100% book - Year 11 Mainstream set 3

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



Term 2

| Swindon | Academy 2023-24 |
|---------------|-----------------|
| 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."





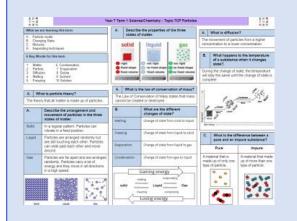






How to use your 100% book of Knowledge Organisers and Quizzable Organisers

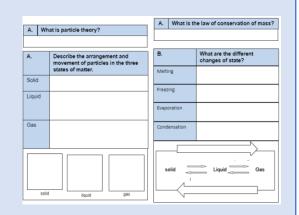
Knowledge Organisers



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.

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!

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.
- 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.

How do I complete Knowledge Organiser Prep?

| Step 1 | Step 2 | Step 3 | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Check Epraise and identify what words /definitions/facts you have been asked to learn. Find the Knowledge Organiser you need to use. OF CISC No. 10 TO NO. | Write today's date and the title from your Knowledge Organiser in your Prep Book. A What is particle theory? The beary that all make is not adjust in the five state of manuar. Solid is a negative pattern Precises can be of manuar in the first in the state of manuar. Solid is a negative pattern Precise are an open and once to make in the state of manuar in the st | Write out the keywords/definitions/facts from your Knowledge Organiser in FULL. 29th May 2020 Prespectives of the states of matter Particle theory = all matter is note of particles Soild = regular patien Particles vibrate in fixed particle Liquid = particles are arranged randomly but are still touching each other cal mare arranged can stide past each other cal mare arranged randomly. Perticles carry = lat of energy | | | | |
| Step 4 | Step 5 | Step 6 | | | | |
| Read the keywords/definitions/facts out loud to yourself again and again and write the keywords/definitions/facts at least 3 times. Solid = regular pattern particles vibrate in fixed position Solid = regular pattern particles vibrate in fixed position Solid = regular pattern particles vibrate in fixed position | Open your quizzable Knowledge Organiser. Write the missing words from your quizzable Knowledge organiser in your prep book. A What is particle theory? A Describe the arrangement and states of the fires states of matter. B What is the law of conservation of mass? What is the law of conservation of mass? | Check your answers using your Knowledge Organiser. Repeat Steps 3 to 5 with any questions you got wrong until you are confident. Particle theory = all matter is made of particles Solid = regular pattern porticles vibrate in fixed position Li and = particles fre arranged randomly but are still touching each other and mare ground Gas = Particles are for apart arranged randomly Particles carry of energy | | | | |

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

KS4 MACBETH Foundation

| 1. Context | | | 2. Key Chara | acters | 4. Key Vocabulary | | |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Playwright: Shakespeare (April 23 rd 1564-April 23 rd 1616) | | is partly based on fact. I 11 th Century king who | | eponymous protagonist is the tragic hero of this play. He is both ambitious and s from loyal and respected warrior to a paranoid, tyrannical king, before dying | Ambition | A desire to achieve something e.g. Macbeth and kingship | |
| Dates: written around 1606 Published: in 'the First Folio, 1623 | reigned Scotland fro Shakespeare's version | reigned Scotland from 1040-1057. Shakespeare's version of the story | in battle in Act | v. | Hubris | Having excessive pride or self-confidence | |
| Era: Jacobean Genre: Tragedy = A play ending with the | | Chronicles of nown historian). The y written in 1606 – the | 1 . | A strong, ambitious and manipulative woman who exerts pressure on sue him ambition of becoming king by murdering Duncan. Unable to deal with | Tyrant | A ruler who rules through fear and violence | |
| suffering and death of the main character. Set: Scotland, Structure: Five Act Play | year after the Gunpo | powder Plot of 1605 – ecurities of Jacobean | the guilt of thes | e actions and is driven to madness and suicide. | Corrupt | Acting dishonestly <i>OR</i> being in a state of decay | |
| Structure. The Activity | politics. | | | Weird Sisters: Supernatural and manipulative beings who seem to be able to re. They are unearthly and omniscient. | Patriarchal | A society where power is in the hands of men | |
| | | | | | Duplicitous | Lying and being false. Two-faced. Deceitful | |
| The Divine Right of Kings says that a | King James I of Engl | land (and VI of | | eth's close friend and ally is astute and loyal. Macbeth sees him as a threat. He iired by audiences, and mistrustful of the supernatural witches. | Façade | A false front, mask or illusion. Hiding one's true feelings | |
| monarch is not subject to earthly authority and that they have the right to rule directly | Scotland) came to the following the death | the throne in 1603 of Queen Elizabeth I. | - 10 | | Prescient | Having knowledge of things before they happen – the witches | |
| from the will of God. It implies that only God can judge an unjust king and that any attempt to depose, dethrone or restrict his | | ege to the king's ne witches' prophecy und a line of kings is a | | f Scotland at the beginning of the play. He is a virtuous, strong and respected as the model of good kingship by others in the play. He is murdered by 2. | Nihilistic | The belief that everything is meaningless | |
| powers runs contrary to the will of God and may constitute a sacrilegious act. The | descended from the | family's claim to have e historical Banquo. ed about the reality of | Macduff: A solo | lier who is loyal to Duncan and is suspicious of Macbeth. His family is | Courageous | Being very brave | |
| action of killing a king is called regicide and is considered a terrible crime. | witchcraft and its gr leading to witch trial | reat danger to him als. The play is probably | murdered by M | and which sold build and it is asspicious of MacDeth. It is failing it is accepted to soldiers and he eventually exacts revenge by killing Macbeth. He was an section and therefore was "not of woman born". | Supernatural | Things that are not a part of the natural world | |
| | | not written simply to please James, but certainly looks at relevant ideas. | | Malcolm: Duncan's son and next in line to the throne. He is described as a good man in the | | Events being already decided and out of a person's control | |
| | | | | , and the second | Treachery | Betraying someone's trust | |
| Shakespearean Tragedy. Macbeth is one of Shakespeare's tragedies and follows | | The Great Chain of Being was a belief in a strict religious hierarchy (see key | | 3. Central Themes | | The killing of a king | |
| specific conventions. The climax must end in a tremendous catastrophe involving the | vocabulary) of all things which was believed to have been decreed by God. This idea was important in Elizabethan and Jacobean beliefs. The chain starts from God and progresses downward to angels, demons (fallen/renegade angels), stars, moon, kings, princes, nobles, commoners, | | The play is about the corrupting power of ambition. Both Lady Macbeth and | 5. Key Terminology, Symbols and Devices | | | |
| death of the main character; the character's death is caused by their own | | he chain starts from | Ambition | Macbeth are urged to action by the prophecies of the witches, but they still commit their crimes themselves because they want greater power. Their | | A recurring image or idea that has symbolic importance. The | |
| flaw(s) (hamartia) yet the character has something the audience can identify with. | | | ambition leads them to violence and death. | Motif | best example in Macbeth would be blood. | | |
| | | omesticated animals, trees, recious stones, precious en minerals. | Kingship | The play contrasts the kind and wise rule of Duncan, who is described as a | Soliloquy | When a character is alone on stage and speaks their thoughts aloud to themselves. | |
| | | | | virtuous (good) king, with the brutal rule of Macbeth, who quickly becomes called a tyrant. The play shows how Macbeth has no divine right to rule and upsets the natural order by killing Duncan. | lambic Pentameter | A line of a play or poem that has ten syllables organised into five pairs of syllables, where the second in each pair is emphasised. e.g. "When you durst do it then you were a man" | |
| | hakespearean Tragedy | | | The play subverts the natural order of the world. Macbeth's actions are based on a supernatural belief in a prophecy. It depicts an anarchic world: Macbeth | Foreshadowing | When a hint or warning is given about a later event. | |
| 5 | that destroys centr | ero of status – the ral characters are ple of importance, with er and status to lose. | Order and Disorder | inverts the order of royal succession; his wife inverts the patriarchal hierarchy; the unnatural world disrupts the natural. The disruption underpins the conflict that is not only external and violent but internal as Macbeth and his wife come to terms with what they've done. | Dramatic Irony | When a character is unaware of something that the audience is aware of, so they don't know the full significance of their words. | |
| | t moments of Many | ernatural elements – ny of Shakespeare's | Appearance | Characters in the play are often not what they seem. Lady Macbeth and Macbeth are duplicitous towards Duncan, the witches equivocate (not say | Symbolism | When something symbolises a set of ideas e.g. "The raven himself is hoarse" – raven symbolic of death, supernatural. | |
| always lead to death. | | tragedies feature supernatural influences. | and Reality | what they really mean) and cannot be trusted, Lady Macbeth seeks to manipulate Macbeth. | Aside | When a character pauses in a conversation to speak only to the audience or another character, unheard by the rest. | |

| 1. Context | | | | | KS4 MACBETH Foundation | 4. Key Vocabulary | | |
|----------------------------------------|----------------|---------------------------|-------------------------|---------------------------|------------------------|-----------------------------------------|--|--|
| Playwright: | | Macbeth. | | 2. Key Char | acters | Ambition | | |
| Dates: Published: Era: | | Macbeth: | | Hubris | | | | |
| Genre: | | | | Lady Macbeth: | | Tyrant | | |
| Set: Structure: | | | | | | Corrupt | | |
| | | | | The Witches / | Weird Sisters: | Patriarchal | | |
| | | | | | | Duplicitous | | |
| The Divine Right of Kings | | King James I Scotland) | of England (and VI of | Banquo: | | Façade | | |
| | | Scottanuj | | | | Prescient | | |
| | | | | Duncan: | | Nihilistic | | |
| | | | | | | Courageous | | |
| | | | | Macduff: | | Supernatural | | |
| | | | | Malcolm: | | Fate | | |
| | | | | | | Treachery | | |
| Shakespearean Tragedy. | | The Great Chain of Being | | 3. Central T | hemes | Regicide | | |
| | | | | | | 5. Key Terminology, Symbols and Devices | | |
| | | | | Ambition | | Motif | | |
| | | | | | Soliloquy | | | |
| | | | | Kingship and Tyranny | | lambic Pentameter | | |
| Conventions of a Shakespearean Tragedy | | | | | Foreshadowing | | | |
| A tragic hero. Hamartia - | | A hero of status – | | Order and Disorder | | Dramatic Irony | | |
| External conflict – | Internal confl | lict | Supernatural elements – | | | Symbolism | | |
| | | | | Appearance and Reality | | Aside | | |

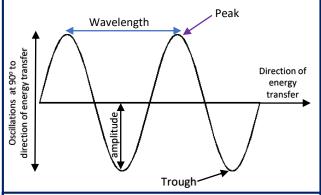
T2 Y11 P6 - Mainstream - Waves

Transverse Waves

- Oscillations (vibrations) **perpendicular** to direction of energy transfer.

Examples:

- Electromagnetic waves
- Ripples on water.



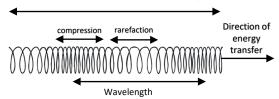
Longitudinal Waves

- Oscillations (vibrations) are **parallel** to direction of energy transfer.

Examples:

- Sound waves

Oscillations are parallel to the direction of energy transfer



Sound waves have areas of compression and rarefaction.

Compression = particles pushed closer together Rarefaction = particles are further apart

Properties of Waves

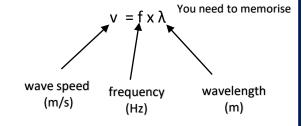
Amplitude – maximum displacement from undisturbed position.

Wavelength – distance from a point on one wave to the equivalent point on the next wave.

Frequency – number of waves passing a point each second.

Frequency is measured in Hertz (Hz) 1Hz = 1 wave per second.

Wave speed – the speed at which energy is transferred through a medium.



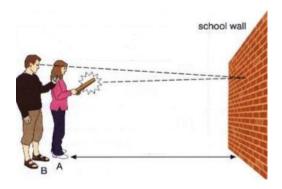
Measuring speed of sound waves in air

- Stand 50m from a large flat wall.
- One person claps/bangs bricks
- Measure time taken to hear the echo.
- Calculate speed of sound using:

Speed = distance x time

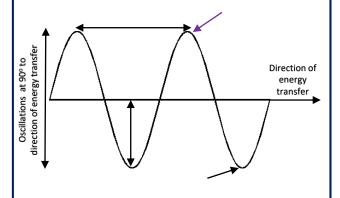
- Remember distance is double (in this case, 100m) as it travels to the wall and back.
- Take several measurements and calculate the mean to reduce error.

This is unlikely to produce an accurate value for sound in air (330 m/s) as the reaction time of the person operating the stopwatch is likely to be a significant proportion of the time measurement.



T2 Y11 P6 - Mainstream - Waves

- 1. How are transverse waves produced?
- 2. Label the wave features below.



- 1. Describe a longitudinal wave
- 2. Give an example of a longitudinal wave.
- 3. Label an area of compression and rarefaction in the diagram below



1. Define the following:

Amplitude

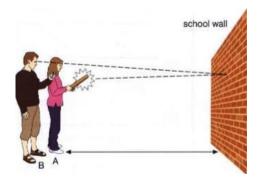
Wavelength

Frequency

2. What are the units for frequency?

3. What is the equation linking frequency, speed and wavelength?

 Describe a method to investigate the speed of sound waves in air.



- 2. What is the biggest source of error in this investigation?
- 3. What is the speed of sound in air?

T2 Y11 P6 – Mainstream – Waves Required Practical – investigating wave in a solid and a ripple

Measuring waves in a liquid Equipment

- Ripple tank
- Measuring ruler
- Stop watch

Method

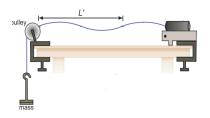
- 1. Set up the equipment as shown and turn on the motor to produce low frequency waves so that they are able to be counted.
- 2. Adjust the lamp until pattern is seen clearly on white screen underneath
- 3. Use a ruler to measure the length of a number of waves (e.g 10) and divide the length by the number of waves to give wavelength. This improves the accuracy of the measurement.
- 4. Record the waves using a camera or mobile phone. Count the number of waves passing a point in 10 seconds using a stopwatch and slowing the recording down.
- 5. Divide the number of waves counted by the time to give frequency.
- 6. Use $v = f \times \lambda$ to calculate the wave speed. Repeat for different frequencies of the motor.

| Ехр | Length of 10 waves (cm) | Wavelength of 1 wave (cm) | Number of waves in 10 s | Frequency (Hz) | Speed (cm/s) |
|-----|----------------------------|---------------------------------|-------------------------------|-------------------|-----------------|
| 1 | 65 | 0.65 | 121 | 12.1 | 7.9 |
| 2 | 50 | 0.5 | 155 | 15.5 | 7.9 |
| 3 | 42 | 0.42 | 187 | 18.7 | 7.9 |

Measuring waves in a solid

Equipment

string, vibration generator, hanging mass set and pulley



Method

- 1. Set up the equipment as shown.
- 2. Turn on the vibration generator
- 3. Adjust the length of the string until a standing wave is achieved
- 4. The frequency can be read from the vibration generator
- Measure as many complete waves as possible using a rule
- 6. Divide the length by the number of waves to give wavelength
- 7. Calculate speed using $v = f x \lambda$

Conclusion:

In both experiments, when you increase the frequency, the wavelength decreases – the speed remains the same in the same medium

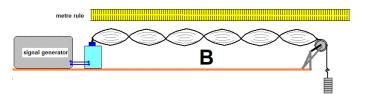
T2 Y11 P6 – Mainstream – Waves – Required Practical – Ripple Tank

1. Complete the table below to explain the method in calculating the speed of waves in a ripple tank.

| Step | Reason |
|------------------------------------|---------|
| Fill the ripple tank with water, | NC43011 |
| 1 | |
| switch on a lamp and place white | |
| card underneath the tank. | |
| Switch on the motor and adjust it | |
| to give low frequency waves | |
| Place a stopwatch next to the card | |
| and record the waves, with the | |
| stopwatch in view for 10 seconds | |
| Play the recording in slow motion, | |
| count the number of waves | |
| passing a certain point and divide | |
| this by 10 | |
| Measure the length of 10 waves | |
| by taking a picture of the card | |
| with a ruler on it. | |
| Divide the length by 10 | |
| | |
| | |

- 2. If the length of 10 waves is 55cm, what is the wavelength of 1 wave?
- 3. If there are 210 waves in 10 seconds, what is the frequency?

When investigating waves produced by a vibration generator on a string, how do we know the frequency?

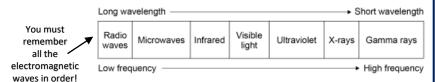


- 2. How many complete waves are shown in the image above?
- 3. If the length from the generator to the pulley was measured at 66 cm, what is the wavelength?
- 4. Why is it better to measure multiple waves and divide to find wavelength rather than measure one single wave?
- 5. What happens to wavelength when frequency increases?
- 6. What happens to wavelength when frequency decreases?

T2 Y11 P6 - Mainstream - Waves

The Electromagnetic Spectrum

- All transverse waves
- Transfer energy from the source of waves to an absorber.
- All travel at the same **velocity** through a vacuum or air **speed of light**.
- Speed of light = 300,000,000 m/s



| Wave | Use | Other information | | | |
|---------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------|--|--|--|
| Radio waves | Television and radio | Easily transmitted through the air. Harmless if absorbed by the body. | | | |
| Microwaves | Satellite communications and cooking food | Can be harmful when internal body cells become heated by over exposure. | | | |
| Infrared | Electrical heaters, cooking food and infrared cameras | Can cause burns to skin | | | |
| Visible light | Fibre optic communications | Only EM wave detectable by human eye. | | | |
| Ultraviolet | Energy efficient lamps, sun tanning | Causes skin tanning and can lead to burns or skin cancer . | | | |
| X-rays | Medical imaging and airport security scanners. | Very little energy is absorbed by body tissues. | | | |
| Gamma rays | Sterilising medical equipment or food and treatment for some cancers. | Passes through the body. They can lead to gene mutation and cancer. | | | |

Ray diagrams

- You need to construct **ray diagrams** to show how a wave is **refracted** at the boundary of a different medium.

Less dense → More dense (e.g. air to glass)
- Ray **slows down** and bends **towards the**

normal line.

air

air

glass block

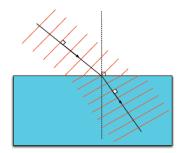
Normal line

Normal line

More dense \rightarrow Less dense (e.g. glass to air)

- Ray speeds up and bends away from the normal line.

The ray bends because different parts of the wavefront cross the boundary at slightly different times –



If wave hits medium at an angle of 90° then the ray will slow down but will not be refracted.

| T2 Y11 P | 6 – Mainstream | _ | Waves |
|----------|----------------|---|-------|
|----------|----------------|---|-------|

- 1. State two properties of electromagnetic waves.
- 2. Write the EM spectrum in order of increasing wavelength
- 3. Write the EM spectrum in order of increasing frequency
- 4. How fast do electromagnetic waves travel?
- 5. State the uses of:
- a) radio waves
- b) microwaves
- c) infrared
- d) visible light
- e) ultraviolet
- f) x-rays
- g) gamma rays

- What happens when a ray goes from a less dense → more dense medium?
- What happens when a ray moves from a more dense → less dense medium?
- 3. What is the line at 90° to a surface called?

- 4. What happens if a ray hits a medium at 90°?
- 1. What type of current do radio waves create when absorbed?
- 2. What is the frequency of the current produced by a radio wave of frequency 250Hz?

T2 Y11 P6 - Mainstream - Waves - Required Practical - Infrared radiation

<u>Aim</u>

Investigate how the amount of infrared radiation **emitted** (given out) by a surface depends on the nature of that surface.

In this investigation you are finding out which type of surface emits the most infrared radiation:

- Dark and matt
- Dark and shiny
- Light and matt
- Light and shiny

Method

- 1. Place Leslie cube on a heat proof mat.
- 2. Once the kettle has boiled, fill the Leslie cube with water.
- 3. Hold the infrared thermometer 5cm from the first surface
- 4. Record the temperature
- 5. Repeat the experiment three times on each surface and calculate mean for each surface.

Independent variable: surface

Dependent variable: temperature of the air (infrared radiation

emitted)

Control variables: Temperature of the water inside, the distance between the cube surface ad the infrared

thermometer



In this investigation you are finding out which type of surface absorbs the most infrared radiation:





Method

- 1. Fill a black and a silver can with water from the tap.
- 2. Take the temperature of the water in each can
- 3. Place the infrared thermometer 5cm from the cans
- 4. Leave for at least 10 minutes
- 5. Record the temperature of the water in each can and calculate the rise in temperature

Independent variable: surface of the can

Dependent variable: Temperature increase of the water

(infrared radiation absorbed)

Control variables: Temperature of the water inside, the distance between the cube surface ad the infrared

thermometer

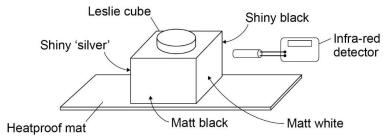
Conclusion

Black matt surfaces absorb and emit the most infrared radiation.

White/silver and shiny surfaces are poor emitters and poor absorbers of infrared radiation

T2 Y11 P6 - Mainstream - Waves- Required Practical - Infrared radiation

1. Describe how you could use the equipment below to investigate the emission of infrared by different surfaces.



1. A student was investigating the amount of infrared radiation absorbed by water in cans with different surfaces.





Name the... Independent variable:

Dependent variable:

Control variables:

- 2. What kind of surfaces are the best emitters of infrared radiation?
- 3. Why does the water in the silver can heat up less than the black can?

T2 Y11 C8 – Mainstream – Chemical Analysis Vocabulary: Suspension, Formulation

Pure substances

Pure = single element or compound - not mixed with any other substance.



Testing to see if a substance is pure:

- Pure substances have specific melting and boiling points
- Compare your data to a library of known values.
- E.g. Water has a boiling point of 100°C, if it is above or below this, it is not pure.

Formulations

Formulation = a mixture that is designed as a useful product.

- Components mixed carefully to get the required properties.

Examples of formulations:

- Fuels
- Cleaning agents
- Paints
- Medicines
- Alloys
- Fertilisers
- Food

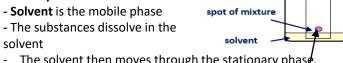
Chromatography

- Technique used to separate mixtures of **soluble substances**.
- How soluble a substance is determines how far it travels across paper.

More soluble = travels further (higher up paper)

Mobile phase

- solvent

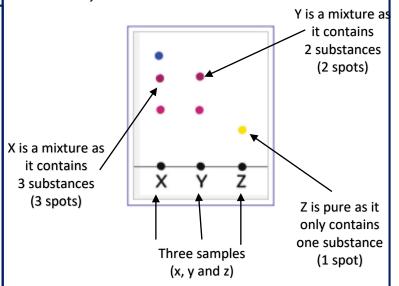


- The solvent then moves through the stationary phase. Stationary phase

- Does not move. The paper is the stationary phase.

Important – start line on paper must be drawn in pencil as pencil is insoluble and will not run

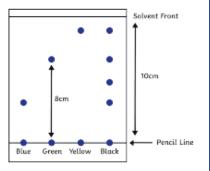
The spot and start line must be above the solvent line so the colours won't just wash into the solvent in the beaker.



Rf Values

This is the ratio of the distance moved by a substance to the distance moved by the compound

- Should always be between 0 and 1.
- Each substance has a unique Rf value.
- Can compare Rf values to a library of known substances
- Can identify unknown substances.



Rf value of green:

8cm / 10cm = 0.8

| T2 Y11 C8 – Mainstream – Che | mical Analysis – Chemical Analysis | |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 1. What is a pure substance? | 1. What is chromatography used for? | How do you calculate the Rf value? |
| 2. How can you test that a substance is pure? | 2. What determines how far the substance travels? | Rf values should always be between |
| | 3. What is the mobile phase in paper chromatography? | 3. Use a ruler to measure the distance the solvent moved in the diagram below. |
| | 4. What is the stationary phase in paper chromatography? | 4. Use a ruler to measure how far the yellow spot moved |
| 1. What is a formulation? | 5. How would you be able to identify a pure substance on a chromatogram? | 5. Calculate the Rf value for yellow |
| 2. Give 3 examples of formulations. | 6. Draw and label a diagram of the experiment to Investigate how many different colours there are in food colouring using paper chromatography. | Solvent Front |
| | | Blue Green Yellow Black |

T2 Y11 C8 – Mainstream – Chemical Analysis

Required Practical – Paper Chromatography

Aim: Investigate how paper chromatography can be used to separate and distinguish between coloured substances.

Method

- 1) Using a ruler, measure 1cm from bottom of chromatography paper and draw a line across the paper with a **pencil**.
- 2) Using a pipette, drop small spots of each ink onto pencil line (leave a gap so do not merge).
- 3) Pour solvent into a beaker, do not fill solvent above the pencil line on the paper.
- 4) Place chromatograph paper into beaker and allow solvent to move up the paper.
- 5) Remove paper just before solvent reaches top of the paper and leave to dry.
- 6) Calculate R_f values of all the spots using the equation below:

 $R_f = \frac{\text{distance travelled by substance}}{\text{distance travelled by solvent}}$

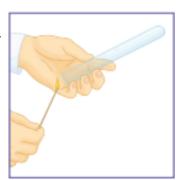
Common questions

- Q1) Why is a pencil used instead of a pen?
- **A1)** Ink in the pen would move up the paper with the substances.
- Q2) Why do you not fill the solvent above the line?
- **A2)** Substances would wash off into the solvent instead of rising up the paper
- Q3) Why might water not work as a solvent?
- A3) Some substances are insoluble in water.

Identification of the Common Gases

Test for hydrogen – Place a **burning** splint at the opening of a test tube. If hydrogen gas is present, it will burn with a **squeaky-pop sound**.

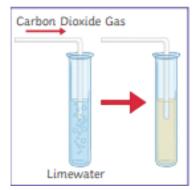




Test for Oxygen – Place a **glowing** splint inside a test tube. The splint will **relight** in the presence of oxygen.

Test for Carbon Dioxide –Bubble the gas through the lime water – if the gas is carbon dioxide, the limewater turns **cloudy**.





Test for Chlorine – Damp litmus paper is held over the of gas. If the tube contains chlorine, the litmus paper becomes **bleached** and **turns white**.

| T2 | T2 Y11 C8 – Mainstream – Chemical Analysis | | | | | | |
|----|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--|--|--|--|--|
| 1. | Describe how you would carry out paper chromatography to separate and identify the different colours in food dye. | 1. Describe the tests and the positive results for: | | | | | |
| | | a) Hydrogen | | | | | |
| | | b) Carbon dioxide | | | | | |
| 2. | Why is a pencil used instead of a pen? | c) Oxygen | | | | | |
| 3. | Why do you not fill the solvent above the pencil line? | d) Chlorine | | | | | |
| 4. | Why might water not work as a solvent? | , | | | | | |
| | | | | | | | |

The significance of food, water and energy to economic and social well-being.

Everybody needs food, water and energy Resources, such as food, water and energy are needed for basic human development. People need food and water to survive and stay healthy. Energy is needed for a basic standard of living. Access to food, water and energy affects the social well-being of people and countries.



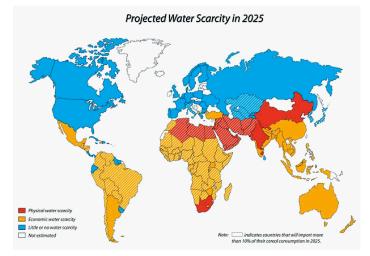
Map showing daily calorie intake world wide

- 1.As can be seen from the map, the daily calorie intake is **uneven** across the world. With many **LIC countries** having a very **low calorie intake**. Especially the Sub Saharan African countries.
- 2. Without access to enough safe, nutritious food people can become **malnourished** which means to not have the right balance of nutrients in their diet, this can affect a child's development.
- **3.Malnourishment** increases the likelihood of getting **diseases** one third of all children under the age of 5 that die globally due to diseases linked to malnourishment.
- 4.People who may not get enough to eat will **not preform** as well in **school** or at **work**. Meaning the population will **lack** the **skills** needed to help a country's economic development.
- 5.Overall a lack of food will have a **negative impact on social well** being of people. It may lead to social unrest and **civil war**, it leads to **health problems**, and forces people to **migrate** from their homes.
- problems, and forces people to migrate from their homes.

 6.It can also have a negative impact on the economic well-being of the people, as people can't work if they have no food, children can not attend school as they must either try to farm the land or find food. This stops the country from developing.

<u>Water</u>

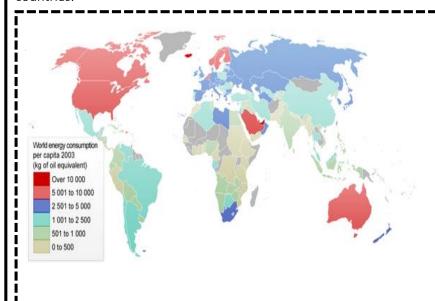
A map showing projected water scarcity



- 1.As can be seen from the map, water availability is **uneven** across the globe. Many north African countries may not have physical access to water by 2025.
- 2. Water is needed for **drinking**, **cleaning and cooking**.
- **3.Without sanitation**, water sources can also become **polluted** e.g. by raw sewage
- 4. Water borne diseases like **cholera and typhoid** kill millions of people each year.
- 5.A lack of water impacts the **social well being** in countries as **diseases and death** are common. Civil war can also take hold. It can lead to a lack of food and starvation.
- 6.It can also have a **negative** impact on the **economic well being**, as people spend all day **searching for water** meaning they can not work or attend school. This stops the country from developing.

The significance of food, water and energy to economic and social well-being.

<u>Everybody needs food, water and energy</u> Resources, such as food, water and energy are needed for **basic human development**. People need food and water to **survive** and stay healthy. **Energy** is needed for a **basic standard of living**. Access to **food, water and energy** affects the **social well-being** of people and countries.



Energy

- 1. The map shows that energy consumption is **uneven** globally, with the **highest rates** of consumption generally taking place in the **HICs.**
- 2. Energy is important for **industry**, **transport and homes**.
- **3.Social well being** will be **negatively impacted without** energy as people will not be able to heat homes, or turn lights on during the night. Social unrest/civil war can take place over the availability of resources
- 4. The **economic well being** in the country can be **negatively impacted**, as industries can not operate, meaning there are few jobs, which could help the country develop. Furthermore, people can not travel to jobs in other places, as the lack of energy makes travelling difficult.

An overview of global inequalities in the supply and consumption of resources.

- 1. The global distribution of resources is uneven
- 2. Some countries do not have energy reserves, others have **poor climates** meaning food production is difficult.
- 3. For some countries the only way to access these resources is to **import** them, which is **expensive**.
- 4.Consumption of resources therefore depends on wealth and their availability.
- 5.HIC's can afford to buy more resources, so consumption is greater to sustain their higher standards of living and social well being.
- 6.In NEE's like China consumption is growing quickly. Industry is developing very fast, which requires lots of energy) and population and wealth is also increasing rapidly
- 7. However, in **LICs** they can not afford to exploit their resources or import from other countries, so consumption is low.

Key word:

•Consumption: the action of using up a resource

An overview of resources in relation to the UK: Food

Seasonal foods are now available all year round

- 1. The type of food that are in demand in the UK has changed. Before the 1960's most fruit and veg sold in the UK was grown locally. Seasonal foods could not be purchased all year round, such as strawberries or Brussel sprouts. Seasonal foods are not available all year round, you can only buy it during the months it growth. This has now changed.
- 2. There has been a growing demand for seasonal produce to be supplied all year round. So now we import things like strawberries from Mexico and Apples from South Africa.
- **3.Demand** has grown for high value foods like **exotic fruits**, vegetables and spices. Theses high value foods have become more popular in the UK as people's incomes have increased. These are often grown in LICs and imported to the UK.
- 4. There has been a growing demand for organic food. These are grown without the use of artificial fertilisers and the production of organic produce does not have a negative impact on the environment. Some organic food is produced in the UK, but lots is imported too.

The problems associated with our food – the carbon footprint!

- 1. The growing, processing and packaging of our food produces CO2 and other greenhouse gases. In 2013 9% of the UK's greenhouse emission came from growing food.
- 2.Transporting food from where it is grown to where it will be sold produces CO2. This movement is called 'food miles.'
- 3. The amount of greenhouse gas produced during growing, packaging and transporting is called it's carbon foot print. A larger carbon
- footprint means more greenhouse gases and more global warming.
- **4.Imported foods** have to be transported along way, so have **high food miles** and a **large carbon footprint**.
- 5. Environmentalists are encouraging people to **buy locally** grown food. **Farmers markets**, farm shops and locally
- produced vegetable boxes are becoming more popular reducing the carbon footprint of the food we eat.

Farming is becoming more industrialised

- 1. Since the 1960's there has been a growth in large scale industrial farming where processes from the production of seeds and fertilisers, to the processing and packaging of food is controlled by large firms, known as agribusiness.
- 2. This has caused farm sizes to increase. Small farms have been taken over and field sizes made bigger, so more can be produced.
- 3. The use of **chemicals** has increased large amounts of **artificial fertilisers** and **pesticides** are added to crops to help them grow. and special feed to animals to encourage growth
- 4. The number of workers has fallen, as modern technology is capable of doing the work.
- 5. Industrial farming has had negative environmental impacts, including hedgerow destruction (loss of habitats), increased soil erosion, and fertilisers running into streams and ponds, causing algae to grow and the fish life to die.

An overview of resources in relation to the UK: Water

Demand for water across the UK

- 1.In the UK the places with the **best supply** of water are **not** the areas with the **greatest demand.**
- 2. The **highest demand** for water in the UK is in the **South East**, where the population is growing and there is little rainfall. The **highest** amount of **rainfall** is in the **north west**, where the population is actually declining.
- 3. The south east is an area of water deficit (there is a greater demand than can be supplied).
- 4. The **north and west** are areas of **water surplus** (there is a greater supply than demand).
- 5. The amount of water used in the UK has increased by 70% since 1975. Mainly due to new appliances like washing machines and dishwashers 6. The UK's population has also increased by 10 million, meaning more users.
- 7. The south east continues to grow, even though water supply is low. This is due to the north south divide.
- 8.Demand is increasing because of Increased population, more crops required, Technology has changed (washing machines etc), power showers, central heating

The problems of polluted water in the UK

- **1.Polluted** or **low quality water** reduces the amount available for use
- 2. The quality of water in the UK has been **improving**. However there are **still problems**, such as **nitrates** from fertilisers being **washed into rivers** and soaked into groundwater. Also, **pollutants from vehicles** being washed into water sources through run-off when it rains.
- **3.80%** of water in southern parts of the UK comes from **groundwater**. However, **pollution** is affecting about **50%** of this. Many groundwater supplies have been closed, or expensive treatment of them has taken place.
- 4.Strategies used to improve water supply include, putting **stricter regulations** on how much **fertilisers** and pesticides can be used. Also, **higher taxes** have been introduced on the **most polluting cars**. This encourages people to but newer, greener models.

Water transfer can help to maintain supplies

One way to **deal water deficit** issues, is to **transfer water** from areas of surplus to deficit. Water Transfer schemes meet the demand for water by **transferring water from areas of water surplus** (low population, high rainfall) to **areas of water of deficit** (high population, low rainfall and high industry). Its first creates a reservoir in an area of water surplus and holds it. This water is then transferred to areas of water deficit. However, water transfer can cause problems: Dams can be **expensive** to build and the reservoirs lead to huge areas being flooded, damaging farm land, habitats and causing people to be relocated. **Political issues** can exist e.g. people may not want their water transferred to another area.

Conserving water is also being used to lower the demand. The UK is trying to conserve water by: fixing leaking pipes, teaching children in schools about not wasting water i.e turning off taps while brushing your teeth, Using technology, duel flushing systems on toilets or collecting and using rain and grey water, Banning the use of hose pipes during times of water stress

An overview of resources in relation to the UK: Energy

The UK's energy mix is changing – renewables!

- 1.Traditionally the UK relied on fossil fuels (coal, oil and gas) to supply it's energy. In 1970, 91% of our energy came from oil or coal.
- 2. The discovery of large gas reserves under the North Sea meant that by 1980, 22% of the UK's energy was supplied by gas.

emissions and the cost of mining these reserves is very expensive. The last deep coal mine closed in the UK in December 2015..

- 3. The use of nuclear energy to produce electricity also increased during the 1990's.
- 4.Recently there has been a movement towards using renewable energy supplies, rather than fossil fuels. All coal fired power stations in the UK are due to close by 2025. In 2014, 19% of all electricity produced in the UK was generated by renewable energy. 5. Wind and bioenergy (energy from the burning of biological source e.g. food waste or oil rape seed) are the biggest sources of renewable energy,
- but the use of solar and hydroelectric power have also increased. The UK's supplies of coal, oil and gas are running out

- 1.North Sea oil and gas reserves are rapidly running out.
- 2. The UK still has coal reserves, but the use of coal has declined rapidly since the 1950's. This decline has happened as we have tried to reduce CO2
- 3. The use of shale gas from underground in the UK is being considered. This is extracted using a process known as fracking: fluid is pumped into shale rock at high pressure, causing it to crack. This forces gas trapped in the rock to flow back out of a well, where it is collected. Much of the fracking in the UK would take place in the North West of the country, this has the potential to create thousands of jobs in an area of economic decline. Aberdeen is one of the most wealthiest places in the UK and this is linked directly to job creation and taxes from offshore oil and gas.

Exploiting energy sources causes economic and environmental issues.

Energy resources are very important for the UK, exploiting these creates jobs and wealth for areas of the UK. However this extraction can cause problems:

Economic issues:

- 1. The cost of extracting fossil fuels can be expensive. As the reserves
- run out extraction becomes more difficult and costs increase further. 2. North Sea oil is especially expensive to extract. If the price of oil
- drops (as it did between 2010-2013), it may cost more to produce than to sell. This could lead to job loses. 3. The cost of producing energy from renewables and nuclear is very
- high. This cost is often passed on to the consumer,
- 4. Money is needed to continue to research into alternative energy sources such as fracking, or building new nuclear power plants 5. Renewable energy can be unreliable and inefficient. This means the
- UK still has to pay high prices to import energy from other countries. 6. Nuclear waste is expensive to dispose of as it is highly dangerous. This pushes up the cost of producing electricity.

Environmental Issues 1. The burring of fossil fuels produces CO2 and greenhouse gases,

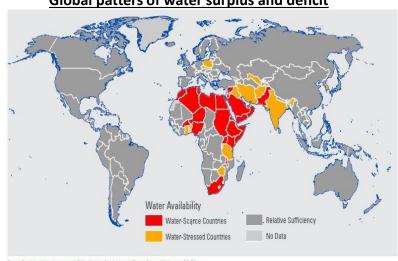
putting tourists off visiting.

- this is causing the greenhouse effect.
- 2.Fracking may pollute groundwater and cause mini-earthquakes
- this has led to some people campaigning to ban it. 3. Large areas of land are needed to produce energy, this can destroy habitats and create a scar on the landscape (lowering
- house prices). 4. Accidents such as oil spills or nuclear disasters, can leak toxic chemicals into water sources, soils and the atmosphere, killing animals and posing a significant risk to human health.
- 5. Natural ecosystems can be damaged by renewable energies, like large wind farms, which create noise and scare wildlife. They can also ruin the landscape of coastal and countryside areas,

WATER: Areas of surplus (security) and deficit (insecurity): • global patterns of water surplus and deficit • reasons for increasing water consumption: economic development, rising population ● factors affecting water availability: climate, geology, pollution of supply, over-abstraction, limited infrastructure, poverty.

Global patters of water surplus and deficit

Water security – area with high rainfall and or very low population density e.g. Canada and Brazil



Water insecurity – areas with low rainfall and or very high population density e.g. Libya, Mexico

Source: Population Action International (PAI). Mapping Population and Climate Change. Washington, DC: PAI.

Global demand for water: Water insecurity is not having enough clean water

- Water security means having a reliable and sustainable source of enough good quality water to meet everyone's needs for industry, agriculture and personal health.
- Water security depends on the amount of water available (e.g. from rainfall, rivers, groundwater etc.) and the number of people that need to use that water. It also depends on being able to access that water which can be hard if you are poor.
- Having more water than is needed is known as water surplus. When there is not enough water to meet everyone's needs it's called a water deficit.
- A water deficit can lead to water insecurity when there is not enough clean water to keep everyone healthy, or enable them to make a living (e.g. to water their crops, provide energy etc.)
- When **demand** for water is **greater than** the **supply** during a certain period, or when water is not of high enough quality to use, places are said to experience water stress.

WATER: Areas of surplus (security) and deficit (insecurity): • global patterns of water surplus and deficit • reasons for increasing water consumption: economic development, rising population • factors affecting water availability: climate, geology, pollution of supply, over-abstraction, limited infrastructure, poverty.

Water demand is rising as there are more people with more money:

Rising population

- The world population is increasing. Each person needs water for drinking, washing, preparing food etc.
- More people also means that more food needs to be grown – irrigation for agriculture uses 70% of the world's freshwater resources.

sewage contaminates the supply.

Economic development

- Countries are becoming more industrialised as they develop. This means they
 are producing more goods. Manufacturing uses a lot of water.
- Energy production 15% of all water withdrawn globally is used to produce energy, e.g. cooling in thermal power plants.
- Rising living standards as countries develop, people's wealth increases and they can afford a higher standard of living. This increases water use as more people use flushing toilets, showers, dishwashers etc.

Factors affecting water insecurity:

Physical factors:

- **Climate** most places rely on rainfall, which feeds lakes and rivers, for their water supply. If **climates** are **hot**, lots of water is lost from lakes and rivers due to **evaporation**.
- **Climate change** is altering the total amount of rainfall in places, as well as how often it rains and how heavy it is. Many dry **areas** are **getting drier**, increasing the risk of droughts.
- are getting drier, increasing the risk of droughts.
 Geology when rain falls on impermeable rock e.g. clay, it can't soak in, so flows off into rivers and lakes. These are easy to get water from. However, when rain falls on permeable rock e.g. sandstone, it infiltrates through them and forms underground water stores aquifers), which are harder to get to. However groundwater can make water available in very dry places e.g. the Sahara desert.

Economic and social factors

- Over extraction can take place, when more water is being used than is being replaced. This can be caused by population growth (which is common along the area of the Sahel on the edge of the Sahara desert). Another cause can be improvements in sanitation and personal hygiene e.g. people take more showers. Finally, tourism and recreation can increase water stress, for example watering golf courses in dry areas in Spain one golf course of the summer season uses as much water as a town with a population size of 20,000 in the UK.
- The pollution of water from rapid industrial development, means less water is available for drinking.
- Human and animal waste are a hazard where people share water sources with animals and do have access to sanitation.
- Limited infrastructure rapid urbanisation means that water pipes and sewers can not be built quickly enough. This means
- **Poverty** water providers charge a fee for supplying water. People who are **too poor** to **pay** for the **mains supply** will look for other sources, which may not have been treated to make them safe.

<u>Impacts of water insecurity – waterborne disease and water pollution, food production, industrial output, potential for conflict where demand exceeds supply.</u>

- **Diseases** where water is scarce, supplies of drinking water can become contaminated with sewage or industrial chemicals e.g. fertilisers. This can cause **cholera and typhoid**, leading to death.
- Reduced food production —A shortage of water means less irrigation can happen, therefore less crops produced which can lead to starvation.
- Industrial output can decline Industries use huge amounts of water, when water is scarce it results in less being produced, causing profits and wages to fall, which is bad for the economy.
- It can cause **conflict** When countries of water insecurity share the same water supplies e.g. a river or aquifer, water shortages can trigger conflicts. For example one country may decide to build a dam to trap more water, however this will mean the country further down stream will have less.

Overview of strategies to increase water supply: • diverting supplies and increasing storage, dams and reservoirs, water transfers and desalination

Water supplies can be increased

- Water is often not where it is needed. Water diversion schemes transfer water from areas of surplus to areas of deficit.
- Seasonal variations in rainfall can cause a water deficit at certain points during the year. One way to solve this is to store water in tanks, or in reservoirs. This gives a reliable source of water all year round.

Water transfer

- Water transfers are **large scale engineering** projects that move water from a river that has surplus water to a river that has a water shortage.
- The water is usually transferred in canals and pipes.
- Water transfer can reduce the water deficit issue, meaning farmers do not suffer crop failure and life can carry on as normal e.g. no hosepipe bans etc. In LICs this stops people being forced to drink dirty water.
- However, it can cause social and economic problems. For example, the cost of pipes can be expensive and this is passed on to the consumer, this means poorer people may struggle to buy the water. Areas where the water is being transferred from could end up in drought, during particularly dry periods. This causes conflict as local farmers may be angry that they can't grow crops as their water is being transferred.

Overview of strategies to increase water supply: • diverting supplies and increasing storage, dams and reservoirs, water transfers and desalination

Dams and Reservoirs

- Building a dam across a river traps a large amount water behind the dam, creating a reservoir.
- During times of water surplus the reservoir will fill. This is stored and can then be released in times of water deficit. Meaning there is a consistent flow of water all year round. This provides clean water for the population and allows crops to be grown.
- Water transfer from reservoirs is usually along **pipelines** and **pumping stations**. These are **expensive** to construct and maintain and push the price of water up for the local population.
- Most of Birmingham's water comes from the Elan valley in mid-Wales, where a series of dams and reservoirs provide a continuous supply for the city.
- Reservoirs cause **conflict** due to the huge area of **land** which is **flooded**. This destroys agricultural land, putting farmers out of business. It can drown settlements in the local area, meaning locals are forced to move, breaking up the community.

Desalination allows sea water to become a water source

- 1. Desalination is the **removal of salt from seawater** so that it can be used. There are **two ways** to do this. The first is to **heat** the seawater so it evaporates, the water is then condensed, this is collected and drinkable water has been achieved. The other method is to use a **special membrane** to remove the salt. This provides clean drinking water in areas of water deficit such as places like Dubai.
- 2. This is very **expensive** as the seawater must be **heated**, or enough **energy** is needed to push the water through the membrane. This means huge amounts of **fossil fuels** would be needed, **increasing CO2 levels**. However, in Saudi Arabia, they are currently building the world's first large scale solar powered desalination plant.
- 3. In the **UK**, **desalination** is mainly used during **droughts**. For example, London has a desalination plant on the banks of the river Thames. It can supply enough water for 400,000 homes in times of water shortage.
- 4. Wealthy desert countries such as Dubai, mainly use desalination as their main source of clean, drinking water. In **Dubai 98.8% of the water comes from desalination** with one supply plant creating 140 million gallons of desalinated water each day. This means that huge amounts of energy are being used to produce this.
- 5. The plants being used across the Arab countries are quiet energy efficient, with the latest plant in Dubai being 82% efficient. However, it still has one of the **largest carbon footprints** in the world because of this. Also the amount of **salt in the sea is rising** rapidly as the water is taken out and the salt dumped back into the sea, this is threatening sea life in the area.
- 6. Dubai only has **4 days worth of back up supply of water at any time**, so if any problems were to arise at the desalination plants, the area would quickly run out of water.

An example of a large scale water transfer scheme to show how its development has both advantages and disadvantages.

China's south to north water diversion project – Large scale project

To cope with water insecurity, the Chinese government has planned a \$62 billion project that will transfer 44.8 billion cubic litres of water every year from the south to the north of the country. Two of the three planned routes have been completed – the Central and Eastern Routes.

Advantages of the project

- 1. It provides water for people in the north, in major cities such as Beijing and Tianjin. In total over **50 million people will benefit** from the project, as the will have clean, uncontaminated water.
- 2. Industry can continue to develop in these large cities and across northern China, bringing taxes and wealth to the country allowing it to develop.
- 3. It provides a reliable source of water to **irrigate farmland**, meaning crops can be grown and food shortages do not happen.

Disadvantages if the project

- 1. Huge areas of **land** had to be **flooded** to create the **reservoirs**, one of the largest was part of the 3 gorges dam project. This caused **habitats to be ruined** and animals such as the **yellowfin dolphin** to become extinct.
- 2. The creation of the **Danjiangkou Reservoir flooded farmland**, causing farmers to lose jobs, as well as forcing 345000 people to move, destroying the communities within the area.
- 3. The water supplied to Beijing is very expensive for consumers as the project cost so much. The project only supplies urban areas and those that can afford it this means that the urban poor and those in rural areas have not got access to this clean water source so still have the same problems as the past.
- 4. Water stress in the south will increase as so much water is being diverted. During severe droughts, there won't be enough drinking water or irrigation water for over 30 million people. This could cause crop failure and force people to drink dirty water causing disease.



Moving towards a sustainable resource future: an example of a local scheme in an LIC or NEE to increase sustainable supplies of water.

Kenya: Sand Dams

Kenya is a LIC, with a hot, dry climate. Most rain falls in just a few heavy downpours each year. Most rivers therefore only flow in the rainy season, as in the dry season the water evaporates. It is difficult for rural communities to storm water for future use. People in Kenya's Malaika near the town of Mitito Andei have been helped to build sand dams (African Sand Dam Foundation), which give them access to water all year round.

This is how:

- 1. A low dam (about 1 m high) is built across the river using locally found materials like rocks and cement
- 2. During the rainy season, when water is flowing in the river, coarse material like sand is trapped behind the dam.
- 3. Water gets trapped between the sand particles (about a third of what is trapped behind the dam is actually water)
- 4. Over many rainy seasons the sand builds up
- 5. The sand prevents the water from being evaporated by the hot sun during the dry season and filters the water
- 6. When the river stops flowing, water can be extracted from the sand by digging a well, piping the water through the dam to a tap or simply digging holes and scooping the water out
- 7. Eventually the water table also rises, which means that crops start to flourish in the area.
- 8. The dams are cheap to build, use local materials and don't require much maintenance
- 9. The height of the dam can be raised every year to trap more sand and water

Problems of the scheme:

- 1. Require the charity to supply the concrete and knowledge on how to build the dam
- 2. Require the charity to educate local people on drought resistant crops

Both of these depend on overseas aid donations from the public.

Moving towards a sustainable resource future: water conservation, groundwater management, recycling, 'grey' water

Water conservation:

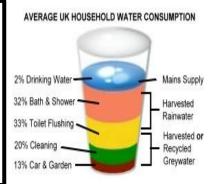
- Fixing leaking reservoirs, pipes and dripping taps helps to stop water being wasted. In the UK 3.3 billion litres of water are lost every single day.
- 2. Fitting **dual flush toilets** reduces use, as they use less water. They save up to **3.5 litres** for every flush. Some urinals are also waterless now, such as in McDonalds, saving millions of litres of water per day.
- More efficient dishwashers and washing machines are now used, and people are encouraged to only run these on full load.
- 4. Fitting homes and businesses with water meters, means people are more aware of the water which they are wasting/using. This means they are more likely to reduce their use.
- **5. Educating people** to take sorter showers and turn off taps when not in use (e.g. brushing teeth).
- 6. Building adaptations such as green roofs, these filter rain water and allow it into the main supply. Where it can be used for cleaning.
- 7. Water butts can be used to catch rainwater which would from the downpipe of gutters. This can be used to water the garden, flush toilets etc.

Recycling and 'Grey' Water:

- 1. Recycling water means to take what has already been used and using it again, rather than returning it to a river or the sea. This makes water use more sustainable because less water needs to be taken from rivers or groundwater.
- 2. Water from homes and industries can be pumped to water treatment plants, where it is cleaned and made safe to reuse.
- 3. The recycled water is used for **irrigation**, **industry**, **power plants and toilet flushing**. However, it can be treated enough to make it redrinkable and the process is expensive and polluting.
- **4.** 'Grey' water is a type of recycled water. It is usually used immediately rather than being treated first. It is normally waste water from peoples homes, for example, from washing machines, showers or sinks. It does not include toilet water as this is contaminated.
- Because it is quite clean it can be used for irrigating gardens, farmland, washing cars and flushing toilets. This can safe thousands of litres of water.
- 6. This also **conserves the energy** needed to treat the water, which can be expensive.
- 7. This is also good as it **reduces the use of clean water**, which can be saved for drinking.
- 8. However, a negative is grey water can not be used as drinking water as it is far too dirty.

Ground water management:

- 1. Monitoring groundwater extraction means that you can ensure that extraction of the water is not faster than is naturally being replaced.
- **2. Farmers** have been told to use **less artificial fertilisers and pesticides**, companies that leak toxic waste are fined. This stops the water supply becoming contaminated.
- **3. International agreements** have been created where **groundwater** is **shared** between countries. This ensures that one country does not take an unsustainable amount of water leaving another country short. However, agreeing how much water each country can take from the aquifer can be very difficult.



Year 11 OCR A Term 1 – People of the world

| A. | How can | we measure development? | | | What ha | as caused uneven development? | | E. | What is Nigeria like? | |
|----------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------|----------------------------------------|-------------------------------|----------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--|
| Life expect | tancy | The average lifespan of so | meone born in that country | Natural | l resource | | es (oil, gas) can be traded. | | eria's environmental,/ political/ economic | |
| Birth rate | | Number of live births per 1 | 000 per year | 0 1 1 | | | clean, safe water | _ | <u>ntext</u> | |
| GDP per capita | | An average of the national gross domestic product per person per year in \$ | | Colonialism | | country and | y goes into another I claims they are in power. Iteal their raw materials. | | Nigeria is an EDC in west Africa. It borders Niger to the north and Benin to the west. Nigeria lies on the Atlantic Ocean. | |
| Literacy ra | te | Percentage of people over and write | the age of 15 who can read | Industr | ialisation | and increas | re built, increasing trade sing economic | | Nigeria has a tropical climate in the South (near the Niger delta) and semi-desert | |
| Death rate | | Number of deaths per 1000 | O people per year | | | developme | nt | | climate in the North. | |
| HDI | | Measures life expectancy, capita. Scored 0-1, 0 is low | • | Trade | | | or unfair. Helps a country eir economy. | | Nigeria was colonised by the UK and became independent in 1960 It has high levels of international migration | |
| Internet us | ers | Percentage of people who | have access to the internet | Climate | е | | mate (too hot or too cold) ustry and affect health | | due to jobs in the oil industry | |
| A. | Но | w can we measure develop | oment? | | | | aou, and anost noa | • | Agriculture in Nigeria provides a stable food supply for much of West Africa | |
| | | POSITIVE | NEGATIVE | | | | | | Nigeria has had a stable government since | |
| Life | | ows condition of | Does not consider political | C. | The diffe | rent types of aid | d | | 2015 | |
| expectancy | ' | althcare and quality of rvices | factors such as war | Aid | | | or organisation gives | Wh | at has enabled Nigeria to develop? | |
| Birth rate | | ows development of | Does not consider how long | | | products or tech | other country (e.g. Money, nnologyp | • | With a population of 182 million, | |
| | | althcare (e.g., ntraception) | babies survive in the country | Bi later | al aid | | given by one country to | | Nigeria has the largest population of | |
| GDP per c | | ows how wealthy a | Very small/ large populations | NA. dellas | anal aid | | nas 'strings' attached. | | any African country. Nigeria has grown mainly through | |
| | | untry's population is uality of life) | can disrupt data (e.g. China) | Multilat | teral aid | | different countries or tions (e.g. Oxfam, red | | the export of raw materials such as | |
| Literacy ra | edi | ows the quality of ucation received in a untry | Does not consider other factors that disrupt education (e.g. water collection) | Short-to | erm aid | | port a country following a ter an earthquake) | • | oil, oil palm and cocoa. They export In 2014 it has the highest GDP in | |
| Death rate | hea | ows the quality of althcare/ disease/ od/water | Can be disrupted if country has an elderly population (Japan) | Long-te | erm aid | • | a long period of time to ry's development (e.g. | | Africa | |
| HDI | | es a combination of | | | | | Factors contributing to 1 | Nigeri | a's economic growth | |
| Internet us | | easures= more accurate ows the development of | Does not consider the quality | | | Imports | Goods coming into a count | ry | | |
| internet us | | rastructure in a country | of this infrastructure | | | Exports | Goods leaving a country | | | |
| D. How | D. How does aid promote and hinder development? | | | | International When one country (e.g. U | | () fun | ds businesses in another country (e.g. | | |
| Promote | usir | Aid can help a country improve it's healthcare, communications rapic using ready developed technology from more developed nations. It chelp a country recover quickly after a natural disaster. | | | | investment | Nigeria) | | | |
| Hinder | Aid | can hinder a country's devel | opment by encouraging depend | | $-\parallel$ | Population structure | The 'make-up' of the popu | lation | . E.g how old or young/ males and females. | |
| | in a | id could be used in the wron | tions. If a government is corrupt g places (e.g. armament). Tied a spend money buying goods from | aid can pu | | Employment structure | How the workforce is divi | ded u | p (primary/ secondary/ tertiary) | |

| | | <u>Year 11</u> | OCR A 1 | <u> </u> | - People of th | ne world | | |
|-----------------|---------------------------------|----------------|------------------|----------------------------------------|-------------------------|-------------------------|-------------|---------------------------------------------|
| A. How | can we measure development | ? | B. | B. What has caused uneven development? | | | E. | What is Nigeria like? |
| Life expectancy | | | Natural resource | | rces | | | geria's environmental,/ political/ economic |
| Birth rate | | | Color | nialism | | | ┪ | |
| GDP per capita | | | | | | | | |
| Literacy rate | | | Indus | strialisation | n | | | |
| Death rate | | | | | | | <u> </u> | |
| HDI | | | Trade | e | | | | |
| Internet users | | | Clima | ate | | |] | |
| A. | How can we measure develo | pment? | | | | | | |
| | POSITIVE | NEGATIVE | | | | | _ | |
| Life expectancy | | | C. | The diff | erent types of aid | I | Wi | nat has enabled Nigeria to develop? |
| Birth rate | | | Aid | | | | | |
| 2 | | | Di lote | eral aid | | | \parallel | |
| GDP per capita | | | Di late | erai aiu | | | | |
| | | | Multil | ateral aid | | | 7 | |
| Literacy rate | | | Short | -term aid | | | ╢ | |
| | | | | | | | | |
| Death rate | | | Long- | term aid | | | 1 | |
| | | | | | | | 」└─ | |
| HDI | | X | | | | Factors contributing to | Niger | ia's economic growth |
| Internet users | | | | | Imports | | | |
| D. How does | aid promote and hinder devel | Innment? | | | Exports | | | |
| D. How does | s alu promote anu miliuei uevel | юршент | | | International | | | |
| Promote | | | | | investment | | | |
| Hinder | | | | | Population structure | | | |
| | | | | | Employment structure | | | |
| | | | | | | | | |

| Where is Rio? | 100 110 110 110 110 110 110 110 110 110 | 14. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Rio de Janeiro is located in South America. It is located in south Brazil. It borders the Atlantic Ocean. | H. Where do people in Rio come from? | Sustainable Management in Rio- Transport |
| G. Why is Rio de Janeiro a global city? Until 1960 Rio was the capital of Brazil however this has not changed to Brasilia. Rio is still very important. Brazil is in an Emerging Developing Country. This means that it is experiencing rapid economic growth Rio is a mega-city. This means it has a population of over 10 million people. The exact population of Rio is unknown however it is over 18 million. Rio is the cultural capital of Brazil with an annual carnival and over 50 museums. It is also a UNESCO World Heritage Site. In 2014 the world cup took place in Rio In 2016 Rio hosted the Olympics. | Migration accounts for 65% of urban growth in Rio de Janeiro. Largely people come from Europe, in particular Portugal because they speak Portuguese in Rio. However, large numbers of people come from other parts of Brazil including the Amazon Basin because there are better jobs, higher income, improved medical care and education. People also travel from other countries in South America- Argentina/ Bolivia due to the cultural opportunities in Rio. Many people come from the USA and UK. These are largely people who are highly skilled and are attracted due to the growing secondary and tertiary | |
| High Mass Consumption The Drive to Maturity UK 1820 USA 1850 Take Off The Traditional Society The Traditional Society The Traditional Society | industry (specifically in oil exploration). • Many people come from China and Japan, this is because Rio de Janeiro has a growing finance and banking industry which is well paid. I. How has migration influenced the character and way of life within Brazil? Copacabana Beach: The beaches in Brazil are stunning and so are the natural surroundings. Rio is one of the most visited cities in the southern hemisphere. It is a UNESCO world | Sustainable Management in Rio- Housing Sustainable Management in Rio- Waste |
| F. What is Rostow's model? Human Influenc e • Currently Nigeria is in stage 3. This is where secondary industries dominate. • In the future Nigeria may develop to stage 4 • They will do this by becoming more self-reliant by improving education. • This will lead to increase in tertiary employment such as nursing and IT support. | Heritage Site which means that it should be protected from | |
| Positive impacts of urbanisation Employment opportunities in banking, finance and insurance. Good infrastructure (roads) which link different areas together. Better quality of life More jobs in secondary and tertiary sectors | Negative impacts of urbanisation • 40% of people living in favelas do not have a job. • Due to unemployment there's not much tax being paid by a large proportion of the population. • Not enough houses – 40% of population live in favelas (illegal squatter settlements). • Only 50% of people have access to healthcare. • Air pollution – 5,000 deaths/year | |

Where is Rio?

Year 11 OCR A Term 1 - People of the world

Due population growth, means that the nent in use of cars has grown by 40% in the last 10 years. They have expanded the public transport system which is a metro that runs under the bay and connects various parts of Rio. More and more people are using the metro system and buses; however, they are no extremely busy as there aren't enough services to go around. They have also put tolls into the city centre, this means that traffic is reduced because people don't want to pay. Lastly, they have made busy roads one way in rush hour. Car use has reduced slightly, however many still use cars for their own safety. Hillsides were secured and new health nent in and education facilities were built in these areas, however the budget of US\$1Billion is probably not going to be enough to do this in every Favela. It has also led to rent rising and many people can't afford to live in their old homes. As we saw before, the largest problems nent in concerning waste disposal are in the Favelas. Many are built on steep slopes and have few proper roads meaning that it is difficult for waste collection lorries to get through. Imagine if rubbish in Swindon wasn't collected every week – it would pile up outside our houses, attracting rats and foxes. It would also really smell. The waste in Rio does the same, it builds up and pollutes the water system spreading diseases like Cholera. To reduce this, a power plant

has been set up near the University or Rio which uses methane gas from rotting rubbish to produce energy. This is more environmentally friendly than a lot of electricity production, however it does release some methane which is a greenhouse gas. It consumes 30 tonnes of rubbish a day (that's 2 busses) and produces electricity for 1000 homes. However, because of the methane gas it

can be a stinky business.

K.

| Rio de Janeiro is located in South America. It is located | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| in south Brazil. It borders the Atlantic Ocean. | H. Where do people in Rio come from? | Sustainable Management in Rio- Transport | Due population growth, means that the use of c has grown by in the lastyears. |
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| High Mass Consumption The Drive to Maturity UK 1820 USA 1850 Take Off UK 1950 Fee-conditions USA 1890 | due to theindustry (specifically in oil exploration). Many people come from, this is because Rio de Janeiro has a growingindustry which is well paid. | Sustainable Management in Rio- Housing Sustainable Management in Rio- Waste | Hillsides were secured and news were built in these areas, however the budget of U\$\$1Billion is probably not going to be enough to do this in every Favela. It has also led toand many people can't afford to live in their old homes. |
| The Traditional Society | I. How has migration influenced the character and way of life within Brazil? Copacabana Beach: The beaches in Brazil are stunning and so | | As we saw before, the largest problems concerning are in the Favelas. Many are built on and have few meaning that it is difficult for lorries to get through. Imagine if rubbish in Swindon wasn't collected every week — it would pile up outside our houses, attracting It would also The waste in Rio does the same, it builds up and pollutes the water system spreading To reduce this, a has been set up near the which uses from |
| F. What is Rostow's model? Human Influenc e In the future Nigeria may develop to They will do this by becoming This will lead to increase in such as nursing and IT support. | are the natural surroundings. Rio is one of the most visited cities in the southern hemisphere. It is a UNESCO world Heritage Site which means that it should be protected from environmental harm. Crime and government: Due to, there are not many which means that many people must resort to As a result, often rule over the Police have been sent in to pacify these slum areas (make) with the aim to improve quality of life for people living there. | | |
| Positive impacts of urbanisation Employment opportunities in Good infrastructure (Better More jobs in sectors | Negative impacts of urbanisation 40% of people living in fs do not Due to unt there's not much being paid by a large proportion of the population. Not enoughs - 40% of population live ins (illegal squatter settlements). Only 50% of people have access to he. | | environmentally friendly than a lot of electricity production, however it does release some methane which is a greenhouse gas. It consumesof rubbish a day (that's 2 busses) and produces electricity for 1000 homes. However, because of theit can be a stinky business. |

Balboa the Conquistador

1509

Balboa rescues Spanish expedition in trouble on mainland America.

Founds first permanent settlement on mainland

1510

America, Santa Maria de la Antigua del Darien. 1511

Confirmed, by King Ferdinand, as captain general and governor of Darien.

Expedition across Isthmus of Panama - finds the Pacific and claims it and surrounding lands for Spain.

1514

Plans an expedition to sail south on the Pacific. Replaced as governor by Pedrarias. Arrested for treason, tried and beheaded.

Pedrarias and Espinosa: the significance of **Panama**

Pedrarias and Espinosa explored the south coast separately, but both ended up on the same point on the Pacific coast - this became Panama. Panama significant because: -Situated on Pacific coast - closest in distance to

Nombre de Dios on the Caribbean Sea. -a route between Panama and Nombre de Dios was the quickest way of moving goods, people and

messages between the Pacific and the Caribbean -land surrounding Panama was fertile and had sea

-Panama was a port, well situated for Spanish treasure ships to off-load.

Velázquez conquers Cuba

1515 - City of Havana founded.

1511 – Hatuey a native chief living in Haiti, flees to Cuba with 400 natives to escape Spanish cruelty. Velázquez and 300

conquistadors pursue

them.

1513 - Massacre at

Canao - thousands of

natives killed.

strong native resistance, Hatuey is captured and burned alive.

1514 - Conquest of Cuba complete. City of Santiago de Cuba founded and becomes capital of Cuba.

1512 - After

2. The Conquistadors 1513-1528



Cortes' expedition to Mexico 1519 March – Lands on

1519 February -Cortes sails from Cuba, despite

Velázquez attempts to stop him.

July - Re-establishes

a Spanish settlement

at Vera Cruz. Cortes

also sinks his ships.

Yucatan Peninsula and claims land for Spain.

August - Cortes is met by cheering natives at Cempoala

September - Fights Tlaxcalans - enemies of the Aztecs – makes peace and allies with them.

April - Fights Tabascan

natives and takes control

of the city of

Pontonchon. Makes

peace with Tabascans.

Given Malinche.

Aztec religion

and allies with

them.



Quetzalcoatl

What beliefs did the Aztecs have towards the Spanish?

Some Aztecs wanted to treat Cortes and the Conquistadors as returning gods; others as dangerous invaders. Aztecs worshipped many gods. They were usually connected to nature. Human sacrifices were common among the Aztecs.

The god Quetzalcoatl was the god of life. Aztecs believed he had vanished into the sea and would one day return. Many Aztecs believed that Cortes and the conquistadors were

returning gods.

Cortes and the conquistadors appeared from the same sea, and in the same spot, from which Aztecs believed Quetzalcoatl disappeared.

Magellan

Magellan and his ships managed to circumnavigate the world between 1519 and 1522 and claim the Phillipines for Spain.

- This was important because:
- It meant that Spain could claim the Spice Islands - as they had found a western route to it.
- It brought prestige to Spain -Magellan and his ships were the first to complete a voyage of global circumnavigation.

Cortes removed as governor

Cortes had many enemies which were causing him problems back in Spain. In 1528 he was removed as governor because:

- Velázquez became a determined enemy.
- Rumours of greed reached the Spanish court.
- The king wanted to control Cortes.

In 1528 Cortes returns to Spain. Charles I was impressed with what Cortes had found but did not trust him. Cortes was no longer governor but he kept his land. An enemy of Cortes was installed so they could keep an eye on both, and to prevent one gaining too much power.

Date Event 1519

1520

Feb Cortes sails from Cuba

Tabascans. Given Mayan woman, Malinche.

March Lands on Yucatan peninsula and claims land for Spain April Fights Tabascan natives and takes control of Pontonchon. Makes peace with

July Re-establishes Spanish settlement at Vera Cruz. Sinks his ships.

August Met by cheering natives at Cempoala and allies with them.

Sept Fights Tlaxcalans – enemies of the Aztecs – makes peace and allies with

them. October Cortes and his forces massacre 3000 natives in the town of Cholula.

8th Nov Cortes and his forces enter Tenochtitlan - welcomed by Montezuma. 14th Nov Montezuma taken prisoner by Cortes – becomes a puppet emperor.

April Spanish troops arrive at Vera Cruz under instructions from Velázquez, intending to arrest Cortes. May Cortes leaves Tenochtitlan to oppose Velázquez's troops. Cortes deputy,

Alvarado, massacres thousands of Aztec nobles. 24-29 June Spaniards trapped in Tenochtitlan as Aztecs rise against them.

29th June Montezuma killed. 30th June The Night of Tears: Spaniards are massacred as they flee from

Tenochtitlan and spend nearly a year re-grouping and planning. 1521

22nd May Battle for Tenochtitlan begins. 1st Aug Spaniards fight their way into the centre of Tenochtitlan.

13th Aug Tenochtitlan falls to the Spaniards and the Aztecs surrender.

Cortes strengthens Spanish control

In the years to 1528. Cortes strengthened control in many ways: -He continued killing Aztecs and natives that supported them.

- -He took tribute from remaining Aztec chiefs.
- -Tenochtitlan was rebuilt on the ruins of the Aztec city.
- -He encourages exploration and establishment of new communities.
- -Agriculture was developed.

Aztec

priests

killed

- -Industry was developed.
- -He helped with the spread of Christianity.

The Spanish impose the encomienda system of landholding

The fall of the Aztec

Temples

pulled

down

Aztec leaders killed and Aztecs ruled by **Empire Spaniards**

Millions of Aztecs die from smallpox

Christian priests and friars convert Aztecs to Christianity

Forced labour kills millions of Aztecs



Year 11 Religious Education: Peace and Conflict



| A. | Can you define these key words? |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Key word | Key definition |
| Forgiveness | Pardoning someone for wrongdoing |
| Greed | Going to war to gain land or natural resources such as oil |
| Holy War | A war that is fought for religious reasons, usually backed by a religious leader |
| Just War | A Christian theory that asks whether a war is fought justly |
| Justice | Bringing about what is right and fair, according to the law or God's will |
| Pacifism | A belief that all forms of violence are wrong, commonly held by Quakers |
| Conflict | A serious disagreement |
| Jihad | The struggle to defend against that which threatens Islam/ the internal struggle to defend against temptation that might lead you away from God |
| Protest | A public expression of disapproval, often in a big group, can be peaceful or violent |
| Reconciliation | Postering friendly relationships ofter a war or |
| Retaliation | Deliberately harming someone as a response to them harming you |
| Self-Defence | Protecting yourself or others from harm |
| Terrorism | Using violence in order to further a political or religious message |

What we are exploring this term: Pacifism . Protest. Terrorism. Weapons of mass destruction Just war

Is violent protest or terrorism acceptable?

- A small minority of Christians may say yes if it truly brings an end to sufferinglove thy neighbour and 'free the oppressed'
- 2. A small minority of Muslims may agree due to the duty of jihad to defend the faith against true oppression.
- 3. A humanist may agree in a rare occasion if it truly had the best consequences for humanity as a whole
- 4. Hindus may point to their warrior class to justify a god given right to fight if needed

Is pacifism wrong? Yes

- 1. Most Christians consider terrorist acts of violence to be wrong, as Jesus did not accept violence. He said 'put your sword pack in its place' when his disciple tried to protest against his arrest.
- 2. Muslims do not agree with terrorism because terrorist acts of violence are considered to be wrong and against the wishes of God, especially as the victims are usually innocent people. There is no justification for terrorist acts in the teachings of Islam-Qur'an says that innocents much not be harmed.
- 3. Humanists might say that it does not help human wellbeing as it created disorder and fear. As such the consequences are rationally seen to be not worth it.
- 4. Hindus might argue that all violence is wrong (Ahimsa) as it causes bad karma and keeps us in the cycle of samsara

| The Muslim duty of Jihad suggests pacifism can be wrong Christians are called to 'free the oppressed' and 'protect the weak and needy Humanists may argue that pacifism is not reasonable or realistic in a world of violence and may not help humanity protect each other | It works- see Ghandi and Martin Luther King Christians believe 'blessed are the peacemakers' Muslims believe that greater Jihad is the struggle to defend the faith against the internal struggle to fall from the right path Innocent people should not be harmed in all religions and pacifism is the only way to truly ensure this |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

No

| D | What are the rules of the just war theory? | Can just war theory make war fair? | | |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | 1. There must be a just cause such as to defend 2. Intentions must be to do good and overcome evil 3. War must be started by legitimate authority 4. Innocents must not be harmed 5. Force and damage must be proportionate to the good done by the war 6. War must be the last resort 7. There must be a reasonable chance of success | Yes as it protects innocents Yes as it allows us the right to self defence Yes as it has to be the last resort so it is really is the only option left It will mean the war is for a good/fair reason and not pointless greed It means nuclear weapons can't be used | No as innocents will always be harmed in war A 'legitimate' authority could still be corrupt You never know the harm of war until many years later so you can't calculate whether it is proportionate You cannot know whether it will be successful until you have fought it For success someone will have to use a greater force so the 'proportionate ' rule will never be followed | |

| B. | Religious and non religious beliefs about weapons of mass destruction |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | It is wrong to damage the environment which is God's perfect creation. It would be a form of blasphemy to destroy God's Sacred work. |
| 2 | They hurt many innocent people and this is against all religious teachings. Lif e is a sacred God given gift and only God has the right to take life. |
| 3 | For humanists, if their use means we can end more human suffering than the weapons cause, then there might be a possible circumstance in which they could be deemed acceptable. |



Year 11 Religious Education: Peace and Conflict



| A. | Ca | n you define these key words? | VVI | iat w | e are exploring this term: Pachishi . Plote | est. Terro | nsm. weapons of mass destruction Just war |
|----------------|-------------------------------------------------------------------------|--------------------------------------|-----|-------|---------------------------------------------|------------|-------------------------------------------|
| Key wo | | Key definition | С | Is | violent protest or terrorism acceptable? | | |
| Forgiven | ess | | | 1. | | 1. | |
| Greed | | | | | | | |
| Holy Wai | • | | | 2. | | 2. | |
| Just War | | | | | | | |
| Justice | | | | 3. | | 3. | |
| Pacifism | | | | | | | |
| Conflict | | | | 4, | | 4. | |
| Jihad | | | | | | | |
| | | | E | Is | s pacifism wrong? Yes | | No |
| Protest | | | | | | | |
| Reconciliation | | | | | 1. | | 1. |
| Retaliation | | | 2 | 2. | | 2. | |
| Self-Defence | | | | | | | 3. |
| Terrorism | | | 3 | 3. | | 4. | |
| | | | | | | | |
| D | What a | re the rules of the just war theory? | | | Can just war theory make war fair? | - | |
| | 1. 2. | | | | 1. | | 1. |
| | 3. 4. | | | 2. | | 2. | |
| | 5. | | | | 3. | | 3. |
| | 6. 7. | | | | 4. | | 4. |
| | | | | | 5. | | 5. |
| В. | . Religious and non religious beliefs about weapons of mass destruction | | | | | | |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | _ | | | | | | |



GCSE Unit 8 SPANISH Knowledge organiser.

el abrebotellas

el abrelatas

el aeropuerto

Topic Holidays and Travel

What we are learning this term:

- Talking about travelling to holiday destinations
- Talking about the weather
- Talking about holiday accommodation
- Talking about the regions of Spain
- Understanding tourist leaflets and websites

6 Key Words for this term

- alojarse 2. veranear
- 4. vacaciones 5. un folleto
- la pensión 6. el AVE

el aire acondicionado air conditioning

8.1G ¡Me voy de vacaciones!

el andén platform el asiento seat el autocar coach el AVE (tren de alta velocidad) high-speed train el avión plane cheap barato/a el barco boat la bici(cleta) bike, bicycle el coche la consigna left-luggage office el crucero cruise desde luego of course to miss echar de menos Escocia Scotland estrecho/a narrow el equipaje luggage el ferrocarril railway el invierno winter la maleta suitcase underground el metro no fumador non smoking autumn el otoño la primavera spring la sala de espera waiting room Sudamérica South America el tranvía tram

holidays

summer

to travel

journey

las vacaciones

el verano

viajar

el viaje

8.1F ¿Dónde te alojas? tin-opener

airport

bottle-opener

a la derecha on the right a la izquierda on the left el albergue juvenil youth hostel Alojarse to stay (in a hotel) el bañador swimming costume la cama de matrimonio double bed camping campsite, camping la estación de servicio petrol station la estrella star fatal awful, terrible el folleto leaflet la gasolina (sin plomo) (unleaded) petrol el guía / la guía guide (person) la guía auidebook la habitación (doble/ (double/single) room individual) key la llave to get wet moiarse la oficina de turismo tourist office el papel higiénico toilet paper el parador state-owned hotel (in Spain) el pasaporte passport la pensión boarding house, B & B ponerse en camino to set off por desgracia unfortunately la recepción reception reservation la reserva el saco de dormir sleeping bag los servicios toilets la tarjeta de embarque boarding card la tienda (de campaña) tent la taquilla ticket office

8.2G ¿En qué región vives?

el desempleo unemployment la diversión entertainment muy poblado crowded nacer to be born I was born Nací he/she was born nació el país country Pescar to fish el río river la sierra mountain range tanto so much, so many

Key Verbs

Quedarse Veranear To go To summer holiday To stay

to do/make Hago I do I summer holiday

Vuelo I fly

Volar

To fly

Vuelas

You flv

Me auedo I stay Te quedas

Vas You go

Va

s/he goes

Vamos

Vov

I go

Veraneas

Veranea

Veraneo

Haces You summer hol

He/she summer hol

You do Hace s/he does

Hacer -

Vuela He/she/ it flys

Volamos

We flv

Nos quedamos We stay

You stav

Se queda

Se quedan

They stay

abrir to

abierto/a

open

open

He/she/it stays

They go Van They go

Veranean They summer hol

Veraneamos

We summer hol

Hacen They do

Hacemos

We do

Vuelan They fly

8.2F Un folleto turístico

8.1H ¿Qué hiciste y qué te gustaría hacer durante las vacaciones? aburrirse to get bored acabar de (+ infinitive) to have just (done

callado/a auiet, reserved cargar to load cerrar to close, shut la cocina cuisine, cooking to know (a person /a place) conocer el cultivo crop entero/a entire, whole gruñón/oña grumpy ir de paseo to go for a walk la mina mine el monasterio monastery el monte hill, mountain sheep la oveja Pintoresco picturesque recomendar to recommend memory, reminder, souvenir el recuerdo la refinería (de petróleo) (oil) refinery la sombrilla sunshade, parasol el taller workshop tranquilo/a peaceful la vaca cow vallev el valle el/la visitante visitor

something) broncearse to get a tan to catch, to take coger cruise el crucero descansar to rest el esquí acuático water skiing extranjero/a foreign el extranjero (en el ___, abroad al__) France Francia brilliant, great genial Grecia Greece la insolación sunstroke la isla island las Islas Canarias Canary Islands a mediados de in the middle of (time) Mediterranean el Mediterráneo ocupado/a busy, engaged gold el oro la plata silver to return regresar relajarse to relax sunshade, parasol la sombrilla el vestuario changing room, cloakroom la vida nocturna night life to return volver el vuelo flight colocar to place, to put

la empresa company, firm

la época era, age, time

8.2H Describiendo tu región

acostumbrado/a accustomed to, used (adj) to la barca pesquera fishing boat casero/a home-made la cita amorosa date (with someone) el clima climate



GCSE Unit 8 SPANISH Knowledge organiser.

| Topic Hol | idays and Travel | Quedarse | | | | Hacer – |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------|-------------------------------------|---------------------------------------------------------------------|---------------------|
| What we are learning this term: | 8.1F ¿ Dónde te alojas? | To stay | To go | To summer ho | liday | to do/make |
| Talking about travelling to holiday destinations | el abrebotellas tin-opener | Me quedo | Voy I go | I summer hol | liday | Hago ——— |
| B. Talking about the weatherC. Talking about holiday accommodationD. Talking about the regions of Spain | el aeropuerto on the right a la izquierda | Te You stay | Vas —— | Veraneas | | You do |
| Understanding tourist leaflets and websites Key Words for this term | el albergue juvenil Alojarse swimming costume | queda He/she/it stays | s/he goes | He/she summe | er hol | Hace s/he does |
| 1. alojarse 4. vacaciones | la cama de matrimonio camping campsite, camping | Nos quedamos We stay | Vamos They go | Veraneamos We summer ho | ol | We do |
| veranear la pensión la pensión el AVE | la estación de servicio la estrella | Se They stay | They go | They summer | hol | Hacen They do |
| 8.1G ¡Me voy de vacaciones! | awful, terrible el folleto la gasolina (sin plomo) | 8.2F U | n folleto turístic | co | 8.1H | ¿Qué hiciste y qu |
| el aire acondicionado el andén el asiento el autocar el AVE (tren de alta velocidad) plane cheap boat bike, bicycle car left-luggage office cruise desde luego echar de menos Scotland narrow luggage railway el invierno la maleta underground | el guía / la guía la guía [| cargar c el cultivo ent gruñón/oña tc la mina el monte pintoresco (o | to recommer memory, remine | nd der,souvenir oil) refinery | descar el esqu el extra al) Franci Grecia la inso | |
| el otoño spring la sala de espera South America | 8.2G ¿En qué región vives? unemployment entertainment | tranquilo/a co | w alley | _ | el oro | a a to retu |
| tram las vacaciones summer viajar el viaje | crowded nacer Nací he/she was born el país pescar river la sierra so much, so many | to, used (adj) to la barca pesquer hon date someone) | accustomed a ne-made | | la vida volver el vuel coloca la emp | changii nocturna |

| Key | Verbs | |
|-----|-------|--|
| | | |

| Quedarse To stay | To go | To summer ho | = oliday | Hacer – to do/make | Volar — |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Me quedo | Voy I go | I summer ho | liday | Hago ——— | l fly |
| Te You stay | Vas | Veraneas | | You do | Vuelas |
| queda He/she/it stays | s/he goes | He/she summ | er hol | Hace s/he does | Vuela He/she/ it flys |
| Nos quedamos We stay | Vamos They go | Veraneamos We summer h | ol | We do | We fly |
| Se They stay | They go | They summer | hol | Hacen They do | They fly |
| 8.2F U | n folleto turísti | со | 8.11 | ا Qué hiciste y q durante las v | ué te gustaría hacer vacaciones? |
| el cultivo gruñón/oña la mina el monte pintoresco lo sui el taller tranquilo/a el/la visitante 8.2H Describier | to close, shut uisine, cooking to know (a pers ire, whole o go for a walk monastery sheep to recommende petróleo) enshade, paraso walley accustomed | on /a place) nd der,souvenir (oil) refinery | (done brond describer of the service | e something) cearse to ca ansar quí acuático foreigi tranjero (en el silandias Canarias diados de silandias canarias change change change de change change change cearse cearse cearse change cearse c | mediterranean sy, engaged turn shade, parasol ing room, cloakroo |
| | ne-made (with limate | | la em la ép | npresa oca | |



GCSE Unit 9 SPANISH Knowledge organiser. **Topic My Studies**

What we are learning this term:

- Giving your opinion about different subjects
- Talking about your studies
- Talking about your school life and daily
- D. Talking about school rules and uniform
- Translating into English

6 Key Words for this term

asignaturas 2.

Útil

useful

- suspender notas licienciatura
- 3. aprobar elegir

9.1G El instituto y las asignaturas

el arte dramático drama subject la asignatura career, university course la carrera science las ciencias la clase class cooking, food technology la cocina continuar to continue, carry on los deberes homework dejar to drop el dibujo art difficult, hard difícil divertido/a fun PE la educación física to choose Escoger Spanish el español estudiar to study fácil easy French el francés la geografía geography la historia history el inglés English las matemáticas maths práctico/a practical próximo/a next la selección choice

9.1F ¿Cómo ser buen estudiante?

abrir to open Afectar to affect el apoyo support aprender to learn los apuntes notes asistir a to attend la biblioteca library el/la compañero/a classmate completar to complete Consultar to consult el debate discussion los deberes homework dictionary el diccionario la duda doubt, query exercise el ejercicio entender to understand la escuela school Esperar to hope, to wait, to expect el examen, exámenes exam, exams la excursión trip to miss lessons faltar a clase la frase sentence Intentar to try interrumpir to interrupt el instituto school levantar la mano to raise your hand la literatura literature llevar to take, to carry, to wear meiorar to improve mirar to look at world el mundo necesitar to need la nota grade to offer ofrecer el ordenador computer organizar to organise la palabra word la pantalla screen to take part participar to ask for, to request pegado/a a glued to perder to lose, miss blackboard la pizarra la pizarra interactiva smartboard Preguntar to ask el/la profesor(a) teacher el progreso progress la prueba test Repasar to revise

Key Verbs

| Aprobar To pass | Elegir To choose | Suspender To fail | | Estudiar To study | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Apruebo I pass | Eligo I choose | Suspendo I fail | | Estudio I study | |
| Apruebas You pass | Eliges You choose | Suspendes You fail | | Estudias You study | |
| Aprueba He/she/it passes | Elige He/she/it chooses | Suspende He/she/it fails | | Estudia He/she/it studies | |
| Aprobamos We pass | Elegimos We choose | Suspendemos We fail | | Estudiamos We study | |
| Aprueban They pass | Eligen They choose | Suspenden They fail | | Estudian They study | |
| 9.1F ¿Cómo | ser buen estud | iante? | | 9.1H ¿Qué t | |
| responsable responsible resultar en to end up with, to lead to saber to know sacar buenas / to get good / bad grades malas notas serio/a serious las tareas homework el trabajo work, piece of work la tutoría tutorial Usar to use el vocabulario vocabulary | | | antig asusi el ata atent el au ayud busca camb cansa | tado/a fright tar to frighten asco traffic ja o/a attentive la (fem.) cla ar to help ar to look fo oiar to chang ado/a tired | |
| 9.1H ¿Qu | ıé tal el institut | 0? | conte | ····-, | |
| preocupar to w la sala de informá | • | | los de | eberes hom iorado/a dila | |

sencillo/a simple Sentirse to feel usar to use el viaje journey

área

la zona

hey study They think 9.1H ¿Qué tal el instituto?

pupil

Pensar

To think

Pienso

I think

Piensas

Piensa

You think

Pensamos

We think

Piensan

He/she/it thinks

old /a frightened lo/a to frighten traffic jam, blockage attentive (fem.) classroom to help to look for to change tired to meet, to get to know glad, happy to answer school year, course homework rado/a dilapidated, shabby distinto/a different la emoción excitement emocionante exciting encima on top encontrar to find explicar to explain feo/a ugly el gimnasio sports hall, gym hambriento/a hungry el idioma language inmenso/a immense el laboratorio laboratory largo/a long better mejor nervioso/a anxious, nervous el patio del recreo the school yard, playground la pregunta question

Translation Practice. G - blue F - orange H - Green Me el francés like French La historia es History is more fun than divertida que el inglés English a estudiar las am going to study maths matemáticas La literatura es más Literature is more fun that que el francés French Me encanta dibujo. Voy a love art. I'm going to en Septiembre study it in September. No, I don't want to pick No, no elegir esa opción that option Pienso que las ciencias I think that science is really useful son muy _ don't believe that I'm No creo que voy a going to fail informática used to study ICT in en la escuela primaria primary school Ayer mis deberes Yesterday I did my homework La semana pasada ast week I spoke with con mi profesora my teacher Voy a I'm going to continue estudiando tecnología studying technology Si necesitas algo, If you need anything ask the teacher al profesor. enjoy studying science a mucho estudiar ciencias hablado con el I have already spoken with the teacher profesor It's going to be very Vaa muy linteresante interesting have chosen this option He esta opción really want to do it a lot Quiero mucho No sé don't know what to do hacer

| Key Questions | s: Answer the following in your own words. Use these model answers |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ¿Qué estudias ahora, que te gustaría estudiar en el futuro, que vas a dejar? | Ahora en el colegio, estudio unas asignaturas obligatorias. Las asignaturas obligatorias son las matemáticas, las ciencias y el ingles. También he elegido estudiar el español, la geografía, la historia, la tecnología, el arte, el dibujo La asignatura que me interesa más es porque La asignatura que me molesta/irrita más es porque |
| ¿Cómo es tu colegio, las reglas, los edificios, las instalaciones? | Mi colegio es un colegio grande que tiene circa ochocientos alumnos. Está en las afueras de Swindon en los barrios de Pinehurst y Penhill. Tenemos una biblioteca nueva, una cantina acogedora, un patio grande En el colegio no debes comer chicle, no debes acosar, no tienes que gritar, no deberías comportarse mal En el colegio tienes que comportarse bien, llevar el uniforme, ir al baño solo durante el recreo, llegar al colegio a hora |
| ¿Describe tu primer día en tu colegio? El primer día, estaba un poco nervioso porque me preocupaban los profesores, lo otros alumnos, las clases, me preocupaba que los profesores serian estrictos, m preocupaban los exámenes, me preocupaba que el colegio sería tan inmenso | |
| Es obligatorio estudiar matemáticas. ¿Crees que es una buena idea? ¿Por qué (no)? | Si, en mi opinión me parece una buena idea porque las matemáticas son muy importantes en el futuro/para un buen trabajo bien pagado/para mi futuro/para ir a una buena universidad/porque las matemáticas se usan en todos los trabajos |
| En tu opinión, ¿cuáles son las características más importantes de un buen profesor? | En mi opinión, un buen profesor es siempre simpático, nunca malhumorado, es de vez en cuando gracioso, es comprensivo y cariñoso, es siempre alegre y no es nunca antipático |
| ¿Qué cambiarías de tu colegio si tuvieras la oportunidad? | Si tuviera la oportunidad, cambiaría/me gustaría cambiar las reglas. Me gustaría cambiar el uniforme porque me parece que es tan feo, me gustaría cambiar las reglas porque son demasiadas estrictas, me gustaría cambiar unos profesores porque son tan antipáticos |
| | Key Grammar |
| ongoing actions, | -ar -aba, -abas, -aba, -ábamos, - abais, -aban -er and –ir -ía, -ías, -ía, -íamos, - íais, -ían |
| ('would like to' tense). | Remember the conditional ('would') tense endings for –AR, -ER, -IR verbs. They are: -AR, -ER, -IR: -ía, -ías, -ía, -íamos, -íais, -ían |
| Future Tense ('will') | All verb groups: -é, -ás, -á, -emos, -éis, -án |

With this tense, do NOT take the verb ending away but ADD it on to the infinitive.

| 1. Types of F | 1. Types of Production | | |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| There are three ma | ain types of production: | | |
| Type of Production | Explanation | | |
| Job Production | Job production is one-off production for a one-off order. It is tailored-made to the specific requirements of a single customer. This can be a very costly method production however this means that the business has increased flexibility in terms of the product produced. | | |
| Batch Production | Batch production involves producing a limited number of the same item. This method of production is cheaper than job production however this method of production is not as flexible. | | |
| Flow Production | Flow production is continuous output of identical products. This is the cheapest method of production as production becomes fully automated. However this affords the business no flexibility in terms of product differentiation. | | |

| 2. Types of P | roduction (Advantages and Disadvantages) |
|---------------------|--------------------------------------------------------------------------|
| There are three mai | n types of production: |
| Type of Production | Advantages and Disadvantages |
| Job Production | Advantages: Highly flexible; gives the customer exactly what they |
| | want. |
| | Disadvantages: High production costs. Skills may be in short |
| | supply, making it hard for the business to grow |
| Batch Production | Advantages: Gain some cost advantages from producing several |
| | items at onceyet still able to offer customers the colour/size |
| | they want |
| | Disadvantages: May be limited scope for automation, making |
| | production costs far higher than with flow production. Not as |
| | flexible as job production. |
| Flow Production | Advantages: Can automate production fully, making it highly cost |
| | effective (which should be good for customers as well as |
| | suppliers). Many customers value consistency, and flow will |
| | provide an identical product each time. |
| | Disadvantages: Likely to be expensive to set up and inflexible to |
| | use; could be a disaster if a product life cycle proves much |
| | shorter than expected. |
| | Lacks flexibility in terms of meeting individual customer needs. |

| 3. Managing Stock – Ke | 3. Managing Stock – Key Definitions | | |
|------------------------|--------------------------------------------------------------------------------------------------------------------|--|--|
| Term | Explanations | | |
| Bar Gate Stock Graph | agram used to manage stock. | | |
| Buffer (stock) | e minimum stock level always held to avoid running out. | | |
| Just in Time (JIT) | When new supplies must arrive 'just in time' moments before they are required. | | |
| Stock | Items held by a firm for use or sale, for example components for manufacturing or sellable products for a retailer | | |

Managing Stock well is vital to the success of a business. Successful stock management requires the right balance between reliability and cost. **Too little stock and customers will feel let down.** Too much stock and high costs will force high prices. Without stock, sales cannot happen. Manufacturers and retailers need to make sure they supply the right amount of goods to keep the shelves full.

| 4. Procurement – | Working with Suppliers |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| There are five main factor | rs at the heart of a relationship between a company and its suppliers: |
| Quality | Suppliers must supply high quality products to businesses, suppliers will struggle to maintain a good relationship with a company if they are not supplying good durable products. First and fore most suppliers must supply high quality materials to businesses. |
| Delivery | Suppliers must deliver on time to clients, there is little point supplying at the right price and with the right product, if the product doesn't arrive on time. Failing to deliver supplies on time can bring manufacturing to a halt or leave shops with empty shelves. |
| Availability | Suppliers must be available and able to cope with varying orders in a timely fashion and sometimes within a short timeframe. Suppliers must be flexible and aware of the needs of their customers. |
| Cost | Cheaper supplies mean lower variable costs and higher profit margins. Therefore, the price charged by a supplier will be a key factor in the relationship between a firm and its suppliers. Price to highly and firms may look to alternative suppliers, price to low and firms may question the quality of merchandise. Pricing is key to the relationship between supplier and firm. |
| Trust | Trust is key for the relationship between firm and supplier. Most business transactions are on credit and not cash – therefore suppliers <u>have to</u> be able to trust that a firm will make a profit and be able to pay them back in cash. |
| 5. Placing Strategy – N | Nanaging Quality within a Business |
| Type of Quality Control | Explanation: |
| Quality Control | Quality control is a system of inspection to try to make sure that customers don't experience a poor-quality product or service. Such controls may include Factory Inspectors at the end of a production line checking the quality of a product |
| Quality Assurance | Quality Assurance describes the system put into place by a company to assure quality within the production system. Every member of staff will have responsibilities to quality assure products. Over time this should lead to quality products as people become better at their roles. |
| Quality Culture | Quality culture means the general attitudes and behaviours among staff within a workplace is focussed on high quality production. Quality culture describes motivated, punctual, diligent and invested employees who care about the business and strive to improve it. |

| 6. The Sales Pr | rocess | |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------|--|
| Term | Definition | |
| Customer Engagement | The attempt to make a customer feel part of something rather than an outsider. | |
| Customer Feedback | k Comments, praise or criticisms given to the company by its customers | |
| Post-Sales Service | Service received after the purchase is completed because something has gone wrong or as a way of promoting customer engagement | |
| Product Knowledge | How well staff know all the features of the products and service issues surrounding the products. | |

| - | _ | | | _ | |
|---|----|------|-----|-----|-------|
| | CH | :toi | mer | Sel | rvice |
| | | | | | |

Great Customer Service is pivotal to any successful business, but there is far more than that to the sales process. To succeed in sales, a business must make sure it provides:

| Component of Customer Service | Term |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | |
| Product Knowledge | Customers expect that staff will be sufficiently well trained and well-motivated to have good knowledge of the products and services being |
| | offered. In order to ensure staff, have good product knowledge, certain things are essential: |
| | Good Training – if businesses provide good training to staff, then staff will be knowledgeable about products and therefore will be able to improve the customer experience |
| | Loyal Staff – The longer staff stay working in a job the better they become. If staff only stay three to six months, they will never develop a |
| | rich understanding of the products and services that the business provides. Well managed businesses pay fairly and treat staff with respect. |
| | Committed Staff – Committed and enthusiastic staff are crucial to the smooth running of any business. This is affected by the quality of recruitment, the standard of training and the overall culture that exists within the company's workforce. |
| Speedy and Efficient Service | Good customer service is designed for the customer not the company. |
| speedy and Efficient Service | Efficient service: |
| | Gets products to customers exactly when you want them |
| | Gets products to customers exactly when you want them Gets products to customers in good condition |
| | |
| Customer Francisco | If there is anything wrong - it will be sorted out as soon as possible and considerately |
| Customer Engagement | In the world of social media, it becomes possible to try to keep customers engaged with the business on a regular basis. Companies engage customers in a variety of ways: |
| | E-Mail |
| | |
| | Social Media (Facebook and Instagram) |
| | Post |
| | Text |
| | Television/Web advertisements. |
| | It is vital that customers feel up to date and informed about any product innovations |
| Responses to Customer | How companies respond to customer feedback is vital, providing great customers service where people feel listened too ensures |
| Feedback | customers continue to come back and buy products from the business. |
| | It can cost a lot of money to persuade new customers to come advertising is expensive and it's affects are hard to judge. Building up a |
| | reputation for responding to customer feedback can travel by word of mouth and this is much cheaper. |

| 1. Types of Production | | |
|------------------------|--------------------------|--|
| There are three ma | ain types of production: | |
| Type of Production | Explanation | |
| Job Production | | |
| Batch Production | | |
| Flow Production | | |

| 2. Types of Production (Advantages and Disadvantages) | | | |
|-------------------------------------------------------|------------------------------|--|--|
| There are three mai | n types of production: | | |
| Type of Production | Advantages and Disadvantages | | |
| Job Production | Advantages: | | |
| | Disadvantages: | | |
| Batch Production | Advantages: Disadvantages: | | |
| Flow Production | Advantages: Disadvantages: | | |
| | | | |

| 3. Managing Stock – Ke | 3. Managing Stock – Key Definitions | |
|------------------------|-------------------------------------|--|
| Term | Explanations | |
| Bar Gate Stock Graph | | |
| Buffer (stock) | | |
| Just in Time (JIT) | | |
| Stock | | |

Managing Stock well is vital to the success of a business. Successful stock management requires the right balance between reliability and cost. **Too little stock and customers will feel let down. Too much stock and high costs will force high prices. Without stock, sales cannot happen. Manufacturers and retailers need to make sure they supply the right amount of goods to keep the shelves full.**

| 4. Procurement – Working with Suppliers | | | |
|-----------------------------------------|-------------------------------------------------------------------------------------------------|--|--|
| There are five main factors | There are five main factors at the heart of a relationship between a company and its suppliers: | | |
| Quality | | | |
| Delivery | | | |
| Availability | | | |
| Cost | | | |
| Trust | | | |
| 5. Placing Strategy – M | anaging Quality within a Business | | |
| Type of Quality Control | Explanation: | | |
| Quality Control | | | |
| Quality Assurance | | | |
| Quality Culture | | | |
| | | | |
| 6. The Sales Proc | ess | | |
| _ | - a | | |

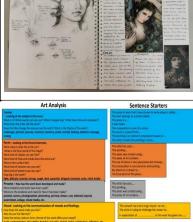
| 6. The Sales Process | | |
|----------------------------|------------|--|
| Term | Definition | |
| Customer Engagement | | |
| Customer Feedback | | |
| Post-Sales Service | | |
| Product Knowledge | | |

| 7. Customer Service | 7. Customer Service | | |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| sure it provides: | Great Customer Service is pivotal to any successful business, but there is far more than that to the sales process. To succeed in sales, a business must make sure it provides: | | |
| Component of Customer Service | Term | | |
| Product Knowledge | | | |
| Speedy and Efficient Service | | | |
| Customer Engagement | | | |
| Responses to Customer Feedback | | | |
| Excellent Post Sales Service | | | |

Year 11 Term 2 : Topic = Personal project

G. Assessment objectives A01, A02 How you are assessed A01 Assessment Objective 1 Assessment Objectives: AO1 Is about developing ideas from a Each component is marked based on 4 assessment objectives: You will be assessed on how effectively you meet the criteria set out in starting point through to a final outcome. This is achieved by each objective. responding in sketch format by taking inspiration from a variety of artists. A02 Assessment Objective 2 6 Key Words for this term AO2 is about refining your ideas through the selection of appropriate Observe 4 context media, materials, techniques and Develop processes, and should be linked to the 5 inspiration artists you have studied. You should Critical understanding 6 juxtaposition be annotating your work showing clearly these connections A. What three techniques will you develop next in your project? Anlwork Analysis



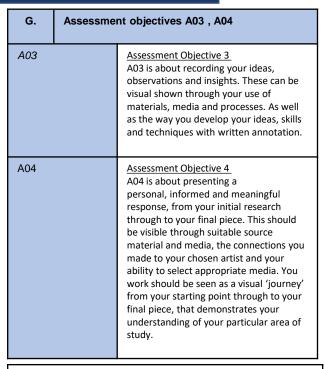




Installation Photography

Inks

| | The same | |
|-----------|----------|-----------------------------------|
| G. | Have you | explored the following techniques |
| Orawin | g | |
| Etching | , | |
| Collage | • | |
| Paintin | g | |
| Sculpture | | |



Kev auestions

If you are looking at an image and don't know how to respond to it break it down into its individual parts.

What colour is it? - could you make a response just looking at its colour or shape?

How does it make you feel? Could that trigger an instinctive/ expressive response

Could you respond to the shape or texture?

Could you delve deeper into the social or historical context of the piece of artwork?

Your key areas of focus should be on figuring out how you can turn your piece of artwork into something else. Your GCSE is a series of developments and experiments leading up to your exam







Year 11 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. Ob

E. Oblique Drawing

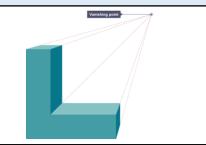
F. CAD G. Orthographic Drawing

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 a show a view into a room.

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

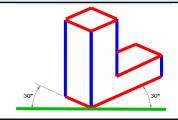
produce realistic drawings of an object.

Horizon

Vanishing point

C. Isometric Technical Drawing

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



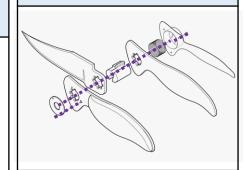
Used by architects and engineers to communicate their ideas to the client and manufacturer.

Two-point Perspective Drawing

Vanishing point

D. Exploded Technical Drawing

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

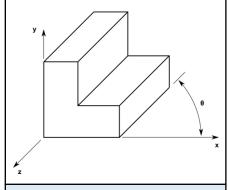


All parts are shown separately so you can see all aspects. **Dashed lines** indicate where everything goes and in what order.

E. Oblique Technical Drawing

Consists of an object where the front view is drawn flat with height and width of the object draw to the correct lengths.

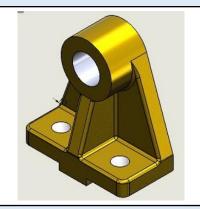
Diagonal lines are drawn at 45-degrees.



Commonly used by engineers for drafting ideas.

F. | CAD (Computer Aided Design)

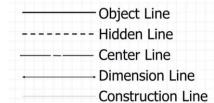
This is designing using a computer using a software such as 2D Design or Solidworks.



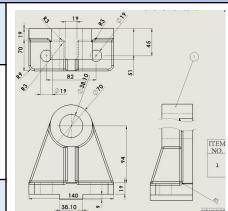
Commonly used to model, test and develop an idea before manufacture.

G. Orthographic Projection – 2D <u>NOT</u> 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.



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



Commonly used by architects to show realistic building ideas.



Year 11 PRODUCT DESIGN Term 2



CAD (Computer Aided Design)

What we are learning this term:

One-Point Perspective

B. Two-point Perspective

C. Isometric Drawing

Isometric Technical Drawing

D. Exploded Drawing

B.

E. Oblique Drawing

F. CAD G. Orthographic Drawing

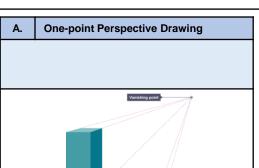
C.

Design Strategies Introduction.

E.

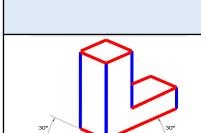
G.

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.



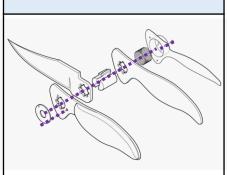
Commonly used by interior designers to a show a view into a room.

Two-point Perspective Drawing

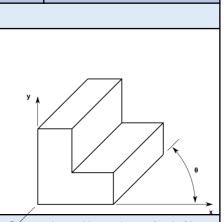


Used by architects and engineers to communicate their ideas to the client and manufacturer.

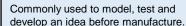
D. **Exploded Technical Drawing**

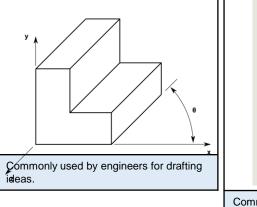


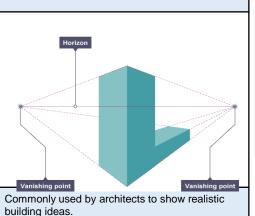
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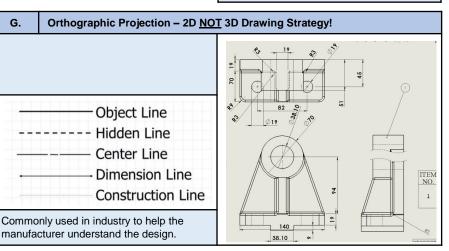


Oblique Technical Drawing









Food science

Functions of ingredients

Ingredients provide a variety of functions in recipes.

Carbohydrate, protein and fat Carbohydrate, protein and fat all have a range of properties that make them useful in a variety of food products.

Carbohydrates perform different functions in food.

They can:

- · help to cause the colour change of bread, toast and bakery products (dextrinisation):
- contribute to the chewiness. colour and sweet flavour of caramel:
- thicken products such as sauces and custards (gelatinisation).

Maillard reaction

Foods which are baked, grilled or roasted undergo colour, odour and flavour changes. This is primarily due to a group of reactions involving amino acids (from protein) and reducing sugars.

Dextrinisation

When foods containing starch are heated they can also produce brown compounds due to dextrinisation. Dextrinisation occurs when the heat breaks the large starch polysaccharides into smaller molecules known as dextrins which produce a brown colour.

Caramelisation

When sucrose (table sugar) is heated above its melting point it undergoes physical and chemical changes to produce caramel.

Gelatinisation

When starch is mixed with water and heated, the starch granules swell and eventually rupture, absorbing liquid, which thickens the mixture. On cooling, if enough starch is used, a gel forms.

Proteins perform different functions in food products.

- aerate foods, e.g. whisking egg
- thicken sauces, e.g. egg custard;
- bind ingredients together, e.g. fishcakes:
- form structures, e.g. gluten formation in bread:
- gel, e.g. lime ielly.

Gluten formation

Two proteins, gliadin and glutenin, found in wheat flour, form gluten when mixed with water. Gluten is strong, elastic and forms a 3D network in dough. In the production of bread, kneading helps untangle the gluten strands and align them. Gluten helps give structure to the bread and keeps in the gases that expand during cooking.

Gelation

Gelatine is a protein which is extracted from collagen, present in animal connective tissue. When it is mixed with warm water, the gelatine protein molecules start to unwind. On cooling, a stable, solid network is formed, trapping the liquid.

Denaturation

Denaturation is the change in structure of protein molecules. The process results in the unfolding of the protein's structure. Factors which contribute to denaturation are heat. salts, pH and mechanical action.

Coagulation

Coagulation follows denaturation. For example, when egg white is cooked it changes colour and becomes firmer (sets). The heat causes egg proteins to unfold from their coiled state and form a solid. stable network.

Aeration

Products such as creamed cakes need air incorporated into the mixture in order to give a well-risen texture. This is achieved by creaming a fat, such as butter or baking spread, with sugar. Small bubbles of air are incorporated and form a stable foam.

Fats performs different functions in food.

They help to:

- · add 'shortness' or 'flakiness' to foods, e.g. shortbread, pastry;
- provide a range of textures and cooking mediums;
- glaze foods, e.g. butter on carrots:
- · aerate mixtures, e.g. a creamed cake mix:
- add a range of flavours.

Plasticity

Fats do not melt at fixed temperatures, but over a range. This property is called plasticity.

Colloidal systems

Colloidal systems give structure, texture and mouthfeel to many different products.

| System | Disperse phase | Continuous phase | Food |
|----------------|-------------------|---------------------|---------------|
| Sol | Solid | Liquid | Unset jelly |
| Gel | Liquid | Solid | Jelly |
| Emulsion | Liquid | Liquid | Mayonnaise |
| Solid emulsion | Liquid | Solid | Butter |
| Foam | Gas | Liquid | Whipped cream |
| Solid foam | Gas | Solid | Meringue |

Raising agents

Raising agents include anything that causes rising within foods, and are usually used in baked goods. Raising agents can

- biological, e.g. yeast;
- chemical, e.g. baking powder:
- mechanical, e.g. adding air through beating or folding.

Functional ingredients

These are ingredients that are specifically included in food for additional health benefits. They include:

- probiotics 'good' bacteria that may have a positive impact on human health:
- prebiotics food ingredients that promote the growth of beneficial microorganisms in the aut:
- sterols/stanols compounds that can lower cholesterol;
- healthy fats (e.g. omega-3);
- added vitamins and minerals (more than in the original food).

Food is prepared and cooked to:

- make the food more palatable improves flavour, texture and appearance:
- reduce the bulk of the food:
- provide variety and interest to

Methods of cooking food

The methods of cooking are divided up into groups. These are based on the cooking medium used. They are:

- moist/liquid methods, e.g. boiling;
- dry methods, e.g. grilling;
- fat-based, e.g. frying.

Selecting the most appropriate way of preparing and cooking certain foods is important to maintain or enhance their nutritional value.

- · Vitamins can be lost due to oxidation during preparation or leaching into the cooking liquid.
- Fat-based methods of cooking increase the energy (calories) of the food.
- The use of different cooking methods affects the sensory qualities of the food.

Key terms

Conduction: the exchange of heat by direct contact with foods on a surface. Convection: currents of

hot air or hot liquid transfer the heat energy to the

Functional ingredients: Included in food for additional health benefits.

Heat transfer:

transference of heat energy between objects. Radiation: energy in the form of rays.

Tenderisation

- Mechanical tenderising a meat cleaver or meat hammer may be used to beat the meat. Cutting into small cubes or mincing can also help.
- Chemical tenderisation (marinating) -the addition of any liquid to flavour or soften meat before cooking.

There are three ways that heat is transferred to food.

- · Conduction the exchange of heat by direct contact with foods on a surface.
- Radiation energy in the form of
 - Convection currents of hot air or hot liquid transfer the heat energy to the food.



Tasks

- · Choose a recipe that you enjoy or have made recently and explain in detail the functions of the ingredients.
- · Explain the function of raising agents, giving examples of



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- _

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prebiotics -

sterols/stanols -

healthy fats (e.g. omega-3);

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Coagulation follows denaturation. For example:

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Convection:

Functional ingredients:

Heat transfer:

Radiation:

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 Chemical tenderisation (marinating)

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sport

objectives?

Key word

Etiquette

Enhancing

Initiatives

Reputation

Creed

Inclusion

Sportsmanship

Gamesmanship

D.

What we are learning this term:

The Olympic and Paralympic values

The important of etiquette and sporting

The use of performance enhancing drugs

Key guestion from Assessment

The values that can be promoted through

Initiatives that promote values through sport

Key definition

A code of polite

To improve something

A scheme to try and

improve something

The opinions about

A belief in something

Making sure everyone

Fair and generous

Winning by bending

something

has an equal

opportunity

behaviour

the rules

behaviour

Year 11 Cambridge National- Contemporary issues in sport- Term 2

Learning outcome: Know about the role of sport in promoting values

C.

bending the rules to gain an advantage

What is spectator etiquette?

- Quiet at Wimbledon during rallies 1.
- Quiet during snooker
- Quiet during national anthems



What are the values that can be A. promoted through sport?

- Team spirit
- 2. Fair play
- 3.
- 4.
- 5.
- 6.
- Excellence



A. What are the Olympic and Paralympic values?

- Respect 1.
- 2. Excellence
- 3. Friendship
- 4. Courage
- 5. Determination
- 6. Inspiration
- 7. Equality

G. Performance enhancing drugs

Why do athletes use them?

Pressure to succeed as an individual Pressure to succeed as a nation Pressure from sponsors

Why they shouldn't be used?

Long term health issues Consequences when found guilty Unfair advantage

What is WADA?

World Anti Doping Agency The organisation is charge of drug testing across the world

How do they carry out drug testing?

Blood sample Hair sample Nail sample



Sporting values

| | | Learning how to work together and support others |
|--|--|--------------------------------------------------|
|--|--|--------------------------------------------------|

Fair play Learning the importance of playing by the rules

Citizenship

National

pride

Involved in your local community through sport

Tolerance Developing and understanding of different countries respect and culture through sport

Initiatives to get Inclusion under-represented social groups involved in sport

Supporters and performers unite behind a country in international events

Excellence Striving to be the best you can be in your favourite sport

Values that can be promoted through sport

A.

What is the Olympic creed?

"The most important thing is not to win but to take part, just as the most important thing in life is not to triumph but the struggle. The essential thing is not to have conquered, but to have fought well."

Pierre De Coubertin-Founder of the modern Olympic games

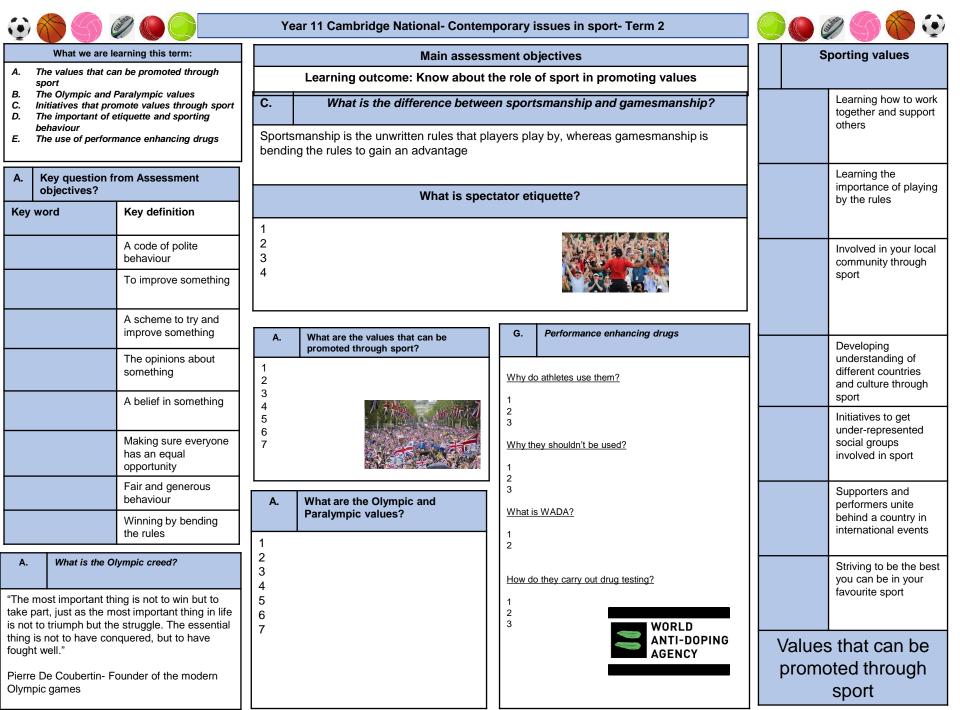


What is the difference between sportsmanship and gamesmanship?

Sportsmanship is the unwritten rules that players play by, whereas gamesmanship is

- 2.
- 3.
- Clapping for a new batsman in cricket

Citizenship Tolerance Inclusion National pride





В.

C.

D.

E.

F.

2

A.

Key word

Major

Independent

Musician

Composer

Songwriter

Conductor

Live Sound

Technician

Instrument

Technician

Manufacturer

Broadcaster

Roadie

A&R

Unit 1: The Music Industry

What we are learning during this unit: Job Roles in the Music Industry **Employment Patterns** Record Labels (Pros and Cons) Venues / Health and Safety / Security Unions/Agencies/Trade Bodies Publishing (Pros and Cons) 6 Key Words for this term **Employment** 4 Responsibility

5 Union

Job Roles in the Music Industry

6 Publishina

| B. | Employ | ployment Patterns | |
|------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------|--|
| Fulltime | | 5 days a week, Contract (holidays/sick pay and pension) | |
| Part time | | 1-4 days a week, Contract like full time. | |
| Freelance | | Self-employed, no long-term contracts! No work = no pay | |
| Permanent Permanent = guaranteed work / security whereas casual is not secure, varies but does give more flexibility | | | |

| C. Record Labels (pros | and cons) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Major | Independent |
| e.g. Warner, Sony, Universal | Smaller labels |
| Pros = lots of money, links with companies to promote and publish, lots of contacts, get the best deals for manufacturing, good links with advertising and media to promote and market artist/band Cons = difficult to stand out, less control over your music, contracts can be unfair | Pros = individual style of artist is important, more control over music, closer relationships, contracts more artist friendly Cons = not as much money, less publicity and promotion, not as organised/connected, less media contacts |

Venues/Health and Safety/Security

Large Venue = Arena Small Venue = school hall/pub



Health and Safety

Risk Assessment = to identify and minimise risks HSE = health and safety executive

Security

ID/Bags/Crowd Control



E.

Unions/Agencies/Trade Bodies



Agencies



MCPS / PRS

Mechanical-Copyright Protection Society and the Performing Right Society. Collects royalties for musicians for physical formats like CD (MCPS) and live music (PRS)

PPL = Phonographic Performance Limited. Licenses the right to perform recorded music



Unions

Unions provide support for lots of people, they provide things like advice for freelancers on NI/TAX, handling disputes, and support in negotiating contracts

MU = Musicians Union



Equity BECTU = Broadcasting Entertainment Cinematograph Theatre Union

Trade bodies



MPG = Music Producers Guild Represents people involved in producing recorded music

PLASA = Professional Lighting and Sound Association



Represents those who work/supply technologies

APRS = Association of Professional Recording Services Represents those who work in the audio industry, e.g. recording studios/producers

APRS-

Publishing (pros and cons)

Major Self-Publishing

Remember: Publishing Company = Composition OWNERSHIP

Pros = good distribution, payment often upfront (in advance), marketing and promotion is good Cons = signed through an agent (which means they take a cut!). narder to get published when the company is huge, more editing done

on your work so less control

Pros = no need for an agent, send work directly, done on social media, more in control of editing, stepping stone to a larger company

Cons = less money, less marketing and promotion

Software Programmer DJ Retailer Distributer Stylist Accompanist

Key definition Plays an instrument or voice Writes music e.g. films Writes songs Record producer Directs recording sessions Directs an orchestra / ensemble Monitors sound at live events Moves equipment /sets up Fixes stuff like guitars/drums The boss of the artist/band! Responsible for health/safety Artistic Manager Book recordings/H&S Sells tickets to live events! Venue Manager Finds new talent to sign to Studio Manager Promoter / Marketer labels Records the music in studio Sound Engineer Plays in recordings or live Session Musician shows Mastering Engineer Perfects finished recording Makes the CD's to sell Music Journalist Writes about music / reviews Blogger/Vlogger Blogs about music / reviews E.a. Radio Presenters Codes musical software Mixes/plays live music Sells merchandise! Gets finished CD's to shops to sell (now also done online!) Works on the band/artist

Attends auditions, plays for a

solo musician e.g. piano



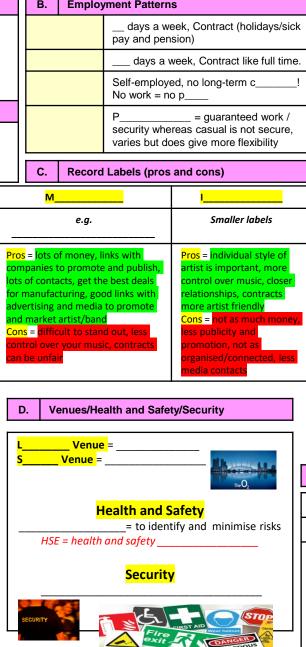
Unit 1: The Music Industry

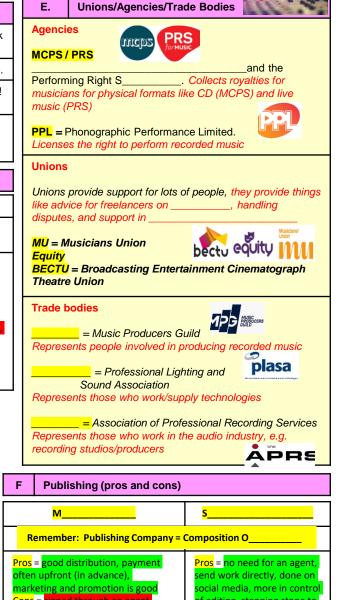
| Wł | at we are learning during this unit: |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A. B. C. D. E. F. | Job Roles in the Music Industry Employment Patterns Record Labels (Pros and Cons) Venues / Health and Safety / Security Unions/Agencies/Trade Bodies Publishing (Pros and Cons) |
| 6 F | ey Words for this term |
| 1 2 3 | E 4 R M 5 U I 6 P |

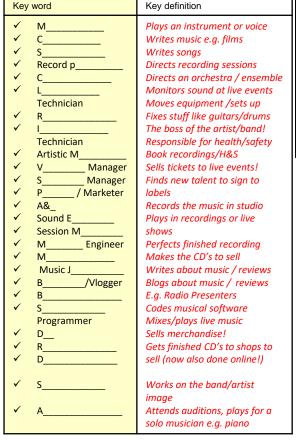
Job Roles in the Music Industry

| B. | Employment Patterns | | |
|----|---------------------|----------------------------------------------------------------------------------------------------|--|
| | | days a week, Contract (holidays/sick pay and pension) | |
| | | days a week, Contract like full time. | |
| | | Self-employed, no long-term c! No work = no p! | |
| | | P = guaranteed work / security whereas casual is not secure, varies but does give more flexibility | |

| | | | | days a we pay and pen | eek, Contract (holidays/sick sion) |
|------------------------------------|--------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | days a v | veek, Contract like full time. |
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| | | security whe | P = guaranteed work / security whereas casual is not secure, varies but does give more flexibility | | |
| | | C. | Record | Labels (pros | and cons) |
| M | | | | l | |
| | | | | | |
| _ | | | e.g. | | Smaller labels |
| co lot for ad an Co | mp s o r m ver d n ns | panies to f contaganuface tising a narket = diffice | of money, lico promotes acts, get the sturing, good and media artist/bancult to stan | e and publish, e best deals od links with to promote | Pros = individual style of artist is important, more control over music, closer relationships, contracts more artist friendly Cons = not as much money, less publicity and promotion, not as organised/connected, less media contacts |









Cons = signed through an agent (which means they take a cut!),

harder to get published when the company is huge, more editing done on your work so less control

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marketing and promotion



Year 11 Engineering Term 2 (Unit 1)

What we are learning this term:

- Health & Safety
- C. Orthographic
- E. Materials and properties
- Manufacturing processes D. Tools & Equipment

| A. | A. Health & Safety | | |
|---------------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Risk Assessment | | A risk assessment is the analysis of the risks involved when using equipment or performing a process. | |
| Signage | | Signage is the word used for all the sign that you may see in a workshop environment. sowing how to translate an understand the signs in a workshop is vi when dealing with potentially dangerous equipment and processes. | ıd tal |
| Mandatory sign- Specific instruction on behaviour | | cific instruction Prohibiting | 1- |





or actions

Warning sign-Giving warning of hazard or danger



No danger sign-Information on exits, first aid etc

В. Manufacturing processes

Pillar drill

Pillar drills are free standing machine tools that use high powered motors to rotate drill bits at varying speed

Milling machine

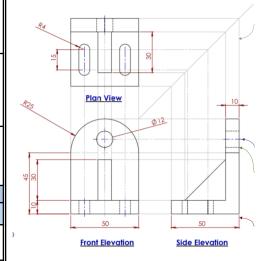
A milling machine is a device that rotates a circular cutting tool that has a number of cutting edges. The workpiece is held in a vice or similar device clamped to a table that can move in directions. X, Y & Z axis

Centre lathe

A centre lathe is used to manufacture cylindrical product /objects and is 'turned' to create different shapes. Different cutting tools can be used such as facing, parting and knurling.

C. Orthographic (b)

The study of human measurements to ensure the products and environments are the correct size for the intended user.

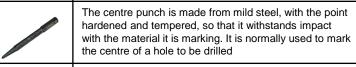


| represents Diameter – so it is telling us how wide the circle is overall. | | |
|----------------------------------------------------------------------------------|--|--|
|----------------------------------------------------------------------------------|--|--|



The letter R on this dimension tells us the Radius of the curve or circle - the distance from the centre to the outside

| D. | Tools & Equipment | | | | |
|----|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| | | Battery/cordless drill - A drill is a tool used for making round holes or driving fasteners. It is fitted with a bit, either a drill or driver chuck. Battery for ease of use | | | |
| | | Checking for true (i.e. straight and accurate) alignment of edges, planes and angles is by far the most common engineer square use. | | | |
| / | | A scriber (scribe) is a hand tool used for marking-out areas ready for machining/cutting/drilling, etc. on workpieces made from metal. The scriber is made from high-carbon steel and is hardened to make sure it can score the surface of the metal. | | | |





Divider, instrument for measuring, transferring, or marking off distances, consisting of two straight adjustable legs hinged together and ending in sharp points.

| E. | Materials and properties | | |
|--------------|--------------------------|---------------------------------------------------------------------------|--|
| Stre | ength | Ability of a material to withstand compression, tension and shear | |
| Hardness | | Ability to withstand impact without damage | |
| Toughness | | Materials that are hard to break or snap are tough & can absorb shock | |
| Malleability | | Being able to bend or shape easily would make a material easily malleable | |
| Duc | tility | Materials that can be stretched are ductile | |
| Elas | sticity | Ability to be stretched and then return to its original shape | |



Year 11 Engineering Term 2 (Unit 1)

What we are learning this term: C. Orthographic Health & Safety E. Materials and properties Manufacturing processes D. Tools & Equipment Health & Safety A. C. Orthographic Risk The study of human measurements to ensure the Assessment products and environments are the correct size for the intended user. Signage sign-_sign-Specific instruction Prohibiting on behaviour **Plan View** or actions Q12 signsign-Information on Giving warning of hazard or danger exits, first aid etc First aid Manufacturing processes Pillar drill 50 **Front Elevation Side Elevation** Milling machine Ø12 Centre lathe P25

| | = . | | | |
|----|----------------|-----------|---------|--|
| D. | Tools & | Equipment | | |
| | Makifa | | | |
| | | | | |
| / | | | | |
| | | | | |
| / | | | | |
| | | | <u></u> | |
| | | | | |

| E . | Materials and properties | | | |
|-----|--------------------------|--|--|--|
| St | Strength | | | |
| Ha | Hardness | | | |
| To | Toughness | | | |
| Ma | Malleability | | | |
| Du | Ductility | | | |
| El | Elasticity | | | |



YEAR 11 BTEC DRAMA KNOWELDGE ORAGNISER - BLOOD BROTHERS

Who is Willy Russell?



What we are learning this term:

- A. How to develop our understanding of set design.
- B. How to apply the stanislavski system to character development.
- How to interpret the director's creative intention in Blood Brothers.
- How to reflect, analyse and evaluate our development.

| WILLY RUSSELL'S BLOOK Prothe/S |
|----------------------------------|
| |

Key learning aims from Component 2

William "Willy" Russell (born 23 August 1946) is an English dramatist, lyricist and composer. Russell was born in Whiston, Lancashire (which is now Merseyside). Aged 15, he became a ladies' hairdresser, eventually running his own salon, until the age of 20 when he decided to go back to college. This led to him qualifying as a teacher. During these years, Russell also worked as a semi-professional singer, writing and performing his own songs in folk clubs. At college, he began writing drama and, in 1972, took a programme of two one-act plays to the Edinburgh Festival Fringe, where they were seen by writer John McGrath, who recommended Russell to the Liverpool Everyman, which commissioned the adaptation, When The Reds..., Russell's first professional work for theatre.

1. Educating Rita

Russell

Other Plays by Willy

Our Day Our
 Shirley Valentine

4. Keep your eyes down

5. Stags and Hens

Key Words:

Synchronisation – movement or speech that happens at the same time.

Physical & Visual Theatre - a form of theatre that puts emphasis on movement rather than dialogue

 ${\mbox{\bf Chorus}}$ - those who perform vocally in a group as opposed to those who perform singly.

Soundscape – layered voices and sounds to create a location or atmosphere

Abstract – representational and symbolic, not life-like or naturalistic Sequence – an order of events/movements Pattern – a repeated phrase/sequence of movements.

Naturalism- 'A slice of life onstage' Naturalistic performance that aims to be as true to life.

Epic Theatre - didactic drama presenting a series of loosely connected scenes that avoid illusion and often interrupt the story line to address the audience directly with analysis, argument, or documentation Motivation - the reason a character does anything Revelations – when information is disclosed

Narration – adding a spoken commentary for the audience about the action on stage or to help progress the story on.

Climax – is a play or a specific scene's point of highest tension and drama

Emotional Memory- to create a reservoir of memory from which to draw and on which to build. This memory can then be tapped into when the actor was working towards the creation of a character Narrative – the storyline and character's trajectory

Symbols -are often used in drama to deepen its meaning and remind the audience of the themes or issues it is discussing.

| Compone | nt 2 |
|--------------|-------------|
| Learning aim | A1: Develop |

A1: Development of physical, vocal and interpretative skills. Introduction to developing skills and techniques; participation in workshops as well as exploring symbolic and abstract performance.

Learning aim B: Apply skills and techniques in rehearsal and performance

A: Develop

techniques for

performance

skills and

B1: Interpretation of sections of Blood Brothers through a mixture of epic theatre techniques inspired by Brecht. Development of skills, techniques and interpretive skills leading to final performance in front of a live audience.

Learning aim
C: Review own
development
and
performance

C1: Review own development of skills and techniques for performance Evaluation of development of skills, responding to teacher/peer feedback and observations, identifying strengths and areas for development, setting actions and targets for improvement, referring to professional working practices.

| | Keywords linked to Assignment Brief |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical skills | The physical attributes you need to be able to practically move with technical accuracy. Rehearsal – Practising to improve your performance. |
| Performanc e skills | The performance attributes you need to be able to practically perform applying confidence, a character, a narrative etc. |
| Reflect | Look over your current work and the work of others and be able to reflect and comment on your own and others practice. How does reflection lead to improvement? |
| Analyse | Watch and then analyse your own, and the group, performance by seeing where your strengths and weaknesses are and how these can be improved. |
| Apply | How you can then physically apply the physical and performance skills to a live performance to make a successful practical performance. |
| Apply | |

Component 2 - Key focus

This component is designed to give students a practical overview of the skills, techniques and practices required for the discipline of drama. You will explore the techniques of Epic Theatre and apply them to the play: Blood Brothers. You will apply Brechts non-naturalism to a section of the blood brothers script and perform to an audience. Through a series of workshops and rehearsals you will explore the different scenes of blood brothers as well as the direction's creative intention. Using symbolism, non-naturalism, and minimalism you will explore the motivations behind these characters and their final fate.



YEAR 11 BTEC DRAMA KNOWELDGE ORAGNISER - TERM 2

Frantic Assembly – https://www.youtube.com/user/franticassembly

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| What we are learning this ter | What | at we are | learning | this | term |
|-------------------------------|------|-----------|----------|------|------|
|-------------------------------|------|-----------|----------|------|------|

- A. How to develop our understanding of set design.
- B. How to apply the stanislavski system to character development.
- How to interpret the director's creative intention in Blood Brothers.
- D. How to reflect, analyse and evaluate our development.



| Who is Willy Russell | Other Shows by Willy Russell |
|----------------------|------------------------------|
| | |
| | |

| Key Words: |
|----------------------------------------------------------------------------------------------------|
| Synchronisation – Physical & Visual Theatre - a form of |
| Chorus - those who perform |
| Soundscape – layeredAbstract – |
| Sequence – an order of |
| Naturalism - 'A slice of life' on stage. Naturalistic |
| Motivation - the |
| Epic Theatre- Didactic drama to address the |
| audience directly with analysis, argument, or documentation |
| Climax – is a play or a specific scene's point of |
| and drama Narrative – the s |
| e and |
| Symbols -are often used in drama to |
| and remind the audience of the themes or issues it is discussing. Emotional Memory- to |
| This memory can then be tapped into when the actor was working towards the creation of a character |
| |
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| |

Expand your knowledge and understanding!

Blood Brothers - GCSE English Literature Revision - AQA - BBC Bitesize

| | Key learning aims from Component 2 | | |
|---------------------------------------------------------------------------|--------------------------------------------------------|--|--|
| Learning aim A: Develop skills and techniques for performance | | | |
| Apply technic | ng aim B: skills and ques in sal and mance | | |
| C: Re | ng aim view own opment mance | | |

| | Keywords linked to Assignment Brief |
|------------------------|-------------------------------------|
| Physical skills | |
| Performanc e skills | |
| Reflect | |
| Analyse | |
| Apply | |

Component 2 – Key focus

This component is designed to give students a practical overview of the skills, techniques and practices required for the discipline of drama. You will explore the techniques of Epic Theatre and apply them to the play: Blood Brothers. You will apply Brechts non-naturalism to a section of the blood brothers script and perform to an audience. Through a series of workshops and rehearsals you will explore the different scenes of blood brothers as well as the direction's creative intention. Using symbolism, non-naturalism, and minimalism you will explore the motivations behind these characters and their final fate.

Year 10 BTEC Health and Social Care- Component 2: Health and Social Care Services and Values.

| Year 10 BTEC Health and Social Care- Component 2: Health and Social Care Services and Values. | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| What we are learning: | | B What are the different types of health care services? | | C. | What are the different types of social care services? |
| A. Key words B. What are the different types of health care services? C. What are the different types of social care services? D. What barriers are there to accessing care services? | | Primary Care Primary care is the first point of contact a patient is likely to have with the NHS – you can refer yourself to primary care providers. Primary care providers include: | | Children and young people may need support on a temporary or permanen | |
| A. Key words fo | Key words for this Unit | | Primary care providers include pharmacists, Registered GPs/doctors, walk-in centres, accident and emergency | people | ill; they have family problems, they |
| Primary care | First point of contact when seeking health care | | departments (A&E), dentists and Opticians. | | have behavioural issues or additional needs. Types of support for children and |
| NHS | National Health Service – Tax funded health care in the UK. | Secondary Care | Secondary care is specialist treatment or care. A primary care provider will refer a patient for secondary care if they feel it is | | young people include foster care, residential care and youth work. |
| Secondary care | Specialist health treatment and/or care | | necessary for the patient to receive further advice, tests or treatment. • Secondary care providers include | | Children and adults may need support with specific needs including learning disabilities, sensory |
| Tertiary care | Advanced specialist health treatment and/or care. | | cardiologists (heart), gynaecologists (female reproduction), paediatrics | specific needs | impairments and long-term health issues. |
| Allied health professionals | Professionals who are involved in patient care from diagnosis to recover | Tertiary Care | (children), obstetrics (childbirth and midwifery), psychiatry (mental health) and dermatology (skin). | | Types of support for children and adults with specific needs include residential care, respite care and domiciliary care. |
| Clinical support staff | Support allied health professionals with the treatment and care of patients. | Tertiary Care | Tertiary Care is advanced specialist treatment or care. A secondary care provider will refer a patient for tertiary care for long-term treatment and/or care. | Older Adults | Older adults may need support with a range needs including arthritis, cardiovascular disease, dementia and |
| Foster care | A stable family home where care is provided on either a short or long-term basis. | | Tertiary care areas include spinal, cardiac (heart), cancer care, chronic pain, burns and neonatal (premature and ill new born babies). | | depression. Types of support for older adults include residential care, carers and personal assistants. |
| Residential care | Accommodation and care for a number of children, young people or adults living together in one building. | Allied Health Professionals | Allied health professionals work in a range of specialities They support patients through all stages of care – from diagnosis to recovery. To work with the public they | Informal Social C | 3.1 |
| Respite care | Short-term care which provides relief for family member who are carers. | | must register with the Health and Care Professions Council (HCPC). • Allied health professionals include art therapists, dieticians, paramedics, | | Informal carers include a spouse or partner, children, friends and neighbours. Informal carers do practical |
| Domiciliary care | Care received in the person's own home. | | physiotherapists, speech and language therapists and radiographers. | | household duties, shopping, laundry, walk the dog and help with personal |
| Sensory impairment | Difficulties with senses, most commonly vision and hearing. | Clinical Support Staff | Clinical support staff work within a range of departments under the guidance of | | care. |
| Braille | Raised lettering to help visually impaired. | | allied health professionals. They are trained in their roles but are not required to register with the HCPC. | | \bigcirc |
| Occupational therapist | Offers support to develop independence for daily living activities. | | Clinical support staff include theatre support workers, prosthetic technicians, dietetic assistant, phlebotomist (collects blood samples), hearing aid dispensers | | |

and maternity support workers.

D. What barriers are there to accessing care services? **Physical Barriers** Difficulty accessing care due to mobility and/or disability. Obstacles include uneven and rough pavements and services, narrow doorways, no lift and transport. Access could be improved by planning journeys in advance and reporting any problems to the council. **Sensory Barriers** Sensory impairments can be a barrier to accessing care. • A person with poor vision may need glasses or documents in large print. Profound sight problems may benefit from Braille. • A person with a hearing impairment may benefit from a hearing aid or sign language interpreter. Social, Cultural and Social, cultural and psychological barriers may leave people feeling nervous about accessing support. **Psychological** These can include: religion/cultural barriers, negative experience, self-diagnosis, substance misuse, opening hours. Care services can give individuals opportunities to share their concerns, offer different gender practitioners, facilities to **Barriers** worship and show respect and understanding. **Language Barriers** • Language can be a barrier to accessing care services because individuals and care providers may struggle to understand each other. Support for individuals could include translated documents, translators and interpreters and support from family members. Geographical Individuals may struggle to reach care services because public transport may not run regularly, specialist treatments may require long distance travel and travel can be expensive. **Barriers** Support could include being provided with direct travel or having travel costs reimbursed. • If an individual has a learning disability is can cause difficulty in them accessing care services. **Intellectual Barriers** Support might include a learning disability nurse, speech and language therapist or occupational therapist. **Resource Barriers** · As the population ages and more disorders are being successfully treated, there is a huge strain on health and social care resources – at times it might seem that not everyone can access what they need. • There are huge staff shortages which puts strain on people that work in the health and social care sector. **Financial Barriers** Seeing a GP or using emergency services are free but some services, such as optical and dental care, often involve some payment. This can be difficult for people if they are from a low-income household as they may not feel they can afford to access the care they need.

Year 10 BTEC Health and Social Care- Component 2: Health and Social Care Services and Values.

What we are learning: E. Define the key words F. What are the care values and how can they be implemented? E. Define the key words Self-respect Valuing yourself Person centred approach Planning care around the wants and needs of a service user

| E. | Define the key words | | | | |
|-------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------|--|--|--|
| Self-respect | | Valuing yourself | | | |
| Person centred approach | | Planning care around the wants and needs of a service user | | | |
| Empowerment | | Supporting people to take control of their lives and futures by involving them decisions on their care and treatment | | | |
| Confi | dentiality | Not passing on information or discussing a private conversation to anyone | | | |
| Digni | ty | Being respected and treated with care | | | |
| Safeguarding | | Policies to ensure children and vulnerable adults are protected from harm, abuse and neglect | | | |
| Discrimination | | Treating a person or group of people unfairly or less well than others | | | |
| Compassionate | | Feeling or showing sympathy and concern for others | | | |
| Competence | | The ability to do something successfully and efficiently | | | |
| Consequences | | A result or effect, typically one that is unwelcome or unpleasant | | | |
| Review | | Involves assessing or inspecting something with the intention of making change if necessary | | | |
| Empathy | | Being able to understand and share feelings and views of another person. | | | |
| Insomnia | | Difficulties in sleeping | | | |

| F. | What a | e the care values and how can they be implemented? | | | |
|--------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Empowering and promoting independence | | Empowerment is when an individual feels in control of their own life and have a say in what happens to them. Some people might need help with empowerment because of their age, circumstances or confidence e.g. elderly people, children, adult with learning disabilities. You can promote empowerment and independence by involving individuals, where possible, in making choices about their treatment. | | | |
| Respect for other | ers | You can show respect for the individual by respecting their privacy, needs, beliefs and identity. Show respect by being patient when someone takes longer to perform simple tasks due to their age, disability or injury. Do not leave personal files around for others to see or discuss your patients' case with friends. Gain permission before entering a room, provide private place for personal conversations. | | | |
| Maintaining confidentiality | | It is a person's right by law to have information about them kept confidential. Care workers and not allowed to talk about one service user to another, or someone who is not involved in helping them get better. This involves not having those private conversations in public places where other can overhear. Paper and electronic files are to be kept confidential and only shared with care workers which are involved in the treatment of the patient. | | | |
| Preserving dignity | | Preserving the dignity of individuals to help them maintain self-worth, privacy and self-respect. You do this by involving the person in their own care; helping them go to the bathroom; giving the person time they need, checking what they would like to be called; closing door or curtain when they are changing; making sure their clothes are clean; dealing with embarrassing situations sensitively and professionally. | | | |
| Effective communication | | In health and social care it is important to communicate effectively with service used in order to build trusting relationships. These can be lost of the care worker appears not to care or listen. Recognising different communication needs and trying to overcome them shows that cares respect the individual e.g. when visually impaired providing a leaflet in braille; if can't speak English well, have a translator organised beforehand. Show you value the person through showing empathy, asking questions, not judging, smiling, using their name, giving appropriate eye contact, open body language, giving time to process. | | | |
| Safeguarding and duty of care | | Health and social care workers have a legal duty to protect service users from harm, neglect or abuse. They must recognise the signs and symptoms of abuse so they can protect people. Signs of abuse include low self-esteem, STDs, unexplained injuries or bruises, insomnia, change in appetite, change of personality, self-harming, fear of being alone etc. What to do: report the abuse, never promise to keep the abuse secret, make it clear that you will have to tell someone e.g. your supervisor or the police. DUTY OF CARE Care workers must work in ways that never put individuals at any risk or harms. They need to know their responsibilities, procedures, deliver care as the care plan states and always report and record any concerns about the service user even if they appear minor. | | | |
| Promoting anti- discriminatory practice | | Discrimination can be obvious but sometimes it can be subtle and hidden, and The Equality Act 2010 makes it illegal to discriminate against people because of their e.g. age, gender, race, disability, religion, sexual orientation, marital status etc. You can promote anti-discriminatory practice by: having patience with someone who doesn't speak English well; communicating in a way that the person will understand; showing tolerance towards people who have different beliefs and values from you; challenging unkind behaviour. | | | |

Year 10 BTEC Health and Social Care- Component 2: Health and Social Care Services and Values.

| What we are learning: | | H Iden | tifying own strengths and areas for improvement against the care values | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | ly care values in a compassionate way. own strengths and areas for improvement against ues | Working together | All care works have the responsibility to uphold care values. If everyone works together, doing their 'bit', service users and colleagues alike will all be able to have positive experiences. Put any feelings aside, some clients can show anger or aggressions towards you, continues to work in a way that respects each of the care values. Staff training: Staff training keeps everyone updated. Even if they also ready had care values training it is important to have it again and remind them of their importance. | |
| way? | apply care values in a compassionate | | | |
| Being patient Showing sensitivity Understanding Actively listening Having a positive outlook Being encouraging Having genuine concern for other people. | | Making mistakes | Everyone sometimes make mistakes. It is crucial that staff own up to mistakes that they have made, not matter how small. This is part of the duty of care to safeguard individuals, it demonstrates respect. You need to be honest about your mistake, do not pretend it never happened and do not blame someone else. You can: Tell your supervisor, admit it and apologise Be honest and accurate about what happened, | |
| Care workers can check themselves against the 'Six C's of Compassionate Care' checklist to make sure they are applying care values with compassion. | | | Suggest ways to avoid it happening again Earn back the trust of the person involved Prove you can do the job Do no be too hard on yourself; seek help and guidance from others. | |
| Care | Helps to improve an individual's health and wellbeing. Care should be tailored to each person's needs and circumstances | Reviewing own applications of | One way to improve skills is to look carefully at the areas you are good at, what you are able to do well and things that you find difficult. | |
| Compassion | Shows the care worker understands what the individual is experiencing. Being empathetic to their situation shows care and value to the individual | care values | Knowing your strengths will allow you to take on task with ease and make you feel confident that you are doing a good job. Knowing your weaknesses and what needs improving will help you work on them and develop. It is important to be open with yourself and others in order to progress further and be better at your job. | |
| Competence | Shows that care workers can safeguard and protect individuals from harm | Receiving | Regularly review your strengths and weaknesses because they change overting The purpose of feedback is to let you know what you are doing well and the | |
| Communicati on | How to adapt to individuals and their circumstances to ensure important information is given and shared- keeping the individual at the heart of everything that is done | feedback | areas you need to improve. This can be formal- like reports and following an observation at work and Informal- like chatting to colleagues at break time. Both types encourage you to feel pleased with what you have done well and motivate you to improve in weaker areas, perhaps even provide a way forward. Remember: when giving and receiving feedback, positives must be noted so that | |
| Courage | Protecting individuals by speaking up if you think something is wrong; being brave enough to own up if you have made a mistake. | | you know what you are doing well and continue to do so. Negatives are hard to uncomfortable to hear, but do not take them personally, you need them to get better at your job and feel more confident. | |
| Commitment | Carrying out your duties to care for others to the best of your ability. | Using feedback | Create yourself a SMART action plan to set yourself Specific, Measurable, Achievable, Realistic and Time-related targets or goals to help plan for your improvements | |

