small muscles in the body that happen throughout life.
3-8 years	Early Childhood	Becoming increasingly independent, improving thought processes and learning how to develop friendships.		
9-18 years	Adolescence	Experiencing puberty, which bring physical and emotional changes.	Intellectual Development (I) 	I = how people develop their thinking skills, memory and language.
19-45 years	Early Adulthood	Leaving home, making own choices about a career and may start a family.	Emotional Development (E) 	E = how people develop their identity and cope with feelings.
46-65 years	Middle Adulthood	Having more time to travel and take up hobbies as children may be leaving home; beginning of the aging process.		
65+ years	Later Adulthood	The aging process continues, which may affect memory and mobility.	Social Development (S) 	S = describes how people develop friendships and relationships.

D.	How do humans develop physically (P)?
0-2	- Gross Motor Development (G) = life head, roll over, sit unaided, walk holding onto something, walk unaided, climb stairs, kick and throw, walk upstairs, jump. - Fine Motor Development (F) = hold a rattle for short time, reach for an item, pass item from one hand to other, hold between finger and thumb, scribble, build a tower, use a spoon, draw lines and circles, turn page of a book.
3-8	- G = ride a tricycle, catch a ball with two hands, walk backwards and step to the side, bounce a ball, run on tiptoes, ride a bike, catch a ball with one hand, balance along a thin line. - F = hold a crayon to make circles and lines, thread small beads, copy letters and shapes with a pencil, make detailed models with construction bricks, joined up writing, use a needle to sew.
9-18	- Girls = puberty starts at 10-13 years, breasts grow, hips widen, menstruation begins, uterus and vagina grow. - Boys = voice deepens, muscles and strength increase, erections, facial hair, produce sperm. - Both = pubic and underarm hair, growth spurts.
19-45	- Physically mature, sexual characteristics are fully formed, peak of physical fitness, full height, women at most fertile. - Later in the life stage people may put on weight, hair turn grey and men may lose hair, women's menstrual cycle was slow down
46-65	- People may put on weight, hair turn grey and men may lose hair, women's menstrual cycle was slow down. - Women go through the menopause – when menstruation ends and they can no longer become pregnant. - Men may continue to be fertile throughout life but decrease in sperm production in this life stage.
65+	- Women's hair becomes thinner, men may lose most of their hair, skin loses elasticity and wrinkles appear, nails hard and brittle, bones weaken, higher risk of contracting infections disease and illness. - Stamina, reaction time, muscle and senses (hearing, sight, taste) all reduce.

What we are learning this term:	
A. Key words B. What are the main life stages C. What are the 4 areas of growth and development (PIES)? D. How do Humans develop physically (P)?	
A.	Key words for this Unit
Characteristics	
Life stages	
Growth	
Development	
Gross motor development (G)	
Fine motor development (F)	
Language development	
Contentment	
Self-image	
Self-esteem	
Informal relationships	
Friendships	
Formal relationships	
Intimate relationships	

B	What are the main life stages?		C	What are the 4 areas of growth and development (PIES)? Explain them.	
Age Group	Life Stage	Developmental Characteristics and Progress			
0-2 years			Physical Development (P) 		
3-8 years					
9-18 years			Intellectual Development (I) 		
19-45 years			Emotional Development (E) 		
46-65 years					
65+ years			Social Development (S) 		

D.	How do humans develop physically (P)?
0-2	
3-8	
9-18	
19-45	
46-65	
65+	

What we are learning this term:		F.	How do humans develop emotionally (E)?	
E. How do humans develop intellectually (I)? F. How do humans develop emotionally (E)? G. How do humans develop socially (S)?			<u>Infancy and Early Childhood</u>	<u>Adolescence and adulthood</u>
E. <u>How do humans develop intellectually (I)?</u>			<u>Bonding and Attachment</u> Bonding and attachment describe the emotional ties an individual forms with others. It starts in the first year of life between infants and their main carer because that person fulfils the infants needs which makes them feel safe and secure.	<u>Self-image and Self-esteem</u> Self-image is heightened during adolescence because of the physical changes we experience. Our self-esteem can change from day to day based on a variety of factors including employment and health status.
Infancy 	At birth brains are already well developed. Infants use all of their senses to learn about the world around them. Infancy is a time of rapid intellectual development. At 3 months infants can remember routines. At 9-12 months infants are developing their memory. At 12 months to 2 years infants understand processes and how things work. Language begins to develop during this stage.		<u>Security</u> For infants and young children, security is mainly the feeling of being cared for, being safe and loved – it is closely linked with attachment.	<u>Security</u> Adolescence may feel insecure because of puberty. Adults may feel insecure about relationships, job security of income. Later in life adults may feel insecure about staying in their own home or going into a care home. Feeling secure helps us cope better with everyday situations.
Early childhood 	At 3-4 years of age children become more inquisitive and enjoy exploring objects and materials. They ask lots of questions and enjoy solving simple problems. At 5-6 years old children's memory is becoming well developed. This helps them to talk about the past and anticipate the future.		<u>Contentment</u> Infants and young children are content if they have had enough food, love, are clean and dry and all other needs are met.	<u>Contentment</u> When people feel discontented with aspects of their life – for example, relationships or work – their emotions can be negatively affected.
Adolescence 	During this time abstract thought is developed – thinking logically and solving complex problems are possible by the end of this life stage. Adolescents may find it difficult to understand the consequences of their actions but they are developing empathy – seeing things from another's point of view.		<u>Independence</u> Independence is to care for yourself and make your own decisions. Infants are completely dependent on their carer. As children enter early childhood they develop more independence – feed self and get dressed. However, children still need a lot of help from their carer.	<u>Independence</u> Adolescence are dependent on their parents but are beginning to enjoy more independence and freedom to make their own choices. Adults enjoy living independently and controlling their own lifestyle and environment. Later in adulthood people become more dependent on others again.
		G.	How do humans develop socially (S)?	
		Life Stage	Types of relationships and social development	
		Infancy	Solitary Play - From birth to 2 years, infants tend to play alone although they like to be close to their parent or carer; they may be aware of other children but not play with them.	
		Early childhood	- Parallel Play - From 2 to 3 years, children enjoy playing next to other children but are absorbed in their own game; they are not socialising or playing with other children. - Cooperative or social play – from 3 years upwards, children start to play with other children; they have developed social skills that help them to share and talk together; they often make up games together, such as being a shopkeeper and customer.	
		Adolescence	- People become more independent and build more informal and formal relationships. - Social development closely linked to emotions. - Often strongly influenced by peers – 'peer group pressure'.	
		Early adulthood	- Increased independence means greater control of decisions about informal relationships. - People may be developing emotional and social ties with partners and their own children. - Social life often centred on the family but social skills are required to build and maintain formal relationships.	
		Middle adulthood	- Children have often left home, but there are likely to still be strong family relationships. - Social circles may expand through travel, spending more time on hobbies or joining new groups.	
		Later adulthood	- Retired by this stage and so may enjoy more social time with family and friends or join new groups. - However, later in the life stage people may begin to feel isolated if they struggle to get out or if partners and friends pass away.	
Early and Middle Adulthood 	By these life stages most adults have a good range of general knowledge. They use this knowledge and experience to solve problems that they come across in their personal and work lives.			
Later adulthood 	During this life stage people continue to learn and develop intellectually, however, their speed of thinking and memory may decline. This may affect their ability to think through problems and make logical decisions.			

What we are learning this term:		F.	How do humans develop emotionally (E)? Explain each.	
E. How do humans develop intellectually (I)? F. How do humans develop emotionally (E)? G. How do humans develop socially (S)?		<u>Infancy and Early Childhood</u>		<u>Adolescence and adulthood</u>
E. <i>How do humans develop intellectually (I)?</i>		<u>Bonding and Attachment</u>		<u>Self-image and Self-esteem</u>
Infancy 		<u>Security</u>		<u>Security</u>
		<u>Contentment</u>		<u>Contentment</u>
		<u>Independence</u>		<u>Independence</u>
Early childhood 		G.		How do humans develop socially (S)?
		Life Stage	Types of relationships and social development	
		Infancy		
Adolescence 		Early childhood		
		Adolescence		
		Early adulthood		
Early and Middle Adulthood 		Middle adulthood		
		Later adulthood		
Later adulthood 				

What we are learning this term:	
H.	Key words
I.	How do physical factors affect development?
J.	How does lifestyle affect development?
K.	How do social and cultural factors affect development?
L.	How do relationships and isolation affect development?
M.	How do economic factors affect development?

H	Key words:
Genetic inheritance	Genes the person inherits from their parents
Genetic disorders	Health conditions that are passed on from parent to child through their genes. e.g. cystic fibrosis
Lifestyle Choices	Include the food you eat and how much exercise you do. They also include whether you smoke, drink alcohol or take illegal drugs.
Appearance	The way that someone or something looks
Factor	A circumstance, fact, or influence that contributes to a result
Gender role	The role and responsibilities determined by a person's gender.
Culture	ideas, customs, and social behaviour.
Role models	Someone a person admires and strives to be like.
Social Isolation	Lack of contact with other people
Material possessions	Things that are owned by an individual
Economic	To do with person's wealth and income.

I.	How do physical factors affect development?	
	<u>Genetic Disorders</u>	<u>Disease and Illness</u>
Physical Development	A person's physical build can affect physical abilities. Inherited diseases may affect strength and stamina needed to take part in exercise.	May affect the rate of growth in infancy and childhood. Could affect the process of puberty. Could cause tiredness and/or mobility problems. Could limit or prevent participation in physical activity.
Intellectual Development	Some genetically inherited diseases may result in missed schooling, or have a direct impact on learning – conditions such as Edward's syndrome impact learning.	School, college, university, work or training could be missed. Memory and concentration could be affected.
Emotional Development	Physical appearance affects how individuals see themselves (self-image), and how others respond to them impacts on their confidence and wellbeing.	May cause worry and/or stress. Individuals may develop negative self-esteem. Could lead to feelings of isolation.
Social Development	Physical characteristics or disease may affect opportunities or confidence in building friendships and becoming independent.	May cause difficulty in having opportunities to socialize with other and build wider relationships.

J.	How does lifestyle affect development?	
Lifestyle choices include; diet, exercise, alcohol, smoking, sexual relationships and illegal drugs, appearance.		
Positive lifestyle choices lead to: • Healthy hair, skin, nails and teeth • Positive self-image • Energy and stamina • Good health • Emotional security 	Negative lifestyle choices lead to: • Being overweight or underweight • Lack of energy • Ill health • Negative self-image • Sexually transmitted diseases (STDs) • Unplanned pregnancy 	
Our appearance includes: body shape, facial features, hair and nails, personal hygiene and our clothing. Our appearance can affect the way we view ourselves- self-image		
Positive self-image: • Feel good about yourself. • Healthy hair, skin, nails and teeth • Big social circle. • High self-esteem. • High self-confidence. 	Negative self-image • Low self-esteem • Low self-confidence • Can lead to eating disorders e.g. anorexia • Can lead to anxiety or depression • Can lead to self-harm • Negative impact on building relationships- social circle decreases. 	

What we are learning this term:	
H.	Key words
I.	How do physical factors affect development?
J.	How does lifestyle affect development?
K.	How do social and cultural factors affect development?
L.	How do relationships and isolation affect development?
M.	How do economic factors affect development?

H	Key words:
Genetic inheritance	
Genetic disorders	
Lifestyle Choices	
Appearance	
Factor	
Gender role	
Culture	
Role models	
Social Isolation	
Material possessions	
Economic	

I.	How do physical factors affect development?	
	<u>Genetic Disorders</u>	<u>Disease and Illness</u>
Physical Development		
Intellectual Development		
Emotional Development		
Social Development		

J.	How does lifestyle affect development?	
Lifestyle choices include; diet, exercise, alcohol, smoking, sexual relationships and illegal drugs, appearance.		
<u>Positive lifestyle choices lead to:</u> • • • • • • 		<u>Negative lifestyle choices lead to:</u> • • • • • • 
Our appearance includes: body shape, facial features, hair and nails, personal hygiene and our clothing. Our appearance can affect the way we view ourselves- self-image		
<u>Positive self-image:</u> • • • • • • 		<u>Negative self-image</u> • • • • • • 



K	How do social and cultural factors affect development
Development can be influenced by the persons culture or religion because it affected their: • Values: how they behave • Lifestyle choices: diet, appearance	
<u>Positive affects of a persons culture/religion:</u> • A sense of security and belonging from sharing the same values and beliefs with others. • Good self-esteem through being accepted and valued by others	<u>Negative affects of a persons culture/religion:</u> • Feeling discriminated against by people who do not share their religion/culture which leads to low self-image • Feeling excluded and isolated because their needs like diet, are not catered for.
Community refers to: local area where people live, school, religious group or hobby clubs. They have common values and goals.	
<u>Belonging to a community:</u> • Brings sense of belonging essential for emotional development. • Building and maintaining relationships- social development • Feeling of security. • Increases self-image and self-confidence	<u>Not belonging to a community:</u> • Minimal contact with others- isolation • Anxiety leading to depression • Making negative lifestyle choices • Feeling less secure • Difficulty in building relationships • Slow self-image and self-confidence
Traditionally, men and women had distinctive responsibilities and expectations which for their gender called gender roles. However, nowadays UK equality legislation stops people being discriminated against because of their gender.	
What happens when people face discrimination because of gender: • They might be excluded from a group • They may be refused promotion at work • They may be expected to carry out a particular role • They may be paid less.	

What we are learning this term:	
K. How do social and cultural factors affect development? L. How do relationships and isolation affect development? M. How do economic factors affect development?	
L	How do relationships and isolation affect development?
1	In adolescence, young people often argue with parents because they want more independence- negative affect on family relationships- can lead to isolation from them.
2	In later life, older people might need to rely on their children for support. This then has a positive affect on their development because all their need are catered for.
3	Relationships are important because they provide emotional security, contentment and positive self- esteem.
4	The breakdown of personal relationships can have a negative effect on persons PIES development: Low self-esteem, loss of confidence, stress.
5	Isolation can happen when individuals do not have the opportunity of regular contact with others. They have no one to share their feelings, thoughts and worries with resulting in feeling insecure and anxious.
6	Isolation can happen because they live alone, are unemployed or retired, are discriminated against or have an illness or a disability.
7	People have role models- infants learn by copying others, and adolescence base their identity on their role models. Role models can influence how people see themselves compared to others and their lifestyle choices can be positive or negative.

M	How do economic factors affect development	
	Having enough money gives individuals and their families feeling of content and security	Not having enough money causes stress and anxiety.
	Having enough money means that the whole family is eating healthy.	Not having enough money can mean that the family is not about to eat well balanced diet, and this has a negative effect on their physical development
Elderly people rely on state pension to live which is not enough and have to cut down on travel, shopping, bills, therefore it speeds their aging process and lead to health decline.		
	<u>Living in good housing with open spaces:</u> • Feeling good about themselves • Be more likely to stay healthy, • Space to take exercise • Feel safe and secure • Warmth	<u>Living in a poor housing with cramped and damp conditions:</u> • Have low self-esteem and self-image • Be more likely to experience ill health • Be less likely to exercise • Anxious and stressed.
	Material possession like a new phone or coat has a positive effect on the persons development because they might have more friends as they look nicer, high self-image.	Not having a phone or the newest trainers can have a negative affect in the persons self-image and self-esteem. They might feel isolated from others.



K	How do social and cultural factors affect development
Development can be influenced by the persons culture or religion because it affected their: Values: how they behave Lifestyle choices: diet, appearance	
<u>Positive affects of a persons culture/religion:</u>	<u>Negative affects of a persons culture/religion:</u>
Community refers to:	
<u>Belonging to a community:</u>	<u>Not belonging to a community:</u>
Traditionally, men and women had distinctive responsibilities and expectations which for their gender called gender roles . However, nowadays UK equality legislation stops people being discriminated against because of their gender.	
What happens when people face discrimination because of gender:	

What we are learning this term:
K. How do social and cultural factors affect development? L. How do relationships and isolation affect development? M. How do economic factors affect development?

L	How do relationships and isolation affect development?
1	
2	
3	
4	
5	
6	
7	

M	How do economic factors affect development
Having enough money....	Not having enough money
Having enough money means that....	Not having enough money can mean that...
Elderly people rely on state pension to live which is not enough and have to cut down on travel, shopping, bills, therefore it speeds their aging process and lead to health decline.	
<u>Living in good housing with open spaces:</u>	<u>Living in a poor housing with cramped and damp conditions:</u>
Material possession like a new phone or coat has a positive effect on the persons development because.....	Not having a phone or the newest trainers can have a negative affect on.... Because....

What we are learning this term:	
N. What are life events? O. How do people deal with life events? P. How is dealing with life events supported?	
N.	What are life events?
Life Events	Life events are expected or unexpected events that can affect development. Examples include starting nursery, getting married or becoming ill.
Expected Life Events	Expected life events are life events that are likely to happen. Examples include starting primary school aged four and secondary school aged 11.
Unexpected Life Events	Unexpected life events are events which are not predictable or likely to happen. Examples could include divorce and bereavement (the death of a loved one).
Physical Events	Physical events are events that make changes to your body, physical health and mobility. Examples include illnesses such as diabetes and injuries and accidents such as car accidents.
Relationship Changes	Relationship changes could be new relationships such as the birth of a sibling, a new friendship or romantic relationship. Relationship changes can also be changes to existing relationships such as divorce.
Life Circumstances	Life circumstances are different situations that arise in our life that we must deal with. Examples include redundancy (losing a job), moving house or retirement (finishing work in later adulthood).

O.	How do people deal with life events?
Individual	- The effects of life events vary from person to person based on how they deal with their new situation. - Some people react to able to react to life events positively, others find it more difficult due to a range of factors.
Factors	Factors that may affect how people cope with life events: age, other life events happening at the same time, the support they have, their disposition (their mood, attitude and general nature), their self-esteem, their resilience (how quickly they recover).
Adapting	- Adapt – to adjust to new conditions or circumstances. - Expected on unexpected life events can often force people to make changes to their lives. Individuals must find their own way to adapt to the changes that life throws at them.
Resilience	- Resilience – a person's ability to come to terms with, and adapt to, events that happen in life. - Resilience is stronger in people who have a positive outlook on life, accept that change happens, has supportive family and friends and plans for expected life events.
Time	- Sometimes people need a long time to adapt to unexpected life events. - It can take time for people to move on from and accept difficult changes in their life.

P.	How is dealing with life events supported?
Types of Support	How this helps individuals deal with life events
Emotional Support	Emotional support is needed to help individuals deal with all life events – expected and unexpected. Having someone to talk to helps people feel secure and adapt to change. Sometimes individuals can find this support in family and friends or professionals to process difficult life events – such as bereavement.
Information and Advice	Life events, particularly unexpected ones, can cause people to feel like they do not know what to do. Information and advice can help people to have a better understanding of their situation, which allows them to deal with it more successfully. Information and advice help them know where to go for help, the choices than are available to them and how to make healthy choices.
Practical Help	- Financial help – an individual may need money to help them adapt to a life change i.e. money to pay for a stair lift if their mobility has been affected. - Childcare – an individual may need support looking after their children i.e. a lone parent after a divorce that needs to go to work. - Transport – an individual may need support with transport if they have mobility problems i.e. a car could be adapted to support a person who has had an accident and can no longer walk.
Informal Support	Informal support is the support an individual receives from partners, family and friends. It is usually the first form of support an individual experiences after and expected or unexpected life event. Informal support can provide reassurance, encouragement, advice, a sense of security, someone to talk through options with and practical help.
Professional Support	Formal support may be provided by statutory care services (the state), private care services and charitable organizations. Professional support may include counsellors, teachers, careers advisers, occupational therapists, social workers and health specialists. Professional support may be needed to help people with a health condition, regain mobility, deal with life changes and emotions, get advice and information or change their lifestyle.
Voluntary Support	Organizations offering voluntary support are charities, community groups and religious groups. At voluntary support services, many staff are volunteers (they work for free), but they also employ qualified people who are paid by donations. Community groups work at a local level to meet the needs of people living in a specific neighbourhood i.e. foodbanks. Religious groups are formed by people who share the same religious or spiritual beliefs but they help all people in need regardless of their beliefs and background i.e. a church run soup kitchen for the homeless.

What we are learning this term:		O.	How do people deal with life events?
N. What are life events? O. How do people deal with life events? P. How is dealing with life events supported?		Individual	
N.		Factors	
What are life events?		Adapting	
Life Events		Resilience	
Expected Life Events		Time	
Unexpected Life Events		P.	How is dealing with life events supported?
Physical Events		Types of Support	How this helps individuals deal with life events
Relationship Changes		Emotional Support	
Life Circumstances		Information and Advice	
		Practical Help	
		Informal Support	
		Professional Support	
		Voluntary Support	

Musical forms and devices

Area of study 1 - Eduqas GCSE Music



Baroque era (1600-1750)

- Harpsichord
- Ornaments
- Terraced dynamics
- Basso continuo
- Small orchestra (mostly strings, plus some wind)
- Suite, sonata, oratorio, chorales, trio sonata
- Bach, Handel, Vivaldi

Classical era (1750-1810)

- Slightly larger orchestra
- Piano introduced
- Alberti bass
- String quartets
- Symphony, solo sonata, solo concerto
- Balanced, regular phrases
- Haydn, Mozart, Beethoven

Romantic era (1810-1910)

- Lyrical, expressive melodies
- Large orchestra
- Wider range of dynamics
- Richer harmonies and use of chromatic chords
- Programme music
- Opera symphony
- Tchaikovsky, Grieg, Schumann, Dvorak, Brahms, Verdi, Wagner

Form and structure

BINARY

A B

Two sections: A usually ends in a related key (e.g. dominant or relative minor), but B returns to the tonic. B will contain with some change/contrast.

TERNARY

A B A

Three sections: section B provides a contrast (e.g. new tune key change). A may return exactly or with some slight changes.

RONDO

A B A C A

A longer form: A returns throughout the piece, with contrasting sections called 'episodes', containing new ideas and using different keys.

MINUET AND TRIO

II: AB: II II:CD: II AB

The minuet was a type of graceful dance from the 17-18th century, and was often used as the 3rd movement in symphonies in the Classical era. The minuet had two repeated sections, the trio had two new repeated sections, with a return to the minuet at the end (no repeat).

VARIATIONS

A a A A A

The main theme (tune) is repeated and developed a number of times in a variety of different ways.

STROPHIC

A A A

A simple form where the song uses the same melody over and over.

Devices

Repetition	A musical idea is repeated exactly.
Imitation	An idea is copied in another part.
Sequence	Repetition of an idea in the same part at a higher/lower pitch.
Ostinato	A short, repeated pattern or phrase.
Drone	A long held or constantly repeated note(s).
Arpeggio/broken chord	The notes of a chord played individually.
Alberti bass	A broken chord accompaniment (I,V,iii,V) common in the Classical era.
Anacrusis	An 'up-beat' or pick-up before the first strong beat.
Dotted rhythms	A rhythm using dotted notes (gives a 'jagged' or 'bouncy' type of effect).
Syncopation	Off beat accents.
Conjunct	Notes that move in steps.
Disjunct	Notes that move in leaps/ intervals.
Regular phrasing	Balanced parts of a melody (like the phrases in a sentence) e.g. four bar phrases.

Scales and chords

A **CHORD** is a group of two or more notes played at the same time. A **TRIAD** has three notes. A **CHORD SEQUENCE/PATTERN** is a series of chords. **DIATONIC HARMONY** is based on the chords of major/minor scales.

Primary chords I, IV, V
Secondary chords ii, iii, vi, vii

C Major Scale

C Major Triads

C Major Scales

A Minor (Harmonic) Scale

Chromatic Scale on C:

Blues Scale in C:

Major pentatonic

Minor pentatonic

Cadences

The two chords at the end of a phrase

Perfect	V-I	Strong ending – sounds 'finished'; a musical full stop.
Plagal	IV-I	Sounds finished but 'softer', Amen.
Imperfect	I-V, ii-V, vi-V	Sounds unfinished.
Interrupted	V-vi	Moves to an unexpected chord; 'surprise'.

Question	Answer	Question	Answer
The term used for the Third note in a scale is...	Mediant Subtonic Dominant	Which key word does this definition belong to? <i>'the notes of a chord played individually'</i>	
What years was the Baroque era?		How do we label sections of music in BINARY form?	AB ABBA ABA
What sections are in a Ternary Form piece of music?	AB ABA ABACA	Define disjunct	
What Chords are used in a Perfect Cadence ?	V – I VI – vi IV – I	Which features are seen in music from the baroque era ? (1600-1750)	
How many sections are in Binary form?		When was the Classical Era?	
Define Imitation		What is the difference between ternary form and rondo form ?	
List 3 Classical composers		What does the term variations mean?	
Define Drone		Describe the difference between orchestras in the romantic, classical and baroque period	
What are 2 features of Romantic era pieces?		Define Syncopation	
Which two chords are commonly used for an imperfect cadence ?		When was the Romantic Era?	

SWINDON ACADEMY READING CANON

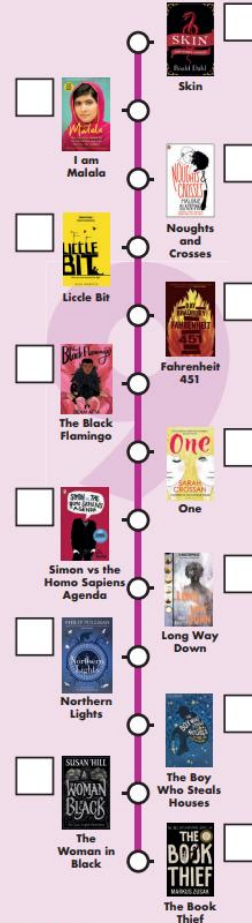
Year 7



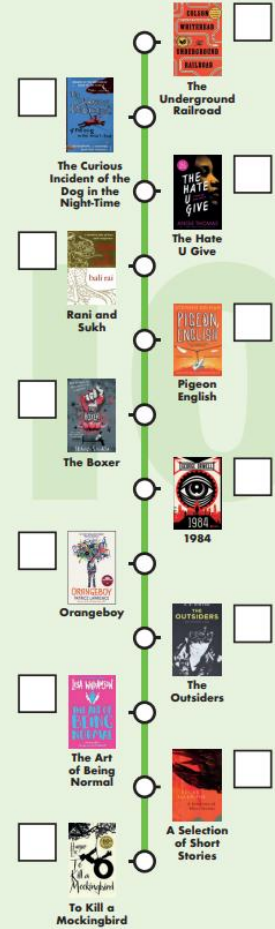
Year 8



Year 9



Year 10



#ReadingisPower