



WGSA

believe in yourself, in others, in God

“

I truly believe
the only way
we can create
global peace
is through not only
educating our minds,
but our hearts
and our souls.

-- Malala Yousafzai

**Knowledge
Organiser
Year 10
Spring 2
2021**



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Contents Page

Homework Timetable	3
Instructions for use	4
Subject: English	5
Subject: Maths	6
Subject: Science	8
Subject: RE	14
Subject: PE	15
Subject: History	16
Subject: Geography	17
Subject: Spanish	18
Subject: Art	19
Subject: Music	20
Subject: Food Technology	22
Subject: Creative Media	23

Homework Timetable

You are expected to study the subjects shown on your timetable each day.

Each day use a page of your exercise book to evidence your work: half a page per subject.

Week starting 22nd Feb	Subject 1	Subject 2	Signed Off
Monday	English	Option 1	
Tuesday	Maths	Option 2	
Wednesday	Physics	RE	
Thursday	Chemistry	English	
Friday	Biology	Maths	

Week starting 1st March	Subject 1	Subject 2	Signed Off
Monday	English	Physics	
Tuesday	Maths	Chemistry	
Wednesday	Physics	Biology	
Thursday	Chemistry	Option 1	
Friday	Biology	Option 2	

Week starting 8th March	Subject 1	Subject 2	Signed Off
Monday	English	RE	
Tuesday	Maths	English	
Wednesday	Physics	Maths	
Thursday	Chemistry	Physics	
Friday	Biology	Chemistry	

Week starting 15th March	Subject 1	Subject 2	Signed Off
Monday	English	Biology	
Tuesday	Maths	Option 1	
Wednesday	Physics	Option 2	
Thursday	Chemistry	RE	
Friday	Biology	English	

Week starting 22nd March	Subject 1	Subject 2	Signed Off
Monday	English	Maths	
Tuesday	Maths	Physics	
Wednesday	Physics	Chemistry	
Thursday	Chemistry	Biology	
Friday	Biology	Option 1	

Week starting 29th March	Subject 1	Subject 2	Signed Off
Monday	English	Chemistry	
Tuesday	Maths	Biology	
Wednesday	Physics	RE	

Read, Cover, Write



Step 1: Read the part of the section you want to remember.

Step 2: Read it again.

Step 3: Read it aloud.

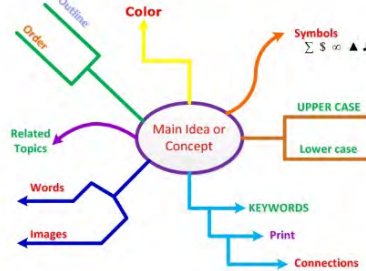
Step 4: Cover the part you are remembering with your book.

Step 5: Write as much as you can remember in your exercise book.

Step 6: Check your answers with a tick for correct answers or a cross for incorrect.

Step 7: Correct your mistakes with the information from that section.

Mind Mapping



Step 1: Read the part of the section you want to remember.

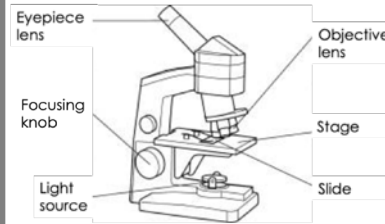
Step 2: Draw a mind map with the key information.

Step 3: Add an extra information that provides more detail about the topic

Step 4: Check your answers using the information in all three sections of the Knowledge Organiser.

Step 5: Correct any mistakes

Explaining a Diagram



Step 1: Read, cover and recreate the diagram

Step 2: Write a paragraph explaining what is happening in the diagram and give specific examples.

Step 3: Check your answers using your class notes or ask your teacher to check in your next lesson.

Step 5: Correct any mistakes

Putting new words into sentences

Foreboding	A feeling that something bad will happen.
------------	---

There was a sense of foreboding through the reference to the 'shadows that followed'

Step 1: Read, cover, write the new words and their definitions

Step 2: Write a sentence that includes the new word into a real context, just as you would use it in a lesson/exam question.

Step 3: Check your answer with a friend or ask your teacher to check you have used them correctly.

Step 5: Correct any mistakes

Y10 GCSE English Literature Knowledge Organiser: Macbeth by William Shakespeare

MACBETH Plot

Act 1	Macbeth and Banquo meet witches who give them predictions. Cawdor executed. Lady Macbeth reads letter. She taunts Macbeth and Duncan arrives.
Act 2	Macbeth sees a dagger reflecting his doubts about the murder- but kills Duncan with Lady Macbeth's help. Malcolm flees and Macbeth chosen to be king.
Act 3	Banquo suspects Macbeth. Macbeth murders Banquo but his son Fleance escapes. Macbeth sees Banquo's ghost.
Act 4	Witches second predictions. Macbeth orders the killing of Macduff's family. Macduff and Malcolm agree to invade Scotland.
Act 5	Lady Macbeth's mental state deteriorates and she passes away. Malcolm's army invades through Birnam Wood and eventually Macbeth is killed by Macduff. Malcolm is proclaimed king.

Vocabulary

blank verse
prose
iambic pentameter
trochaic tetrameter
soliloquy
dramatic irony
hamartia
prophecy (noun)
prophesy (verb)
symbols
regicide

ACTIVITIES:

WEEK ONE: Design a crossword to test knowledge of the plot.

WEEK TWO: Look, cover, write, check information about the main characters. Challenge: check all of your spellings are correct.

WEEK THREE: Choose two words from the vocabulary list, then write a paragraph making a connection between the two words.

WEEK FOUR: make a poster to help students learn the contextual information.

WEEK FIVE: Make a poster about the literary form of the play.



Character

Macbeth	A loyal warrior who becomes duplicitous as he becomes obsessed with the witches' prophecies of power
Lady Macbeth	Macbeth's wife who drives his ambition in the beginning but loses her control by the end.
Banquo	Macbeth's close friend and ally who also receives prophecies from the witches
Fleance	Banquo's son
Duncan King of Scotland	Portrayed as a strong and respected leader at the start of the play.
Macduff	A brave warrior who is loyal to Duncan and is consistently suspicious of Macbeth.
Malcolm	Duncan's son and next in line to the throne.
The Three Witches	(Weird Sisters) – Portrayed as forces of nature who seem to know the future (is this true?) They fascinate Macbeth.

Context

Macbeth is loosely based on historical rulers in **feudal Scotland** in the **11th Century** and would have been known to King James. **King James** inherited the throne through his ancestors Banquo and Fleance who appear in the play.

This violent period in Scotland's history ended with stronger links with England much like **the union of the crowns** that took place when King James became King of England as well as Scotland.

King James was fascinated by **witchcraft** and it is likely that the witches were included to please him as Shakespeare wanted his approval.

King James also believed in **The Divine Right of Kings** meaning that any attempt to depose a king went directly against God and would be judged harshly. This is reflected in Macbeth's failure as a king.

Both King James' parents were killed in politically motivated moves to secure power and an attempt was made on his life through the gunpowder plot. Shakespeare echoes this interest in **usurpation** in the murders in the play.

There is a **direct reference to King James** in the play in Act 4 Scene 1 when Macbeth sees a vision of kings stemming from Banquo's sons

Form

Shakespeare uses **soliloquy** to allow the characters to communicate their true thoughts to the audience.

Macbeth is one of Shakespeare's **Tragedies** and follows specific **conventions**. The **climax** must end in a tremendous catastrophe involving the death of the main character; the character's death is caused by their own flaw(s) (**hamartia**); the character has something the audience can identify with which outweighs their flaws so we care about them.

Year 10 – Mathematics

Square and cube numbers

Square numbers

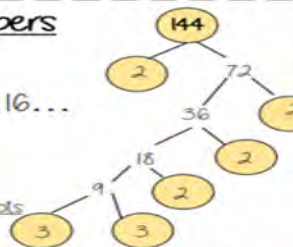
1, 4, 9, 16, ...

$$144 = 2 \times 2 \times 2 \times 2 \times 3 \times 3$$

$$(2 \times 2 \times 3) \times (2 \times 2 \times 3)$$

Prime factors can find square roots

$$\sqrt{144} = 12$$



Cube numbers

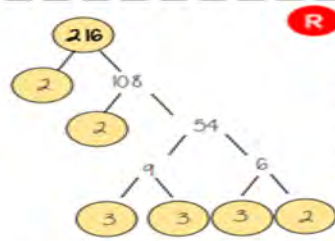
1, 8, 27, 64, 125, ...

$$216 = 2 \times 2 \times 2 \times 3 \times 3 \times 3$$

$$(2 \times 3) \times (2 \times 3) \times (2 \times 3)$$

$$6 \times 6 \times 6$$

$$\sqrt[3]{216} = 6$$



R

Higher powers and roots

$$x^n$$

x – the base number

n – power (number of times multiplied by itself)

$$\sqrt[n]{x}$$

Finding the nth root of any value

Other mental strategies for square roots

$$\begin{aligned} \sqrt{810000} &= \sqrt{81} \times \sqrt{10000} \\ &= 9 \times 100 \\ &= 900 \end{aligned}$$

Addition/ Subtraction Laws

$$a^m \times a^n = a^{m+n}$$

$$a^m \div a^n = a^{m-n}$$

Standard form

Any number between 1 and less than 10

$$A \times 10^n$$

Any integer

$$0.001$$

$$1 \times \frac{1}{1000}$$

$$1 \times 10^{-3}$$

10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
10^1	10^0	10^{-1}	10^{-2}	10^{-3}
10	1	0.1	0.01	0.001

Any value to the power 0 always = 1

Numbers in standard form with negative powers will be less than 1

$$3.2 \times 10^{-4} = 3.2 \times \frac{1}{10} \times \frac{1}{10} \times \frac{1}{10} \times \frac{1}{10} = 0.00032$$

Negative powers do not indicate negative solutions

R

Zero and negative indices

$$x^0 = 1$$

Any number divided by itself = 1

$$\frac{a^6}{a^6} = a^6 \div a^6$$

$$= a^{6-6} = a^0 = 1$$

Negative indices do not indicate negative solutions

$$2^2 = 4$$

$$2^1 = 2$$

$$2^0 = 1$$

$$2^{-1} = \frac{1}{2}$$

$$2^{-2} = \frac{1}{4}$$

Looking at the sequence can help to understand negative powers

Powers of powers

$$(x^a)^b = x^{ab}$$

$$(2^3)^4 = 2^3 \times 2^3 \times 2^3 \times 2^3$$

The same base and power is repeated Use the addition law for indices

$$(2^3)^4 = 2^{12} \leftarrow a \times b = 3 \times 4 = 12$$

NOTICE the difference

$$(2x^3)^4 = 2x^3 \times 2x^3 \times 2x^3 \times 2x^3$$

The addition law applies ONLY to the powers The integers still need to be multiplied

$$(2x^3)^4 = 16x^{12}$$

Standard form calculations

Addition and Subtraction

Tip: Convert into ordinary numbers first and back to standard form at the end

$$6 \times 10^5 + 8 \times 10^5$$

Method 1

$$= 600000 + 800000$$

$$= 1400000$$

$$= 1.4 \times 10^6$$

$$= 1.4 \times 10^6$$

Multiplication and division

$$\frac{1.5 \times 10^5}{0.3 \times 10^3}$$

$$= \frac{1.5}{0.3} \times \frac{10^5}{10^3}$$

$$= 5 \times 10^2$$

$$= 5 \times 10^2$$

$$= 5 \times 10^2$$

$$= 5 \times 10^2$$

$$= 5 \times 10^2$$

$$= 5 \times 10^2$$

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$$= 5 \times 10^2$$

$$= 5 \times 10^2$$

$$= 5 \times 10^2$$

$$= 5 \times 10^2$$

$$= (6 + 8) \times 10^5$$

$$= 14 \times 10^5$$

$$= 1.4 \times 10^6$$

$$= 1.4 \times 10^6$$

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Week 1 – State, with examples the difference between a square number and a cube number.

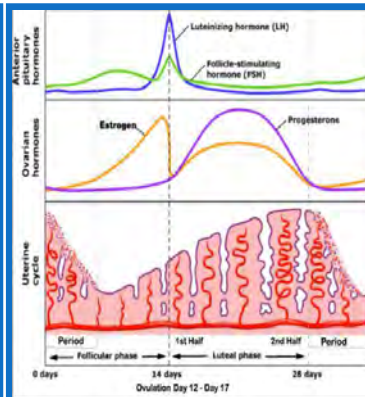
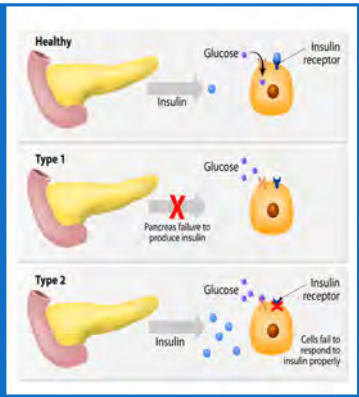
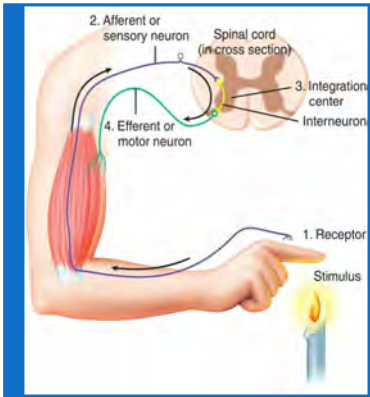
Week 2 – State the addition and subtraction laws for indices. Write down two examples.








Week 3 – State the laws for zero and negative indices and show an example of each.

Week 4 – State what standard form is. Write a) 0.002 b) 200000 in standard form

Week 5 – State with examples how to add, subtract, multiply and divide indices.

Year 10 Biology 4.5: Homeostasis and response.



	Hormonal or non-hormonal?	How it works?	Pros & Cons?
	Hormonal	Mixed pill = low dose of oestrogen and progesterone. This inhibits FSH so no eggs mature. Also stops uterus lining developing and make mucus in cervix thick preventing sperm getting through.	Side effects: raised blood pressure, blood clots and breast cancer
	Hormonal	Doctor injects small tube which releases progesterone.	Only lasts 12 weeks, 99.9% effective.
	Hormonal	Patch that works like mixed pill. Replaced every 7 days and hormones absorbed directly into blood.	Don't have to remember to take it every day
	Non-hormonal - chemical	Chemical that kills or disables sperm. Often coated on condoms.	Readily available but not very effective at preventing pregnancy.
	Non-hormonal - barrier method	Thin latex sheet on penis during intercourse.	No side effects. Prevents STIs.
	Non-hormonal - barrier	Placed in cervix before sex and prevents sperm entry.	No side effects, must be inserted by doctor. If not positioned carefully, sperm may enter.
	Can be copper or	Inserted into uterus by doctor. Prevent embryos	Lasts 3-5 years. Very

Stimuli	Changes in the external or internal environment.
Receptors	Cells that detect stimuli – changes in the internal or external environment.
Effectors	Areas that bring about responses in the body.
Sensory neuron	Neuron that carries information from the sensory organ to the coordination centre.
Motor neurone	Carries information from the coordination centre to the effector organs.
Relay neuron	Relay neurons are found in the brain and spinal cord and allow the sensory and motor neurons to communicate.

Insulin	Hormone involved in the lowering of blood sugar levels by turning Glucose into Glycogen.
Glucagon	Hormone involved in increasing blood sugar levels by turning Glycogen into Glucose.
Type 1 diabetes	A disorder where the pancreas fails to produce any insulin.
Type 2 diabetes	A disorder in which the body cells no longer respond to the insulin produced by the pancreas.

Oestrogen	The female reproductive hormone.
Progesterone	A hormone that maintains the Uterus lining .
FSH	Causes the eggs to mature.
LH	Stimulates the release of a mature egg from the Ovary.
Menstrual cycle.	A monthly cycle in which the Uterus lining is built up and broken down.

Week 1 – Reflexes
Describe the pathway taken by a reflex if you touched a hot candle?

Week 2 - Diabetes
Describe the difference between type 1 and type 2 diabetes.

Week 3 -Hormones
Read, cover and write the functions of each of the hormones involved in the menstrual cycle.

Week 4 – Contraception
Read, cover and write the definitions of the main types of contraception.

Week 5 – Contraception
Choose one hormonal and one non-hormonal method of contraception and evaluate which is best.

Separate science

Section 1: Key vocabulary Read, cover, write

Keyword	Definition
Oxidation	When a metal gains oxygen to form a compound.
Reduction	When a metal compound loses oxygen.
Reactivity series	A list of metals in order of their reactivity.
Acid	A substance which neutralises an alkali. Acids produce H ⁺ ions in aqueous solutions.
Base	A substance which neutralises an acid, including alkalis. Do not have to be soluble e.g. metal oxides.
Alkali	A soluble base which neutralises an acid e.g. sodium hydroxide solution. Alkalis produce OH ⁻ ions.
Neutralisation	When an acid and base are mixed to produce a neutral substance (pH7).
OILRIG	Oxidation Is Loss (of electrons), Reduction Is Gain (of electrons).
pH Scale	A scale used to identify whether a solution is acidic or alkaline.

Section 2: Word equation rules Cue cards

Metal + acid → metal salt + hydrogen
Metal + water → metal hydroxide + hydrogen
Metal + oxygen → Metal oxide
Metal oxide + acid → metal salt + water
Metal hydroxide + acid → metal salt + water
Metal carbonate + acid → metal salt + water + carbon dioxide

Section 3: Salt names Cue cards

Acid used	Salt name	Acid used	Salt name
Hydrochloric	Chloride	Nitric	Nitrate
Sulfuric	Sulfate	Carbonic	Carbonate

Example:
Magnesium + hydrochloric acid → Magnesium chloride + hydrogen

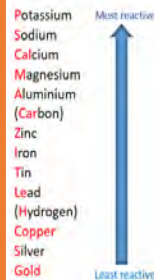
Chemistry: Chemical changes

Section 4: Using the reactivity series Create a mnemonic for the order of reactivity (learn the order!)

During a displacement reaction, a less reactive metal is pushed out of the compound by a more reactive metal.

Metals can be extracted from their ores by reduction with carbon. This will only occur if the metal is less reactive than carbon. It doesn't work with elements such as gold, as this is found in its native state.

Metals less reactive than hydrogen will not react with acids.



Section 5: Making metal salts (required practical) Mind map

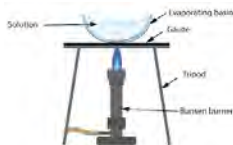
"Prepare a salt from an insoluble metal carbonate or oxide"

Step 1: Mix the metal oxide/carbonate with the acid until the solid is in excess.

Step 2: Filter the mixture into a conical flask.

Step 3: Pour the filtrate into an evaporating basin and heat above a Bunsen burner until two thirds of the solution has evaporated.

Step 4: Leave the remaining solution to crystallise over a period of a few days.



Key notes:

The name of the acid and metal oxide/hydroxide used will be given in the exam question so you should use the correct names of chemicals for step 1.

The three processes used during this practical are filtration, evaporation and crystallisation.

Section 5: Using titration to investigate reaction volumes (required practical) Mind map

Step 1: Measure known volume of alkali.

Step 2: Add indicator.

Step 3: Rinse burette with distilled water and then acid. Then fill with acid, ensuring tap is closed.

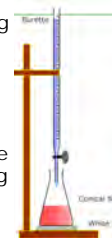
Step 4: Record reading on burette.

Step 5: Open the tap to allow small amounts of acid at a time to the alkali, until the end point.

Step 6: Record the reading on the burette and work out the rough titre (final reading - initial reading).

Step 7: Repeat, adding the acid drop by drop as you reach the rough titre value.

Repeat until you have two to three concordant results.



Section 7: Knowledge recall Cue cards

Question	Answer
1. State what reduction means.	When a metal compound loses oxygen.
2. Define a base.	A substance which neutralises an acid, including alkalis.
3. What does OILRIG stand for?	Oxidation Is Loss, Reduction Is Gain.
4. What would the products be when a metal oxide is reacted with an acid?	A metal salt and water.
5. What is the name of the salt formed from nitric acid?	Nitrates.
6. Name the three processes used to prepare a salt.	Filtration, evaporation and crystallisation.
7. Which metals will react with acids?	Any higher than hydrogen on the reactivity series.
8. What is a displacement reaction?	Where a less reactive metal is pushed out of its compound by a more reactive metal.

ELC

Section 1: Key vocabulary Look, cover, write	
Keyword	Definition
Earth's early atmosphere	Consisted of mostly carbon dioxide with some nitrogen, water vapour, ammonia and methane.
Carbon Dioxide	A gas that is used up in photosynthesis but produced in respiration and combustion of fuels.
Oxygen	A gas that is produced in photosynthesis. It makes up 20% of the atmosphere today.
Crude Oil	A fossil fuel that is a mixture of chemicals.
Fractional Distillation	A process that is used to separate mixtures (such as crude oil) by their boiling points.
Hydrocarbon	A compound consisting of only mainly hydrogen and carbon.
Complete combustion	When a fuel is burnt in sufficient oxygen to produce carbon dioxide and water.
Incomplete combustion	When a fuel is burnt in insufficient oxygen so the products include carbon monoxide and carbon and water.

Section 2: Rate of reaction

Look, cover, write

Rate of reaction is the speed at which a reaction takes place. It can be measured in two ways -

1. The rate at which reactants are used up.
2. The rate at which products are produced.

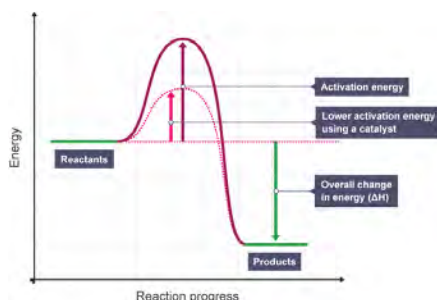
Mean rate = $\frac{\text{amount reactant used up/product made}}{\text{time (s)}}$

Many factors affect the rate of reaction, for example

- Surface area of reactant
- Temperature
- Concentration
- Adding a catalyst

Chemistry Component 4

Section 3: Reaction Profiles Look, Cover, Draw



1. Describe the difference between a reaction without a catalyst and a reaction with a catalyst.
2. Does a catalyst affect the overall energy change?
3. Does a catalyst affect the activation energy?
4. Why might a catalyst be used in industry?

Name of metal	Name of acid	Name of ion from acid	Example of metal salt
Zinc	Hydrochloric acid	Chloride	Zinc chloride
Magnesium	Sulfuric acid	Sulfate	Magnesium sulfate
Iron	Nitric acid	Nitrate	Iron nitrate

Reactions of Acids Look, Cover, Write



Section 6: Knowledge recall Flashcards

Question	Answer
1. What is the name of the reaction between an acid and an alkali?	A neutralisation reaction.
2. What does soluble mean?	Soluble means that a substance will dissolve in a solvent.
3. What is the pH of a neutral substance?	The pH of a neutral substance is 7.
4. What pH does an alkali have?	An alkali has a pH of more than 7.
5. How do you test for carbon dioxide?	Carbon dioxide turns lime water cloudy.
6. How do you test for hydrogen?	Hydrogen produces a squeaky pop sound when a lit splint is held to it.
7. How is a metal salt separated from a solution?	The water in the solution evaporates off to allow crystals of the metal salt to form.
8. What is a solvent?	A solvent is a liquid that substances dissolve in.

Key vocabulary [Look, Cover, Write, Check](#)

Keyword	Definition
Transverse	A wave in which vibrates at right angles (perpendicular) to the direction of its movement
Longitudinal	A wave vibrating in the direction of (parallel) its movement
Wavelength	The distance from a point on one wave to the equivalent point on the adjacent wave
Amplitude	The maximum displacement of a point on a wave away from its undisturbed position
Crest	The highest point on a wave
Trough	The lowest point on a wave
Frequency	The number of waves passing a point each second
Echo	A reflection of sound
Electromagnetic Waves	Transverse waves that transfer energy from the source of the waves to an absorber
Density	the degree of compactness of a substance
Solid	Ridged, fixed shape, fixed volume
Liquid	Not ridged, No fixed shape, fixed volume

Equations [Flashcards](#)

Wave equation	Wave speed (m/s) = frequency (Hz) x wavelength (m) $v = f \lambda$
Wave Period	Period(s) = $\frac{1}{\text{frequency (Hz)}}$ $T = \frac{1}{f}$
$\rho = m/v$	Density = Mass + volume

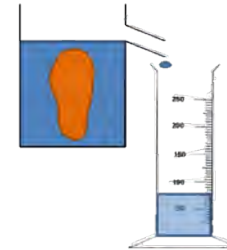
Physics 6

Electromagnetic Spectrum and uses [FLASHCARDS](#)

EM Wave	Use
Gamma rays and X-Rays	Medical Imaging And Treatments
Ultraviolet	Energy Efficient Lamps, Sun Tanning
Visible Light	Fibre Optic Communications
Infrared	Electrical Heaters, Cooking Food, Infrared Cameras
Microwaves	Satellite Communications, Cooking Food
Radio Waves	Television and Radio

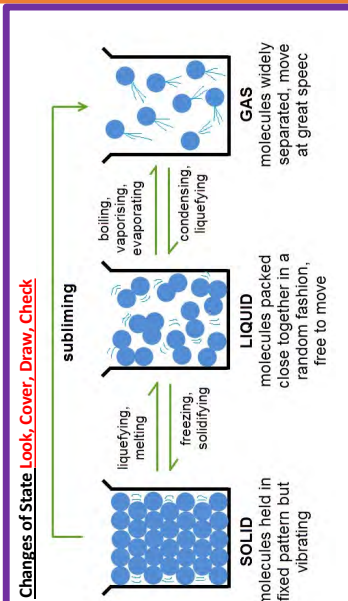
Measuring density of irregular objects [Write a method to measure density](#)

Measure the mass of the object on a set of balances.

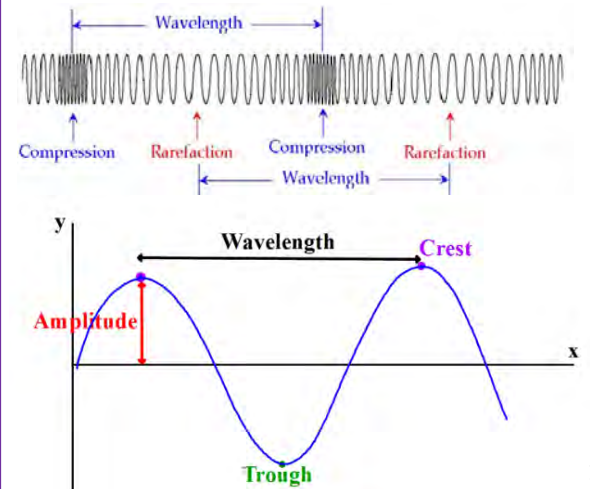


Fill the Eureka can until it stops overflowing. Gently lower the object into the can and measure the volume of water it displaces in a measuring cylinder.

Use the density equation $\rho = m/v$
To calculate the density of the object.



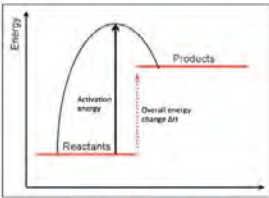
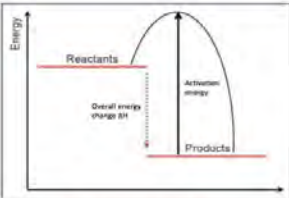
Measuring density of irregular objects [Explain the similarities and differences between the waves](#)



Trilogy Chemistry: Energy changes

Section 1: Key vocabulary Look, cover, write	
Keyword	Definition
Exothermic reaction	A reaction that transfers energy to the surroundings.
Endothermic reaction	A reaction that takes in energy from the surroundings.
Reaction profile	A graph which shows the relative difference in the energy of reactants and products.
Activation energy	The minimum amount of energy needed for a reaction to occur.
Overall energy change	The difference between the reactant energy and the product energy.
Bond energy	The energy needed to break the bond between atoms.
Chemical cell	A cell containing chemicals which react to produce electrical energy.
Fuel cell	A cell supplied by an external fuel source (e.g. hydrogen) and air or oxygen.
Electrolyte	A liquid which is broken down by electricity in the process of electrolysis.

Section 2: Reaction profiles Look, cover, draw and label

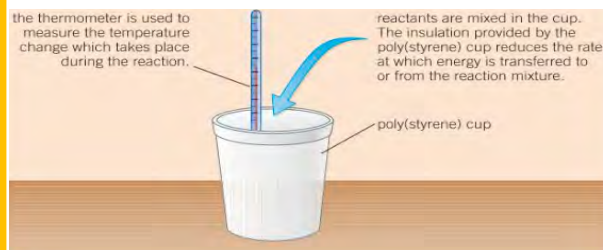
Endothermic reaction **Exothermic reaction**

The overall energy change for an exothermic reaction is a negative number, as the energy exits the reaction. The products have less energy than the reactants.

The overall energy change for an endothermic reaction is a positive number, as the energy enters the reaction. The products have more energy than the reactants.

Section 3: Investigating temperature changes Write a method

"Use appropriate apparatus to investigate the variables that affect energy changes in reactions involving at least one solution"



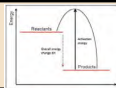
A lid on this apparatus would further reduce energy transfers to the surroundings.

Section 4: Bond energy calculations (HIGHER TIER)

When calculating energy changes during a chemical reaction you need to work out:

1. How much energy is needed to break the chemical bonds in the reactants
2. How much energy is released when forming the new bonds in the products.

If the overall energy change is a positive number, the reaction is exothermic. If it is a negative number, it is an endothermic reaction.

Section 6: Knowledge recall Flashcards	
Question	Answer
1. State what is meant by an endothermic reaction.	A reaction that takes in energy from the surroundings.
2. State the definition of 'bond energy'.	The energy needed to break the bond between atoms.
3. Draw the reaction profile for an exothermic reaction.	
4. When investigating temperature changes, why is it better to use a polystyrene cup with a lid?	The insulator material and the lid will reduce energy transfers to the surroundings.
5. From a bond energy calculation, how would you know that a reaction is endothermic or exothermic?	If the overall energy change is a positive number, the reaction is exothermic. If it is a negative number, it is endothermic.
6. State the definition of 'activation energy'.	The minimum amount of energy needed for a reaction to occur.
7. Which piece of equipment would you use to measure temperature change?	A thermometer or temperature probe.
8. What is meant by bond energy?	The energy needed to break the bond between atoms.

Section 7: Variables

Look, cover, write

The independent variable is the thing you change.

The dependent variable is the thing you measure.

Control variables are things you keep the same.

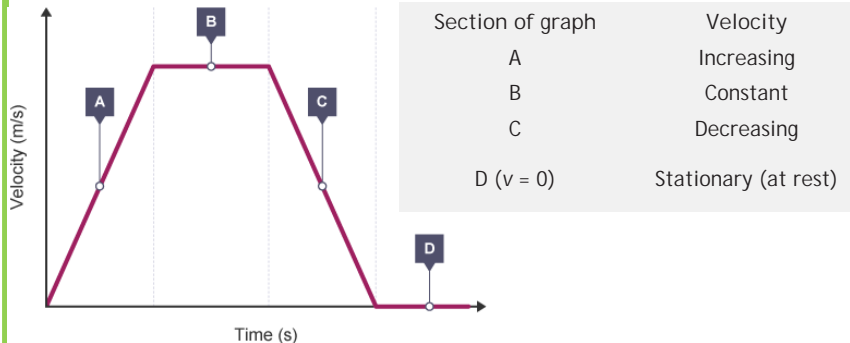
Trilogy Physics - Forces

Week 1 - Keywords

Flashcards

Keyword Tier 3	Definition
Contact force	A force acting between/on objects that are touching
Drag	The frictional force caused by any fluid (a liquid or gas) on a moving object
Elastic deformation	An object undergoing elastic deformation will return to its original shape once any forces being applied to it are removed.
Elastic object	An object which can be elastically deformed
Equilibrium	A state in which all the forces acting on an object are balanced, so the resultant forces are zero.
Inelastic deformation	An object undergoing inelastic deformation will not return to its original shape once the forces being applied to it are removed.
Limit of proportionality	The point beyond which the force is applied to an elastic object is no longer directly proportional to the extension of the object
Line of action	A straight line passing through the point at which the force is acting in the same direction as the force
Non-contact force	A force that can act between objects that are not touching
Resultant force	A single force that can replace all forces acting on an object to give the same effect as the original forces acting altogether
Terminal velocity	The maximum velocity a falling object can reach without any added forces. It's the velocity at which the resistive forces (drag) acting on the object match the force due to gravity (weight).
Upthrust	The resultant force acting upwards on an object submerged in a liquid, due to the pressure of the liquid being greater at the bottom or the object than the top

Week 2 - Velocity-time graphs Draw the potential map of the journey shown on this graph.



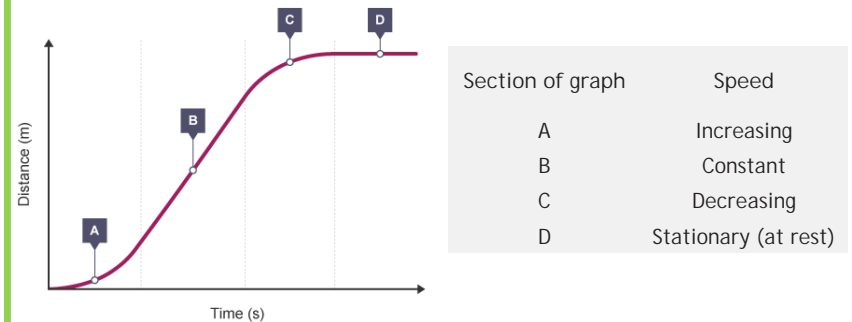
Week 3 - Keywords

Look, Cover, Write, Check

Keyword Tier 2	Definition
Acceleration	A measure of how quickly velocity is changing
Displacement	The straight-line distance and direction from an object's starting position to its finishing position
Force	A push or a pull on an object caused by interacting with something
Friction	A force that opposes an object's motion. It acts in the opposite direction to motion.
Pressure	The force per unit area exerted on a surface
Speed	How quickly an object is travelling
Stopping distance	The distance travelled by a vehicle in the time between the driver seeing a hazard and coming to a stop. It is the sum of the thinking and braking distance
System	The object or group of objects that you are considering
Velocity	The speed of an object in a given direction
Weight	The force acting on an object due to gravity

Week 4 - Distance-time graphs

Draw a storyboard to show the motion of this object



Week 5 - Stopping distance

Suggest the factors that would affect the thinking distance and the braking distance of a car

Thinking distance - The distance a car travels whilst the driver reacts

Braking distance - The distance the car travels whilst braking



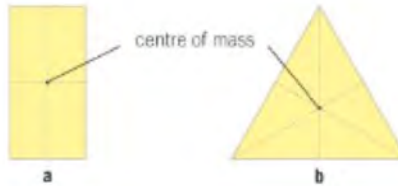
Section 1: Keywords **FLASHCARDS**

Keyword	Definition
Acceleration	A measure of how quickly velocity is changing
Air resistance	The frictional force caused by air on a moving object
Contact force	A force acting between/on objects that are touching
Displacement	The straight-line distance and direction from an object's starting position to its finishing position
Elastic deformation	An object undergoing elastic deformation will return to its original shape once any forces being applied to it are removed.
Equilibrium	A state in which all the forces acting on an object are balanced, so the resultant forces are zero.
Force	A push or a pull on an object caused by interacting with something
Friction	A force that opposes an object's motion. It acts in the opposite direction to motion.
Inelastic deformation	An object undergoing inelastic deformation will not return to its original shape once the forces being applied to it are removed.
Inertia	The tendency of an object to remain stationary or continue travelling at a constant velocity
Limit of proportionality	The point beyond which the force is applied to an elastic object is no longer directly proportional to the extension of the object

Physics separate – Forces

Section 3: Centre of mass **Write a method to find the centre of mass of a regular object**

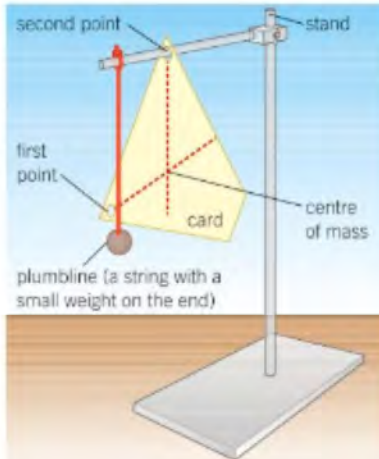
The centre of mass of a regular shape is found by drawing on the lines of symmetry. Where the lines cross is the centre of mass of the object



Scalar quantity – Just size
Vector quantity – size and direction

Section 4: Centre of mass of irregular objects **Suggest how to find the centre of mass of an irregular object using the diagram below**

- Put a hole in one corner of the card
- Use a plumb line to draw a vertical line on the card
- Repeat for different corners

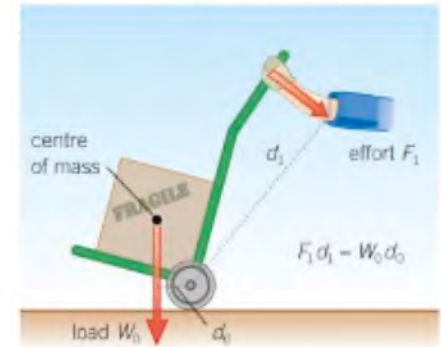
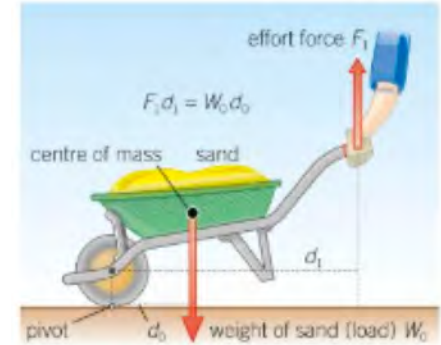


Section 2: Key equations **FLASHCARDS**

Question	Answer
Newton's law	$Force = mass \times acceleration$
Moments	$moment = force \times distance$
Work done	Work done – force x distance
Elastic potential	$[E_e = 0.5 K e^2]$
Pressure	$P = F/A$
Pressure in a liquid	$p = h\rho g$
Speed/distance	Distance = speed x time

Section 5: Moments **Explain how each situation below is balanced**

the sum of all the clockwise moments about any point = the sum of all the anticlockwise moments about that point



Task 1



- **Monogamy** - marriage to only one person at a time
- **Procreation** - making a new life
 - **Sacraments** - an outward ceremony through which God's grace is given
- **Grace** - God's gift which gives the strength to be good & holy
- **Cohabitation** - living together in a sexual relationship without being married
- **Premarital sex** - sexual activity before marriage
 - **Homosexuality** - sexual attraction to someone of the same sex
 - **Extramarital sex** - sex acts outside marriage, usually referred to as adultery
- **Promiscuity** - having sex with a number of partners without commitment
- **Consensual sex** - where both parties freely agree to sexual activity
 - **Civil partnership** - legal ceremonies giving homosexual partners the same legal rights as husband & wife
- **Homophobia** - hatred or fear of homosexuals
- **Heterosexual** - attraction to the opposite sex

Task 2 -

Use the information below to create a Mind map about views towards gender in Christianity



Evangelical Protestants believe that men and women should have different roles in life and that women cannot have equal rights in religion. They believe that only men should be church leaders and ministers.

The Catholic Church is against gender prejudice and discrimination and believes that women should have equal rights but believes that only men can be priests because Jesus and the Apostles were men.

Liberal Protestants believe in complete equality, are against gender prejudice and discrimination, and have women priests or ministers.

Many Christians have opposed gender discrimination, especially the Movement for the Ordination of Women, which persuaded the Church of England to ordain women, and the Catholic Women's Ordination, which is trying to persuade the Catholic Church to allow women priests.

Atheists and Humanists are totally against gender prejudice & discrimination



Task 3 -

Summarise which viewpoint you agree with most and explain why

Year 10 Religious Education

Task 4 -

Gather opinions from 10 people and ask them to explain whether marriage is still important in today's British Society. Record the information and then write a paragraph explaining what do your findings suggest?

Task 5 -

Questions to complete by end of unit:

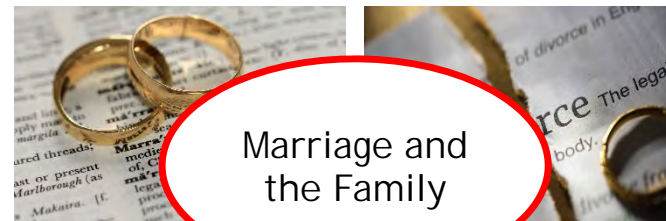


A - outline three Christian beliefs about marriage (3)

B - Explain two reasons why there are different Christian attitudes to contraception (4)

C - Explain two reasons why Christian teachings about sexual relationships may be important today, in your answer you must refer to a source of wisdom & authority (5)

D - 'Christians should work together against gender discrimination.' Evaluate this statement considering arguments for & against (12)



Section 1: Key Words: Look, Cover, Write, Check

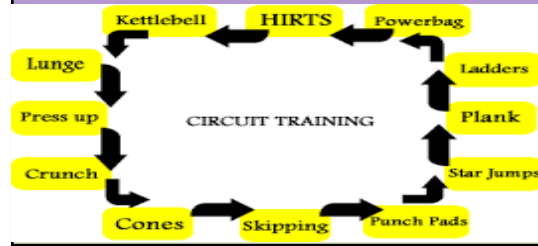
Circuit Training	Different stations/exercises using different muscle groups to avoid fatigue. Stations can work multiple components of fitness depending on design.	
Continuous Training	Training at a steady pace. At least 30 minutes without stopping. 60% - 85% of your maximum heart rate. Aerobic training zone.	
Fartlek Training	A form of continuous training. Intensity is changed by running at different speeds over different terrains.	
Interval Training	Periods of exercising are followed by a rest and recovery period.	
Plyometric Training	Lots of explosive movements. Muscles exert their maximal force for a short time period. Exercises include, bounding, lunging, hurdling and press-ups with claps.	
Free Weights	Can be used to train for strength (low reps & high loads). Or endurance (high reps & low loads)	
Acceleration Sprints	Pace is gradually increased from standing to jogging, then striding and maximal sprint.	
Hollow Sprints	Series of Sprints followed by 'hollow' periods of jogging or walking.	
Static Stretching	There are two types: Active Stretching: Is performed independently and uses internal force to stretch and lengthen the muscle. Passive Stretching: Requires the help of another person or object to provide external force causing the muscle to stretch.	
Ballistic Stretching	Uses the force of a limb to stretch muscles beyond their normal range of movement.	
Proprioceptive Neuromuscular Facilitation (PNF)	Uses an object to provide resistance. The stretch is held at its upper limit for 6-10 seconds.	

Physical Education Year 10 Term 4 Training Methods

Section 2: Warm up & Cool down: Create a sports specific warm up and cool down for the athletes shown below.



Section 3: training: Create a circuit training session of your choice. It must have 8 stations and not work the same muscle groups twice in a row.



Section 4: Advantages v Disadvantages: Each fitness training method has advantages and disadvantages- choose one training method and consider the 6 points below for your chosen method.

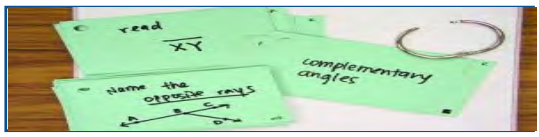
- VARIETY – is the training method interesting enough?
- INTENSITY – is it easy to vary the intensity?
- PURPOSE – does the training method improve the type of fitness you want it to?
- COST – Does the training method needs lots of expensive equipment?
- SPORT SPECIFIC – can the training method be changed to suit different sports?
- SAFETY – Can the training method cause injury. e.g. an advantage of stretching is that it increase flexibility. A disadvantage of stretching is that it can cause muscle soreness.

Section 5: Link to Components of Fitness: Create a table linking each method of training to a component of fitness that they would help to improve. The first one is done for you.

Training Method	Component of Fitness
Free Weight	Muscular endurance/ Muscular strength

Section 6: Knowledge recall: Create flashcards for each question.

Question
1. How would you use free weights to improve muscular endurance?
2. Name 3 athletes that would benefit from plyometric training and explain why.
3. What is fartlek the Swedish term for?
4. Is continuous training targeting the aerobic or anaerobic training zone?
5. Explain which training method you would use to increase your speed and why.



Key Terms – Task 1 – READ, COVER, WRITE

History:
German Depression

Key Methods – Task 4 – Create a mindmap

Create a mindmap for 'Methods used by Hitler to secure power':

- 1) Held a new election
- 2) Created a Communist plot
- 3) Passed the Enabling Act
- 4) Formed the Gestapo
- 5) Set up Concentration Camps
- 6) Banned Trade Unions
- 7) Night of the Long Knives (killed any opponents)

Key Elections and Dates – Task 5 – Create Flashcards

Create flashcards for the date of the German elections, and on the other side, write the percentage of the vote the Nazis gained

- May 1928 – 2.6%
- September 1930 – 18.25%
- July 1932 – 37.27%
- November 1932 – 33.09%
- March 1933 – 43.91%
- November 1933 – 92.11%

Key Dates – Task 2 – Create a timeline


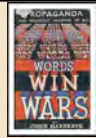




- October 1929 – Wall Street Crash
- 1930 – Hitler Youth junior branches are established
- September 1930 – Nazi Party gain 18.3% of the vote, becoming the second largest party in Germany
- July 1932 – Nazi Party gain 37.4% of the vote, becoming the largest party
- 30th January 1933 – Hitler appointed Chancellor of Germany by President Hindenburg
- 3rd February 1933 – Hitler defined the Nazi Party foreign policy
- 27th February 1933 – The Reichstag Fire
- 5th March 1933 – Nazi Party gained 44% of the vote
- 23rd March 1933 – Enabling Act
- 26th April 1933 – The Gestapo are formed

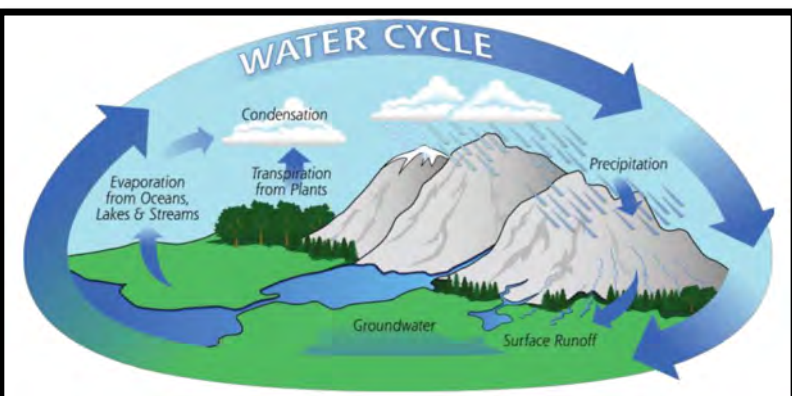
Key People – Task 3 – Create fact files for the following people:

1. Franz von Papen
2. Kurt von Schleicher

Research these key people, and include the following in their fact files:

- Date of Birth/Death
- Place of Birth/Death
- Important roles
- Any achievements
- Any failures

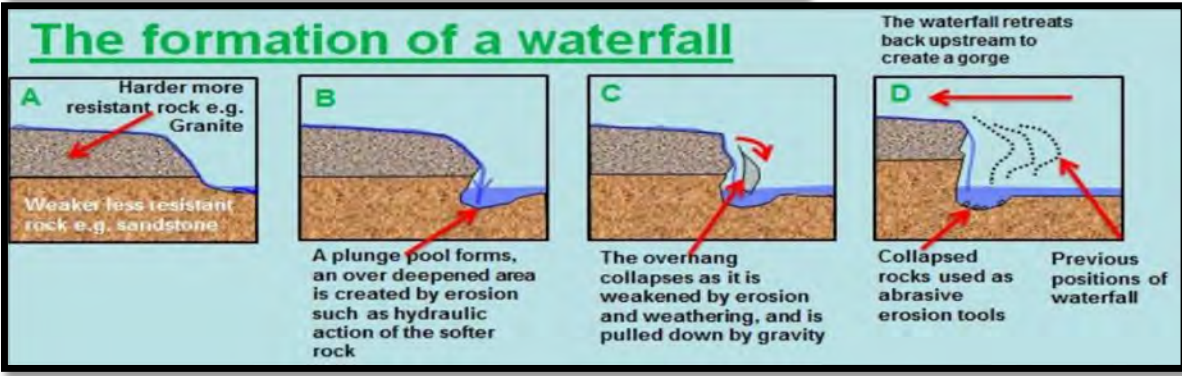
<u>Key Terms</u>	<u>Definition</u>	<u>Image</u>
Economic Depression	A sustained, long-term downturn in economic activity	
Propaganda	Information, especially of a biased or misleading nature	
Coalition	When two or more political parties agree to work together	
Dictator	A ruler with total power over a country, typically one who has obtained control by force	
Gestapo	The official secret police of Nazi Germany, and in German-occupied Europe	
Cabinet	The most senior politicians in a government, who regularly meet to make national decisions	



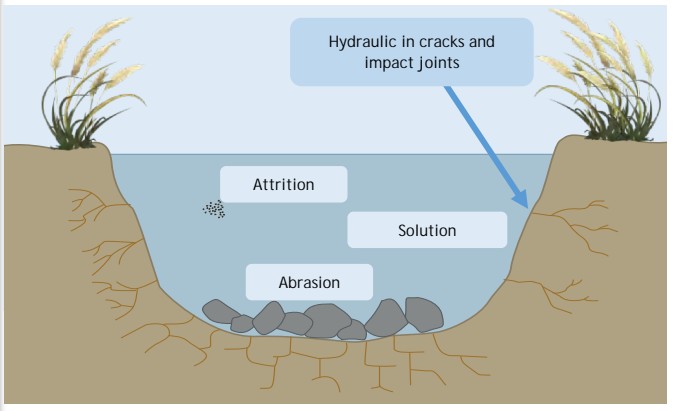
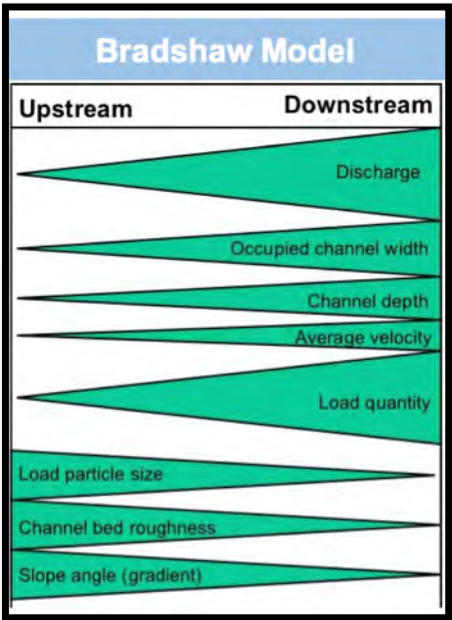
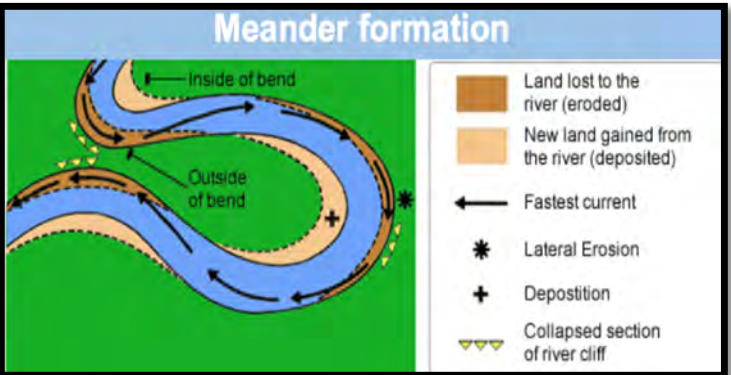
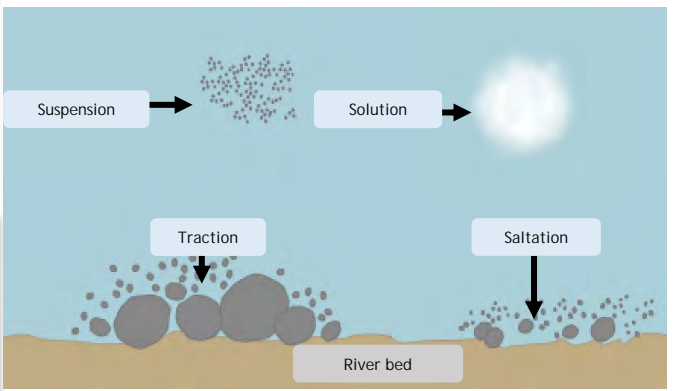
Geography

RIVERS AND FLOODS

Rivers	
Hydraulic action	the force of the river against the banks can cause air to be trapped in cracks and crevices. The pressure weakens the banks and gradually wears it away.
Abrasion	rocks carried along by the river wear down the river bed and banks.
Attrition	rocks being carried by the river smash together and break into smaller, smoother and rounder particles.
Solution	soluble particles are dissolved into the river.
Erosion	Erosion involves the wearing away of rock and soil found along the river bed and banks.
Deposition	When a river loses energy, it will drop or deposit some of the material it is carrying.
Drainage Basin	A river basin or drainage basin is an area of land drained by a river and its tributaries.



- 1) Create flash cards of all the key words and descriptions from across this sheet.
- 2) Explain in detail the processes of the water cycle.
- 3) Describe the formation of river meanders AND waterfalls, use diagrams.
- 4) Explain the types of river **EROSION** and **TRANSPORTATION**, using these diagrams to help.
- 5) Explain the Bradshaw Model in detail?



I'm not the present tense.
I'm a tense present.



Year 10 Spanish Present Tense

There are two main present tenses in Spanish.

Present tense: Used to talk about things that usually happen.

Present continuous tense: Used to talk about things that are happening right now.

To form:

1. Take your infinitive.
2. Remove the -AR, -ER, -IR
3. Add the correct ending

To form:

1. Take the present tense of the verb "estar".
2. Add the present participle

Endings

Verb "estar"

Examples

-AR verbs		-ER verbs		-IR verbs	
I	-o	I	-o	I	-o
You	-as	You	-es	You	-es
He/she	-a	He/she	-e	He/she	-e
We	-amos	We	-emos	We	-imos
You lot	-áis	You lot	-éis	You lot	-ís
They	-an	They	-en	They	-en

-AR verbs	
Estoy	I am
Estás	You are
Está	He/she/it is
Estamos	We are
Estáis	You lot are
Están	They are

Present	English	Present	English
Tengo	I have	Estudio	I study
Voy	I go	Trabajo	I work
Doy	I give	Dejo	I stop
Soy	I am	Uso	I use
Sigo	I carry on	Escucho	I listen
Puedo	I can	Como	I eat
Hago	I do	Bebo	I drink
Salgo	I go out	Aprendo	I learn
Juego	I play	Veo	I watch
Hablo	I talk/speak	Vivo	I live
Continuo	I continue	Escribo	I write

AR Verbs	Present participle	ER/IR verbs	Present participle
hablar	hablando (speaking)	comer	comiendo (eating)
jugar	jugando (playing)	beber	bebiendo (drinking)
estudiar	estudiando (studying)	aprender	aprendiendo (learning)
escuchar	escuchando (listening)	escribir	escribiendo (writing)
llevar	llevando (wearing)	vivir	viviendo (living)
continuar	continuando (continuing)	ver	viendo (watching)
decir	diciendo (saying)	ir	yendo (going)

Time phrases

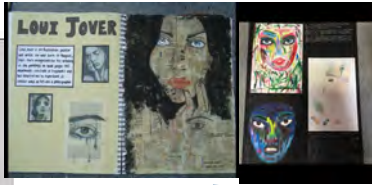
- Normalmente – normally
- Suelo + infinitive – usually/I tend to...
- Generalmente – generally
- Hoy – today
- Por la tarde - in the evening/afternoon
- Por la mañana – in the morning
- Por la noche – at night
- Los lunes/martes etc... - on Mondays, Tuesdays etc...
- Todos los días/cada día – everyday
- Siempre – always
- A veces – sometimes
- A menudo – often
- De vez en cuando – from time to time
- Frecuentemente – frequently
- Tarde – late
- Temprano – early
- Ahora – now
- De nuevo – again
- Durante – during
- Cada quince días – every fortnight
- Casi nunca – almost never
- En mi tiempo libre – in my free time
- Cuando hace buen tiempo – when it's nice weather
- Cuando hace mal tiempo – when it's bad weather
- Cuando tengo tiempo – when I have time

- Task 1 – create flashcards for the time phrases and learn them off by heart
- Task 2 - learn the endings for the present tense off by heart
- Task 3 – create flashcards for the examples of present tense verbs in the 1st person
- Task 4 – learn the present tense of verb 'estar' off by heart
- Task 5 – Find a photo with people in it and describe what they are doing using the present continuous tense

GCSE ART AND DESIGN HUMAN CONDITION TERM 4

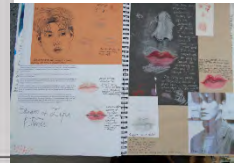
AO1

Develop ideas through investigations, demonstrating critical understanding of sources



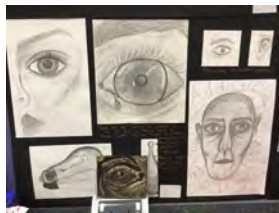
AO2

Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes



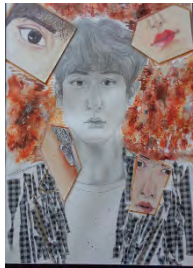
AO3

Record ideas, observations and insights relevant to intentions as work progresses



AO4

Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language



Task 1 Create Flash cards describing the methods of the artist's work you have used (AO1) Augustus John; tones, Fred Hatt; colour crayon. Loui Jover; mixed media and Francoise Neilly; thick paint marks and Day of the dead artists.

Task 4/5 Create a mini final piece (A04) using the materials you have at home, or a detailed annotated design, on the theme Human condition.



Task 2 Create a diagram to describe how to annotate your work.



3

Annotation

Describes writing notes, using images and explaining your thoughts to show the development of your work.

Step 1- Describe

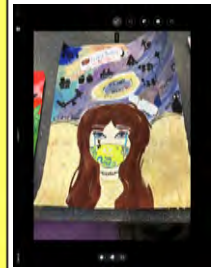
What is this an image of? What have you done here? What was this stage of the project for?

Step 2- Explain

How was this work made? How did you produce particular effects? How did you decide on the composition?

Step 3- Reflect

Why did you use these specific methods? Why do particular parts work better than others? Why might you do things differently next time?



Evaluation Questions

Explain how you approached your final idea? What was it about? Go through the process of the whole project, which artists did you look at what drawings and paintings did you do?

How did all these experiments help you with your final piece? Talk about the variety of media/materials that you have used for your final piece?

What works well about your ideas? What could you improve on your final ideas?

Task 3 Evaluate how you personally met all the Assessment Objects in this year's work. Artists Research A01, design ideas A02, drawing skills A03 and final piece A04.

Agencies

An agency is an organization (business) that provides a particular service on behalf of a business or an artist. There are many agencies within the music industry that are concerned with protecting the rights of work produced by the music industry, including the revenue generated by these works. It is important that you remember these and their acronyms.

MCPS

The Mechanical Copyright Protection Society represents their members' mechanical rights, whenever a piece of music is reproduced as a physical product. They then collect royalties for this.

PRS

Performing Rights Society represents their members' performing rights, whenever a piece of music is performed or played in any public space or place outside of the home. They then collect royalties for this in the form of licenses.

PPL

Phonographic Performance Limited licenses the right to play recorded music and music videos in public. They then collect royalties for this.

Royalties = Every time music is used commercially (played), a % of earnings is given to the artist, label, songwriter.... etc



Music

Trade Bodies

A trade body is an organisation founded and funded by businesses that operate in a specific industry. An industry trade body participates in public relations activities such as advertising their trade, providing training for members and lobbying politicians about issues that affect their trade. However, its main focus is collaboration between companies and businesses. It is important that you remember these and their acronyms.

MPG (Music Producers Guild)

Represents the interests of all involved in the production of recorded music

- Record Producer
- Sound Engineer
- Mastering Engineer
- Software programmer



APRS (Association of Professional Recording Services)

Represents those who work in the audio industry.

- Record Producer
- Sound Engineer
- Mastering Engineer
- Manufacturer
- Live Sound Technician

PLASA (Professional Lighting and Sound Association)

Represents those who supply technologies and services to events.

Task 1

Look cover, write, check, information on Agencies

Task 2

Design a mind map on Trade Bodies

Unions

A Union is an independent organisation that represents their members and stands up for rights of their members.

- monitoring employment conditions and contracts between employees and employers
- advice for freelancers on tax and National Insurance (NI)
- support in relation to negotiation of minimum rates of pay and working conditions
- handling of disputes such as if there are contract disputes or if someone isn't paid
- other services – networking opportunities, information about insurance and pensions, information and updates about changes to relevant legislation.

Each union represents a certain collection of industry job roles. It is important that you remember these and their acronyms.



MU (Musicians' Union)

The Musicians' Union is an organisation which represents members in the creative sector

- Musician
- Composer/songwriter
- Record Producer
- Session musician
- Conductor

BECTU (Broadcasting Entertainment Cinematograph and theatre)

Represents members who work in broadcasting, film, theatre, entertainment, leisure and interactive media.

- Music Journalist
- Broadcaster
- DJ
- Roadie
- Live sound technician

Equity

Equity is the UK trade union for professional performers and creative practitioners. It represents artists from across the entire spectrum of arts and entertainment.

- Musician
- Session Musician
- Broadcaster

Hire Companies



You need to know reasons why you might hire the following:

Sound and Lighting Equipment Hire

- (1) Sound equipment such as P.A. systems are expensive. If a venue or band doesn't use it much then it is cheaper to hire
- (2) You get the technical expertise of the company
- (3) Equipment is high quality
- (4) The hire company sound engineers takes control of the sound and lights so the artist can concentrate on the music

Rehearsal and Studio Space Hire

- (1) To record a song in a room with the best acoustics - creates the best sound
- (2) Excellent acoustics (sound) for a rehearsal

Task 3

Create revision flashcards on Unions

Task 4

Write a paragraph using the reasons supplied of why you would use a hire company.

Task 5 Design a crossword on the three organisations, Agencies, Unions and Trade Bodies.

Year 10 Hospitality & Catering - Food Spoilage, Contamination and Food Poisoning

There are **SIX TASKS** to complete (see Red Bold text)

Food spoilage

As soon as food is harvested, slaughtered or processed it starts to change. This happens for two main reasons:

- autolysis – self destruction, caused by enzymes present in the food;
- microbial spoilage – caused by the growth of micro-organisms, i.e. bacteria, yeasts and moulds.

Food spoilage: Autolysis – enzymes

Enzymes are chemicals which can cause food to deteriorate in three main ways:

- ripening – this will continue until the food becomes inedible, e.g. banana ripening;
- browning – enzymes can react with air causing certain foods, e.g. apples, to discolour;
- oxidation – loss of nutrients, such as vitamin C from food, e.g. over boiling of green vegetables

Food spoilage: Microbial spoilage

Spoilage can be caused by the growth of:

- bacteria – single celled micro-organisms which are present naturally in the environment;
- yeasts – single celled fungi;
- moulds – fungi which grow as filaments in food.

Food contamination

Food contamination can lead to food poisoning. There are three ways which food can be contaminated: **bacterial**, **chemical** and **physical**.

TASK 2:

- **List** TWO examples of each.

Physical contamination

This can occur in a variety of ways at different stages of food processing and production. Some examples are:

- soil from the ground when harvesting;
- a loose bolt from a processing plant when packaging;
- a hair from a chef in the kitchen.

Bacterial contamination

Most bacteria are harmless but a small number can cause illness. These are known as pathogenic bacteria. Food which is contaminated with pathogenic bacteria can look, taste and smell normal.

Bacteria can be transferred onto food through cross-contamination, via equipment, people or pests, or can be naturally present in the food. Some bacteria can produce toxins which can cause food poisoning.

Micro-organisms

Micro-organisms need conditions to survive and reproduce these can include:

- temperature;
- moisture;
- food;
- time;
- oxygen and pH level.

Temperature

Bacteria need warm conditions to grow and multiply.

- The ideal temperature for bacterial growth is 30°C – 37°C.
 - Some bacteria can still grow at 10°C and 60°C.
 - Most bacteria are destroyed at temperatures above 63 °C.
 - Bacterial growth danger zone is 5°C - 63°C.
- At very cold temperatures, bacteria become dormant – they do not die, but they cannot grow or multiply.

TASK 3:

- **Draw** a Thermometer to show these temperature ranges:

Moisture

When there is no moisture bacteria cannot grow. However, bacteria and moulds can both produce spores which can survive until water is added to the food.

Food

Bacteria need a source of food to grow and multiply, these food are usually high in moisture, fat and protein, and may be ready to eat. Food where bacteria rapidly multiply in is called a **high risk food**. For example:

- meat, meat products and poultry;
- milk and dairy products;
- eggs – uncooked and lightly cooked;
- shellfish and seafood;
- prepared salads and vegetables;
- cooked rice and pasta.

Time

Given the right conditions, one bacterium can divide into two every 10-20 minutes through a process called binary fission.



People at high risk of food poisoning

Elderly people, babies and anyone who is ill or pregnant needs to be extra careful about the food they eat

Symptoms of food poisoning

Food poisoning can be mild or severe. The most common symptoms are:

- feeling sick;
- being sick;
- diarrhoea;
- abdominal pain.

Campylobacter

Sources

Raw and undercooked poultry, unpasteurized milk, contaminated water.

Signs and symptoms

Onset 2 – 5 days (can be longer). Fever, headache and dizziness for a few hours, followed by abdominal pain.

E Coli 0157

Sources

Raw and undercooked meat and poultry. Unwashed vegetables. Contaminated water.

Signs and symptoms

Onset usually 3-4 days. Diarrhoea, which may contain blood, can lead to kidney failure or death.

Listeria

Sources

Unpasteurised milk and dairy products, cook-chill foods, pate, meat, poultry and salad vegetables

Signs and symptoms

Onset 1-70 days. Ranges from mild, flu-like illness to meningitis, septicaemia, pneumonia. During pregnancy may lead to miscarriage or birth of an infected baby.

water.

Signs and symptoms

Onset 6-48 hours. Headache, general aching of limbs, abdominal pain and diarrhoea, vomiting and fever. This usually lasts 1 – 7 days, and rarely is fatal.

Staphylococcus aureus

Sources

Humans: nose, mouth and skin. Untreated milk.

Signs and symptoms

Onset 1 – 6 hours. Severe vomiting, abdominal pain, weakness and lower than normal temperature. This usually lasts 6 – 24 hours.

Key terms

Bacteria: Small living organisms that can reproduce to form colonies. Some bacteria can be harmful (pathogenic) and others are necessary for food production, e.g. to make cheese and yogurt.

Binary fission: The process that bacteria uses to divide and multiply.

Cross-contamination: The transfer of bacteria from one source to another. Usually raw food to ready to eat food but can also be the transfer of bacteria from unclean hands, equipment, cloths or pests. Can also relate to allergens.

Food spoilage: The action of enzymes or microorganisms which make the food unacceptable to consume.

Food poisoning: Illness resulting from eating food which contains food poisoning micro-organisms or toxins produced by micro-organisms.

Toxin: A poison produced by some bacteria which can cause food poisoning.

TASK 1:

- **Copy** out these Key Terms in full. Revise

Allergens

Allergenic ingredients can cause adverse reactions in some people. Care must be taken at each stage of food processing to prevent contamination.

Desirable food changes

Desirable changes that can be caused by micro-organisms include:

- bacteria in yogurt and cheese production;
- **mould** in some cheeses, e.g. Stilton;
- yeast in bread production

Chemical contamination

Chemical contamination can occur in a variety of ways at different stages of food processing and production. For example, chemicals from the farm; cleaning products used in the processing plant and fly spray used in the kitchen.

To find out more, go to <https://bit.ly/3nE9fpE>

TASKS 4 to 6:

- **Explain** in detail the conditions bacteria need to survive and reproduce. Give FIVE examples of controls to reduce the likelihood of bacterial multiplication and risk of food poisoning.
- Make notes on each of the Headings on this sheet. This should be then transferred onto a **Flash Card** highlighting the main points.
- Choose ONE type of Food Poisoning and **design** an information sheet on it

Creative Media

Tasks – Cross-sector exploration You must carefully select **at least one** media product from **each** of these three sectors: **.audio/moving image. Publishing .interactive** media products You will need to explore the relationship between each media product, its audience and purpose, by investigating:

- the type and content of each media product
- the primary and secondary target audiences for each media product
- the purpose of each media product from the perspective of both the producer and the audience. Make sure you use media terminology accurately and present your outcomes to a high standard.

Component 1: Learning Aim B: GENRE, NARRATIVE, REPRESENTATION & AUDIENCE INTERPRETATION

GENRE IS...
the word is used to describe a particular style which has certain characteristics or 'Ingredients', which we call **genre CONVENTIONS**



SUB and HYBRID genres

Within most genres we can find sub genres, for example within Comedy we can find RomCom

A hybrid genre is a genre which blends themes and elements from two or more different genres, for example *The Office* is a documentary/comedy

GENRE: Repetition & Difference

Genres are instances of repetition and difference (Steve Neal). Mere repetition alone would not attract the audience

Products must conform to (repeat) enough of the genre's conventions to be considered a part of that genre

Products must also subvert these conventions (difference) to be considered a unique product

This leads to genres changing over time – genres are therefore not static

Conventions	Genre conventions are all the parts of the genre such as character similarities and repeated plots that allow us to distinguish between genres. Genres have elements that the audience expects as they have been used many times in previous films.
Actors	Certain types of characters stereotypically only act in the same genre of film for example Jenifer Aniston is usually only found in Romcoms, Jason Statham as a star would usually indicate an action film
Narrative	A film's 'story, or plot', for example boy meets girl would indicate romance, Heroes or Heroines vs Villains indicates Action
Setting or Location	A film's setting can help us to tell a film's genre, for example 'western' films are usually set in the American outback, a Sci-fi film will usually be set in space
Mise-en-scene	A French term meaning "put into the scene", this includes costumes, hair, make-up and props and can help us identify the genre.
Iconography	Icons that help us to identify the genre, for example icons of the Western genre includes ten gallon hats, spurs and horses, the action genre would include guns.
Technical Codes	Technical codes are aspects like camerawork, sound and lighting and these can indicate genre. For example the technical code of lighting is used in all genres but in horror, side and back lighting is used to create mystery and suspense.

NARRATIVE: Todorov's Theory

1. A state of equilibrium (all is as it should be)
2. A disruption of that order by an event
3. A recognition that the disorder has occurred
4. An attempt to repair the damage of the disruption
5. A return or restoration of a NEW equilibrium

Audience RESPONSE

Preferred Reading – the audience respond to the product the way media producers want/expect them to without questioning – these are **passive audiences**

Negotiated Reading – the audience knows what the producer wants us to think, knows why that might be an untruthful representation, but forms an opinion which is a combination of both – these are **active audiences**

Oppositional Reading – the audience completely reject the product's message

Everything we see in the media is constructed – the people, places, issues and events we see are a *re-presentation* of reality. When analysing a media text you should consider:

- What is being represented? To whom?
- Is the representation positive or negative?
- How might different audiences 'read' this representation?

Types of NARRATIVE Structure

linear, where the story is told in order and a new equilibrium arrived on at the end

non-linear, where events are told out of sequence

circular, where the story ends where it began – ie there has been no change to the equilibrium

interactive, where the audience can influence the narrative

open narratives, where there is no resolution by the end

closed narratives, where the story is resolved

single-strand, where the narrative follows just one storyline

multi-strand, where there are different interwoven stories

Propp's CHARACTER Types

Hero – undertakes a journey or a quest

Villain – attempts to thwart or kill the hero

Donor – gives the hero advice or a useful object

Helper – a friend who helps the hero in their quest

Princess – motivation and reward for the quest

Dispatcher – sends the hero on their quest

False Hero – one who turns on the hero and is punished