Year 11

Knowledge Organisers

Term 3 - 2024

### Year 11 Term 3 Quizzing Homework - Question Bank

### **Business Studies**

#### Term 3 BS questions on Finance

- 1. What is the calculation to work out Revenue?
- 2. What is the calculation to work out total costs?
- 3. What is the calculation to work out variable costs?
- 4. What is the calculation to work out net profit?
- 5. What is the calculation to work out net profit margin?
- 6. Name an advantage to owners capital?
- 7. Name an advantage of retained profit?
- 8. Name an advantage of loans?
- 9. Name a disadvantage of issuing shares?
- 10. Name a disadvantage of retained profit?
- 11. Name a disadvantage of owners capital?

#### **Child Care**

#### Year 11 Child Development term 3

#### Methods of observation

- 1. What is naturalistic observation?
- 2. When would you use a naturalistic observation?
- 3. What is participant observation?
- 4. When would you use participant observation?
- 5. What is non-participant observation?
- 6. When would you use non-participant observation?
- 7. What is naturalistic observation?
- 8. When would you use naturalistic observation?
- 9. What is event sampling?
- 10. When would you use event sampling?

#### Methods of recording information

What is the advantage of using the following to record a child's progress

- 11. Photograph
- 12. The child's work e.g. a picture
- 13. Notes on the way the child worked
- 14. A check list of skills/knowledge.
- 15. A learning journal

#### Safety awareness.

Name 1 way to reduce the risk of an accident when:

- 16. Cutting shapes
- 17. Riding a bicycle
- 18. Painting
- 19. Junk modelling
- 20. Playing outside in a sand pit

#### **Computer Science**

- 1. What is SQL Injection?
- 2. What is Malware?
- 3. Explain the differences between Trojans, worms and viruses
- 4. What way can you ensure you don't have poor network security?
- 5. Explain what a Brute force attack is
- 6. What is network forensics?
- 7. Explain how penetration testing is done.
- 8. What is internal pen testing?
- 9. What is external pen testing?
- 10. What is an AUP?
- 11. What is a DOS attack?

#### **Drama**

- Name five style/practitioners. Stanislavski, Brecht, Artaud, Physical Theatre, Documentary drama.
- 2. Which practitioner uses an episodic structure (not linear) placards and intends to teach with performance? Brecht.
- 3. Which practitioner has the "fourth wall" intact so that actors might create as realistic performance as possible? Stanislavski.
- 4. Which practitioner uses ritualistic movement and aims to make the audience uncomfortable? Artaud.
- 5. What is split stage?
- 6. What is thought-track?
- 7. What is "marking the moment"?
- 8. What is slow motion?
- 9. What is choral speech or movement?
- 10. What is multi-roll?
- 11. How have you contributed to your performance?
- 12. Write down all vocal skills.
- 13. Write down all physical skills.
- 14. How could you use vocal skills?
- 15. How could you use physical skills?
- 16. Why would you use your vocal skills in that way?
- 17. Why would you use your physical skills in that way?
- 18. What is the context of the play we are studying for text in practice?
- 19. What is the context of the extracts you have chosen within the play?
- 20. What are your individual artistic intentions?

#### **Engineering**

#### Year 11 Quiz 3 20 Questions – Engineering

- 1. Name a personal safety precaution for using a Metal lathe?
- 2. Why do we use cutting compound when creating a thread?
- 3. What tools do you use to make threads?
- 4. Name three marking out tools for metal?
- 5. What drawing angle do we draw isometric drawings?
- 6. Name a process used on a lathe?
- 7. Name a safety precaution for using a wood lathe to turn wood?
- 8. What saw do we use to cut wood?
- 9. What do we use to help measure metals to the correct size?
- 10. What is a ferrous metal?
- 11. Name and alloy and explain what it could be used for?
- 12. Name a common Non-Ferrous metal that is used to make water taps?
- 13. Give two examples of how you can protect Steel from the environment?
- 14. Why is aluminium such a good material?
- 15. What chemical symbol is used to describe iron?
- 16. What is a smart material?
- 17. What material can chance colour with heat?
- 18. What is a tolerance?
- 19. What is a template and why do we use them?
- 20. What is a composite material, give examples?

#### **English**

#### Knowledge organiser questions – English language Paper 2

- 1. How many extracts are there on English language paper 2?
- 2. How many marks is section A worth?
- 3. How many marks is section B worth?
- 4. The exam is 1hr 45mins. How long should you spend on each section?

B=

5. How long should you spend on Q1?

A=

- 6. How long should you spend on Q2?
- 7. How long should you spend on Q3?
- 8. How long should you spend on Q4?
- 9. Q1 asks you to 'choose 4 statements that are true': True or false?
- 10. What is explicit information?
- 11. What is implicit information?
- 12. Which 2 questions ask you to compare the 2 texts?
- 13. In Q2 you are summarising the texts; you do not need to analyse language to do this. True or false?
- 14. How would you structure your answer for Q2?
- 15. What does infer mean?
- 16. Which question asks you to explicitly analyse the language used in one of the texts?
- 17. In Q4 you have to compare the writer's viewpoints and perspectives what does this mean?
- 18. In Q4 you need to write about the methods used true or false?
- 19. In P2 Q5, are you asked to write a description/narrative text or a non-fiction text?
- 20. How would you structure your answer to question 5?
- 21. List 5 of the different text types you might be asked to write.
- 22. What technique means to over exaggerate?
- 23. Name the term: describing something non-human, with human qualities.
- 24. What term is used to describe the repetition of the 's' sound in words close together?
- 25. Name the term: 'a reference outside of the text to another story, film, or myth?'
- 26. Highlight the adverb in the following sentence 'swaying violently, the trees fought back against the raging winds"
- 27. What is a plosive sound?
- 28. What does semantic field mean?
- 29. List at least 4 techniques that you could include in a piece of persuasive writing.
- 30. What is a counter argument?

| omoo | and tuliat guartians.                         | lokyll a | nd Hyde guestions   |
|------|---|----------|---|
|      | and Juliet questions:                         |          | Complete the quotation: "The moment I, I can                          |
| 1.   | ·   | 1.       | be"   |
|      | love, O'                                      | 2.       | Complete the quotation: "I to I                                       |
| 2    | (1.1)   |          | will never set eyes on him again"                                     |
| ۷.   | Complete the quotation: 'Juliet is            | 3.       | Complete the quotation: "If I ever read                               |
| 2    | the(2.2)                                      |          | on a face"  |
| 3.   | Complete the quotation: '                     | 4.       | What technique is used in the above quotation and what is             |
| 4    | be my conduct now'                            |          | the effect?   |
| 4.   | Complete the quotation: 'O, I am              | 5.       | Complete the quotation: 'I must die; and yet I shall                  |
| 5.   | What technique is used in this quotation and  | 6        | Complete the quotation: "Well, when that masked thing                 |
| Э.   | what is the affect?                           | 0.       | like a jumped from among the  |
| c    |   |          | and whipped into the cabinet"   |
| 6.   | Complete the quotation: 'I defy               | 7.       | Complete the quotation: "If he be,'                                   |
| 7    | (5.1)   |          | he had thought, 'I'   |
| 7.   | Who says the above quotation, when and why    | 8.       | Complete the quotation: "a great                                      |
| _    | – what is the effect?                         |          | pall lowered over"  |
| 8.   | Complete the quotation: These violent         | 9.       | Choose one of the quotations and explain in detail what               |
|      | have violent                                  |          | the effect of the language used is.                                   |
|      |   | Dower    | and Conflict Poetry questions   |
| 9.   | Complete the quotation: Who says the above    |          | Complete the quotation: 'our brains in the                            |
|      | quotation and why?                            | 10.      | winds that  |
| 10.  | Complete the quotation: 'let two more         |          | ,   |
|      | wither in their                               | 11.      | Complete the quotation from COTLB: 'into the                          |
|      | (1.2)   |          |   |
| 11.  | Who says the above quotation and what does    | 12.      | Complete the quotation: 'Bullets                                      |
|      | it mean?                                      |          | air'  |
| 12.  | Complete the quotation: 'Hang thee            | 13.      | Complete the quotation: 'I see every round                            |
|      | , disobedient                                 |          |   |
|      | ′ (3.5  | 14.      | Complete the quotation from Poppies: "spasms of                       |
| 13.  | Complete the quotation: 'ao'                  | 4.5      | Complete the greatesting (  |
|      | both your' (3.1                               | 15.      | Complete the quotation: ' set out in ordered rows'                    |
| 14.  | Complete the quotation: How many times does   | 16       | Complete the quotation: 'strung out                                   |
|      | Mercutio say the above quotation and what     | 10.      | on a green-blue translucent sea'                                      |
|      | effect does this have?                        | 17.      | Write a quotation from Emigree that shows she misses her              |
| 15.  | Complete the quotation: 'you beasts. That     |          | country.  |
|      | quench the fire of your pernicious rage/ With | 18.      | Write a quotations from Storm on The Island that shows                |
|      |   |          | the power of nature.  |
|      | issuing from your'                            | 19.      | Write a quotation from Tissue that shows the fragility of             |
| 16.  | Who is the Prince speaking to in the above    |          | human power.  |
|      | quotation and why?                            | 20.      | Write a quotation from Checking out me History that                   |
| 17.  | Write a quotation from the sonnet in Act1     |          | shows Agard is angry with the education system.                       |
|      | scene 5 – Romeo and Juliet's first meeting –  | 21.      | Write a quotation from My Last Duchess that shows the                 |
|      | that uses religious imagery.                  | 22       | abuse of power.   |
|      | and the confidence and gen y                  | 22.      | Write a quotation from The Prelude that shows nature as overpowering. |
|      |   | 23       | Write a quotation from London that shows how society is               |
|      |   | 23.      | being controlled.   |
|      |   |          | 200   |
|      |   |          |   |
|      |   |          |   |
|      |   | 1        |   |

#### Food French Year 11 Term 3 French Quizzing 1. Explain the term – food miles. 2. Give 1 suggestion for reducing carbon Revise the food and drink items and write from memory: emission in food production. 5 fruits; 4 vegetables; 3 drinks; 2 meat items; 2 fish 3. Give 2 ways of reducing food waste in the items; 2 types of ice cream; 2 kinds of sandwich home. Then write these in French from memory: 4. What is meant by sustainable food? 5. Give 1 suggestion for sustainably of fish? 1. For breakfast I eat 6. What is intensive farming? 2. For lunch I eat

- 7. Give 1 positive and 1 negative to intensive
- farming.8. What does Food Traceability mean?
- 9. Why is food traceability important?
- 10. Explain the term organic?
- 11. What are the pros and cons of free-range farming?
- 12. What is Hydroponics?
- 13. What are the positives to Genetically Modifying food?
- 14. What ere the concerns linked to genetically Modifying foods?
- 15. List 3 Food Assurance schemes.
- 16. Explain the terms Primary and Secondary Food Processing.
- 17. What is meant by UHT milk?
- 18. What is pasteurisation?
- 19. List the steps involved with making cheese.
- 20. List 3 different ways we dry foods.

- 3. For dinner I eat
- 4. I love Italian food because it is tasty
- 5. Junk food is unhealthy because it is fatty
- 6. For starter I am going to have tomato soup
- 7. For main course I'd like fish with vegetables
- 8. For dessert I'm going to eat a strawberry ice cream
- 9. To drink I want orange juice
- 10. French food is delicious.

Revise the sports and leisure activities, then answer these questions in French:

- 1) Qu'est-ce que tu fais pendant ton temps libre normalement? (What do you do in your free time normally?)
- 2) **Quels sports aimes-tu? Pourquoi?** (What sports do you like? Why?)
- 3) Quelle est ton opinion des sports d'hiver? (What do you think of winter sports?)
- 4) Quel sport est-ce que tu voudrais essayer à l'avenir ? (What sport would you like to try in the future?)
- 5) **Quel sport as-tu fait récemment?** (What sport did you do recently?)

### Geography

#### Quiz questions for Natural hazards

- 1. Draw and label the tricellular model of atmospheric circulation
- 2. Where do hurricanes form?
- 3. How warm must the sea be for them to form?
- 4. Name our typhoon example
- 5. When did this typhoon take place?
- 6. How many people were killed?
- 7. Give two primary impacts
- 8. List two secondary impacts
- 9. What was the response to the typhoon?
- 10. What caused the flooding of the Somerset levels?
- 11. List three impacts of the flooding
- 12. List 3 pieces of evidence for climate change
- 13. List 2 greenhouse gases
- 14. Sketch a diagram to show the enhanced greenhouse effect
- 15. What can be done to manage climate change?
- 16. Name our LIC case study of an earthquake
- 17. When did it occur?
- 18. How many people were killed?
- 19. How strong was it?
- 20. List three impact
- 21. What was the response to the earthquake?
- 22. Name our HIC case study of an earthquake
- 23. When did it occur?
- 24. How many people were killed?
- 25. How strong was it?
- 26. List three impact
- 27. What was the response to the earthquake?
- 28. Why do people continue to live in hazardous areas?
- 29. Why are the impacts of earthquakes greater in LICS

#### **Health and Social Care**

#### Year 11 Health and Social Care questions Term 3

- 1. What is a support plan?
- 2. What method of communication could you use when presenting a support plan if the service user is:
  - a. Visually impaired
  - b. Has a learning disability
  - c. Is 4 years old
  - d. Speaks English as a second language
  - e. Has a hearing impairment
- 3. What is a risk assessment?
- 4. State 1 hazard for someone who is visually impaired
- 5. How could you plan to reduce this risk
- 6. State 1 hazard for someone who uses a wheelchair
- 7. State 1 way you could overcome this risk
- 8. What is a cleft foot?
- 9. What is cerebral Palsy?
- 10. What is asthma?
- 11. What is a visual impairment?
- 12. As a child with a visual impairment ages their needs change. State 1 way their needs may change.
- 13. As a child with a cerebral palsy ages their needs change. State 1 way their needs may change.
- 14. As a child with asthma ages their needs change. State 1 way their needs change.
- 15. State 1 form of support that could be offered to a person:
- 16. Who is visually impaired
- 17. Has a cleft foot
- 18. Has asthma
- 19. Has a hearing impairment

### Music

# Year 11 Term 3 Low Stakes Quiz Question Bank

- Draw out a semiquaver, quaver, crotchet, minim and semibreve and write down how much each of these beats last
- 2. Put the following tempo's in order from slow to fast: Presto, Adagio, Andante, Allegro Moderato, Largo
- 3. What is the difference between Binary and Ternary Form?
- 4. What is the musical word for copying between the parts?
- 5. What is the difference between arco and pizzicato?
- 6. What is the difference between staccato and legato?
- 7. Name the four voice types and what they sound like
- 8. What instruments would you usually find in a Popular/Rock band?
- 9. What is the typical structure of a Popular song?
- 10. What is a riff?
- 11. What is the musical word for how the music is organised?
- 12. What does conjunct mean?
- 13. What is the difference between syllabic and melisma?
- 14. Draw the key signatures for G, A, D and E Major
- 15. Draw the key signatures for F, Bb, Eb and Ab Major
- 16. What rhythmic device means a pick up beat?
- 17. What is a homophonic texture?
- 18. What are the two main types of tonality?
- 19. What are the key features of Badinerie by Bach?
- 20. What are the key features of Africa by Toto

Also recognising images of the following instruments:

Orchestral Instruments Rock and Pop Instrument

#### B6 part 2:

Science

- 1. What is polydactyly?
- 2. What is extinction?
- 3. How is resistance bacteria made?
- 4. What is a recessive allele?
- 5. What is selective breeding?
- 6. What is a fossil?
- 7. What is evolution?
- 8. What is genetic engineering?
- 9. How does variation happen?
- 10. What is embryo screening?

#### C9 – Chemistry of the atmosphere

- 1. Which gases make up the Earth's atmosphere?
- 2. How much oxygen is there in the atmosphere?
- 3. How much carbon dioxide is there in the atmosphere?
- 4. How much nitrogen is there in the atmosphere?
- 5. When did oxygen first appear in the Earth's atmosphere?
- 6. What led to this change in the level of oxygen in the atmosphere?
- 7. What process led to the change in the amount of oxygen?
- 8. How is the amount of carbon dioxide in today's atmosphere different to the amount in early atmosphere?
- 9. What led to this change in the level of carbon dioxide in the atmosphere?
- 10. What are the major sources of atmospheric pollution?

#### P6 Waves:

- 1. What are the two types of waves?
- 2. What is moved by waves?
- 3. Describe the movement of a longitudinal wave.
- 4. Give an example of a longitudinal wave
- 5. What is rarefaction in a wave?
- 6. What is compression in a wave?
- 7. Describe the movement of a transverse wave
- 8. Give an example of a transverse wave
- 9. Draw and label a transverse wave.
- 10. What is a wavelength?

### **Spanish** Year 11 Term 3 Spanish Quizzing A] Revise the food and drink items and write from memory: 5 fruits; 4 vegetables; 3 drinks; 2 meat items; 2 fish items; 2 types of ice cream; 2 kinds of sandwich Then write these in Spanish from memory: 1. For breakfast I eat 2. For lunch I eat 3. For dinner I eat 4. I love Italian food because it is tasty 5. Junk food is unhealthy because it is fatty 6. For starter I am going to have tomato soup 7. For main course I'd like fish with vegetables 8. For dessert I'm going to eat a strawberry ice cream 9. To drink I want orange juice 10. Spanish food is delicious. B] Revise the sports and leisure activities, then answer these questions in Spanish: 1) ¿Qué haces en tu tiempo libre normalmente? (What do you do in your free time normally?) 2) ¿Qué tipo de deportes te gustan? ¿Por qué? (What type of sports do you like? Why?) 3) ¿Qué opinas de los deportes de invierno? (What do you think of winter sports?) 4) ¿Qué deporte te gustaría probar en el futuro? (What sport would you like to try in the future?) 5) ¿Qué deporte hiciste recientemente? (What sport did you do recently?)

# Stellar evolution

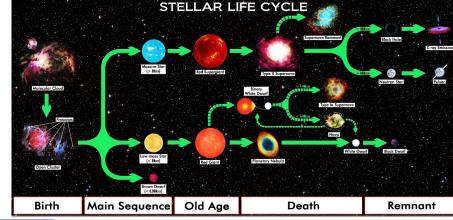
Open clusters



**Evolution of stars** 

Giant Molecular cloud of gas and dust

> cloud collpases into unstable fragments





Nebula

Galaxies

Evolution of low-mass stars - Chandrasekhar limit 1.4 x mass of Sun



clumps together to form a

protostar

Hot enough for nuclear fusion of hydrogen into helium. The star is 'born'.

sequence

collapses

Radiation pressure increases until it balances gravitational collapse of the star. The star will spend 90% of its life at this stage.

Réd Giant Hydrogen fuels runs out, core collapses, other fuels undergo fusion in shells of the star causing it to expand.

Planetar

Outer layers continue to expand and are visible as a sphere of gas.

White Dwarf

Core stops collapsing due to electron degeneracy pressure. Over time will become a black dwarf.

#### Evolution of massive stars - Core mass greater than Chandrasekhar limit



Red / Blue supergiant

Core collapse continues, temperatures rise and carbon fuses into neon. Eventually iron is formed but this cannot be fused and release energy.



Star collapses in on itself. There is a sudden halt when the neutron degeneracy pressure is reached and a shock wave is generated that tears the star apart enriching the interstellar medium with chemical elements up to iron and heavier ones created in the supernova.



Globular cluster

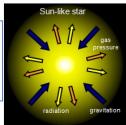
### Neutron star

Formed if core's mass is no greater than 3 times than that neutron degeneracy pressure.

### Black hole

Formed if core's mass is greater than 3 solar masses, neutron of the Sun. Collapse is halted by pressure insufficient is overcome.





#### **Break-even forecast**

A prediction about the break-even quantity based on estimates of future sales revenues and costs

#### **Break-even quantity**

The amount a business must sell to earn enough revenue to cover its costs

#### Margin of safety

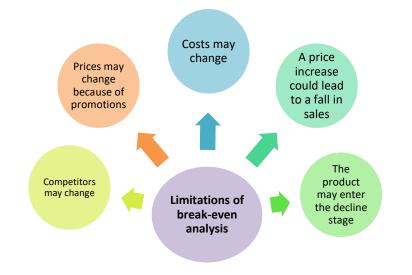
The amount by which a business' actual output is greater than its break-even output Businesses use information about revenues and costs to calculate the break-even level of output

#### 5:4 Breakeven

#### Calculating break even

Total fixed costs ÷ (price - variable costs per unit)





#### Cash flow forecast:

shows the expected flow of money into and out of a business

#### Inflows

Cash flowing into the business

#### **Outflows**

Cash flowing out of the business

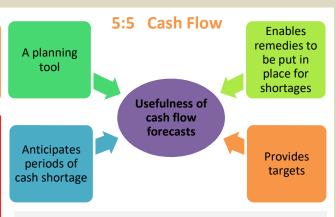
#### Expenditure

Money that the business pays out

### Opening balance

Cash available at the start of the month Closing balance

Cash available at the end of the month



A negative cash flow may:

- only be temporary and may not necessarily cause a problem for the business
- require the business to obtain additional finance in the form of an overdraft to help it overcome a shortage of cash
- mean that the business has to delay payment of money it owes to others such as suppliers

#### **Assessment Information**

Your assessment will take place during a normal timetabled lesson but you should be revising at home.

Number of marks available: 40 Time allowed: 50 minutes

Answer **ALL** of the questions

The first 10 questions will be multiple choice - you must only select **ONE** answer, selecting two will score 0 marks.

The other questions will include a range of 2, 3, 4, 6, 7, & 9 mark questions

#### Possible questions

- 1. State one function of the finance department.
- 2. Calculate the profit a business would make in 4 weeks.
- 3. Analyse one benefit of owners' savings.
- Recommend one source of finance for a business to use.
- 5. Evaluate whether a business should use a bank loan or retained profit.

State Explain Analyse Recommend Evaluate

### R020: LO3 Be able to plan different play activities for a chosen developmental area with a child from birth to 5 years.

- 1. **Aim** State the purpose of the activity how will the children benefit from taking part?
- **2. Briefly describe the activity you have planned**. Give it a **clear title**. This could include: mark making, gardening. What's the time Mrs Wolf?, ride on bikes, stepping stones, collage, model making.....
- **3. Reasons for choice.** Explain how this activity will help the children's development in the area you have chosen. Explain how it will relevant to a particular child.
- **4. Safety considerations** Plan a risk assessment for the activity. Think carefully about any safety issues there may be and explain how you will reduce this risk.
- **5. Time scale** State how long it will take to set up the activity, carryout the activity and tidy away at the end of the activity. Be as realistic as possible
- **6. Resources** List all the equipment you will need for the activity. Check that these will be available, especially if the resources are less common or need fresh or expensive resources.
- 7. **Methods of observation.** Explain how you will observe and record the child's behaviour in the activity. This could be: Naturalistic, event sampling, snapshot, participant, non participant.
- **8. Methods of recording** Now you need to plan how you will record your observations. This could include: charts, photographs, written notes, examples of children's work. Remember images (videos or photos) must only be taken with the parent's permission. Full face photos should be blanked out.

### **Child Development Year 11 term 3**

| Key word                    | Definition  |
|-----------------------------|---|
| Naturalistic Observation    | A child's spontaneous behaviour is observed Adults do not lead or prompt the child  |
| Participant Observation     | The practitioner deliberately interacts with the child. They may ask the child to perform a certain task e.g. build a tower of blocks                               |
| Non Participant Observation | You sit where you can see the child but the child is<br>not aware the observation is taking place. (this may<br>not be easy!) You see the child's natural behaviour |
| Event Sampling              | Used to record when and how often an event occurs. E.g. when a child shows aggression   |
| Snapshot                    | A practitioner notices a child doing something and observes them spontaneously. Often lasts for only a minute or two  |
| Risk Assessment             | Identifying potential hazards, assessing the risk and putting plans in place to reduce the risk.  |
| Learning Journal            | A child's progress is recorded in their learning journal. The information in the journal includes: Charts, Photographs, Written record, Examples of child's work    |

#### Revision Summary Sheet – The Law

| Legal<br>Jurisdiction   | an area of land where a particular legal system has authority.  | Supreme court  | the final court of appeal in the UK for civil cases, and for criminal cases from England, Wales and Northern Ireland but not Scotland. It hears cases that affect the whole population.   |
|---|---|--|---|
| Devolution of<br>Power  | the transfer of some decision-making to local control (local governments making some decisions  | State  | an organised political community under one government.  |
| Homicide  | the killing of one person by another, this includes manslaughter as well as murder  | Small Claim  | Small Claim – a claim of under £10,000 is known as a small claim.   |
| Murder  | if a person is considered to be of sound mind and intended to cause serious harm to the victim  | County Court   | this type of court deals with civil matters such as financial or housing disputes, family issues, personal injury or breach of contract.  |
| Manslaughter  | killing someone with no intention to cause death or the accused has a partial defence such as loss of control.  | Magistrates'<br>court                                      | all criminal cases pass through this court, serious<br>crimes get sent to Crown courts and minor<br>criminal matters are tried in a magistrates   |
| Crown Court   | the court used for the trial of serious criminal offences.  | Defendant  | the person accused of the offence   |
| Discrimination  | unfavourable treatment of others often based on prejudice.  | Prosecution  | the prosecution Lawyers work on behalf of the crown and in co-operation with the Police to prove that the defendant is guilty.  |
| Advisory<br>conciliation<br>and<br>arbitration<br>service (ACAS | provides free and impartial information and advice to employers and employees on workplace relations and employment law.  | Jury   | a group of ordinary people aged 18 and over, in a crown court they listen to the evidence and arguments from both sides before making decision if the defendant is guilty or not.         |
| Citizens advice<br>Bureau (CAB)                                 | an independent charity that offers free, confidential and independent advice to everyone on rights, responsibilities and the law.   | Information<br>commissioner'<br>s office (ICO)             | an independent watchdog sponsored by the Ministry of Justice that reports directly to parliament on data protection and privacy issues.   |
| Employment<br>tribunal  | hear cases brought by employees who think that their employer/potential employer or trade union has treated them unlawfully.  | Data<br>Protection Act<br>(original 1998,<br>revised 2015) | controls how personal information is used by businesses, organisations or the government.   |
| Legal Aid   | government provide financial support to people with a low income so that they can have access to justice.   | Solicitor  | a member of the legal profession who deals with property transfers, drawing up of wills and other legal matters. They sometimes instruct Barristers and represent clients in some courts. |
| Work to rule  | employees work strictly to the rules of their contract and refuse to do any additional work outside of their job description.   | Barrister  | qualified member of the legal profession who is a specialist in representing their clients in court   |
| Joint<br>Enterprise   | Or common purpose means that all participants in the crime can be held responsible for its outcomes. E.g. if a gang attacked someone with a knife then they all may be held responsible if they actively assisted or encouraged the attack. | Public order<br>offences                                   | offences that prevent people going about their normal business e.g. riots   |
| Inchoate<br>offences  | the police can arrest and charge people who are planning or intending to commit a crime, even if there are no victims or criminal activity taking place   | "No Win, No<br>Fee"  | the lawyer only charges a fee if they win the case.   |
| The Crown<br>Prosecution<br>service (CPS)                       | consider the information and evidence provided by the police and they decide if there is enough evidence to take the matter to court, and if doing so would be in the public interest.  | Legislation  | acts or laws passed by parliament or assembly   |

#### **Revision Summary Sheet - The Law**



Blindfolded to suggest that justice is impartial (fair) and objective (unbiased).

Holding a sword that faces downwards represents punishment. This is held below the scales to show that evidence and court are always held before punishment

Blind/Lady Justice



Scales to show the weighing of evidence. They are balanced to show that evidence should stand on its own

Fairness: the making of judgements that fit the circumstances of a particular case without being influenced by personal feelings or interest.

Justice: giving each person what he/she deserves. In law, this includes:

- · Protecting everyone from crime and criminals.
- Enabling people suspected of crime to defend themselves properly.
- Sentencing criminal so that their punishment fits their crime.
- Compensating victims of crime so that they are in the same position as before the crime took place.

We have Laws to regulate the behaviour of the people. Not everyone will agree with all of the laws but everyone is expected to the obey the law (this is known as the rule of law). If we ignored the rules that we didn't like then there would be no common code of behaviour. People would never know what to expect from other members of their community and they would find it difficult to trust others. Law and order would break down if laws applied to some and not others, leading to protests and a loss of respect for the police. Laws work best when:

- · Most people know about the law and agree with it.
- The law is clear and easy to understand
- The law can be easily enforced without discrimination.
- Punishments are clear and fairly applied.

The purpose of law: protecting safety.

Many laws are designed to protect our safety.

Laws forbidding homicide, assault and burglary are examples of this. As lives have changed and developed parliament have passed laws that protect health and safety. Such laws protect people on roads, in work places, shops, restaurants, schools and even homes.

- Direct discrimination: when someone is treated less favourably because of a protected character list (see opposite). Examples of less favourable treatment could include not employing them; refusing training; giving them worse working conditions/terms than other workers.
- Indirect discrimination: when everyday
  decisions made in an organisation or
  business disadvantage people on the basis
  of the characteristics (opposite). E.g.
  advertising a job for applicants to be
  1.8m tall. On average men are taller than
  women so this discriminates against
  women.

The purpose of law: Protecting rights, and promoting freedoms and equalities.

In the second half of the 20th century governments passed laws to protect peoples rights, promote their freedoms and guarantee equalities by safeguarding people against discrimination. This has continued into the 21st century. The two most recent laws to protect equalities in the UK are the Human rights act (1998) and the Equality Act (2010)

**The Equality Act (2010)** is designed to protect people against discrimination in relation to any of 9 specific characteristics:

- Age
- Disability
- Gender reassignment
- Marriage and civil

#### partnerships

- Pregnancy and maternity
- Race
- Religion and belief
- Sex
- Sexual orientation

Employers must make reasonable adjustments for employees so that they can work as normally as possible in the event of disabilities or other issues e.g. pregnancy. This is the same in wider society. (ramps, lifts, braille on cashpoints and now some have voice prompts)

#### **Revision Summary Sheet - The Law**

Keep a record of relevant events: include dates and times, and a description of what happened together with copies of any relevant paperwork, such as, letters, memos, emails, notes of meetings.

1

Seek information and advice from the **Advisory**, **Conciliation and Arbitration Service (ACAS)**. **Citizens Advice**, a trade union or a solicitor.

1

See the boss or supervisor to try to sort the problem out informally.

(Ask for the support of a work colleague or trade union representative at this stage or any of the stages below.)

1

Use the company's grievance procedure to make a official complaint.



Contact your trade union, professional association or ACAS to see whether they can resolve the matter through mediation.



Take legal action by taking the case to an **employmetribunal** for an independent judgement. This must done within three months of the problem occurring Before being able to lodge an employment tribunal claim, potential claimants must first notify ACAS of their intention to claim so that ACAS can offer the opportunity to resolve the issue using conciliation. (I more on tribunals, see page 65.)



People can make a complaint under the **Equality Act**. The Equality Act is part of Civil law rather than criminal law. This means that the police and criminal courts are not involved a person with a protected characteristic must take action themselves if they have been discriminated against, harassed or victimised because of that characteristic. (previous page).

#### The purpose of law: settling disagreements.

The law is also used as a way of settling disagreements. Judges are asked to decide who is right or wrong in disputes such as land ownership, money, employment and relationships.

#### Key Legal Principles

The presumption of innocence (innocent until proven guilty) - people must be seen as innocent until they are proved to be guilty in a court of law. The prosecution must prove that the defendant is guilty. It is not the responsibility of the defendant to prove that they are innocent. Defendant does **not** have to:

- Answer questions in a police interview.
- Provide a defence case statement (a document setting out the basics of their defence)
- · Give evidence at their trial
- Provide an explanation for any issues raised by the prosecution.
- Answer questions asked by the prosecution.

However juries are allowed to take the defendants silence into consideration when reaching their verdict of "guilty" or "not guilty". As a result most defendants usually make some response to the charges against them. New laws are sometimes brought in at times of national emergency. This happened after the terrorist attack on New York's World Trade Centre in 2001. The Anti-Terrorism, Crime and Security Act allowed the imprisonment of terror suspects without trial. This can undermine the principle of innocent until proven guilty.

#### Key Legal Principles

Equality before the law. The right to equality before the law (as part of the right to a fair trial) is part of Article 7 of the Universal Declaration of Human Rights (UDHR), it is also included in the Magna Carta. The Principle of the equality before the law means that:

- People should receive a fair, public hearing.
- Cases should be heard by competent, independent, and impartial people in courts established by law.
- Defendant should have time to prepare their case and should be tried without delay.
- Defendants are entitled to legal representation which should be provided by the state through legal aid f the
  defendant cannot pay.
- Defendants should be able to understand what is being said in court and should have the right to an interpreter if they need one.
- Defendants have the right to attend court and question witnesses.
- Any judgement should be made public (expect in special circumstances where it is necessary to respect children's confidentiality).
- · Defendants have a right to appeal to a higher court.

Criminal Law: covers offences against the community as a whole. Parliament decides which types of behaviour should be criminal offences. Offences covered by criminal law usually fall into one of the following categories: Against the person e.g. rape, robbery, assault; Against property e.g. theft, burglary and fraud; Against the state or Crown e.g. tax evasion, smuggling, misconduct in public office, terrorism, immigration or currency forgery; Participatory offences where a person has encouraged or assisted a criminal.

Civil Law: covers disputes between individuals or groups of people/organisations. This covers the following: employment/other contracts or agreements; unfair treatment at work; cases of discrimination under the Equality Act; land and property ownership; inheritance; divorce/separation/child access and custody; copyright and patents; accident and injury; Negligence

#### **Revision Summary Sheet - The Law**

|   | Civil law  | Criminal law   |
|---|--|--|
| Purpose   | Settling disputes and compensating victims   | Deterring and punishing people who offend against the community at large   |
| Who investigates the problem?   | The victim — usually assisted by a solicitor or other representative   | The police   |
| Who pays for all this?  | The two parties in the case will need to pay their legal costs. Sometimes solicitors will agree 'no win, no fee' with their client. Victims with low incomes may be able to claim legal aid.   | The administration of criminal law is mainly funded by the State   |
| Who takes the case to court?  | The victim — usually assisted by a barrister   | Usually the Crown Prosecution<br>Service (CPS)   |
| Which courts deal with the case?  | County Court, Family Court or Tribunal   | Magistrates' Court or Crown Court  |
| (The Court system is complicated<br>because it has grown up over hundreds<br>of years. See Chapter 3 for more details.) | (depending on the type of case)<br>High Court  | (depending on the seriousness of the offence)  |
| Which courts deal with any appeal?  | High Court  Appeal Tribunal or Upper Tribunal Supreme Court  | Court of Appeal<br>Supreme Court   |
| What happens to the victim?   | If they win, they will receive compensation from the loser who may also be made to pay all or part of the victim's legal costs If they lose, they are likely to have to pay all or part of the winner's legal costs as well as their own | May be offered emotional support from the charity Victim Support The Court may order the offender to pay compensation to the victim Victims may also be able to claim compensation from the Criminal Injuries Compensation Authority To win 'damages' from the criminal, they will need to use civil law |
| What happens to the person in the wrong?  | Compensates the winner and may also be<br>ordered to pay the winner's legal costs  | Punishments could include:     community orders     fines     imprisonment   |

#### European and International Law

The EU: When a country joins the EU it allows most EU laws to become part of its own national laws. The UK has been heavily influenced by laws made within the EU, e.g. the UK Human Rights Act (1998) is based on European Law.

The UN: as a member of the UN the UK is bound by a range of international laws and treaties on: human rights, environmental protection and relationships between nations e.g. International Law of the Sea covers things such as rights to navigation and ownership of resources on the seabed

#### Parliamentary Legislation

Most new laws in England and Wales are proposed by the Government and decided by Parliament. These are statute laws, e.g. the conservative Government of 2015 proposed legislation to encourage welfare claimants back to work. This kept a promise that they made during their election campaign.

Sometimes new laws are proposed by individual MP's. In 2015 Labour MP Rob Marris proposed the Assisted Dying Bill in the House of Commons. (This bill wanted to change the law so people with terminal illnesses could end their lives as long as they had medical supervision. The Bill was defeated by 330 votes to 118.

#### Common Law

The English Legal system is founded on Common Law. Law in medieval times was based on decisions made by judge about what was right and wrong. From 12th century (1300) onward, judges would travel around England bringing justice to people wanting to settle disputes. These decisions were based on England's beliefs and traditions. E.g. stealing from a person or causing them personal injury was though by most people to be a threat to the peace and prosperity of an entire community. Judges made decisions on issues such as theft, murder and assault. These rulings were written down and then used by other judges. Through this process of establishing precedent (courts setting out judgements for others to follow) laws became "common" and recognised by everyone. This was judge made not by parliament.

#### Case Law

Precedent is still a very important feature of English Law.
Judges will still refer to other similar cases from the
past. In order to for laws to be applied consistently on "in
common", the judge will follow the decision made by senior
or equal ranking judges in earlier cases. In February 2016
the Supreme Court reinterpreted the law on Joint
enterprise judging that an incorrect precedent had been
set in 1980 and that 100'ss of people had been wrongly
convicted for over 30 years.

Sometimes senior judges rule that past decisions do not fit with recent advances in technology or modern thinking. Judges may reinterpret the law to bring it up to date and so set a new precedent for other judges to follow. They can then recommend that Parliament reviews the law to bring it properly up to date. E.g. Consumer Rights Act (2015) brought consumer law up to date including laws on the purchase of digital content.

Sources

of English

Law

#### **Revision Summary Sheet – The Law**

The UK does not have a single *legal system*. This is because the UK is a political union of nations that were once *independent*.

The Kingdom of Great Britain was created in 1707 by bringing Scotland into *Partnership* with England and Wales. Scotland had its own legal system at the time. It was decided that this would continue largely as it had been before the *union* with England and Wales.

The political union between Great Britain and Ireland in 1801 created the United Kingdom of Great Britain and Ireland but allowed Ireland to keep its **separate courts**. Today only the six northern Irish counties (known as Northern Ireland) **remain** part of the UK still has a different **court system** from that of England and Wales.

This means that England and Wales, Scotland and Northern Ireland have separate legal jurisdictions.

Scotland with its **separate parliament**, and Northern Ireland, through its **assembly** also have the power to pass their own **laws**. For example, the age of criminal responsibility is 12 years old in Scotland but 10 in England, Wales and Northern Ireland.

However, there are more similarities than differences in the laws of these separate jurisdictions. For example, employment in all three jurisdictions is very much the same. On the other hand, there are major differences in family law.





### Computer Science

| Types of Hacking               |  |  |
|--------------------------------|--|--|
| Brute Force Attack             | An attack that runs through a list of different passwords or letters until access to an account is gained,   |  |
| Denial-of-service              | Where a hacker tries to stop users from accessing a part of a network or website, mostly by flooding the network with useless requests, making the network very slow or completely inaccessible.   |  |
| Data Interception and<br>Theft | Shouldering is attempting to look over someone's shoulder when using an ATM. Measures to reduce this risk include destroying paper documents when no longer needed, logging off or locking computers when not in use and locking rooms containing computers. |  |
| Forms of Network Attack        |  |  |
| Passive                        | Where someone monitors data travelling on a network and intercepts any sensitive information they find.  |  |
| Active                         | When someone attacks a network, for example with malware.  |  |
| Insider                        | When someone within an organisation exploits their network access to steal information.  |  |
| Brute force                    | A type of active attack used to gain information by cracking passwords through 'trial and error'. Uses likely password combinations to gain access to user accounts.   |  |

| Identifying and preventing vulnerabilities                                      |  |  |  |
|---|--|--|--|
|   | Use of software for capturing, storing and analysing network events.           |  |  |
| <b>Network Forensics</b>  | The outcome is finding out communication between whom, when,                   |  |  |
|   | how and how often.   |  |  |
|   | A strategy to identify security weaknesses including:                          |  |  |
| Donotrotion (Don)   | <ul> <li>Gathering information about the target of possible attacks</li> </ul> |  |  |
| Penetration (Pen)   | <ul> <li>Identifying possible entry points to the network</li> </ul>           |  |  |
| Testing   | - Attempting to break in   |  |  |
|   | <ul> <li>Report findings and respond.</li> </ul>                               |  |  |
| Internal Day Testing  | Puts the tester in the position of an employee with standard access            |  |  |
| Internal Pen Testing  | rights to the network to determine how much damage they could do.              |  |  |
| Futornal Don Tostina  | May target servers within a business to see how easy they are to break         |  |  |
| External Pen Testing  | and how it can be achieved.  |  |  |
| Acceptable Use  | Procedures and precautions which are in place to make network users            |  |  |
| Policies (AUP) aware of threats and the steps they must take when using the net |  |  |  |

## Network Threats

| Cyber Security Risks                             |   |  |  |
|--|---|--|--|
|  | Knowingly or recklessly obtaining or disclosing                           |  |  |
| Dlogging   | personal data or information without the consent of                       |  |  |
| Blagging   | the controller (Owner of data). EG Employees sharing                      |  |  |
|  | passwords.  |  |  |
| Hacking  | Attempting to gain access to a system through                             |  |  |
| паскіпів   | cracking passwords.   |  |  |
| Human  | People are often the weakest part of security systems                     |  |  |
| Error  | and criminals take advantage of human error and                           |  |  |
| LITOI  | gullibility.  |  |  |
|  | Software that can harm devices, which is installed on                     |  |  |
| Malware  | someone's device without their knowledge or                               |  |  |
| Widiware   | consent. May be spread by email, messaging services                       |  |  |
|  | or downloading infected files.  |  |  |
|  | Emails designed to appear as a reputable                                  |  |  |
| Phishing   | organisation to gain trust of users and harvest                           |  |  |
|  | personal information.   |  |  |
| Poor   | Network policies are not always designed to provide                       |  |  |
| Network  | maximum security. For example, a strong policy                            |  |  |
| policy   | should recommend changing passwords regularly and                         |  |  |
| , ,  | ensure that the passwords used are strong.                                |  |  |
| Spyware  | Secretly monitors user actions (eg. key presses) and                      |  |  |
|  | sends info to a hacker.   |  |  |
|  | Exploiting a technique that exploits security                             |  |  |
| SQL  | weaknesses in websites. Achieved by inserting                             |  |  |
| Injection  | malicious code into a database field on a website                         |  |  |
|  | such as a password field.   |  |  |
|  | Trojans are malware disguised as legitimate software.                     |  |  |
| Trojan   | Unlike viruses and worms, Trojans do not replicate                        |  |  |
|  | themselves – users install them not realising they have a hidden purpose. |  |  |
| <del>                                     </del> | Viruses attach (by copying themselves) to certain                         |  |  |
| Virus  | files. Users spread them by copying infected files and                    |  |  |
| virus  | activate them by opening those files.                                     |  |  |
|  | Worms are like viruses but they self-replicate without                    |  |  |
| Worm   | any user help, meaning they can spread very quickly.                      |  |  |
| L  | any user help, meaning they can spread very quickly.                      |  |  |

#### More info can be found here:

https://youtu.be/jlvvek8n5g8 https://youtu.be/4f05t8ppJfk https://youtu.be/XJEjQN-CEDk

#### **ENGINEERING YEAR 11 MODULE 3 Systems**

#### **KEY WORDS**

#### **System Diagram**

This is a diagram that breaks down an operation into three main component parts: Input, Process, Output.

#### **Processing device**

This device handles information and then turns on or off an output device.

#### Microcontroller

This is a small computer within a single integrated circuit.

#### **Integrated Circuit**

This is a self-contained circuit made from a number of components designed together.

#### **Input Devices**

#### **Switches**





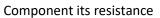


Push Slide

Toggle

#### Light dependant resistor (LDR)

When light hits this



Changes turning on the circuit.

#### Thermistor

When heat hits this



Component its resistance

Changes turning on the circuit.

#### **Process Devices**

A PIC chip (peripheral interface controller) is a simple controller commonly used in schools.



#### Microcontroller

Are small computers within a single integrated circuit (counters, timers and decision-making components).



**Buzzers and speakers** 

**Output Devices** 

Lamps

Bulb

#### Motor





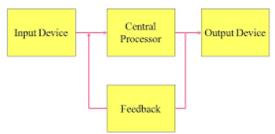
LED (light emitting diode)

An electric motor is a device for converting electrical energy into mechanical energy in the form of rotation.

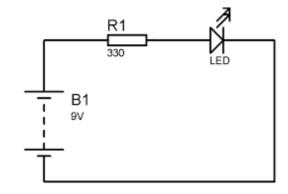
#### **Simple System Diagram**



#### **Simple System Diagram with feedback**



#### **LED** series light circuit



#### **KEY POINTS**

- System block diagrams describe what happens in a system.
- System block diagrams always have a minimum of one input, one process and one output.
- Input devices provide information from outside into the system.
- Process devices handle information received and turn outputs on or off.
- Output devices send out information into the environment.

#### Your FINAL practical exam!

You will perform TWO EXTRACTS from ONE play.

This could be a combination of the following:

- Group performances (no more than four performers): Each extract 15 min long
- Duologue (two performers): Must be between 3 and 10 minutes
- Monologue (one performer): Must be between 2 and 5 minutes

I am going to highly advise we work in groups of 2 and 4 because this will allow us to focus on a specific sections of the play.

You will be assessed on: your overall contribution to the performance, range of theatrical skills, effectiveness with which you use those performance skills, your interpretation of the play as a whole, your understanding of the context of the play, your success in achieving your artistic intentions.

# YEAR 11 DRAMA— Component 3 Texts in Practice

Potential Scripts/Playwrights to look into, including where its set and how many actors needed:

- 'Bouncers' by John Godber (inner-city, four male)
- 'Shakers' by John Godber (inner-city, four female)
- 'Monsters' by Niklas Radstrom (Liverpool, four non-specific)
- 'A Streetcar Named Desire' by Tennesse Williams (New Orleans, two females; male and female; two females and a male \*depending on scene\*)
- 'DNA' by Dennis Kelly (two non-specific)
- 'Girls Like That' by Evan Placey (one to three female)
- 'Abigail's Party' by Mike Leigh (two female and two male)
- 'Daisy Pulls it off' by Denise Deegan
- 'Private Peaceful' by Samuel French (one to two male)
- '1984' by George Orwell (four non-specific
- 'Dancing at Lughnasa' by Brian Friel (three females, one male)
- 'Art' by Yasmina Reza (four non-specific)
- 'Top Girls' by Caryl Churchill (three female)
- 'Collected Grimm Tales' by Carol Ann Duffy (up to four non-specific)

#### Romeo and Juliet Key quotations

- 'O' brawling love. O' loving hate" (1.1)
- : 'she doth teach the torches to burn bright', 'like a rich jewel in an ethiop's ear (1.5)
- 'Juliet is the sun' (2.2)
- 'fire eyed fury be my conduct now' (3.1)
- 'O, I am fortune's fool' (3.1)
- 'I defy you stars' (5.1)

#### <u>Juliet:</u>

- 'Good pilgrim you do wrong your hand too much' (1.5)
- About Romeo: 'if he be married, /Mv grave is like to be mv wedding
- To Friar Lawrence: 'I long to die if what thou speak'st speak not of remedy' (4.1)
- O happy dagger/ This is thy sheath: there rust, and let me die' (5.3)

#### Friar Lawrence:

- 'wisely and slow, they stumble that run fast' (2.3)
- 'These violent delights have violent ends' (2.6)

- 'I think it best you married with the County' (3.5)
- 'a man of wax' (about Paris)

#### Capulet:

- 'let two more summers wither in their pride' (1.2)
- 'Hang thee young baggage, disobedient wretch!' (3.5)

#### Mercutio:

- 'a plague o' both your houses' (3.1)
- 'ask for me to-morrow, and you shall find me a grave man.' (3.1)

#### Benvolio:

- 'I do but keep the peace' (1.1)
- 'part fools! Put up your swords, you know not what you do'

#### Prince:

• 'you beasts. That quench the fire of your pernicious rage With purple fountains issuing from your veins'

#### Tybalt:

- About Romeo: 'To strike him dead I hold it not a sin' (1.5)
- To Romeo: 'thou art a villain' (3.1)

#### Lady Capulet: Juliet's mum.

• 'I wish the fool were married to her grave' (3.5)

**English Literature term 3 Key quotations** 

| Poem  | A01 Key Quotations   |
|---|--|
| Ozymandias<br>(1818)<br>Percy Bysshe<br>Shelley               | "My name is Ozymandias, King of Kings/ Look upon my<br>works ye mighty and despair"<br>"nothing beside remains"<br>"frown/and wrinkled lip and sneer of cold command"<br>"the lone and level sands stretch far away' |
| London<br>(1794)<br>William Blake                             | "In every cry of every man,/in every infant's cry of fear" "And blights with plagues the marriage hearse" "black'ning church" "mind forg'd manacles"   |
| Extract from 'The<br>Prelude'<br>(1798) William<br>Wordsworth | "one summer evening led by her" "but it was a trouble to my dreams" "Huge peak black and huge" "Upreared it's head" "Towered up between me and the stars"  |
| My Last Duchess<br>(1842)<br>Robert Browning                  | "looking as if she were alive" "I gave commands; then all smiles stopped together" "my gift of a nine-hundred-years old name"  |
| Storm on the<br>Island<br>(1966)<br>Seamus Heaney             | 'Strange, it is a huge nothing that we fear'. 'tragic chorus' 'spits like a tamed cat / Turned savage' 'We are prepared'   |
| Cheking out me<br>History<br>(2007)<br>John Agard             | 'Dem' 'Dem tell me/wha dem want to tell me' 'Blind me to my own identity' 'But now I checking out me own history/ I carving out me identity'   |
| Tissue<br>(2006)<br>Imitaz Dharker                            | 'Paper that lets the light/shine through.' "Turned into your skin" "Might fly our lives like paper kites".   |

| Poem  | A01 Key Quotations  |
|---|---|
| Charge of the<br>Light Brigade<br>1854) Alfred Lord<br>Tennyson | 'into the jaws of death, into the mouth of hell' 'cannon to the left of the, cannon to the right of them, canon in front of them.       |
| Exposure<br>(1971) Wilfred<br>Owen                              | 'Our brains ache in the merciless iced east winds that knife us'. 'sudden successive flights of bullets streak the silence'             |
| Bayonet Charge<br>(1957) Ted<br>Hughes                          | 'Bullets smacking the belly out of the air' 'King, honour, human dignity, etcetera/ Dropped like luxuries in a yelling alarm'           |
| Remains<br>(2008) Simon<br>Armitage                             | 'I see every round as it rips through his life' 'his blood shadow stays on the street and out on patrol I walk over it week after week' |
| Poppies<br>(2009) Jane Weir                                     | 'spasms of paper red' 'steeled the softening of my face' 'later a single dove flew from a pear tree'                                    |
| War Photographer<br>(1985) Carol Ann<br>Duffy                   | 'spools of suffering set out in ordered rows' 'his hands, which did not tremble then though seem to now.'                               |
| Kamikaze<br>(2007) Beatrice<br>Garland                          | 'strung out like bunting on a green-blue translucent<br>sea'<br>'he must have wondered which had been the better<br>way to die.'        |
| The Emigree<br>(1993) Carol<br>Rumens                           | 'it may be sick with tyrants, but I am branded by an impression of sunlight' 'My city takes me dancing'                                 |

#### Dr Jekyll

"I swear to God I will never set eyes on him

"that man is not truly one, but truly two" "I am the chief of sinners. I am the chief of sufferers too"

"The moment I choose, I can be rid of Mr Hyde."

#### Mr Hyde

"it was some damned juggernaut." "Mr. Hyde was pale and dwarfish."

"with ape-like fury he was trampling his victim under foot"

"If I ever read Satan's signature on a face "He broke out in a great flame of anger"

#### Dr Jekyll and Hyde Key quotations Poole:

"No, sir; master's made away with!"

"Well, when that masked thing like a monkey jumped from among the chemicals and whipped into the cabinet"

#### Dr Lanyon

I have had a shock," he said, "and I shall never

I must die; and yet I shall die incredulous." "Unscientific balderdash"

#### Mr Utterson

"I let my brother go to the devil in his own way. "'If he be Mr. Hyde,' he had thought, 'I shall be

"That won't hold water; it doesn't comment itself "like a district of some city in a to reason."

#### Pathetic fallacy

"the flog slept on the wing above the drowned city"

"the night was brilliantly lit by the full moon"

"The fog rolled in"

"a great chocolate-coloured pall lowered over heaven."

#### Settings, symbolism and Pathetic fallacy

"shopfronts...like rows of smiling sales-women" "Sinister block of buildings thrust

forward its gable...blind forehead of discoloured wall"

nightmare"

### Revision websites/useful

Mr Bruff videos on all lit texts

https://www.youtube.co m/channel/UCM2vdqz-7e4HAuzhpFuRY8w

### BBC Bitesize – lit and

https://www.bbc.co.uk/ bitesize/subjects/zt3rkqt

JOG revision booklets for each text can be found on the school website:

#### Overview of the exam:

- The exam is an hour and 45 minutes.
- Spend 1 hour on section A (10-15 minutes reading time) You will be given two sources from two different time periods - both are non-fiction texts (pre-1900 and post-1900)
- You should spend an hour on section A-Reading Section (Q1-4)). This allows for 10-15 minutes of reading
- You should spend 45 minutes on section B-Writing section (Q5)

NB: Section A and B are both worth 40 marks

#### QUESTION 1 (5 minutes)

'Choose four statements which are TRUE...'

- Refers to Source A.
- Identify EXPLICIT (Things you are told) and IMPLICT (what you can infer) information referring to part of the text.
- Shade only 4 boxes in.

\*Make sure you read the text and question carefully.

#### QUESTION 2 (10 minutes)

'Write a summary of the differences between...' 8 marks

- You need to refer to source A and Source B.
- Use quotations from both sources to support your answer.
- You need to COMPARE the CONTENT of the two sources in line with what the question is asking you to look for.

Point – evidence – infer – comparative point evidence - infer.

#### **QUESTION 3 (15 minutes)**

'How does the writer use LANGUAGE...?' 12 marks

Explain, comment on and analyse the language used. Make sure that you read the question properly Remember to: Include LANGUAGE TERMINOLOGY- if you do not know what these key terms mean – look them up!

- ✓ Imagery-simile, metaphor, personification
- ✓ Symbolism
- ✓ Adjectives, verbs and adverbs
- ✓ Persuasive language devices: AFOREST/FAT HORSE
- ✓ Satire
- ✓ Allusion
- ✓ Plosives

These are similar questions. However, Q2 is

asking you about what is being said. Q4 is

- √ Hyperbole
- ✓ Semantic field

Consider the effect on the reader. What does this make the reader THINK/FEEL/IMAGINE/BELIEVE?

#### QUESTION 4 (20-25 minutes)

'Compare how the two writers convey their similar/different attitudes/ideas/perspectives to...' 16 marks

- Refers to Source A AND Source B you must address each source equally.
- You need to consider the writers' point of view (their feelings) on the subject and compare the ways they **PRESENT** their ideas (what methods do they use?)
- Remember to talk about the methods they use, such as:
  - ✓ Language choices
  - ✓ Imagery and linguistic devices (similes, metaphors etc)
  - Persuasive techniques (AFOREST/FAT HORSE)
  - ✓ Register that they use 1st or 3rd person
  - ✓ Tone that they use humorous, passionate, frustrated etc
  - ✓ The structure and form that they use.

#### **QUESTION 5**

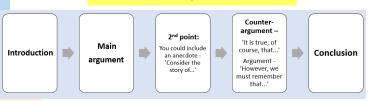
Produce your own non-fiction text (based on the theme in Section A)

You could be asked to write any of the different text types in the table below.

- 24 marks for content and organisation
- 16 marks for technical accuracy

Q5 – Example: -'Festivals and fairs should be banned. They encourage bad behaviour and are disruptive to local communities.' -Write a letter to your local newspaper in which you argue for or against this statement. -

#### How to structure a persuasive text



#### Remember that different text types = different formats

| Letter:  | Two addresses, date, Dear Sir/Madam, Your Sincerely |
|----------|---|
| Article: | Headline, by-line, subheadings                      |

Introduction, convincing opinion throughout, conclusion

Leaflet: Title, subheadings, some bullet points Speech: Address your audience at the start and end, use

direct address,

#### Revision websites/useful links:

#### BBC Bitesize:

Essay:

https://www.youtube.com/watch?v=yKZ\_Tr2Y-CE&list=PLaGFsWf-P-cB-GSeqYup7PXId4pbldQVq

#### Mr Bruff Q1-5 videos on youtube:

https://www.youtube.com/watch?v=yKZ Tr2Y-CE&list=PLaGFsWf-P-cB-GSeqYup7PXId4pbldQVa

#### Revision booklet and example paper:

https://resources.finalsite.net/images/v1553545594/sydenhamlewisha mschuk/xdtvk0car965cxhfivk7/171218-Paper-2-Revision-Booklet.pdf

asking what the writer's views on something \*You do not need to analyse the language. are and how they get these views across.

English Language Paper 2 - Writers' viewpoints and perspectives

### Food Preparation and Nutrition.

#### Food is processed to make it edible and safe.

Where does each of these food start?

What happens to them before they reach us in the shops? What processes have they been through?

Food processing is any deliberate change in a food that happens before it is available for us to eat. Modern processing was developed over the centuries with canning and pasteurisation advancing the micro-biological safety of food.

#### Pasteurisation, sterilisation and irradiation.

The shelf life of food can be extended if sufficient heat is applied to kill microorganisms and inactivate the enzymes that are present. **Pasteurisation** – extends shelf life by killing most food spoilage organisms and pathogenic organisms. Products are treated with mild heat, usually to less than 100°C for 30-35 minutes.

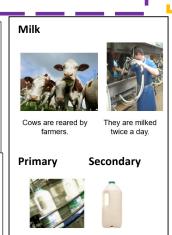
**Sterilisation** – is a more severe process that destroys all microorganisms.

Irradiation – produces an effect in food similar to pasteurisation.

#### Food additives

**Additives** are used to ensure safety, increase shelf life or improve the taste, texture or appearance of food. Additives need to be approved before they can be used.

**Additives** are given an **'E number'** to show that they have been rigorously tested for safety and have been approved for use in food by the European Commission.





#### **Tasks**

- Describe the purpose of food additives. Include at least three examples.
- Choose a food product and research how it is produced, e.g. frozen fish fingers, general semi-skill.
   Using the to: <a href="https://bit.ly/398qABo">https://bit.ly/398qABo</a>
- 3. Using the knowledge organizer of your own base it upon milk and milk processing. Pasteurization, sterilization, UHT, Dried, condensed, evaporated, full fat, skimmed, semi skimmed.

#### Why are Foods Processed?

Foods are processed for a number of reasons:

- to extend the shelf life, e.g. making strawberries into jam;
- convenience, e.g. frozen ready meals;
- health, e.g. reduced fat yogurt;
- to provide consumers with more variety and choice;
- to provide additional nutritional benefits, e.g. fortified breakfast cereals.

Food processing can be very simple, e.g. preparing, freezing or drying food to preserve nutrients and freshness.

It can also be complex, e.g. formulating afrozen meal with the right balance ofnutrients and ingredients.

# There are two main stages to food processing:

**Primary**: foods are processed after harvest or slaughter, e.g. wheat is harvested and then milled into flour.

**Secondary**: food is made into edible products, e.g. flour into bread or pasta.

Steps need to be taken at all stages of food supply to prevent contamination and spoilage and avoid food wastage.

Food companies have a legal responsibility to produce safe food. Companies will have systems, checks and controls in place to ensure high standards of food hygiene and safety.

One system is known as Hazard Analysis Critical Control Points (HACCP). HACCP was developed by NASA for the safe passage of astronauts going to the moon in 1967.

#### Food safety - controls, checks and advice

Environmental Health Officers are employed by local authorities to give advice and guidance, inspect food premises, enforce legislation covering food and investigate outbreaks of food-borne diseases and possible offences.

Food safety issues, e.g. t



ers of safety kaging or



#### **Introductions**

ie m'appelle – I'm called il/elle s'appelle - (he/she) is called ils/elles s'appellent - (they) are called i'ai ... ans - I have (am) ... years old il/elle a ... ans - he/she has (is) ...years old ils/elles ont ... ans - they have (are) ... yrs

#### Descriptions of body parts

#### avoir - to have

i'ai - I have tu as - you have il/elle a- he/she has nous avons - we have

**vous avez**– you have ils/elles ont - they have

les cheveux hair

MILL

Note word order – adjective AFTER noun

> les yeux eves

#### Marriage & Partnership & SFF revision - GCSE French

#### marron - brown Using other tenses

châtain - dark brown

**blonds** - blond

courts - short

longs - long

frisés - curly

**bouclés** - wavy

marron - brown

verts - green

bleus - blue

petits - small

grands - big

gris - grev

gris - grey

Je suis né(e) à + town / le + birthday - I was born in / on J'ai eu seize ans en avril - I turned 16 in April

J'avais/il/elle avait les cheveux plus longs - I/he/she used to have longer hair

Je vais avoir seize ans en août – I'm going to turn 16 in August Il va être chauve bientôt – Soon he is going to be bald

Je vais être plus travailleur/euse à l'avenir - I'm going to be more hardworking in the future

#### Other descriptive phrases:

je/il/elle porte des lunettes – I/he/she wear/s glasses J'ai/il a/elle a tendance à porter des lunettes- I/he/she tends to wear glasses

pour lire / pour conduire / pour regarder la télé - to read / to drive / to watch TV

je portais/il/elle portait des lunettes mais maintenant je/il/elle porte des lentilles - I/he/she used to wear glasses but now I/he/she wears contact lenses

#### Descriptions of people

#### être - to be

ie suis – I am tu es - you are il/elle est - he/she is nous sommes – we are vous êtes - vou are

ils/elles sont - they are

petit/e/s/es - short mince/s - slim aros/se/s - fat chauve/s - bald beau/belle/beaux/belles

grand/e/s/es - tall

attractive

laid/e/s/es - uglv

compréhensif/ive/ifs/ives - understanding amusant/e/s/es - fun honnête/s - honest

méchant/e/s/es - naughtv

raisonnable/s - sensible

mûr/e/s/es - mature

strict/e/os/as - strict

**éqoïste/s** – selfish

aimable/s - friendly

fort/e/s/es - strong

content/e/s/es - happy

triste/s - sad

#### For nuance:

ie peux être - I can be il/elle peut être - (he/she) can be ils/elles peuvent être – (they) can

je tends à être - I tend to be il/elle tend à être - (he/she) tends

ils/elles tendent à être - (they) tend to be

bavard/e/s/es - talkative charmant/e/s/es-lovely

travailleur/euse/eux/euses - hardworking

#### il/elle paraît - he/she seems

Use the adjective for **who** you are describing – male/female; singular/plural They are given in this order: m/f/mpl/fpl or sing/pl

il/elle est – he she is marié/e (avec) – married (to) célibataire – single **divorcé/e** – divorced séparé/e - separated amoreux/euse (de) – in love (with) retraité/e - retired mort/e – deceased

#### Relationships

ie (ne) m'entends (pas) - I (don't) get on

très bien - very well

bien - well

mal - badly avec - with

je ne supporte pas - I can't bea

on (ne) dispute (pas) - we (don't) argue on (ne) se bagarre (pas) beaucoup - we (don't) fight a lot

#### **HIGHER level phrases & vocab**

Mes parents sont séparés et je pense au'ils vont divorcer - my Parents are separated & I think they are going to get divorced

Je vis avec ma mère et je ne vois mon père que le weekend – I live with my Mum & I only see my Dad on the weekend

J'ai un petit ami mais je ne me marierai pas avec lui avant plusieurs années - I have a boyfriend but I won't marry him for several years

À mon avis le mariage n'est pas nécessaire pour être heureux – in my opinion marriage isn't necessary to be happy

Je crois que si on veut avoir des enfants, il est essentiel de se marier – I believe that if you want to have children, it is essential to get married

Je pense que je resterai célibataire – I think that I will stay single

Je vais peut-être adopter un enfant. Après tout, les familles monoparentales, il y en a beaucoup, non? – I am going to adopt a child perhaps. After all, there are lots of single-parent families, aren't there?

Le mariage, c'est pour toute la vie, donc, c'est important – marriage is for your whole life, therefore, it's important

#### Marriage & Relationships

le bisou - the kiss manquer à quelqu'un - to miss someone amoureux/euse (de)- in love (with) mon mari- my husband ma femme- my wife le mariage-marriage mon petit ami – my boyfriend ma petite amie - my girlfriend mon/ma partenaire – my partner (m/f)

**nous sommes des amis depuis cinq ans** – we've been friends for 5 years **nous nous connaissons depuis deux ans** – we've known each other for 2 years nous nous sommes connus à l'école primaire – we met at primary school

| The structure of the Earth     |   |  |
|--------------------------------|---|--|
| The Crust                      | Varies in thickness (5-70 km). Made up of giant slabs of rock called tectonic plates. Can be oceanic or continental.                                    |  |
| The Mantle                     | Widest layer (2900km thick). The heat<br>and pressure means the rock is in a<br>liquid state (magma) that is in a state<br>of convection.               |  |
| The Inner<br>and outer<br>Core | Hottest section (5000 degrees +). Mostly made of iron and nickel and is 4x denser than the crust. Inner section is solid whereas outer layer is liquid. |  |

#### **Volcanic Hazards** Small pieces of pulverised rock and glass Ash cloud which are thrown into the atmosphere. Sulphur dioxide, water vapour and Gas carbon dioxide come out of the volcano. A volcanic mudflow which usually runs Lahar

down a valley side on the volcano. A fast moving cloud of super-heated gas and ash (up to 1000°C). They travel at up to 450mph down the side of the volcano A thick (viscous) lava fragment that is ejected from the volcano.

230,000 people died and 3 million

250,000 homes collapsed or were

damaged. Millions homeless.

affected. Many emotionally affected.

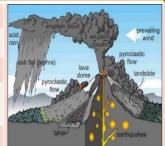
Rubble blocked roads and shut down

**Geological Hazard** 

These are hazards caused by land and

tectonic processes.

Prince. With a very shallow focus of 13km deep.



Ale.

#### LIC -CS: Haiti Earthquake 2010

On a conservative plate margin, involving the Caribbean & North American plates.

The magnitude 7.0 earthquake in 2010 was only 15 miles from the capital Port au

Management

or rescue teams.

\$330 million from the EU.

#### **Convection Currents** The crust is divided into tectonic plates which are moving due to convection currents in the mantle.

- Radioactive decay of some of the elements in the core and mantle generate a lot of heat.
- When lower parts of the mantle molten rock (Magma) heat up they become less dense and slowly rise.
- As they move towards the top they cool down, become more dense 3 and slowly sink.
- These circular movements of semi-molten rock are convection currents
- Convection currents create drag on the base of the tectonic plates and this causes them to move.

### Unit 1a

Effects

# 98% of rubble remained after 6 months.

Meteorological Hazard

These are hazards caused by weather

and climate.

Individuals tried to recover people.

Many countries responded with appeals

Heavily relied on international aid, e.g.

### The Challenges of Natural Hazards

What is a Natural Hazard

A natural hazard is a natural process which could cause death, injury or disruption to

humans, property and possessions.

Causes of Earthquakes

#### **Types of Plate Margins**

#### **Destructive Plate Margin**

When the denser plate subducts beneath the other, friction causes it to melt and become molten magma. The magma forces its way up to the surface to form a volcano. This margin is also responsible for devastating earthquakes.



**Pvroclastic** 

flow

Volcanic

bomb

#### **Constructive Plate Margin**

Here two plates are moving apart causing new magma to reach the surface through the gap. Volcanoes formed along this crack cause a submarine mountain range such as those in the Mid Atlantic Ridge.

#### **Conservative Plate Margin**

A conservative plate boundary occurs where plates slide past each other in opposite directions, or in the same direction but at different speeds. This is responsible for earthquakes such as the ones happening along the San Andreas Fault, USA.





#### build up. From this stress, the pressure will eventually be released, triggering the plates to move into a new position. This movement causes energy in the form of seismic waves, to travel from the focus towards the epicentre. As a

The point directly above the focus, where the seismic waves

SEISMIC WAVES (energy waves) travel out from the focus.

The point at which pressure is released is called the FOCUS.

#### **Managing Volcanic Eruptions**

| Warning signs  | Monitoring techniques  |
|--|--|
| Small earthquakes are caused as magma rises up.            | Seismometers are used to detect earthquakes.                     |
| emperatures around the volcano rise as activity increases. | Thermal imaging and satellite cameras can be used to detect heat |

When a volcano is close to erupting it starts to release gases.

within a volcano. Gas samples may be taken and chemical sensors used to measure sulphur levels.

tellite tect heat

#### Preparation

| reating an exclusion zone around | Being ready and able to evacuate |
|----------------------------------|----------------------------------|
| the volcano.                     | residents.                       |
| Having an emergency supply of    | Trained emergency services and a |
| basic provisions, such as food   | good communication system.       |

#### **Earthquake Management**

#### PREDICTING

#### Methods include:

- Satellite surveying (tracks changes in the earth's surface)
- Laser reflector (surveys movement across fault lines)
- Radon gas sensor (radon gas is released when plates move so this finds that)
- Seismometer measures vibrations or shaking in the crust.
- Water table level (water levels fluctuate before an earthquake).
- Scientists also use seismic records to predict when the next event will occur.

#### PROTECTION

You can't stop earthquakes, so earthquake-prone regions follow these three methods to reduce potential damage:

- · Building earthquake-resistant buildings
- · Raising public awareness through education
- Improving earthquake prediction

#### HIC - CS: Eyjafjallajokull (E15) Eruption, Iceland 2010

#### Causes

The North-American and Eurasian plates move apart on a constructive plate boundary.

The disruption caused by Eyjafjallajökull was the result of a series of small volcanic eruptions from March to October.

#### **Effects**

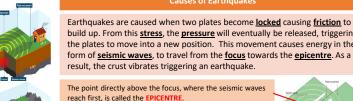
The thick ice cap melted which caused major flooding. No reported deaths.

Airspace closed across Europe, with at least 17,000 flights cancelled

Cost insurers £65m in cancelled flights.

#### Management

Iceland had a good warning system with texts being sent to residents within 30 minutes. Large sections of European airspace were closed down due ash spread over the continent. Airlines developed ash monitoring equipment.





#### Global pattern of air circulation **Changing pattern of Tropical Storms** Extreme weather in the UK Case Study: Somerset Levels floods Atmospheric circulation is the large-scale movement of air by which heat is Scientist believe that global warming is having an impact on the Causes - Wettest January since 1910 & a series of depressions from the Atlantic ocean brought several weeks of very wet weather. The low lying distributed on the surface of the Earth. frequency and strength of tropical storms. This may be due to an increase in ocean temperatures. farmland of the levels & 350mm or rain in January and February led to Hadley Largest cell which extends extensive flooding. cell from the Equator to between **Management of Tropical Storms** Effects Management 30° to 40° north & south. Flood victims travelled aroun Protection Over 600 houses flooded Aid Middle cell where air flows Ferrel Preparing for a tropical storm in boats to go shopping & et to · £10 million in flood damage Aid involves assisting after the poleward between 60° & 70° may involve construction storm, commonly in LIC's. Floodwaters polluted with latitude £20 million flood action plan projects such as sea walls that sewage, oil & chemicals. will improve protection. launched by Somerset council Polar Smallest & weakest cell that Power supplies cut off Rivers Tone & Parratt dredged occurs from the poles to the Development Road & rail links cut off to remove silt Planning Ferrel cell. The scale of the impacts Involves getting people and the What is Climate Change? depends on whether the country emergency services ready to Distribution of Tropical Storms. High and Low Pressure has the resources to cope with deal with the impacts. Climate change is a large-scale, long-term shift in the planet's weather the storm. They are known by many names, High Low patterns or average temperatures. Earth has had tropical climates and ice including hurricanes (North America), Pressure Pressure ages many times in its 4.5 billion years. Prediction Education cyclones (India) and typhoons (Japan Constant monitoring by Teaching people about what to Recent Evidence for climate change. and East Asia). They all occur in a band Caused by Caused by satellites can help to give do in a tropical storm. that lies roughly 5-15° either side of the hot air rising. cold air advanced warning of a TS Global Average global temperatures have increased by more sinking. Causes Equator. temperature than 0.6°C since 1950. stormy, Causes clear **Primary Effects of Tropical Storms** cloudy and calm Ice sheets & Many of the world's glaciers and ice sheets are melting. weather. weather. The intense winds of tropical storms can destroy whole glaciers E.g. the Arctic sea ice has declined by 10% in 30 years. communities, buildings and communication networks. As well as their own destructive energy, the winds can generate Sea Level Average global sea level has risen by 10-20cms in the abnormally high waves called storm surges. Change past 100 years. This is due to the additional water from Sometimes the most destructive elements of a storm are these ice and thermal expansion. subsequent high seas and flooding they cause to coastal areas. Enhanced Greenhouse Effect **Secondary Effects of Tropical Storms** Recently there has been an increase in humans burning fossil fuels for **Formation of Tropical Storms** energy. These fuels (gas, coal and oil) emit greenhouse gases. This is making People are **left homeless**, which can cause distress, poverty and ill the Earth's atmosphere thicker, therefore trapping more solar radiation and health due to lack of shelter. The sun's rays heats large areas of ocean in the summer and autumn. causing less to be reflected. As a result, the Earth is becoming warmer. Shortage of clean water and lack of proper sanitation makes it This causes warm, moist air to rise over the particular spots easier for diseases to spread. Evidence of natural change Once the ocean temperature is 27°, the rising warm moist air leads Businesses are damaged or destroyed causing unemployment. to a low pressure. This eventually turns into a thunderstorm. This · Shortage of food as crops are damaged. Orbital Some argue that climate change is linked to how the Earth causes air to be sucked in from the trade winds. orbits the Sun, and the way it wobbles and tilts as it does it. Changes Case Study: Typhoon Haiyan 2013 With trade winds blowing in the opposite direction and the rotation Sun Spots Dark spots on the Sun are called Sun spots. They increase the of earth involved (Coriolis effect), the thunderstorm will eventually Causes amount of energy Earth receives from the Sun. start to spin. Started as a tropical depression on 2rd November 2013 and gained strength. Became a Category 5 "super typhoon" and made landfall on Volcanic Volcanoes release large amounts of dust containing gases. When the storm begins to spin faster than 74mph, a tropical storm the Pacific islands of the Philippines. Eruptions These can **block sunlight** and results in cooler temperatures. (such as a hurricane) is officially born. **Effects** Management With the tropical storm growing in power, more cool air sinks in the Almost 6.500 deaths. The UN raised £190m in aid. Carbon Capture Planting Trees centre of the storm, creating calm, clear conditions called the eye of 130,000 homes destroyed. USA & UK sent helicopter This involves new technology designed to Planting trees increases the amount of the storm. Water and sewage systems carrier ships to deliver aid reduce climate change. carbon absorbed from the atmosphere. destroyed which caused to remote areas.

Education on typhoon

preparedness.

diseases.

· Emotional grief for dead.

International Agreements

Countries aim to cut emissions by signing

international deals and by setting targets.

Renewable Energy

Replacing fossil fuels with clean/natural

sources of energy like wind or solar

When the tropical storm hits land, it loses its energy source (the

warm ocean) and it begins to lose strength.

Eventually it will 'blow itself out'.

### Crime and punishment Knowledge Organiser: 4. Twentieth century to the present, c.1900 – present.

| Crimes   | Policing  | Punishment   | Key considerations   |
|--|---|--|--|
| Crimes  Conscientious objectors  First World War – voluntary recruitment to 1916; Military Service Acts, Jan / May 1916 introduced conscription. Conscription throughout W.WI.  Moral / religious / political conscience meant some refused to fight / help war effort: Local Military Tribunal to judge cases: much tougher in WWI.  'Alternativists' prepared to do other work; 'Absolutists' no war work at all.  Will government (feared problems with call-up) and public (anger COS 'escaping' contribution to war effort) very hostile; WWII government realised that majority would still fight; fighting Nazi Germany – wanted to eliminate any evidence of 'persecution' in Britain. Potential comparisons to treatment of witches in 16" / 17" Cs.  Homosexuality  Prior to 1967 a crime. Sexual Offences Act, 1967 legalised homosexuality; Criminal Justice Act, 2005 outlawed homophobia.  Reasons for change: decline in religion-based intolerance / prejudice; liberal 1960s attitudes; role of Roy Jenkins; greater sexual tolerance in 21"C.  Race  Race Relations Act, 1968 made it illegal to refuse work / housing, etc. on racial grounds; Criminal Justice Act, 2005 stated that racial hatred made another crime worse; Racial and Religious Hatred Act added crime of spreading hatred.  Act, 2005 stated that racial hatred made another crime worse; Racial and Religious Hatred Act added crime of spreading hatred.  Context: mass non-white immigration post-WWII, e.g. West Indians, Pakistanis, etc. Mass European, etc. immigration since 2000; asylum seekers from Afghanistan, Middle East, etc.  Reasons for change: decline in religious attitudes; rise in feminism – control of bodies / lives; more liberal 1960s attitudes to sex; role of Roy Jenkins.  Domestic violence:  In past male seen as dominant in family; domestic violence a private concern; low police involvement.  1976 Domestic Violence Act gave women more rights; 1991, extended to include rape in marriage; 2014 extended to include controlling behaviour.  Reasons for change: sin feminism; women's refusa | Policing  Developments in policing: Organisation:  Now a small number of large police forces.  Role of women:  First WPCs in 1920s  Training:  1947, Police Training College.  Equipment / transport:  Police bicycles, 1909  Police cars, 1920s/30s  Two-way radio, 1930s  999 introduced  Technological support:  Fingerprint Branch, 1901.  National Fingerprint System.  Blood types discovered, 1901.  Progress in forensic science  First police computers, 1960s  Breathalysers, speed cameras  Police National Computer, 1980 with 25 million records  First DNA conviction, 1988  Automatic fingerprint identification, 1995  National DNA database  CCTV / mass surveillance video  Biometric screening  Specialist units:  Fraud Squad  Specialist drugs units  Dog handling units  Special Branch  Crime Prevention:  1980s- Neighbourhood Watch  Similarities - old community-based policing  Differences — not compulsory; not a national system; only a help to professional | PRISON developments: From the Silent System to more humane prisons:  1902 Hard labour (crank / treadmill) ended. 1922 End of Silent System; abolition of solitary confinement; visits allowed; end of convict crop / arrow uniforms, etc. (Alexander Patterson.) 1933 Open Prisons, e.g. New Hall, Wakefield. Rehabilitation - to prepare prisoners for normal life after prison. 1967 Parole – good behaviour led to reduced sentence. Reasons for change: return of reform / rehabilitation ideas especially through influence, 1922-47, of Prisons Commissioner Alexander Patterson; sympathetic liberal ideas that there was not a 'criminal type' but that difficult individual experiences (at home / community) could negatively affect individuals. Alternatives to prison: 1907 Probation Officers 1907 Probation Officers 1907 Community Service Orders 1990s / 2000s Electronic tagging; drug and alcohol treatment programmes; ASBOs; restorative justice. Reasons: cost of prison; belief that prison could have a negative impact on inmates which might make a life of crime more likely; also see above.  Treatment of young offenders: 1910 Cyoung offenders kept in normal prisons. 1902 first Borstal 1948 Criminal Justice Act created Detention Centres and Attendance Centres 1963 / 1969 Children and Young Persons Acts: focus on caring; reduced age of criminal responsibility to 10; 1969 act – focus on caring and probation. 1982 Youth Custody Centres replaced Borstals Reasons for changes: focus on rehabilitation; avoid negative impact of prison; influence of Alexander Patterson; view that many young offenders victims of negative domestic and social influences; young needed help not punishment; care for drug abusers, etc.  DEATH PENALTY developments: In 1900 death penalty available for 4 crimes. 1908 / 1933 hanging of under 16s/18s ended. 1922 Infanticide Act Miscarriages of justice / controversial executions: 1950 Timothy Evans; 1953 Derek Bentley; 1956 Ruth Ellis. 1957 Homicide Act restrictions 1965 Murder Act + 1969 Amendment ends use of death penalty; 1 | Society:  Mass immigration from 1940s onwards.  Toleration especially during / after WWll; 1960s; early 21stC. Institutions – government:  Changes to laws including on crimes; prisons, alternatives to prison, young offenders; death penalty; etc. Institutions – Church / religion: Continued moral / humanitarian influence of Church, e.g. opposition to death penalty. Decline in influence of Christian religion seen in changes to 'moral' crimes such as homosexuality and abortion. Individuals Alexander Patterson, 1922-47: influence on prisons and young offenders; focus on reform / rehabilitation Roy Jenkins, Home Secretary 1965-67: reforms including on abortion, homosexuality and death penalty Attitudes: Influence of liberal / humanitarian beliefs on definition of crimes, use of prisons / treatment of prisoners and on punishment. Particular influence of Second World War fighting Nazi persecution / intolerance / repression influenced desire to eliminate such negative influences in 1960s linked to eliminating traditional (often Christian religion-based) prejudices and restrictions on behaviour. Also evident in early 21stC regarding race, religion, sexuality, etc. Changing attitudes towards sexual behaviour (abortion), sexual orientation (homosexuality) and towards race (racial toleration) leading to changes in 'crimes'. Continuity: small-scale smuggling and poaching. Change: attitudes to drunk driving, speeding. Science and technology: Links to old crimes being committed in new ways, especially online but also terrorism Developments in police equipment, databases, forensic science, etc. |

#### **Health and Social Care**

#### Be able to create support plans

#### When writing your support plan you must think about:

- 1. How to communicate information clearly, sensitively and appropriately to different audiences. Think about using:
- Sign language
- Makaton
- Simplified language
- Larger size type
- Symbols or pictures
- Audio tapes/dvds
- · Text translated into different languages

- Make sure they can hear, see and are comfortable
- Talk clearly and allow the person to lip read if needed
- The environment should be quiet with no distractions
- The plan must be physically accessible to the individual
- Information should be communicated sensitively
- · Concentrate fully on the individual
- 2. How to match care and support provision to individual needs.
  - a) Identify the **needs** of the individual including Mobility, Medication and General safety in the home
  - b) What does the individual want to achieve?
  - c) What support is already in place?
  - d) What support is needed to meet the needs and wishes of the individual?
- 3. How the care plan needs to evolve through a persons life. e.g.

A child born with a severe physical disability will be dependent on **their parents**, like any other baby

As they grow older and reach adolescence parents may need more support to meet their PILES needs. The child will become bigger and heavier, making them harder to move. They may need a hoist.

The child becomes an adult at 18, and will move from **child health and social care services into adult services**. They may **leave their parents home** and have a home of their own. If they are living on their own they will need **support from HSC services**.

### **Key vocab**

### **R025 Understanding life changes**

| Word                 | Definition  |
|----------------------|---|
| Support Plan         | A plan that sets out how a persons care and support needs will be met.  |
| Cleft Foot           | a rare congenital (meaning your baby was<br>born with it) condition. This causes the<br>affected foot to have missing toes, a V-shaped<br>cleft, and other differences.       |
| Asthma               | A common lung condition that causes occasional breathing difficulties.  |
| Visual<br>Impairment | a loss of sight that cannot be corrected using glasses or contact lenses.   |
| Cerebral Palsy       | the name for a group of lifelong conditions that affect movement and co-ordination. It's caused by a problem with the brain that develops before, during or soon after birth. |
| Need                 | something that is essential for good health   |
| Support              | Provision to help you if you need care because of illness or disability   |

More info can be found here:
Health and Social Care text book
NHS.co.uk



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### **Knowledge Organiser:** Creating Interactive Media



You must be able to consistently prepare and use appropriately use assets for interactive multimedia

#### What is 'Interactive Multimedia'?

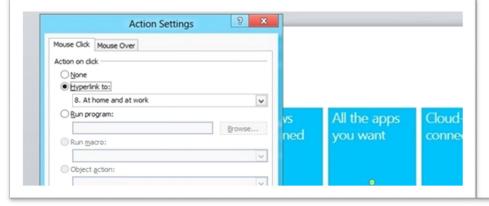
Interactive multimedia is a method of communication in which the program's outputs depend on the user's inputs, and the user's inputs in turn affect the program's outputs. Interactive media engage the user and interact with him or her in a way that non-interactive media do not. Websites, presentations and video games are three common types of interactive media. Movies and most TV shows are generally not considered interactive media; however, shows that require audience participation could be considered interactive media.

Social networking websites are an example of interactive media. The sites use graphics and text to allow users to share photos and information about themselves, chat and play games. Video games are another type of interactive media. Players use controllers to respond to visual and sound cues on the screen that are generated by a computer program.

#### Consistent use of Multimedia Products

Using a multimedia product consistently is about demonstrating how well you have used the capabilities of the software that you have chosen to develop your multimedia product. For example, if you choose to use presentation software then you will have to demonstrate your use of the build in features, such as;

- ⇒ Using **Master Slides** in presentation software to prepare background and font styles
- ⇒ Using the **Home Tab** in presentation software to apply fonts to all pages
- ⇒ Use **Special Effects** icons with added text to create navigation buttons
- ⇒ Appropriate use of text boxes, images, movie elements and sound
- ⇒ Maintaining a **consistent** theme throughout the multimedia product
- ⇒ Employing a design with assets that fully **reflects** the design
- ⇒ Appropriate use of transitions and animations
- ⇒ Using **hyperlinks** and/or **animation triggers** to interact to user inputs
- ⇒ Navigation buttons should enable the user to jump to **any** part of the product, not just the next page.
- ⇒ Multimedia products should be exported to a file which does **not** require the user to buy or need specialist software.

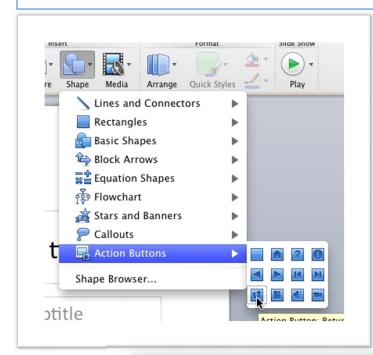




### **Knowledge Organiser:** Creating Interactive Media



#### You must be able to consistently prepare and use appropriately use assets for interactive multimedia



- ⇒ Your multimedia product must combine a **wide range** of different assets.
- ⇒ Your multimedia product must also have a clear and easily understandable **navigation system** to create an **interactive** multimedia product.
- ⇒ **All** the multimedia interactivity must work as intended, so it should be fully **tested**.

**Action buttons** are built-in button shapes you can add to a presentation and set to link to another slide, play a sound, or perform a similar action.

When someone clicks or moves over the button, the selected action will occur. Action buttons can do many of the same things as hyperlinks. Their easy-to-understand style makes them especially useful for self -running presentations.

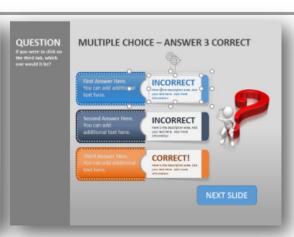
You can insert action buttons on one slide at a time, or you can insert an action button that will show up on every slide. The second option can be useful if you want every slide to link back to a specific slide, like the title page or table of contents.

The appearance of action buttons can be selected to meet the design requirements of the project.

Examples of slides which use interactive buttons to enable the user to navigate the presentation







### Audience Theories: 'Audiences are passive'

#### Bandura – Media Modelling Effects

- Violent behaviour is learned through modelling.
   Humans learn through social interaction social learning can happen from what we see in our lives and in the media.
- Representations of violence in the media can have an even more significant impact on audiences due to the vivid nature of the media.
- There is a significant amount of violence in the media, including in children's TV shows.

#### Two Step Flow

- We are much more likely to be affected by the media if we discuss it with others.
- Our opinions are affected by the way those we socialise with have viewed the media. The people we discuss our ideas with are called 'opinion leaders'.

#### **Moral Panic**

- Cohen suggested that a moral panic occurs when a 'condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests.'
- Cohen believes the media play a decisive role in enforcing moral panic –often deliberately in order to sell papers.
- A moral panic sends society into mass hysteria over a particular issue or events that occurs. The public believe that whatever is reported upon is occurring everywhere.

#### Gerbner's Cultivation Theory

- Media products can shape our perceptions of the world.
- Mass media is very influential and has replaced the role of institutions like education and religion as the main source of symbolic storytelling.
- TV violence can cultivate fear in audiences and lead to mean world syndrome.
- Media consumption leads audiences to accept power structures and mainstream ideologies.

#### **Cumulative Effects Theory**

- The media repeatedly sends messages so it shapes our views over time.
- The Spiral of Silence Noelle-Neumann if we believe our opinion is 'unpopular', we are more likely to not speak of it.

#### Hypodermic Needle Theory

- The media has a very powerful impact on audiences and can change our ideas and behaviour.
- The media influences us by 'injecting' ideologies into our minds which are designed to trigger a response we are immediately influenced.
- Propaganda is seen as a strong example of this (e.g. Nazi propaganda).

#### **Bardic Function**

- Media's specialised language that helps to define reality for us, reinforcing the dominant myths of our culture.
- Shakespeare was known as 'the bard' a bard is a poet. This refers to how literature used to have the role in society that TV now has.

| Key term                 | Definition  |
|--------------------------|---|
| Enculturation            | The process by which culture is learned and transmitted through TV and other media forms  |
| Mainstreaming            | Blurring, blending, and bending process that makes heavy TV viewers from contrasting groups develop a common outlook on the world |
| Resonance                | How much a message broadcast through the media connects with that persons' ideology   |
| Cultivation differential | Heavy viewers are more likely to be influences by the media; light viewers are less likely to be influenced by it.                |
| Symbolic power           | Powerful figures in media narratives are seen to have real-world power.   |
| Desensitisation          | Audiences are made less sensitive due to repeated exposure to violence in the media.  |

### Mynamics

Fortissimo (ff) – Very loud

Forte (f) - Loud

Mezzo Forte (mf) – Moderately loud

Mezzo Piano (mp) – Moderately quiet

Piano (p) - Quiet

Pianissimo (pp) – Very quiet

Crescendo (Cresc.) – Gradually get louder

Diminuendo (Dim.) – Gradually get quieter

### Tempo

Presto – Very fast

Allegro – Fast

Vivace - Fast, lively

Allegretto - Moderately quick, cheerful

Moderato - Moderato

Adagio-Slow

Largo-Very slow

### Structure

Intro

ABA – Ternary AB – Binary

ABACA - Rondo AA1A2A3 - Variation

Bridge

Middle Eight (C)

Outro/Coda

Strophic - Term used to describe

Verse/Chorus structure

### \*Tonality

Major Minor

Chromatic

Pentatonic

| Term        | Symbol           |
|-------------|------------------|
| pianissimo  | pp               |
| piano       | $\boldsymbol{p}$ |
| mezzo piano | mp               |
| mezzo forte | mf               |
| forte       | f                |
| fortissimo  | ff               |
| fortepiano  | fp               |
| sforzando   | s <b>f</b> z     |
| crescendo   | <                |
| diminuendo  | >                |
|             |                  |

| Chon    | Opera         |
|---------|---------------|
| Soprano | Soprano       |
| Alto    | Mezzo-soprano |
|         | Contralto     |
|         | Countertenor  |
| Tenor   | Tenor         |
| Bass    | Baritone      |
|         | Bass          |

## Harmony

Consonant – Notes that belong to a key/chord to produce nice harmonies

Dissonant – Notes that sound 'wrong' together

Cadences – These end phrases/sections of music:

Perfect Cadence (finished), Plagal Cadence (amen),

Imperfect Cadence (unfinished), Interrupted Cadence (unfinished)

Modulation – Change of key

Pedal – A sustained note, usually dominant or tonic.

## Melody

Conjunct-Step/next door notes.

Disjunct-Hop/skip notes

Scalic - descending/ascending within a scale.

Interval – Distance between two notes.

Chromatic – notes that don't belong to a key.

Glissando – Rapid scalic movement on an instrument.

Ostinato – Repeated melodic pattern.

Sequence – Repeated pattern at a higher or lower pitch.

Riff/motif – A short, repeated pattern, often in the bass part.

Melisma – Several notes for one syllable.

### Mhythm

Note values e.g. crotchet, quaver, minim, semibreve.

Dotted rhythms

Polyrhythms – Two or more independent rhythms.

Syncopation – beats played on the weaker beats of the bar; off-beat.

Ostinato/Loop/Repetition – Repeated Patterns of music.

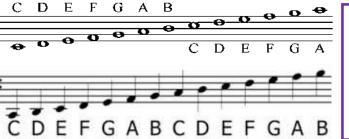
Phrase length and shape (arch shape, spiky shape).

| Note     | Rest | Beats |  |
|----------|------|-------|--|
| o        | -    | 4     |  |
| 0        |      | 2     |  |
| J        | \$   | 1     |  |
| <b>,</b> | 7    | 1/2   |  |
| Ą        | 7    | 1/4   |  |



Accent- Forcefully

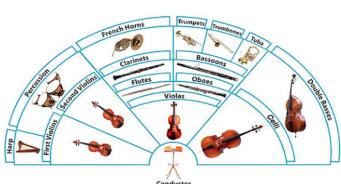
Tenuto- Sustained



### Texture

Monophonic- One melody line Homophonic- Two melodic lines Polyphonic- Many melodic lines Melody and Accompaniment Unison

Call and Response







Year 11 Term 3

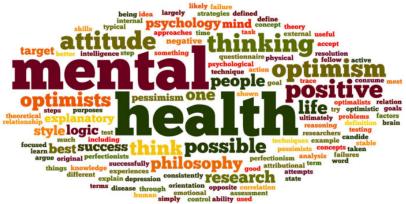
# Connect



### PSHE Knowledge organiser for year 11

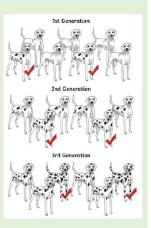
If you need further support in terms of what we talk about in PSHE lessons then feel free to turn to these resources below:

- 1. <a href="https://www.nhs.uk/conditions/contraception/">https://www.nhs.uk/conditions/contraception/</a> (contraception)
- 2. Make an appointment to see your GP (contraception and mental health)
- 3. Kooth.com (advice and counselling on a range of issues on sex/relationships)
- 4. Someone you trust (make sure their advice is accurate!).
- 5. Your PSHE teacher
- 6. Your tutor and Head of Year.
- 7. School counselling.
- 8. <a href="https://www.stonewall.org.uk/">https://www.stonewall.org.uk/</a> (LGBTIAUQ+)
- 9. <a href="https://mermaidsuk.org.uk/">https://mermaidsuk.org.uk/</a> (gender identity)
- 10. <a href="https://www.mind.org.uk/">https://www.mind.org.uk/</a> (mental health and relationships)
- 11. <a href="https://www.childline.org.uk/">https://www.childline.org.uk/</a> (advice on a whole range of issues from mental health, abuse and relationships)
- 12. <a href="https://www.samaritans.org/">https://www.samaritans.org/</a> (someone to talk to)
- 13. <a href="https://www.mindout.org.uk/">https://www.mindout.org.uk/</a> (mental health and LGBTIAQU+)
- 14. <a href="https://www.nhs.uk/using-the-nhs/nhs-services/mental-health-services/child-and-adolescent-mental-health-services-camhs/">https://www.nhs.uk/using-the-nhs/nhs-services/mental-health-services/child-and-adolescent-mental-health-services-camhs/</a> (Mental health services)
- 15. <a href="https://www.womensaid.org.uk/information-support/">https://www.womensaid.org.uk/information-support/</a> (domestic abuse, specifically for women)
- 16. <a href="https://www.relate.org.uk/relationship-help">https://www.relate.org.uk/relationship-help</a> (offer a range of advice and services on sex and relationships for young people)
- 17. <a href="https://www.allsortsyouth.org.uk/">https://www.allsortsyouth.org.uk/</a> (advice and guidance on LGBTQ+ and gender identity)
- 18. <a href="http://www.sane.org.uk/what\_we\_do/support/textcare">http://www.sane.org.uk/what\_we\_do/support/textcare</a> (text service offering support for young people on sex and relationships).
- 19. LGBTQ+ club in our school (this is run by students: email <a href="mailto:friendslikeus@jogschool.org">friendslikeus@jogschool.org</a>).
- 20. <a href="https://www.nhs.uk/apps-library/chathealth/">https://www.nhs.uk/apps-library/chathealth/</a> (text service for young people covering mental health, contraception, sexuality, drugs, relationships)



#### **Selective breeding**

- 1.Choose parents who have a desired characteristic.
- 2. Select the best offspring and breed these to make the next generation.
- 3. The offspring are bred again and again until a desired result is achieved.

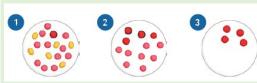


#### Variation:

Variation maybe due to differences in:

- Genes that have been inherited
- Conditions in which they have developed
- A combination of genes and the environment

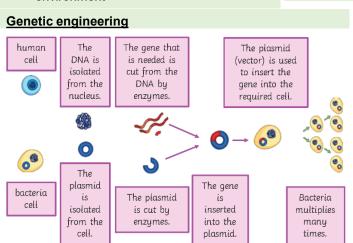
#### **Resistant Bacteria**

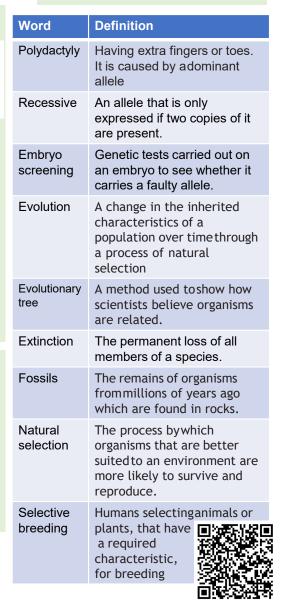


- There is variation in the bacterial population. One bacterium develops a mutation by chance that means it is resistant to an antibiotic.
- The antibiotic kills some of the bacteria, the resistant bacterium survives and reproduces.
- The antibiotic kills the rest of the nonresistant bacteria so the person may start to feel a little better. The resistant bacterium has survived the antibiotic and continues to multiply.

### Evolution:

All species of living things have evolved from simple life forms by natural selection. If a characteristic is advantageous in an environment, then the individual will be better able to compete. This means they will be more likely to survive and reproduce.





#### The Early Atmosphere

Approximately **4.6 billion years ago** the Earth was formed. Scientists have lots of ideas and **theories** about how the atmosphere was produced and the gases within it, but due to the lack of evidence, they cannot be sure.

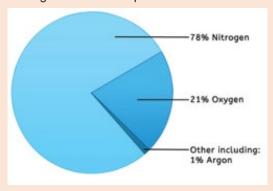
One theory suggested that intense volcanic activity released gases that made Earth's early atmosphere very similar to that of Mars and Venus. These planet's atmospheres mainly consist of carbon dioxide with little oxygen.

Nitrogen gas would have also been released from volcanoes and would have built up in the atmosphere.

Water vapour in Earth's early atmosphere would have condensed to create the seas and oceans. Carbon dioxide would have dissolved into the water, decreasing the level in the atmosphere.

#### Percentage of gases in the Atmosphere

The pie chart below shows the abundance of each gas in our atmosphere.



#### How did oxygen levels increase?

2.7 billion years ago, algae first produced oxygen. Gradually over time, the levels of oxygen in our atmosphere increased as plants evolved. This was followed by animals as the levels of oxygen increased to a level thatwould sustain more complex life.

**Oxygen** is produced by plants in the process of **photosynthesis**.

#### How did Carbon dioxide levels decrease?

Carbon dioxide **dissolves** in water. As water vapour condensed and the oceans and seas formed, the carbon dioxide gas dissolved producing **carbonate compounds**. This process reduced the amount of carbon dioxide in the atmosphere. Carbonate compounds were then **precipitated**: limestone is an example of a sedimentary rock; it has the chemical name calcium carbonate.

#### **Combustion**

Complete combustion occurs when there is enough oxygen for a fuel to burn.

$$C_3H_8 + 5O_2 \longrightarrow 3CO_2 + 4H_2O$$

**Incomplete combustion** occurs when there **isn't enough oxygen** for a fuel to burn.

ethane + oxygen 
$$\longrightarrow$$
 carbon monoxide + water

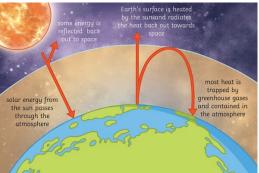
$$2C_2H_6 + 5O_2 \longrightarrow 4CO + 6H_2O$$

| Word                | Definition   |
|---------------------|--|
| Global<br>warming   | the gradual increase in the average surface temperature of the Earth   |
| Climate change      | A long term change in weather patterns.  |
| Carbon<br>footprint | is the total amount of <b>carbon dioxide</b> andother greenhouse gases emitted over the full life cycle of a product, service or event |

#### Sulphur dioxide

Sulfur dioxide is an **atmospheric pollutant**. It is a gas that is produced from the burning of **fossil fuels**.

$$S + O_2 \longrightarrow SO_2$$







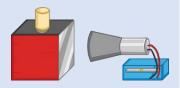
Combined - Physics P6 - Waves

#### **Required Practical**

Aim: investigate how the amount of infrared radiation absorbed or radiated 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

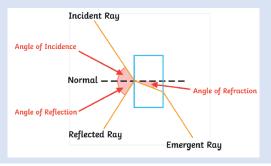


#### **Properties of waves:**

#### Reflection:

The law of reflection states that:

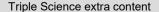
#### Angle of incidence = angle of reflection



| Word         | Definition   |
|--------------|--|
| Compression  | is the part of the wave (or Slinky) that is pressed together                                   |
| Rarefaction  | is the part of the wave (or Slinky) that is spread apart.                                      |
| Oscillations | occurs when a system or object goes back and forth repeatedly between two states or positions. |
| Frequency    | the number of waves that pass a fixed point in unit time                                       |
| Wave length  | the distance between successive crests of a wave   |

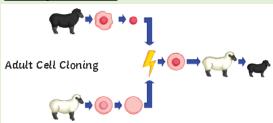
| Frequency | Wave          | Use   | Other Information   |
|-----------|---------------|---|---|
| Low       | radio waves   | Communication via television and radio, and satellite communications.   | Easily transmitted through air and can be reflected to change their direction. Harmless if absorbed by the human body. Are reflected back off the atmosphere and cannot pass through into space.                        |
|           | microwaves    | Communications including satellite communications and cooking food.   | When the molecules absorb microwaves, their internal energy increases.<br>This can be harmful when internal body cells become heated by over<br>exposure to microwaves. Can pass through the atmosphere and into space. |
|           | infrared      | Short-range communications (remote controls),<br>electrical heaters, cooking food, optical fibres,<br>security systems and thermal imaging cameras. | It can cause bums to skin.  |
|           | visible light | Used for lighting, photography and fibre optics.  | Frequency range that is detectable by the human eye.  |
|           | ultraviolet   | Sterilising water and killing bacteria. Detecting forged bank notes.  | 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. Instead, it is transmitted  |
| ↓<br>High | gamma rays    | Sterilising medical equipment or food and treatment for some cancers.   | through the body.<br>These waves can lead to gene mutation and cancer.  |



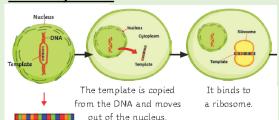


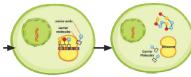
#### Biology

#### Cloning in animals



#### **Protein synthesis**





A carrier molecule binds to every three bases. Each one carries an amino acid which is joined to the previous amino.

The amino acid strand folds into a 3D shape.

#### **Evolution by Natural selection**

Darwin's theory was only gradually accepted because...

- the theory challenged the idea that God made all the animals and plants that live on earth.
- there was insufficient evidence at the time the theorywas published to convince many scientists.

the mechanism of inheritance and variation was notknown until 50 years after the theory was published.

#### Chemistry

#### Flame spectroscopy

Step 1 - A sample is heated in a flame.

**Step 2** – Electrons in the metal ions are excited by the thermal energy provided from the flame. As a result, the electrons move into a higher energy level.

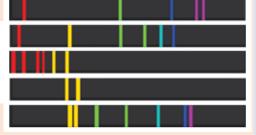
**Step 3** – When the electrons fall back into a lower energy level, they release energy in the form of light.

**Step 4** – The emitted wavelengths of light are analysed instrumentally.

**Step 5** – To identify the metal present, its spectrum is compared with reference spectra from known metal ions.

Above is an example of the spectra produced by flame emission spectroscopy. It looks like a colourful array of lines.

Each metal ion produces a unique emission spectrum.



#### **Physics**

#### Lenses

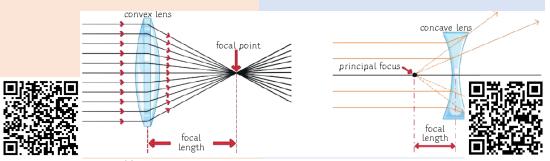
| convex lens   | Lens          | concave lens   |  |
|---|---------------|--|--|
| ←──>  | Ray Diagram   | ><   |  |
|   | Illustration  |  |  |
| Causes parallel waves<br>to converge at the<br>principal focus. | Action        | Causes parallel waves<br>to diverge from the<br>principal focus. |  |
| real or virtual   | Type of Image | always virtual   |  |

An imaginary horizontal line through the middle of the lines is called the axis and this is where the principal focus forms. In a convex lens, the light rays enter the lens parallel to one another and then converge at the principal focus after the lens. In a concave lens, the light rays enter the lens parallel to one another and then diverge. The principal focus is the virtual source of the diverging rays before the lens

power (D) = 1 focal length (m)

D stands for dioptres which is the unit of measurement for lens power.

In a converging lens the power is a positive value. In a diverging lens the power is a negative value.



#### **Grade 7/8/9 STRUCTURES**

Aiming for a 9 will help you do your very best and is the key to success!

#### THE SUBJUNCTIVE

Cuando sea mayor... When I am older... Es importante que sea... It is important that it is No creo que sea... I don't believe that it is...

(No) me sorprende que sea... It (doesn't) surprise me that it is...

(No) me gusta que haya... I (don't) like that there is/are...

(No) me gusta que sea... I (don't) like that it is...

**Dudo que sea**... I doubt that it is

Cuando tenga dinero... - When I have money

### If clauses Subjunctive + Conditional tense

Si (yo) fuera ... + conditional tense (If I were) → Si fuera rico/a compraria una casa – If I were rich I would buy a house. Si pudiera ...+ conditional tense (If I could) → Si pudiera visitar Italia, comería mucha **comida italiana** – If I could visit Italy I would eat a lot of Italian food.

#### Using reflexive impersonal constructions

(no) se debe + infinitive – one must (not) (no) se puede + infinitive – one can (not) No se puede comer chicle – we can't eat gum Se debe hacer algo – we must do something

#### **VERBS & EXPRESSIONS FOLLOWED BY THE INFINITIVE**

odio (andar) - I hate (walking) **quiero** (ir) - I want (to go) me gusta (ver) - I like (watching) tengo que (hacer) – I have to (do) solía (andar)- I used (to walk)

**después de (comer)** – after (eating) **decidí** (ver) – I decided (to watch)

me interesa (ir) – I'm interested (in going) me gustaría (ver) - I would like (to watch) **pienso** (estudiar) – I'm thinking of (studying)

me apetece (salir) – I fancy (going out)

**espero** (*visitar*) - I hope to (*visit*)

me encanta (ir) - I love (going)

tuve que (ir) - I had to (go)

antes de (ir) - before (going)

**sé** (nadar) – I know how (to swim)

quisiera (ir) – I would like (to go)

**suelo** (escuchar) - I usually (listen)

Verbs followed by prepositions... If followed by a verb needs to be infinitive form/if followed by a noun needs el/la/los/las

consistir en - to consist of ayudar a – to help to soñar con – dream of empezar a - to begin to atreverse a - to dare to tratar de – to try

acabar de – to have just (done something) insistir en – to insist on dejar de - to stop doing something tengo que – I have to tengo ganas de - I really want to me apetece – I fancy

Examples:

Skype me **ayuda a** hablar con mis amigos – *Skype helps me to speak to my friends*. **Sueño con una casa** en los Estados Unidos - I dream of a house in the USA **Acabo de leer** un libro muy divertido – *I have just read a really fun book* 

Aim for

Learn a few by

heart to include

in your writing

and speaking!

Using "Si" Sentences

"Si" + present tense + future tense

Si sigues estos consejos podrás ahorrar agua — If you follow this advice you will be able to save water.

"Si" + present tense + inmediate future tense Si reciclamos vamos a ayudar al medio ambiente – If we recycle we are going to help the environment

More subjuntive

**OPINIONS** A mi juicio/en mi opinión/ a mi modo de ver – in my opinion

Hay gente que piensa que – There are people that think that

**lo bueno es que –** The good thing is that

**lo malo es que –** The bad thing is that

lo que más me gusta es – The thing I like the most is

lo que menos me gusta es – The thing I like the least is pienso que/opino que – I think that

me preocupa – (it) worries me me fastidia – (it) annovs me

**lo malo es que –** the bad thing is that

**lo mejor es que –** the best thing is

**creo que** – I believe that

me molesta – (it) bothers me (no) estoy de acuerdo – I (dis)agree lo bueno es que - the good thing is that **lo peor es que –** the bad thing is

CUANDO - When...

Cuando acaben mis exámenes voy a ir de vacaciones – When my exams finish I'm going to go on holidav

Cuando cumpla dieciocho años voy a aprender a conducir – when I turn 17 I'm going to learn to drive.

Cuando me case voy a tener **dos hijos** – When I get married I'm going to have two children.

cabe decir - It is worth mentioning

como ya he mencionado – as I have already mentioned por un lado... por otro lado – on the one hand... on the other hand más... que – more... than.. menos ... que – less than... por lo tanto / por eso - therefore verdaderamente - really

Also see your Knowledge Organisers and Aspire booklet from Y9-11 for more higher level phrases.

**Conversation Fillers** 

bueno.../pues... - well vamos a ver... - let's see no sé – I don't know mira...- look

supongo que – I suppose that

| A. Advanced Adjectives: Characteristics |                    | VOCABULARY B. Advanced Verbs |                        | C. Advanced Nouns |                |
|---|--------------------|------------------------------|------------------------|-------------------|----------------|
| 1. belligerent                          | argumentative      | 1. abhor                     | hate                   | 1. alacrity       | speed          |
| 2. complacent                           | lazy               | 2. acquiesce                 | accept reluctantly     | 2. animosity      | hatred         |
| 3. ephemeral                            | fleeting           | 3. amass                     | gather                 | 3. antithesis     | opposite       |
| 4. endemic                              | widespread         | 4. ameliorate                | make better            | 4. avarice        | material greed |
| 5. erroneous                            | mistaken           | 5. antagonise                | wind up                | 5. benevolence    | kindness       |
| 6. fractious                            | awkward            | 6. augment                   | increase               | 6. conjecture     | speculation    |
| 7. homogenous                           | same kind/alike    | 7. coerce                    | force                  | 7. crescendo      | climax         |
| 8. implacable                           | relentless         | 8. delineate                 | describe precisely     | 8. dichotomy      | opposition     |
| 9. incontrovertible                     | undeniable         | 9. deride                    | mock                   | 9. discord        | conflict       |
| 10. indolent                            | lazy               | 10. domineer                 | intimidate             | 10. discrepancy   | inconsistency  |
| 11. industrious                         | hardworking        | 11. embolden                 | encourage/give courage | 11. enmity        | hatred         |
| 12. insolent                            | disrespectful      | 12. empathise                | understand feelings    | 12. gravitas      | seriousness    |
| 13. invidious                           | unpleasant/awkward | 13. emulate                  | imitate                | 13. hybrid        | mixture        |
| 14. judicious                           | wise               | 14. endeavour                | try                    | 14. ignominy      | public shame   |
| 15. liminal                             | in-between         | 15. ensnare                  | trap                   | 15. infancy       | early stages   |

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