MARSHLAND HIGH SCHOOL

Year 11

50 GCSE Revision Questions

2019-2020

West Norfolk Academies Trust

Contents

Biology

Paper 1

Biology – Cell biology

1. **Name five sub cellular structures found in animal cells.**
   Nucleus, cytoplasm, cell membrane, mitochondria, ribosomes

2. **Plant cells have all the sub-cellular structures that animal cells have, but they often have two additional structures as well. Name them.**
   Chloroplasts and vacuole (also cell wall)

3. **Why is cell division by mitosis important?**
   Growth and repair in eukaryotes

4. **What is the name given to an undifferentiated cell of an organism which is capable of giving rise to many more cells of the same type?**
   Stem cell

5. **Describe the spreading out of particles of any substance in solution or a gas by diffusion.**
   There is a net movement of particles from an area of high concentration to an area of low concentration.

6. **Describe the movement of water in osmosis.**
   Osmosis is the diffusion of water from a dilute solution to a concentrated solution through a partially permeable membrane

7. **What is the name given to the movement of a substance from a more dilute solution to a more concentrated solution which requires energy from respiration?**
   Active transport

Biology – Organisation

8. **Where is amylase produced and what does it do?**
   In saliva and the pancreas to break down starch

9. **Where are proteases produced and what do they do?**
   In the stomach and pancreas to break down proteins into amino acids

10. **Where are lipases produced and what do they do?**
    In the pancreas to break down lipids to glycerol and fatty acids

11. **Where does the right ventricle pump blood to?**
    The lungs

12. **Where does the left ventricle pump blood to?**
    The whole body

13. **What is the blood made up of?**
    Plasma, RBCs, WBCs and platelets

14. **State a proven risk factor for type 2 diabetes.**
    Obesity

15. **State three risk factors for cardiovascular disease.**
    Diet, smoking and exercise

16. **What is the result of changes in cells that lead to uncontrolled growth and division?**
    Cancer

17. **Which cells are adapted for efficient uptake of water by osmosis, and mineral ions by active transport?**
    Root hair cells

Biology – Infection and response

18. **What is a pathogen?**
    A microorganism that causes infectious disease

19. **State three ways white blood cells help to defend against pathogens.**
    Phagocytosis, antibody production, antitoxin production

20. **What is the name given to introducing small quantities of dead or inactive forms of a pathogen into the body to prevent infection?**
    Vaccination

21. **Which type of pathogen do antibiotics kill?**
    Bacteria

Biology - Bioenergetics

22. **What is the word equation for photosynthesis?**
    Carbon dioxide + water → glucose + oxygen

23. **Write the equation that represents aerobic respiration.**
    Glucose + oxygen → carbon dioxide + water + energy

24. **What is the equation for anaerobic respiration in muscles?**
    Glucose → lactic acid

25. **What is the equation for anaerobic respiration in plant and yeast cells?**
    Glucose → ethanol + carbon dioxide

Paper 2

Biology – Homeostasis

26. **What path does a nerve impulse take in a reflex arc?**
    Stimulus → Receptor → Sensory neurone → Relay neurone → Motor neurone → Effector → Response

27. **What is a gap between two neurones called?**
    A synapse

28. **How do reflexes differ from a normal response?**
    Automatic, fast and do not involve the brain

29. **How are hormones carried around the body?**
    In the blood

30. **What hormone which controls glucose levels is produced in the pancreas?**
    Insulin

31. **What does follicle stimulating hormone (FSH) do?**
    Causes the maturation of an egg in the ovary

32. **What does luteinising hormone (LH) do?**
    Stimulates the release of an egg (ovulation)

33. **What do oestrogen and progesterone do?**
    Maintain the lining of the uterus

34. **Name 4 hormonal methods of contraception.**
    Oral contraceptives, contraceptive injection, contraceptive patch, contraceptive implant

Biology – Inheritance, variation and evolution

35. **How could the cells produced by mitosis be described?**
    Identical

36. **How could the cells produced by meiosis be described?**
    Non-identical

37. **Name the male and female gametes in animals**
    Sperm and egg cells

38. **Name the male and female gametes in flowering plants**
    Pollen and egg cells

39. **Which type of reproduction leads to variety in the offspring, sexual or asexual?**
    Sexual

40. **What is a small section of DNA on a chromosome called?**
    A gene

41. **What are the different forms of a gene called?**
    Alleles

42. **How many chromosomes are in normal human body cells?**
    46 (23 pairs)

43. **How many chromosomes are in sperm and egg cells?**
    23

44. **What are the sex chromosomes in human males and females?**
    Males – XY Females – XX

45. **Over how long do fossils form?**
    Millions of years

Biology – Ecology

46. **What do plants compete for?**
    Light, space, water and mineral ions

47. **What do animals compete for?**
    Food, mates and territory

48. **What do all food chains start with?**
    A producer (plant).

49. **What is biodiversity?**
    The variety of all the different species of organisms in an ecosystem.

50. **Name 3 places that pollution can occur.**
    Water, air, land

Business

Costs and Revenue

Costs are the money paid out by a business for the items it needs. Revenue is money received by the business

1. Start-up Costs
The money the business needs to spend before it starts trading, e.g. building, signs, cash register.

2. Paying for Start-up Costs
Money for start-up costs come from savings and loans.

3. Operating Costs
Operating (running) costs are the expenses a business has in its day-to-day operations, e.g. ingredients, utility bills.

4. Start-up Costs vs Operating Costs
Start-up costs are one-off, e.g. only pay once whereas operating costs are regular and recurring, e.g. running costs.

5. Running Costs
Running costs can be divided into Fixed Costs and Variable Costs, Fixed Costs are often *indirect* and Variable Costs are often *direct*.

6. Fixed Costs
Fixed Costs stay the same no matter how many products the business makes or sells, e.g. stall, rent.

7. Variable Costs
Variable Costs change depending on the number of products made or sold, e.g. ingredients, packaging.

8. Direct Costs vs Indirect Costs
A Direct Cost is directly related to output, e.g. production, whereas Indirect Costs are independent of production, e.g. staff uniforms.

9. Total Costs
Total costs are all the costs of the business.
Total Costs = Fixed Costs + Variable Costs

10. Variable Costs
Variable costs change depending of the number of units produced or sold.
Variable Costs = Cost of One Unit x Number of Units

11. Revenue

Revenue is money received by a business. Most revenue comes from selling products and services.
Revenue = Number of sales x Price per Unit

12. Other Sources of Revenue
Charity: Donations
Landlords: Rent
Savings: Interest
Maintenance: Service to go with product

13. Expenditure
Expenditure is money the business pays out. Every day running costs are called overheads, e.g. wages, rent, business rates, utility bills, stock, advertising, internet connection etc.

14. Expenditure types
Stock: Bought for resale
Consumables: Used by the business
Raw materials: Used to make the product

15. Profit or Loss
Profit is when Revenue is more than Expenditure.
Profit/Loss = Revenue – Expenditure

Budgeting

The purpose of budgeting is to ensure that expenditure remains below the anticipated revenue in order for the business to make a profit.

16. Financial planning
Budgeting is a financial planning tool which sets sales targets, identifies spending requirement and sets spending.

17. Revenue budgets
Revenue budgets are used to set sales targets. High sales targets mean higher profit.

18. Expenditure budgets
Expenditure budgets are used to set the spending targets. This is the money set aside for expenditure such as wages, overheads, raw materials etc.

19. Budget Calculation
Profit = Revenue - Expenditure.

20. Budgeting
Setting a budget

21. Budgetary Control
Checking the performance of the business to make sure that the targets are actually met or kept to.

22. Controlling Budget
It is important for the business to monitor the budget on a regular basis, e.g. monthly

23. Monitoring Sales
It is important for a business to compare the actual sales with the predicted sales, so that prompt action can be taken if sales are too low.

24. Monitoring Spending
It is important for a business to compare the actual spending with the predicted spending, in order to ensure that they are within budget, and action can be taken if spending is too high.

Cash Flow

Cash Flow is the money that flows in and out of the business on a daily basis. A business needs this flow of cash to cover expenditure.

25. Cash Flow Forecast
Cash flow forecasting allows a business to predict the cash inflows and cash outflows from a business.

26. Cash Inflow
The cash that flows into the business, e.g. from customer sales, investment, loans etc.

27. Cash Outflow
The cash that flows out of the business, e.g. wages, stock, utility bills etc.

28. Net Cash Flow (aka Net Inflow/Outflow)
The amount remaining when the cash outflow is subtracted from the cash inflow.

29. Opening Balance
The money in the bank account on the first day of the month (the closing balance of the month before).

30. Closing Balance
The opening balance at the beginning of the month added to the net cash flow figure for the month.

31. Cash Surplus
Positive
Cash available to use usually as a result of more inflow than outflow.

32. Cash Deficit
Negative
Not enough cash available.
Usually caused by more outflow than inflow.

33. Cash Transactions
Paid immediately so received into business account immediately.

34. Credit Transactions
Delayed payment so received into business account within a time limit, usually 60 days.

35. Credit Control
Chasing up late payment. If credit transactions are not paid within a time limit, it can cause cash flow problems for the business.

36. Overdraft
If a business has a short term cash flow problem, they could arrange an overdraft with the bank, e.g. a safety net to allow them to pay their bills whilst waiting for customer payments to come in.

37. Short-Term Problem
Delayed payments: Chase up late payments
Bills arriving at same time: Renegotiate payment dates
Emergency payment: Temporary loan from bank

38. Long-Term Problem
Too little revenue: Increase sales
Expenditure too high/costs rising: Find cheaper suppliers

39. Benefits
Timing known
Problems spotted quickly
Surplus cash reinvested
Expensive items bought when cash surplus at highest

40. Filling in the Cash Flow Forecast
Total Inflows – Total Outflow = Net Cash Flow
Opening Balance + Net Cash Flow = Closing Balance
Opening Balance = Closing Balance of previous month

Breakeven

Breakeven is when revenue and expenditure (costs) are the SAME. There is no profit or loss as money from sales equals cost of making product.

41. Breakeven Chart
This shows how much a business needs to sell to break even and how much it will not to start making a profit.

42. Breakeven Chart areas
In the online test, you need to be able to identify: total costs, total revenue, fixed costs, breakeven point, margin of safety, profit, loss.

43. Margin of Safety
This is the amount by which sales would have to fall before the breakeven point is reached

44. Breakeven Point
This is the point where the total costs and total revenue lines cross.

45. Fixed Costs
The fixed costs of the business, regardless of output.

46. Variable Costs

This shows the variable costs at every level of sales.

47. Total Revenue Line
This shows the total revenue at every level of sales.

48. Number of units
On the horizontal axis of the chart, this shows the number of units that must be sold to break even.

49. Breakeven Formula
Fixed Costs
Contribution per unit
(Selling Price – Variable Costs per Unit)

50. Changing Selling Price
If you increase the selling price the breakeven point falls.
If you reduce the price, the breakeven point rises.

Chemistry

Paper 1

1. **What name is given to an incorrect model of an atom that suggested atoms are a ball of positive charge with negative electrons embedded in them?**
   Plum pudding model

2. **Who adapted the nuclear model of the atom by suggesting that electrons orbit the nucleus at specific distances?**
   Niels Bohr

3. **What was James Chadwick able to provide evidence for the existence of?**
   Neutrons in the nucleus

4. **Complete the table**

Name of particle	Relative Charge
Proton	+1
Neutron	0
Electron	-1

5. **What does the atomic number indicate about the atoms of an element?**
   The number of protons

6. **Complete the table**

Name of particle	Relative mass
Proton	1
Neutron	1
Electron	Very small

7. **What is the mass number of an element the sum of?**

The protons and neutrons in an atom

8. **What is the name of atoms of the same element that have different numbers of neutrons?**
   Isotopes

9. **What are elements in the periodic table arranged in order of?**
   Atomic number

10. **What do elements in the same group of the periodic table have in common?**
    The same number of electrons in the outer shell and similar properties

11. **How did Mendeleev overcome problems with ordering the elements?**
    He left gaps for undiscovered elements

12. **What react to form positive ions?**
    Metals

13. **Does reactivity increase or decrease going down group 1 (alkali metals)?**
    Increase

14. **What are the three types of chemical bond?**
    Ionic, metallic and covalent

15. **Which chemical bond forms when non-metals combined with metals?**
    Ionic

16. **What is a covalent bond?**
    A shared pair of electrons between two atoms

17. **What does (aq) show in a chemical equation?**
    Aqueous solution

18. **State key properties of ionic compounds.**
    They have high melting and boiling points and they conduct electricity when molten or dissolved in water

19. **Name three examples of giant covalent structures that you need to know.**
    Diamond, graphite and silica

20. **How are atoms arranged in pure metals?**
    Layers

21. **Which particles in metals allow them to conduct electricity and thermal energy?**
    Delocalised electrons

22. How many covalent bonds does each carbon atom in diamond have?
4

23. How many covalent bonds does each carbon atom in graphite have?
3

24. Which law states that no atoms are lost or made during a chemical reaction?
(The law of) conservation of mass

25. Why do some reactions appear to involve a change in mass?
A reactant or product is a gas

26. What do metals react with oxygen to form in oxidation reactions?
Metal oxides

27. Which chemical reaction can be used to extract metals less reactive than carbon from their oxides?
Reduction (using carbon)

28. What do acids react with metal to form?
A salt and hydrogen

29. What word is used to describe the following reaction: acid + alkali → salt + water?
Neutralisation

30. What produce hydrogen ions (H^+) in aqueous solutions?
Acids

31. What do aqueous solutions of alkalis contain?
Hydroxide ions (OH^-)

32. What process can be used to split ionic compounds that are either molten or in aqueous solution by passing a current through them?
Electrolysis

33. Why is cryolite mixed with aluminium oxide in extraction of aluminium?
To lower the melting point

34. What name is given to a reaction that transfers energy to the surroundings, increasing the temperature of the surroundings?
Exothermic

35. What name is given to a reaction that transfers energy from the surroundings, decreasing the temperature of the surroundings?

Endothermic

Paper 2

36. How is the rate of a chemical reaction calculated?

Mean rate of reaction = $\frac{\text{quantity of product formed}}{\text{Time taken}}$

37. What is the collision theory?

Chemical reactions can occur only when reacting particles collide with each other and with sufficient energy. The minimum amount of energy that particles must have to react is called the activation energy.

38. Name 4 factors that cause a reaction to speed up?

Temperature, Concentration, Surface Area, Catalyst

39. What is a catalyst?

Catalysts change the rate of chemical reactions but are not used up during the reaction. Different reactions need different catalysts. Enzymes act as catalysts in biological systems.

40. How does a Catalyst speed up a chemical reaction?

Provides an alternative pathway for a reaction by lowering the activation energy.

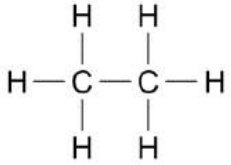
41. How is crude oil separated into different fractions?

Fractional Distillation

42. What are the fractions of crude oil used for?

Fuels (Petrol & Diesel – Cars; Kerosine – Jet Fuel; Bitumen – Road surfaces etc)

43. Draw the displayed formula for ethane.



44. Describe three trends in the properties of the alkanes.

Boiling points – increase with increasing molecular size due to larger intermolecular forces.

Viscosity (how runny it is) – increases with increasing molecular size.

Flammability - decreases with increasing molecular size due to more bonds to break.

45. What is a formulation?

A formulation is a mixture that has been designed as a useful product.

46. What is chromatography?

Chromatography can be used to separate mixtures and can give information to help identify substances.

47. How are Retention Factors (Rf) calculated?

$$Rf = \frac{\text{distance moved by substance}}{\text{Distance moved by the solvent}}$$

48. Describe the chemical test for hydrogen, oxygen & chlorine.

Hydrogen = lit split gives a squeaky pop.

Oxygen = glowing splint relights.

Chlorine = turns litmus indicator paper white.

49. What two main events led to the changes in the atmosphere during its evolution?

Earth cooled and water vapour condensed to form oceans.

Plants evolved so photosynthesis occurred taking in carbon dioxide and releasing oxygen.

50. What effect do the greenhouse gases have on the Earth?

Greenhouse gases in the atmosphere maintain temperatures on Earth high enough to support life. Water vapour, carbon dioxide and methane are greenhouse gases.

Computer Science

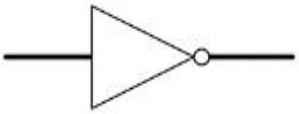
1. What is an algorithm?
A step by step series of instructions to solve a problem

2. An image is 200 pixels wide and 100 pixels high and uses 4 colours. Construct an expression to show its size in bytes.
(200x100x2)/8

3. What are the four different data types?
Integer, Float, Boolean and String

4. What are the functions of an operating system?
File Management, Input/Outpup management, Resource allocation, Process Management, Network Management, User Management

5. What is this symbol?



Not Gate

6. What is a Compiler?
Systems software that converts programs written in high level language into machine code

7. What are network protocols?
Rules about how data is transferred over a network

8. What does this symbol do in programming?
%
Modulus (remainder after the division)

9. What does the ALU do?
Performs arithmetic and logic calculations

10. What is volatile memory?
Used to store program data while it is being executed. Will be lost when there is no power.

11. What type of validation checks how long the data is?
Length Check

12. Apply a Caesar Cipher algorithm to the word Marsh with a shift of +3
PDUVK

13. What is an overflow error?
When you add two eight bit binary numbers and the resulting answer uses a 9th bit therefore creating a binary overflow.

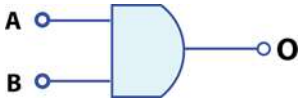
14. What is Type Check validation?
Checks if value is of the expected data type.

15. What does FTP stand for?
File Transfer Protocol

16. What is the heights on a sound wave called?
Amplitude

17. Name a technique that make reading computer code easier.
Comments, Tabs, Line breaks

18. What is this symbol?



And Gate

19. What does Add R0, R1, #5 mean?
Add 5 to what is stored at R1 and store the answer at R1

20. What is the name of the character set that uses 16 bits?
Unicode

21. What are the names of the email protocols?
SMTP, POP3, IMAP

22. Convert the binary value 00111110 into hex
3E

23. What does the Control Unit (CU) do?
Manages instructions

24. What is a Syntax error?

An error in the format of the program statements such as missing semicolons or keywords spelt incorrectly

25. What does this operator mean?
!=
Not equal to.
26. Convert the 8 bit binary value of 00100001 to denary
33

27. What does DNS stand for?
Domain Name System

28. What type of physical storage uses lasers?
Optical

29. What is an Array?
A container object that holds a fixed number of values of a single type.

30. What are buses?
The wires that carry data from one part of the computer to another.

31. What is a type error?
When an operation is attempted that is invalid for that data type.

32. What type of validation checks if data has been entered?
Presence check

33. What is a network packet?
The data that has been broken up to be sent over a network.

34. What does a register do?
Stores data

35. Apply a Run Length Encoding algorithm to the following data: RRRGGRBBBBBBRRRBBBBB
3R2G1R6B3R5B

36. What is Assembly Language?
Machine code tells the microprocessor step by step what to do. For example "Move data from register A to Register B.

37. What is the name of the character set that uses 7 bits?
ASCII

38. What does ADD R0, R0, R3 mean?
Add what is stored at Register 3 to what is stored at Register 0 and store the answer at Register 0

39. Explain what this CSS codes does:

{Font-style: italic; font-weight: bold ;}
Writing is in italic and is bold

40. What two things can be stored using binary values?
Data and Instructions

41. What are the three network media?
Copper, Twisted Pair (Ethernet), Fibre Optic

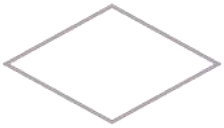
42. What is a name error?
When a name is used that is not known about (often a misspelt variable)

43. What is pseudo-code?
A method of writing code using plain English (often used for planning a program)

44. What is a global variable?
One that can be used in different sub programs. (Throughout the program)

45. What is iteration?
The repetition of a block of statements within a computer program.

46. What does this symbol mean in a flow chart?



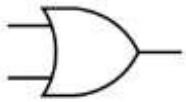
Decision

47. What is cache?
High speed temporary memory (part of the RAM)

48. State how many bits are needed to represent the 26 letters of the alphabet
5

49. What are the different Network Toplogies?
Bus, Ring, Star, Mesh

50. What is this symbol?



Or Gate

Drama

1. How long is the exam?
One hour 30 minutes

2. How long should you spend on section A and B?
Section A = 1 hours and 10 minutes
Section B – 20 minutes

3. Who wrote CCC?
Bertolt Brecht

4. What is the basic synopsis? Bertolt Brecht's play *The Caucasian Chalk Circle*, premiered in 1948. A play-within-a-play, two Soviet Union communes are arguing over who will take over farmland that the Nazis have abandoned in their retreat. One of the communes organizes a skit, based on an old folk tale to be played to cast light on the situation.
A singer and a band of musicians tell the tale: an evil prince organizes a coup to overthrow the governor and his wife, Natella. Arusha, Natella's maid, is left caring for the governor's infant son in the ensuing chaos, when Natella forgets about him in her escape. When the governor's party returns to power, Natella tries to claim her dead husband's estate, sparking a legal battle with Grusha over the custody of the governor's heir.

5. Where are the locations that the play is set in?
Prologue-War ravaged Caucasian village
The Noble Child- Grusinia- In the city of Nuka Outside the church/the Palace
Flight to the Northern mountains- Peasant's Cottage door step/River Sirra Farm House/Highway/Bridge on a glacier.
In the Northern Mountains-Brothers Farm/ Other Farm/ Stream
The story of the Judge- The woods and Azdak's Hut/ Nuka and the court of Justice/ Caravansary on the highroad/Tavern/Court of Justice
The Chalk Circle- Law Court in Nuka

6. Can you name the main characters?
The Singer/Georgi, Natella and Michel Abashwili /Shalva/Grand Duke/ Arsen Kazbeki- Fat Prince/ Simon Shashava/ Grusha Vashadze/ Lavrenti Vashnadze and wife Aniko/ Peasant woman and son Jussup/Azdak

7. What are the characters social class or standing?

Upper	Georgi, Natella and Michel Abashwili, Grand Duke, Arsen

	Kazbeki (Fat Prince), Azdak (Judge)
Middle	Lavrenti Vashnadze and wife Aniko
Lower	Simon Shashava Grusha Vashnadze/ Peasant woman and son Jussup/Azdak

8. Can you describe what happens in each section?

Prologue- Goat farm Rosa Luxemburg and Collective Farm Galinsk are trying to decide if the land that originally owned by Rosa Luxemburg should be given back to them after the war or if the Galinsk fruit growers could make better use of the land.
The Nobel Child – Georgi Abashwili loses his life in a coop by the Fat Princes to over throw the Grand Duke and his Governors. Natella Flees Grusinia with her servant and soldiers, including Simon, but leaves her child behind, Grusha is prosed to by Simon and says she will wait for him to return from the war and she finds Michael and decides to save his life.
Flight to the Northern Mountains- Grusha has a terrible journey and on her way try's to leave the baby at a farm, but ends up assaulting an Iron shirt, fleeing over a breaking bridge.
In the Northern Mountains- Grusha arrives at her bother farm to an un welcome reception from her sister in law- why? Because she has a baby and is not married…. To appease his wife Lavrenti arranges a marriage to a dying man. However just after the marriage the man does not die but recovers (he was feign the illness, so he did not have to go a fight in the war) and Grusha now has to live with her husband and his mother.
The Story of the Judge- Unbeknown to him Azdak harbours the Grand Duke. He thinks that he is helping an old present, but in fact the man is the Grand Duke fleeing for his life. Azdak does not like the Grand Duke or the way he runs the country so when he finds out who he has helped he makes the local policeman take him to the capital and hand himself in. The iron shirts like his attitude and make him the Judge rather than the Fat Princes Nephew.
The Chalk Circle-We see the courtroom scene where Natella tries to calm Michael as her child and Grusha claiming he is hers. Azdak decides on the mother by making the pull at Michael. Grusha cannot see him hurt so let's go twice… after this Azdak rules that Michael is Grusha's child, divorces Grusha and donates the money from the Abashwili estate to the city to build a garden for the children.

9. What is the Themes and moral message of CCC?
The Caucasian Chalk Circle is, at its heart, a work that forces its audience to reckon with the harsh realities of economic and social inequality, through political and moral corruption.

10. Which character can be described as narrators or chorus?
The singer- Tells the story

11. What are rehearsal techniques?
Rehearsal techniques are exercises which help prepare the actors in the early stages to help them shape / mould their characters and interpretation of these roles.

12. Rehearsal Techniques are….But how can you use them?

Hot Seating
Devil and angel
Status cards
Conscience tunnel
Cross cutting

13. What is a character's motivation?
Character motivation is the reason behind the characters behaviours or actions within a scene or at any moment.

14. When discussing use of voice, what does tone of voice refer too?
Tone of voice is its colour or emotional quality. When performing a scene, you must identify your characters emotion at each given moment. You, must make sure that your tone of voice matches your characters mood and what you need to communicate about their feelings.

15. When discussing use of voice, what does tempo of voice refer too?
Tempo of voice refers to the speed or pace in which an actor delivers their lines. Actors must consider the characters emotion, the content of speech and visualise how the script would be relayed.

16. When discussing use of voice, what does pitch refer too?
This is how high or low an actor delivers their line, for example a high pitch might be very shrill sounding where as a low pitch would use a deep voice.

17. Name some physical conventions / techniques / skills or terminology.
- Body language
- Facial expressions
- Gait
- Gestures
- Posture
- Proxemics
- Use of space
- Gest

18. What is meant by the performance skill gait?
Gait – Is the manner in which an actor walks. We can describe large strides as an "open gait" or small steps as a "closed gait".

19. Define the term proxemics.
Proxemics refers to the positioning on stage of actors and how this relates to their relationships / status.

20. Name some rehearsal techniques, describe what they are and the effect / impact of using this technique.
- Emotion memory – recalling a moment from the actor's life where they have experienced something similar to the character and remember how you reacted. They then use this

memory to enhance their performance, which helps create a more naturalistic portrayal and rendition.

- Freezeframes – Create frozen images from moments of the play. This helps give actors space and time to consider their physicality and how space / levels communicate to the audience.
- Vocal exercises / experimentation – using different emotions for re-enactments of the scene to consider suitability and what works.
- Off the text improvisation – performers focus on events not depicted in the script and consider moments which they may explore, to help them define characters and their interpretation of role, motivation and focus. This gives actors more depth when depicting roles and helps them explore / understand relationships within the text.
- Hot seating – Actors answers questions in role whilst sitting in the hot seat – allows them to develop a greater understanding of their role, motivations and gives them freedom to explore the character.

21. What is the playwright's intention for the play?
To make his audience question the political society they lived in and the treatment of the lower classes by the ruling class.

22. Can you discuss the historical context and what was happening in the world at the time of writing?
Written while Brecht was in exile during World War II—and had already witnessed the horrors of World War I as a young man in Berlin—The Caucasian Chalk Circle is a treatise against political, social, and economic corruption. In it, Brecht argues that wealth, privilege, and power lead to both political and moral corruption, which takes the form of evil deeds, war, and the perpetuation of the lower class's suffering.

23. What is the genre of the play?
Epic Theatre
Brecht developed a style that he called Epic Theatre
His plays, the acting style and his staging ideas all contributed to it. He wanted to distance his audience from the audience.
An epic play tells the story as a sequence of events rather than concentrating on an individual characters thoughts and feelings.
Rather than embodying your character Brecht wanted his actors to feel as if they were telling a story about what their characters had done. He didn't want his audience to get emotionally involved with the characters.

24. What is the structure of the play?
Brecht, in his typical anti-realist style, uses the device of a "play within a play". The play is episodic – the action is split into episodes that don't always seem to run on from each other in a logical order or clear timeframe.

25. When was CCC first staged and where?
First performance in 1948, staged by students in Carleton College, Minnesota

26. Can you describe the original staging?

- Proscenium Arch
- Performed by students a year after Brecht had left USA
- Characters dressed in basic costume

- Basic stage lighting
- Minimalist production style

27. Can you define what a theatrical style is?
A theatrical style is the manner in which a storyline or message is conveyed.

28. Common options of theatrical style are…?
Naturalism, Epic Theatre, Theatre of the oppressed, Physical theatre, Symbolism

29. Name the 7 main staging types.
Proscenium Arch, End on, Traverse, Thrust, Promenade, Theatre in the Round, Arena Stage

30. Describe the audience configuration for a proscenium stage?
The most common type of stage. Audience sit and watch the performance through an archway which frames the stage but also provides off stage areas where audience cannot see to help further illusions. This is a great stage for naturalistic performances. You can also project on a back wall.

31. Describe the audience configuration for an end on stage?
The same audience configuration as proscenium arch, however there is no arch to frame the stage.

32. Describe the audience configuration for a traverse stage?
This stage can also be known as a 'catwalk' stage. The audience sit on the two longer sides of a stretched rectangle. The shorter ends act as entrances and exits for performers. This stage is best suited for abstract staging concepts. It is good for creating an intense atmosphere as the audience are close to the action.

33. Describe the audience configuration for a thrust stage?
The stage "thrusts" out into the audience, and their seating is wrapped around 3 out of 4 sides, sometimes creating a horse shoe shape. The back area is good for naturalistic scenes as there are hidden areas to conceal sets and entrances /exits, whereas the central area is intimate with the audience.

34. Describe the audience configuration for a promenade stage?
A promenade staging has no set location and the audience follow the actors around to certain areas of performance and then move on to the next location.

35. Describe the audience configuration for a Theatre in the Round stage?
An In the round stage is positioned at the centre of the audience, with spectators sat all around the space. It creates an intimate atmosphere and is good for performances that involve audience interaction. Can also be known as an arena stage, usually the performance space is square /rectangle but the principle that audience surround the stage is the same.

36. In CCC what might set consist of?
Set is an arrangement of scenery to represent a place -

- ❖ Floor coverings (painted, or actual material such as mud, leaves, grass, branches)
- ❖ Walls
- ❖ Furniture
- ❖ Large scenic elements (Church steps, bridge)
- ❖ Screens for projection

37. Can you name the 6 main types of lantern used to create light in a theatre?

- ✓ Profile spotlight – definite sharp-edged beam, can also be used for gobos.
- ✓ Fresnel Spotlight – soft edged beam, good for smaller areas
- ✓ Par Can – light for large areas as it literally floods the stage
- ✓ Strobe light – quick successive flashing light, making action appear 'jumpy'
- ✓ Birdie – a tiny lantern good for up lighting facial features and distorting them creating an eerie atmosphere
- ✓ Moving head – light which moves across the stage, changes colour and can project images using gobos.

38. What is a gobo?
A gobo is a metal stencil which is placed over a light to project an image onto the stage or cyclorama (back wall of the stage) They can project things like words or windows, or the image of sunlight, rain etc.

39. What is a gel?
To change the colour of light projected on stage a gel is placed in front of the light which creates a coloured filter. They come in a great many colours and shades. Colour is explicitly important and needs real consideration; for example, an evening woodland scene might use blues and greens whereas a daytime woodland scene would predominantly use greens and yellow.

40. What is meant by the term intensity when referring to stage lighting?
Intensity of lighting is a direct reference to how bright or dim the light is, which can directly impact on mood / atmosphere on stage.

41. If sound and music is used correctly, how can it enhance a performance?

Sound and music can add atmosphere, emphasise action happening on stage, and help set the scene, indicate a change of time or location or focus attention onto a character.

42. What is diegetic sound?

Diegetic sound is sound which is heard by the characters on stage and exists within the world of the play. For example, in CCC, in the daytime church step scene there may be playing the sound of birds, church bells beggars begging, in the east gate burning scene audience may hear the sounds of screams and fire. The characters may not react to these but they are there creating a sense of realism.

43. What is non diegetic sound?

These are sounds which exist outside the world of the play and the characters don't appear to hear these. For example, in the scene where Grusha takes Michael you may have emotional music playing as she walks away from him the first time.

44. What is costume?

Costumes are part of the overall design concept for a production and should be considered carefully. Costume should contribute to the production and should help give the audience clues about characters age, class and the time period of the piece, however they must also be practical; for example, in a physical theatre piece an actor needs to be able to move and not be restricted by a tight fitting costume. Simplest definition is that costume refers to what the actors are wearing.

45. When considering costume, what factors should be considered?

- Garments -what they are actually wearing top, trousers etc
- Material – what the garments are made of. (A silk blouse may suggest higher status for example.)
- Condition – A character who was wearing school uniform, with their top button done up, tie done neatly and shirt tucked in would show the audience they are in control and obey rules. A character in a scruffy school uniform with their top button undone and shirt untucked could suggest they are naughty and care little for rules. In the same way that scruffy, ripped clothing might suggest an unkempt character to a clean well turned out role.
- Seasonal – Consider the time of day, year and dress characters appropriately. In winter characters might be wearing coats, scarves hats etc, which would help create a cold atmosphere.
- Remember that hair and make-up also come under the same heading as costume and so this also needs careful consideration.

46. If sound and music is used correctly, how can it enhance a performance?

Sound and music can add atmosphere, emphasise action happening on stage, help set the scene, indicate a change of time or location or focus attention onto a character.

47. What is diegetic sound?

Diegetic sound is sound which is heard by the characters on stage and exists within the world of the play. For example, in CCC, in the daytime church step scene there may be playing the sound

of birds, church bells beggars begging, in the east gate burning scene audience may hear the sounds of screams and fire. The characters may not react to these but they are there creating a sense of realism.

48. What is non diegetic sound?

These are sounds which exist outside the world of the play and the characters don't appear to hear these. For example, in the scene where Grusha takes Michael you may have emotional music playing as she walks away from him the first time.

49. What is costume?

Costumes are part of the overall design concept for a production and should be considered carefully. Costume should contribute to the production and should help give the audience clues about characters age, class and the time period of the piece, however they must also be practical; for example, in a physical theatre piece an actor needs to be able to move and not be restricted by a tight fitting costume. Simplest definition is that costume refers to what the actors are wearing.

50. When considering costume, what factors should be considered?

- Garments – What they are actually wearing top, trousers etc.
- Material – what the garments are made of. (A silk blouse may suggest higher status for example.)
- Condition – A character who was wearing school uniform, with their top button done up, tie done neatly and shirt tucked in would show the audience they are in control and obey rules. A character in a scruffy school uniform with their top button undone and shirt untucked could suggest they are naughty and care little for rules. In the same way that scruffy, ripped clothing might suggest an unkempt character to a clean well turned out role.
- Seasonal – Consider the time of day, year and dress characters appropriately. In winter characters might be wearing coats, scarves hats etc, which would help create a cold atmosphere.
- Remember that hair and make-up also come under the same heading as costume and so this also needs careful consideration.

English

This is **not** a comprehensive list of information for your English exams however these are 50 key facts which will help you on your journey to mastering English.

Your exams in Y11 are as follows:

English Literature Paper 1 1h45:

Macbeth and A Christmas Carol

English Literature Paper 2 2h15:

An Inspector Calls, Power and Conflict Poetry,
Unseen Poetry

English Language Paper 1 1h45:

Fiction and Imaginative Writing

English Language Paper 2 2h05:

Non-Fiction and Transactional writing

English

Macbeth 10 Key Facts:

1. **What type of text is it and what genre is it?**
   It is a play. It is a tragedy.
2. **Who was King at the time and what was the time period called?**
   James I was King of England from 1603 - he was also King of Scotland from 1567. This time period is referred to as the Jacobean era.
3. **What is the tone of the play?**
   It is dark and ominous. It is suggestive of a world that has been changed by foul and unnatural crimes, beginning with the killing of King Duncan.
4. **Where is the play set?**
   The majority of the play is set in various locations in Scotland; there is a brief part in England.
5. **What are the major conflicts in the play?**
   The struggle within Macbeth between his ambition and his sense of right and wrong; the struggle between the murderous evil represented by Macbeth and Lady Macbeth and the best interests of the nation represented by Malcolm and Macduff.
6. **What is the rising action at the start of the play?**
   Macbeth and Banquo's encounter with the witches initiates both conflicts; Lady Macbeth's speeches goad Macbeth into murdering Duncan and seizing the crown.
7. **Where is there a climax?**
   Macbeth murders Duncan in Act 2 (there are 5 Acts). This represents a point of no return for Macbeth. Macbeth then continues butchering his subjects to avoid the consequences of his crime.
8. **How does the play end?**
   In Acts 3 and 4 Macbeth's murders get increasingly brutal. He kills Banquo in Act 3, he meets the Witches for the second time in Act 4 and decides to kill Macduff's family in Act 4. In Act 5 Lady Macbeth commits suicide and Macbeth has his final confrontation with Macduff and the opposing armies. Macbeth has his head chopped off and Malcolm is named King of Scotland.
9. **What are some of the key themes?**
   The corrupting nature of unchecked ambition, the relationship between cruelty and masculinity, the difference between kingship and tyranny (There are others)
10. **What are some key symbols in the play?**
    Blood, the dagger Macbeth sees just before he murders Duncan, the weather (There are others).

A Christmas Carol 10 Key Facts:

1. **What type of text is it and what genre is it?**
   It is a novella. It has aspects of different genres but is often referred to as 'a ghost story'.

2. **Who was Queen at the time of writing (1843) and what was the time period called?**
   Queen Victoria. It was written during the Victorian times.

3. **What is the tone of the novella?**
   The tone shifts throughout the novella. However, the overall tone could be described as moving from dark to hopeful.

4. **Where is the novella set?**
   It is set in London.

5. **How does the novella begin?**
   Scrooge is angry, snappish, mean, miserly, and hates Christmas and people who are hoppy. No one that he knows can change him. His dead business partner Jacob Marley comes to him, as a ghost, to try and show the errors of his ways.

6. **What happens in the middle staves?**
   Three spirits take him to his past, the present and to a horrible future to make Scrooge realise the errors of his ways.

7. **How does the novella end?**
   Scrooge is shocked by the revelations, changes his ways entirely, and becomes a wonderful person and, more importantly, a Christmas lover.

8. **What are some of the key themes?**
   Compassion and forgiveness, isolation, transformation, choices, time, family, the home, memory and the past, guilt and blame (There are others)

9. **What are some key symbols in the novella?**
   Marley's chains, Ignorance and Want, Scrooge's gravestone, Turkey, each Ghost, Scrooge's bed etc. (There are others)
10. **What is the narrator's point of view in the novella?**
    It is a third person limited omniscient narrator.

An Inspector Calls 10 Key Facts:

1. **What type of text is it and what genre is it?**
   It is a play. It takes elements from many genres such as mystery and realism but it is often referred to as a 'drama'.

2. **When and where was it first written?**
   It was first written in 1945-46. First published in 1946 and first performed in the USSR.

3. **What is the tone of the play?**
   It is a social critique; solemn; fatalist; anti-hypocritical (critical of middle-class hypocrisies)/

4. **When is the play set?**
   The play is set in 1912 before the sinking of the Titanic.

5. **Where is the play set?**
   In the fictional town of Brumley in Northern England.

6. **What is the major conflict in the play?**
   Eva Smith/Daisy Renton's death which implicates the entire Birling family, who sort out their responsibility in her downfall.

7. **What is the rising action at the start of the play?**
   An Inspector arrives to ask questions about Eva Smith's suicide.

8. **What is the climax in the play?**
   When Eric is revealed as the father to Eva Smith's unborn baby.

9. **What happens at the end of the play?**
   Gerald tells the family that, perhaps, the Inspector has "hoaxed" them to prove a point about social systems. However, the phone rings to tell Mr Birling that a girl has committed and an Inspector is on the way.

10. **What are some of the key themes in the play?**
    Responsibility, gender, class, generational differences, guilt, learning/forgetting (There are others)

Power and Conflict 10 Key Facts:

1. **How many poems are in the anthology?**
   There are 15 poems – Ozymandias by Percey Shelley; Extract from the Prelude by William Wordsworth; London by William Blake; Exposure by Wilfred Owen; Storm on the Island by Seamus Heaney; Kamikaze by Beatrice Garland; Bayonet Charge by Ted Hughes; The Charge of the Light Brigade by Alfred Tennyson; War Photographer by Carol Ann Duffy; Poppies by Jane Weir; Remains by Simon Armitage; The Emigree by Carol Rumens; Tissue by Imtiaz Dharker; Checking Out Me History by John Agard and My Last Duchess by Robert Browning.

2. **What are some of the key themes in the anthology?**
   Power of nature, power of man, conflict, war, power of memory, identity, guilt, loss/absence, negative emotions, effects of conflict, individual experiences…(There are others)

3. **Which poems are set in WW1?**
   Exposure by Wilfred Owen and Bayonet Charge by Ted Hughes?

4. **Which poems have the power of nature as a central theme?**
   Storm on the Island, The Prelude, Ozymandias, Exposure

5. **Which poems focus on war?**
   Kamikaze (WW2), Bayonet Charge (WW1), Exposure (WW1), Remains (Iraq), Charge of the Light Brigade (Crimean War).

6. **Which poems focus on identity?**
   My Last Duchess, Poppies, Tissue, The Emigree, Kamikaze, Checking Out Me History

7. **Which poems focus on the power of Humans?**
   My Last Duchess, Checking out Me History, Ozymandias, Tissue,

8. **What is a stanza?**
   It is a group of line in a poem.

9. **What is enjambment?**
   When a sentence of phrase runs over from one line or stanza to the next.

10. **What is caesura (plural caesurae)?**
    A pause in a line of poetry.

English Language 10 Key Facts:

1. **Know the following words classes:**
   Nouns – these are naming words such as objects, places, people and ideas.
   Verbs – these are words to describes actions or processes
   Adjectives – these are words to add description to nouns
   Adverbs – these words qualify verbs but can also modify adjectives and other adverbs

2. **What does connotation mean?**
   Some words can create bigger ideas in our minds through the ideas and attitudes they suggests. These ideas and attitudes are called connotations.

3. **What is the first person narrative?**
   This is a narrative writing in the first person. The story is told by an 'I'.

4. **What is a third person narrative?**
   This is a narrative written in the third person. All characters are described using pronouns such as 'he' and 'she', or by their name.

5. **What are synonyms and why they are useful?**
   Synonyms are words with similar meanings. Use them in your writing for both papers to avoid repetition and to add variety.

6. **What is repetition and why can it be useful?**
   Repeating a word or phrase can emphasis a key point, idea, or it can add emphasis to an idea in creative writing.

7. **What is a comma splice?**
   Using a comma to join two sentences instead of a full stop to separate them is a comma splice. **It is to be avoided.**

8. **What are some useful words when evaluating?**
   Powerfully, effectively, successfully, clearly (PECS)

9. **What are some basic types of sentences?**
   Single-clause sentence, multi-clausal sentence and minor sentences.

10. **What is 'TAP' and how will it help me in my transactional writing?**
    T stands for text type so you know what type of text you have to write, A stands for audience so you adapt your writing to meet the needs of your audience and P stands

for purpose so you know why you are writing and adapt your writing to your purpose.

Food

1. The main MICRONUTRIENTS are Vitamins and Minerals. They are needed in smaller amounts.

2. The main MACRONUTRIENTS are protein, Carbohydrates, and Fat. They are needed in larger amounts.

3. Amino acids are the basic components of protein

4. Essential amino acids are amino acids which cannot be made by the body.

5. High Biological protein is protein that contains all the essential amino acids like meat, fish, eggs, milk and cheese.

6. Low biological protein is protein that lacks one or more of the essential amino acids.

7. The 3 main protein alternatives are Tofu, Quorn and Soya.

8. Kwashiorkor is the deficiency disease of protein.

9. Fats are solid at room temperature, oils are liquid.

10. Invisible fats are found in cakes, pastries and biscuits.

11. Fat is made up of three fatty acid parts attached to one glycerol molecule.

12. Cholesterol is a fatty substance found in the blood. It is essential for humans but too much can be harmful.

13. Fat should provide no more than 35% of food energy.

14. 2 essential fatty acids are omega 3 and omega 6.

15. We are advised to eat 2 portions of oily fish a week for health.

16. Saturated fat is found in butter, lard, suet and fat on meat.

17. Carbohydrate is needed to provide energy to the body.

18. The 3 types of carbohydrates are starches, sugars and dietary fibre.

19. 50% of total food energy should come from carbohydrates.

20. Dietary fibre is needed for the digestive system. To help us keep a healthy weight, to reduce cholesterol levels and to prevent some cancers.

21. Adults are advised to eat 30g of fibre a day.

22. The antioxidants are vitamin A, C, E. They help to protect the body.

23. Fortified refers to food that has vitamins and minerals added to improve its nutritional value.

24. Night blindness is caused by a lack of Vitamin A, AND MEANS YOU ARE UNABLE TO SEE WELL IN DIM LIGHT.

25. Vitamin D is known as the sunshine vitamin.

26. Rickets is a condition found in children, where a lack of vitamin D and calcium in the diet cause the bone to soften.

27. The water soluble vitamins are Vitamin B and C.

28. The fat soluble vitamins are vitamin vitamin A and D.

29. Scurvy is caused by a lack of vitamin C.

30. Blanching means immersing fruits or vegetables in boiling water for a few minutes and then cooling them rapidly. Blanching stops enzyme activity and helps to retain vitamins.

31. Free radicals are substances which are found inside the body and will attack healthy cells, which can cause heart disease or cancer.

32. Osteoporosis is a condition in adults where a loss of calcium from the bones makes them weak and more likely to break.

33. The mineral iron is needed for healthy red blood which transports oxygen around the body.

34. A lack of iron is called iron deficiency anaemia.

35. We need water for hydration, body functions, production of sweat and urine.

36. A healthy diet is one which is low in fat, salt and sugar, and high in fibre which meets the current dietary guidelines.

37. The Eat well guide is based on the proportions needed in our diet of the main5 food groups.

38. A portion size is the amount of food required to be eaten in one sitting.

39. Processed foods are foods that have been manufactured and altered to make a product.

40. Energy dense foods are those which contain a high number of calories per gram e.g. biscuits, chocolate, crisps.

41. There are three types of vegetarians, lacto vegetarians, lacto-ovo vegetarians and vegans.

42. Vegans do not eat any food from animal's only plants.

43. Coeliac disease is a sensitivity to gluten.

44. Lactose intolerance means you cannot digest lactose.

45. Kilocalorie (Kcal) is a unit to measure the energy in food.

46. BMR means Basal Metabolic Rate. This is how many kilocalories you need to stay alive for 24 hours.

47. PAL means Physical activity level. This is the measurement of how active you are.

48. BMI means Body Mass Index. This is a measurement of your weight in relation to your height.

49. Diabetes is a condition when the body's sugar levels cannot be controlled properly.

50. Gelatinisation is the process when moist heat is applied to starch grains, which swell and increase in size and then break open releasing amylose which causes the mixture to thicken. This happens at about boiling point. When making a white sauce it is important to keep stirring to prevent lumps forming.

French

Verbs

1. What are the ER verb endings in the present tense?

E, ES, E, ONS, EZ, ENT

2. What are the IR verb endings in the present tense?

IS, IS, IT, ISSONS, ISSEZ, ISSENT

3. What are the RE verb endings in the present tense?

S, S, NOTHING, ONS, EZ, ENT

4. How do you form the past tense?

PP + AV + PP (Personal Pronoun + Auxiliary Verb + Past Participle)

5. What are the two auxiliary verbs?

Avoir (to have) and être (to be)

6. Conjugate the verb avoir in the present tense.

J'ai / tu as / il a / elle a / nous avons / vous avez / ils vont / elles vont

7. Conjugate the verb être in the present tense.

Je suis / tu es / il est / elle est / nous sommes / vous êtes / ils sont / elles sont

8. Which verbs use etre as the auxiliary verb?

MRS VAN DER TRAMP – key verbs are rester (to stay) aller (to go) arriver (to arrive) sortir (to go out) partir (to leave)

8. How do you form the immediate future tense?

Present tense of aller + an infinitive (eg. Je vais manger / nous allons faire)

9. Conjugate the verb aller in the present tense.

Je vais / tu vas / il va / elle va / nous allons / vous allez / ils vont / elles vont

10. How do you form the simple future tense?

Its endings are *-ai, -as, -a, -ons, -ez, -ont*.

The stem of the verb in the future tense is the infinitive for *-er* and *-ir* verbs.

Il adoptera un enfant. He will adopt a child.

For *-re* verbs, it is the infinitive without the final *-e*: *j'attendrai* (I will wait).

Question Words

11. How do you say what?
Que / qu'est-ce que

12. How do you say where?
Où

13. How do you say when?
Quand

14. How do you say how?
Comment

15. How do you say who?
Qui

16. How do you say why?
Pourquoi

Possessive Adjectives

17. How do you say my?
mon (masculine) ma (feminine) mes (plural)

18. How do you say your?
ton (masculine) ta (feminine) tes (plural) – in the ***tu*** form
votre (singular) vos (plural) – in the ***vous*** form

19. How do you say his / hers?
son (masculine) sa (feminine) ses (plural)
Remember – it is not the gender of the person that dictates which one you use but the gender of the ***noun***.

20. How do you say our?
notre (singular) nos (plural)

Opinions

21. How do you say I like?

J’aime

22. How do you say I don’t like?

Je n’aime pas

23. How do you say I love?

J’adore

24. How do you say I hate?

Je déteste

25. How do you say I would like?

Je voudrais / J’aimerais

26. How do you say I liked?

J’ai aimé

27. How do you say I didn’t like?

Je n’ai pas aimé

28. How do you say I loved?

J’ai adore

29. How do you say I hated?

J’ai détesté

30. How do you say I prefer?

Je préfère

31. How do you say it is / it's?

C'est

32. How do you say it was?

C'était

33. How do you say it will be?

Ce sera

34. How do you say because?

Car / parce que

35. How do you say but / however?

mais / cependant

Adjectives

36. What is adejectival agreement?

Adjectives have different endings depending on whether they describe masculine, feminine, singular or plural nouns.

37. How do you make adjectives agree?

Add *-e* if the noun is feminine (unless the adjective already ends in an *-e*).

Add *-s* if the noun is masculine plural.

Add *-es* if the noun is feminine plural.

38. Where does the adjective go in a sentence?

In French, most adjectives are placed after the noun they describe.

39. What sort of adjectives go *before* the noun they describe?

B for beauty: beau (beautiful), joli (pretty)
A for age: jeune (young), vieux (old), nouveau (new)
G for goodness: bon (good), meilleur (better), mauvais (bad), gentil (kind)
S for size: petit (small), haut (high), gros (fat)

40. Some adjectives do not follow the usual pattern. Study the box below.

English translation	Masculine singular	Masc. sing. before a vowel or an 'h'	Feminine singular	Masculine plural	Feminine plural
new	*nouveau*	*nouvel*	*nouvelle*	*nouveaux*	*nouvelles*
beautiful	*beau*	*bel*	*belle*	*beaux*	*belles*
old	*vieux*	*vieil*	*vieille*	*vieux*	*vieilles*
good	*bon*		*bonne*	*bons*	*bonnes*
nice	*sympa*		*sympa*	*sympas*	*sympas*
long	*long*		*longue*	*longs*	*longues*
generous	*généreux*		*généreuse*	*généreux*	*généreuses*
personal	*personnel*		*personnelle*	*personnels*	*personnelles*

Negatives

41. How do you construct a negative phrase?

To express a negative idea, you can use a range of negative phrases. They all work in the same way: the negative structure goes around the verb.

42. How do you say not?

ne …(verb) pas

43. How do you say never?

ne …(verb) jamais

44. How do you say nothing?

ne …(verb) rien

45. How do you say no more / no longer?

ne …(verb) plus

46. How do you say only?

ne …(verb) que

47. How do you say not?

ne …(verb) pas

48. How do you say nobody / no one?

ne …(verb) personne

49. How do you say neither … nor?

ne …(verb) ni … ni

50. **When do negative words stay together and not go around the verb?**

If the verb is in the infinitive, the negative

e.g. Il est important de ne plus fumer. (It's important not to smoke any more).

Geography

Tectonic Hazards

1. Which plate boundary is the oceanic plate subducted?

Destructive

2. The plate boundary were two oceanic crust diverge (separate) is called what

Constructive

3. How deep was the focus in Nepal earthquake of 2015?

15km

4. What was the Richter scale of the earthquake in Chile 2010?

8.8

5. During Nepal how many people were killed on Mount Everest due to an avalanche?

19

6. Which Chilean city had a fire at a chemical plant?

Santiago

7. What was the economic cost of the Nepal earthquake 2015?

$5 billion

8. What would you not expect to see on a LIC earthquake-proof building?

Computer-weight on top of the building

9. How can you monitor a volcano?

Temperature, gas levels, shape deformation

10. How can you plan for an earthquake?

Evacuation drills, planning of where we build

Weather Hazards

11. At the equator what is the warm air doing?

Rising

12. On the equator what type of air pressure is there?

low

13. What ocean conditions are needed for a tropical storm?

70m water depth, 26.5+ surface temperature

14. How wide can tropical storms be?

Up to 300 miles across

15. The calm centre of a tropical storm is called what?

Eye

16. How high were the storm surges at Tacloban?

5m

17. How many fishing boats were destroyed in Tacloban after Typhoon Haiyan?

30,000

18. What was the speed of some of the strongest gusts?

195 mph

19. What caused the Cockermouth flood?

Wet summer, saturated soil, steep slopes, urbanisation, lack of dredging, area of low pressure that got 'stuck'

20. In the Cockermouth floods how many bridges were destroyed?

4

21. What was the average household damage cost?

£28,000

22. What was the cost of the Cockermouth Flood Action Plan?

£4.4 million

Climate Change

23. What natural cause of climate change?

Volcanic activity, solar activity, orbital changes

24. What are the human cause of climate change?

Increased use of transport, increased industry development, population growth

25. Name the three main greenhouse gases and their source.

CO2 – cars, deforestation, burning fossil fuels. Methane – livestock, decaying matter. Nitrous oxide – fertilizer, aviation

26. To mitigate climate change means to reduce, give examples?

Afforestation, alternative energy, international agreement, carbon capture & storage

27. The alternative to mitigation is adapting to climate change. What examples have your learned?

Managing water supply, artificial glaciers, coastal defences

Tropical Rainforests

28. Which word describes organisms which break down plant and animal material and return nutrients to soil?

Decomposers

29. Which economic opportunities are causing deforestation in Malaysia??

Bakun Dam, mineral extraction, commercial farming, logging

30. Why should TRF be protected?

25% medicine, 20% world's fresh water, 28% world's oxygen, 60% biodiversity, indigenous people

31. How can TRF be managed sustainably?

Selective logging & replanting, conservation & education, ecotourism, international agreements (FSC)

Hot Deserts

32. Beyond which degrees north and south will you not find hot deserts?

30°

33. What causes the climatic causes in hot deserts?

Falling air, high pressure, proximity to equator

34. Which cities benefit from the Indira Ghandi Canal?

Jodhpur, Jaisalmer

35. What opportunities in the Thar Desert?

Mineral extraction, tourism, energy, commercial farming

36. What are the challenges of hot deserts?

Extreme temperature, water shortages, accessibility

37. What are the causes of desertification?

Over-cultivation, population growth, over-grazing, climate change

38. How can desertification be reduced?

Water & soil management, national parks, afforestation, appropriate technology

Coastal Landscapes

39. Which wave has a stronger swash which causes deposition?

Constructive

40. Name types of coastal weathering.

Wetting/drying, salt weathering, freeze thaw, biological

41. Name types of coastal mass movement.

Rockfall, landslide, mudflow, slumping, soil creep

42. What process creates spits and bars?

Long shore drift

43. Name hard engineering at Hunstanton?

Groynes, gabions, sea walls

44. Name soft engineering at Hunstanton?

Dune regeneration, dune fencing, beach nourishment

River Landscapes

45. How can river load be transported?

Saltation, traction, suspension, solution?

46. Name erosional features in the upper course

V-shaped valley, interlocking spurs, waterfalls & gorges

47. Name river erosion & depositional landforms in the middle course?

Meanders, oxbow lakes

48. Name depositional landforms I the lower course?

Floodplains, levees, estuaries

49. What factors the lag-time of a hydrograph?

Geology, gradient, saturation of soil, urbanisation, deforestation, afforestation

50. What methods have been used to prevent flooding at Cockermouth?

Dredging, self-raising barrier, flood gates at Market Street, planting of trees

Bonus: - Name your PHYSICAL geography topics and case studies

Section A - The challenge of Natural Hazards

Tectonic Hazards	**Nepal/Chile**
Weather Hazards	**Typhoon Haiyan, Philippines Cockermouth**
Climate change	

Section B- The Living World

Ecosystems	**UK pond ecosystem**
Tropical Rainforest	**Malaysia**
Hot Deserts	**Thar, India**

Section C – Physical Landscapes in the UK

Coastal Landscapes	**Dorset Landforms**	**Hunstanton coastal management**
River Landscapes	**River Tees landforms**	**Cockermouth Flood Action Plan**

German

Cases

1. What or where is the nominative case?

Subject- performing the verb, hence before the verb.

2. What or where is the accusative case?

Object – the person or thing the verb is performed on, hence after the verb.

3. What or where is the dative case?

Indirect object of a sentence. It answers the question: To or for whom?

Articles (the/ a/ no)

4. How many genders exist in German? What are they?

Three. Masculine, feminine, neuter.

5. What are the 3 definite articles (the) in the nominative (subject- performing the verb)?

Der (masculine), die (feminine), das (neuter)

6. What are the 3 indefinite articles (a) in the nominative (subject- performing the verb)?

ein (masculine), eine (feminine), ein (neuter)

7. What are the 3 negative articles (no) in the nominative (subject- performing the verb)?

kein (masculine), keine (feminine), kein (neuter)

8. What are the 3 definite articles (the) in the accusative (object- the verb is performed on)?

Den (masculine), die (feminine), das (neuter)

9. What are the 3 indefinite articles (a) in the accusative (object- the verb is performed on)?

einen (masculine), eine (feminine), ein (neuter)

10. What are the 3 negative articles (no) in the accusative (object- the verb is performed on)?

keinen (masculine), keine (feminine), kein (neuter)

11. What are the 3 definite articles (the) in the dative (after prepositions such as 'mit'- with)?

Dem (masculine), der (feminine), dem (neuter)

12. What are the 3 indefinite articles (a) in the dative (after prepositions such as 'mit'- with)?

einem (masculine), einer (feminine), einem (neuter)

13. What are the 3 negative articles (no) in the dative (after prepositions such as 'mit' - with)?

keinem (masculine), keiner (feminine), keinem (neuter)

Adjective Endings

14. What are the adjective endings after der/die/das and plural die in the nominative?

der –e (masc.) die –e (fem.) das –e (neut.) die –en (pl.)

Der alte Mann, die grosse Frau, das kleine Kind und die lauten Hunde gehen spazieren.

15. What are the adjective endings after den/die/das and plural die in the accusative?

den –en (masc.) die –e (fem.) das –e (neut.) die –en (pl.)

Ich mag den alten Mann, die grosse Frau, das kleine Kind und die lauten Hunde.

16. What are the adjective endings after dem/der/dem and plural die in the dative?

dem –en (masc.) der –en (fem.) dem –en (neut.) den –en (pl.)

Ich treffe mich mit dem alten Mann, der grossen Frau, dem kleinen Kind und den lauten Hunden.

17. What are the adjective endings after ein/eine/ein and plural die in the nominative?

ein –er (masc.) eine –e (fem.) ein –es (neut.) / –e (pl.)

Ein alter Mann, eine grosse Frau, ein kleines Kind und laute Hunde gehen spazieren.

18. What are the adjective endings after den/die/das and plural die in the accusative?

einen –en (masc.) eine –e (fem.) ein –es (neut.) / –e (pl.)

Ich mag einen alten Mann, eine grosse Frau, ein kleines Kind und laute Hunde.

19. What are the adjective endings after dem/der/dem and plural die in the dative?

einem –en (masc.) einer –en (fem.) einem –en (neut.) / –en (pl.)

Ich treffe mich mit einem alten Mann, einer grossen Frau, einem kleinen Kind und lauten Hunden.

Possessive Adjectives

20. What are the singular possessive adjectives for 'my', 'your', 'his' and 'her'?

mein(e) – my dein(e) – your sein(e) – his ihr(e) – her

21. What are the plural possessive adjectives for 'our', 'your', and 'their'?

unser(e) – our euer/eure – your ihr(e) – their

Prepositions

22. Which prepositions are always followed by the dative case?

ab (from-time)nach (after,to) aus (from, out of) seit (since,for-period of time)
bei (at the house of, with) gegenüber (opposite) von (from, by, of)
mit (with, by-transport) zu (to)

23. Which prepositions are always followed by the accusative case?

bis (until) gegen (against) durch (through) ohne (without)
für (for) um (around)

24. Which prepositions are followed by the dative or accusative case?

Any preopsitions that indicate a position, such as:
an (at, on-vertically)) über (over) auf (on-horizontally) unter (under)
hinter (behind) vor (in front of) in (in)
zwischen (in between) neben (next to)

25. How do we know with the prepositions from above, if we use dative or accusative?

If there is movement involved, you must use the accusative (e.g. in becomes into, over becomes across)

Personal Pronouns

26. What are the singular personal pronouns?

I = ich you (1 person) = du he = er she = sie it = es

27. What are the plural personal pronouns?

we = wir you (more than 1) = ihr they = sie

28. How do you express a general 'you'? For example: You learn a lot in school.

Man + third person singular ending –t Man lernt viel in der Schule.

29. What is the pronoun for the formal you, singular and plural?

Sie- with a capital S, even if it is in the middle of a sentence. Verb ending –en.

Verbs and verb endings

30. What are the verb endings for all the pronouns?

ich – e du –st er/sie/es/man –t wir –en ihr –t
sie/Sie –en

31. Do verb endings change in irregular verbs? What exactly changes?

No, verb endings remain the same in regular or irregular verbs. Irregularities will only be in the second and third person singular (du, er, sie, es, man). Mostly the first vowel will change.

32. Give the irregular form of laufen (to run), essen (eat) and lesen (read) with 'er' - he.

ich laufe but er läuft ich esse but er isst ich lese but er liest.

33. Conjugate the verb 'haben' – to have.

ich habe du hast er/sie/es/man hat wir haben ihr habt sie/Sie haben

34. Conjugate the verb 'sein' – to be.

ich bin du bist er/sie/es/man ist wir sind ihr seidsie/Sie sind

35. In what tense do we need to use 'haben' or 'sein' as auxiliary verbs?

In the perfect tense (past) . Mostly 'haben' and 'sein' for verbs of movement (go, fly, drive) and or verbs that indicate a change of state or position (wake up, get up, fall down, get in)

Modal verbs

36. These verbs normally have to be used with another verb. Where does this other verb go
and what form does it have?

To the end of the clause in the infinitive (-en ending). Example: Ich muss Sport treiben.

37. Conjugate the modal verb 'müssen' – to have to/ to must.

ich muss du musst er/sie/es/man muss wir müssen ihr müsst sie/Sie müssen

38. Conjugate the modal verb 'mögen' – to like.

ich mag du magst er/sie/es/man mag wir mögen ihr mögt sie/Sie mögen

39. Conjugate the modal verb 'können' – to can/ to be able to.

ich kann du kanns er/sie/es/man kann wir können ihr könnt sie/Sie können

40. Conjugate the modal verb 'dürfen' – to may/ to be allowed to.

ich darf du darfst er/sie/es/man darf wir dürfen ihr dürft sie/Sie dürfen

Separable verbs

41. What is a separable verb?

A verb that is in 2 parts: a normal verb and a separable prefix.
For example: einkaufen – to shop Ich kaufe ein.

42. How do you put these separable verbs into the 'she' form? abwaschen (to wash up), aufstehen (to get up), ausgeben (to spend), aufmachen (to open), fernsehen (to watch TV)

ich wasche ab. Ich stehe auf. Ich gebe aus. Ich mache auf. Ich sehe fern.

43. How do you put a separable verb into the perfect tense?

You need to put the 'ge' between the prefix and the verb, e.g. Ich habe fengesehen.

The future tense

44. How do you contruct the future tense in German?

You need to use a form of werden and put the other verb to the end in the infinitive form, e.g. Wir werden ins Kino gehen. – We will go to the cinema.

45. Conjugate 'werden' (to will)

Ich werde du wirst er/sie/es/man wird wir werden ihr werdet sie/Sie werden

The perfect tense

46. How do you form the perfect tense?

You need a form of 'haben' or 'sein' as the auxiliary verb. This verb needs to have the correct ending according to the pronoun. Then you need the past participle, which is often constructed by putting 'ge' in front of the normal verb and a t-ending for regular verbs and en-ending for irregular verbs. The past participle goes to the end of the sentence

Example: Er hat Hausaufgaben gemacht. Sie ist in die Stadt gefahren.

Word Order

47. Where does the verb go in a normal sentence?

The verb is always the second idea in a sentence. That does not mean that it is the second word, as you can't separate a phrase like 'In my room' – In meinem Zimmer.

Example: In meinem Zimmer lese ich die Zeitung. (In my room I read the newspaper.)

48. Where does the verb go in a subordinate clause (a clause that does not make sense on its own), when you use weil (because), dass (that), da (as), obwohl (although), als (when-past) or wenn (when)?

The verb goes to the end.

Example: Ich mag meine Katze, weil sie niedlich ist.

49. Where does the verb go when you use 'deshalb' or 'jedoch'?

The verb comes first.

Example. Meine Katze ist niedlich, deshalb mag ich sie.

50. What is the time-manner-place rule? This rule is <u>always</u> assessed in the translation in a writing exam. You need to be aware of this!

When you mention when (time), how (manner) and where (place) you do something, you need to give the time first, then the manner and then the place.

Example: Ich fahre am Wochenende mit dem Auto nach Paris.
Er geht jeden Tag mit seinem Hund im Park spazieren.

Health and Social

1. **What does PIES stand for?**
   Physical, intellectual, emotional, social

2. **What are life stages?**
   The life stages are developmental phases which individuals pass over the course of their lives

3. **Name the life stages.**
   Infancy = 0-2 years. Early Childhood = 3-8 years. Adolescence = 9-18 years.
   Early Adulthood = 19-45 years. Middle Adulthood = 46-65 years.
   Later Adulthood = 65 years+

4. **What is meant by a holistic approach?**
   In a medical setting, holistic refers to addressing the whole person, including their physical, mental, and emotional health, while taking social factors into consideration

5. **What is meant by self-image?**
   Your self-image is a mental picture of yourself, both as a physical body and an individual.

6. **What is meant by self-esteem?**
   Self-esteem is used to describe a person's overall sense of self-worth or personal value. In other words, how much you appreciate and like yourself.

7. **What are inherited conditions?**
   Genes are inherited by children from both their birth parents, genetic inheritance is a physical factor that can have a positive or negative effect on a person's health and well-being.

8. **What is meant by a chronic illness?**
   A chronic illness is an illness that lasts a long time, sometimes a lifetime.

9. **How might a chronic illness impact PIES?**
   Poor growth rate, restricted movement, memory problems, loss of independence, isolation.

10. **What is an acute illness?**
    Acute illnesses start quickly and last a relatively short period of time.

11. **What are the 5 different food groups?**
    Fruit and vegetables / starchy foods / meat, fish and pulses / dairy / oils.

12. Why is fibre an important part of a balanced diet?
It lowers the risk of heart disease and maintains a healthy digestive system.

13. Why do we need vitamins in our diet?
Healthy immune system, skin and eyes.

14. Why do we need protein in our diet?
Growth and repair of tissues

15. What is anaemia caused by?
Reduced number of red blood cells / loss of iron

16. What is the recommended number of calories per day for a women / man?
2000 / 2500

17. How could exercise positively affect PIES?
Healthy weight / improves confidence / improves brain function / encourage social interaction

18. How could a lack of exercise affect PIES?
Obesity, reduced brain performance, poor self-concept, fewer opportunities for social interaction.

19. How much moderate exercise is recommended for adults?
30 minutes five times a week.

20. What is personal hygiene?
This is the cleanliness of a person's body

21. Give examples of good personal hygiene?
Handwashing, bathing, using a tissue when sneezing, brushing teeth.

22. What could negative effects of poor personal hygiene be?
Catching and spreading diseases, body odour, and tooth decay, isolation, being bullied.

23. Alcohol is a lifestyle choice, how many units should not be exceeded per week?
14 units

24. What is binge drinking?
Drinking over the maximum daily amount / drinking excessively.

25. What are possible negative effects of excessive alcohol consumption (PIES)?
Alcoholism, cancer of the mouth, poor judgement, relationship breakdown.

26. What is nicotine?
It is an addictive drug found in cigarettes.

27. Why might people smoke?
To relive stress, peer pressure, to overcome other addictions.

28. What negative impact can smoking have on PIES?
Increases risk of diseases such as cancer / CHD, can cause irritation if unable to smoke.

29. What is passive smoking?
Breathing in the smoke from other peoples cigarettes.

30. What are prescription drugs?
Drugs recommended by a doctor or a practice nurse.

31. How might they be misused?
They might be taken for non-medical reasons, drugs might be taken by someone that they were not prescribed for.

32. What are stimulants, give examples?
Drugs that heighten mood / energy. Nicotine, cocaine.

33. What are depressants, give examples?
Drugs that reduce / calm mood. Cannabis, alcohol, solvents.

34. What could the effects be (short and long term)?
Calm and relaxed, sleep problems, anxiety.

35. How might close friendships benefit health and well-being?
Give feelings of security, promote self-concept.

36. What could the impact of relationship breakdowns be?
Insecurity, poor lifestyle choices and loss of confidence.

37. How does the body respond to stress (PIES)?
Increased heart rate, tension in muscles, and loss of appetite, ulcers and heart disease.

38. How could economic factors affect PIES development (positive / negative)?
Good housing, better activity options, feeling of security, low income could lead to mental health issues.

39. What are negative environmental factors and their effect on PIES?
Pollution is a negative environmental factor which can lead to poor health, allergies, lung damage, and poor memory.

40. What could be positive about living in a town or city on PIES development?
Better transport links, close to facilities, close to health care services.

41. What could be positive about living in a rural location on PIES development?
Fresh air, sense of community.

42. What is the definition of expected and unexpected life events?
Life events that are predicted to happen in most people's lives. Event that are not planned for in life e.g. divorce.

43. What is meant by BMI and what does it measure?
Body mass index indicates proportion of body fat using height and weight.

44. What does Peak Flow measure?
The speed at which a person can expel air from their lungs.

45. What could high blood pressure indicate?
Risk of heart disease or at risk of a stroke.

46. How could low BMI impact health?
Low BMI could suggest a weak immune system or anaemia.

47. What support could be given to support quitting smoking?
E cigarettes, nicotine patches, sup0port from family and friends

48. What are the 7 care values?
Empowerment, respect, dignity, communication, anti-discriminatory practice, confidentiality, safeguarding.

49. What is positive communication?
Effective clear tone, eye contact, positive body language.

50. What are SMART targets?
Specific, measurable, achievable, realistic, time.

History

Anglo Saxon Society

1. **What was the Kings's chief official in each county called?**
   Sheriff (Shire-Reeve)

2. **What was the Anglo-Saxon word for 'wise men'?**
   Witan

3. **What was the name given to the rank of nobles below the earls?**
   Thegn

4. **What was a tithing?**
   A group of ten men over the age of twelve responsible for keeping each other following the laws.

5. **What name is given to free villagers?**
   Ceorls

6. **Name two of the largest towns in England**
   London/York/Southampton/Winchester

7. **What was a mint?**
   Where coins were made overseen by a royal official

8. **Name two items imported from overseas**
   metal/glass/wine/gems/spices

9. **What were hundreds?**
   Sub-divisions of shires which contained around twelve villages

10. **Where did Trial by Ordeal take place?**
    Church

11. **Why didn't Edward have an heir?**
    He didn't have a son.

12. **In what year did the promise between William and Edward take place?**
    1051

13. **Why do we have two versions of the Embassy?**

Both sides tell their own version to further their claims.

14. What claim did Edgar Aetheling have to the throne?
Closest blood relative

15. What claim did Harald Hardrada have?
He was a descendent of Cnut and Tostig had persuaded him the throne could be his.

16. Which battle happened first?
Gate Fulford

17. Who was defeated at Stamford Bridge?
Harald Hardrada

18. What delayed William's invasion?
The wind

19. What forces did William have?
Foot Soldiers, Cavalry and Archers.

20. Who was at the top of Senlac Hill?
Harold Godwin

21. Who did the Witan first name as King after Harold's death?
Edgar Aethling

22. Where did William receive the submission of the earls?
Berkhamstead (and possibly also Barking for Earls Edwin and Morcar)

23. Name the three Marcher Earldoms?
Hereford, Shrewsbury and Chester

24. In what year was Edwin and Morcar's revolt?
1068

25. The death of who contributed to the Harrying of the North?
Robert Comyn

26. Name three features of a motte and bailey castle that made them difficult to attack.
The keep, the motte, wooden palisades, access to the keep, the ditch, the gatehouse

27. Who escaped back to Scotland after the revolt of Edwin and Morcar?
Edgar (Maerleswin and Gospatric also escaped with him)

28. What did Harrying of the North involve?

Burning crops in the fields, destroying seed crops and killing livestock to make life impossible in the region

29. Where did Hereward the Wake's rebellion happen?

Ely

30. Name three ways in which land was transferred from Anglo-Saxons to Normans.

By forfeit, through the creation of new earldoms and other blocks of territory, and through illegal land grabs

31. Name the three earls who plotted against William in 1075

Ralph de Gael, Roger de Breteuil and Waltheof

32. What happened to each of the three earls after their revolt was defeated?

Ralph de Gael escaped the Brittany, Roger de Breteuil was put in prison for life by William, and Waltheof fled abroad.

33. Who was in charge of England at the start of the Revolt of the earls?

Archbishop Lanfranc – as William's regent

34. 'Land held by a vassal in return for service to a lord'. Which key term is that the definition for?

A fief

35. What does 'hierarchy' mean?

Society being organised into levels of importance

36. How many days a year was knight service for?

40

37. What was a relief?

A payment that a Norman heir had to make to the king when they inherited land

38. Stigand was accused of pluralism and simony – which one of these was about appointing people to top Church jobs in exchange for money?

Simony

39. How did Lanfranc reform the church?

Churches rebuilt, abuses ended, Normans given top jobs.

40. What was the demesne?

The land that the king or a tenant kept for his own use rather than granting it as a fief to an under-tenant

41. Describe two features of a Norman sheriff

The representative of the king, the leader of the shire, oversaw the shire court, enforce the law, responsible for the fyrd

42. In what year did William order the Domesday Book to be produced?

1085 (first draft available in 1086)

43. What three main functions did the Domesday Book have?

Military, Financial and Legitimacy

44. What language replaced English for written documents in Norman England?

Latin

45. What tax did William retain from Edward?

Geld Tax

46. How did William restrict the Earls?

Made earldoms smaller and reduced the number of them.

47. Outline three characteristics of William I's personality that help explain the success of the Norman Conquest

He never gave up, he was brutal, he used excessive for to stop revolts, and he demanded loyalty

48. What relation was Robert Curthose to Odo?

Odo was Robert Curthose's uncle. Odo was William's half brother. Robert Curthose was William I's son.

49. Where did Robert battle his brother?

Gerberoy in France.

50. What three styles of question are there for this exam?

'Describe two features, explain why, and how far do you agree?

Maths

Higher

Maths

Foundation

Music

1. What does PLASA stand for?
Professional Lighting and Sound Association

2. What does BECTU stand for?
Broadcasting Entertainment Cinematograph and Theatre Union

3. What does MCPS stand for?
Mechanical Copyright Protection Society

4. What does PRS stand for?
Performing Rights Society

5. What does MU stand for?
Musician's Union

6. What does PPL stand for?
Phonographic Performance Limited

7. What does A&R stand for?
Artists & Repertoire

8. What does AR stand for?
Artist Representation

9. Name the Trade Union beginning with E that supports professional musicians and practitioners.
Equity

10. What does MPG stand for?
Music Producer's Guild

11. Who do Music Publishers may royalties to?
Songwriters & Composers

12. What does APRS stand for?
Association of Professional Recording Services

13. How much percentage of an artist's royalties does their manager gain?

20%

14. Give an example of a large venue.
Wembley Stadium, main stage at a large scale festival (Reading, Leeds etc.), O2 Arena.

15. Give an example of a medium-sized venue.
Local auditorium / theatre.

16. Give an example of a small venue.

Local pub, hotel function room.

17. Which job role is responsible for controlling the sound during a live event?
Sound Technician

18. Which job role is responsible for tuning and maintaining guitars in a recording studio?
Instrument Technician

19. Which job role is responsible for scouting out new talent and signing them to record labels?
A&R (Artists & Repertoire)

20. Which job role is responsible for creating and developing new music software?
Programmer

21. Which job role is responsible for managing bookings at a recording studio?
Studio Manager

22. Which job role is responsible for setting up audio equipment in a recording studio?
Sound Engineer

23. Which job role is responsible for creating original music for clients such as film and TV directors?
Composer

24. Which job role is responsible for selling physical music products such as CDs and vinyls?
Retailer

25. Which job role is responsible for transporting equipment for artists? (for example if on tour)

Roadie

26. Which job role is responsible for the health and safety of staff, performers, and the audience at a venue?
Venue Manager

27. Which job role is responsible for supporting an artist on a personal level and contacting local studios to book recording sessions and negotiating prices?
Artist Manager

28. Which job role is responsible for putting on shows for artists and liaising with venue managers to book them?
Promoter

29. What does HMRC stand for?
Her Majesty's Revenue & Customs

30. Give an advantage of permanent working.
Secure and regular income

31. Give an advantage of casual working.
Flexibility over hours

32. Give a disadvantage of being self-employed.
Responsible for own tax declaration, reliable upon offers for work.

33. Give a disadvantage of being employed by a company (either full or part time).
Less freedom over working hours and holiday.

34. Give an advantage of being employed by a company (either full or part time).
Less time spent working out finances, more time to spend on other things.

35. Give a disadvantage of permanent working.
Rigid hours and restricted time you can take off.

36. Give a disadvantage of casual working.
Income will be sporadic and you may have to adjust your lifestyle as income varies.

37. Which job role is the responsibility of moving physical products to retailers? They also offer online sales of physical products.
Distributers

38. Which job role is responsible for playing a mixing different music at venues?
DJ

39. Which job role is responsible for interviewing artists, playing music, and discussing current trends?
Broadcaster

40. Which job role is responsible for attending artists' shows and writing reviews about them?
Music Journalist

41. Which job role is responsible for bringing their instrument(s) to a recording session, following instructions from the producer and turning up on time?
Session Musician

42. Which job role is responsible for practicing their instrument and/or singing regularly to keep their skills to a high standard?
Musician

43. Give an example of a copyright protection agency.
MCPS / PRS / PPL

44. Give an example of a union.
MU / Equity / MPG

45. Give an advantage of performing a large venue.
Good reputation, high levels of exposure.

46. Give an advantage of performing at a small venue.
Easy access for locals, cheaper to hire, intimate setting.

47. Give a disadvantage of performing at a large venue.
Costs more to hire, usually more difficult to access for specific audiences, costs more for guests.

48. Give a disadvantage of performing at a small venue.
Less exposure, lower reputation.

49. What is the term given to the overall sales strategy of a product?
Marketing

50. What P is part of this overall sales strategy?
Promotion

PE

1. **How could you avoid injury during a game?**
   Wear protective clothing.

2. **What are fast twitch fibres?**
   Type 11a

3. **What are ultra-fast twitch fibres called?**
   Type 11x

4. **What are slow twitch fibres called.**
   Type 1

5. **What word would you use to describe fast twitch fibres?**
   Explosive

6. **Why do you warm up?**
   Prevent injury

7. **Why do you do a cool down?**
   To prepare for recovery.

8. **What is adduction?**
   Moving a limb away from the mid line of the body.

9. **Does a straddle jump show abduction?**
   Yes

10. **What is the test for speed?**
    30m sprint

11. **What is the antagonistic pair of the bicep?**
    Tricep

12. **Give an example of a long bone.**
    Femur

13. **What macro nutrient repairs muscle tissue?**
    Protein

14. What three macro nutrients provide lots of energy for the body?

Fats, Carbohydrates and Protein.

15. How many chambers are in the heart?

4

16. What is the dividing wall in the heart called?

Septum

17. A function of the skeleton is?

Protection, Muscle attachment, mineral storage, blood production, joints to provide movement.

18. What does the cranium protect?

Brain

19. What do the ribs protect?

Heart and lungs

20. The Karvonen formula is a method of calculating your target zone. How would you calculate an aerobic training zone for a 16 year old?

220-age. 220 – 16 =204. 0.6 x 204.

21. How would you test for leg power?

Vertical jump test.

22. Plyometric training improves what?

Power.

23. What is a big disadvantage of plyometric training?

Injury.

24. Name the part of a lever that is a fixed pivot point?

Fulcrum

25. Name the lever that has the Load in the centre?

Second class lever

26. Give an obvious example of a second class lever.

Bicep curl

27. Name the lever that has the effort in the centre?
Third class lever

28. Give an obvious example of a Third class lever.
Taking off at long jump

29. Name the lever that has the fulcrum in the centre?
First class lever

30. Give an obvious example of a First class lever.
Nodding your head – looking up or down with head movement.

31. The amount of time it takes you to respond to a stimulus is the definition of what component of fitness?
Reaction time

32. Name the fitness test that measures reaction time.
Ruler drop test.

33. Which soft tissue injury occurs on the outside of the elbow?
Tennis elbow

34. What does the R stand for in PARQ?
Readiness

35. **Name the section of the vertebral column that has the most bones within it (12)?**
Thoracic

36. How many bones are there within the vertebral column?
33

37. Name the short bone in your wrist/hand?
Carpals

38. What attribute does a short bone have?
Strength

39. What attaches bone to bone?
Ligaments

40. What attached muscle to bone?
Tendons

41. Where are blood cells produced?
Bone Marrow

42. When the angle at the joint decreases, which type of movement occurs?
Flexion

43. The knee joint is which joint classification?
Hinge

44. The neck joint is what joint classification?
Pivot

45. The ribs are an example of which bone classification?
Flat

46. The Patella is an example of which bone classification?
Irregular

47. The wrist joint is what joint classification?
Condyloid

48. Which component of blood fights infection?
White blood cells

49. Which blood vessel pumps blood out of the heart and to the rest of the body?
Aorta

50. Which blood vessels carries blood at low blood pressure?
Veins

Physics

Paper 1

Energy

1. **Write the equation used to calculate the kinetic energy of a moving object.**
   Kinetic energy = 0.5 × mass × (speed)^2 or $E_K = \frac{1}{2} m v^2$

2. **Write the equation used to calculate the amount of elastic potential energy stored in a stretched spring.**
   Elastic potential energy =
   0.5 × spring constant × (extension)^2 or
   $$E_e = \frac{1}{2} k e^2$$

3. **What is the unit for kinetic energy, gravitational potential energy and elastic potential energy?**
   Joules, J

4. **Write the equation used to calculate the amount of gravitational potential energy gained by an object raised above ground level.**
   g.p.e. =
   mass × gravitational field strength × height or $E_p = m g h$

5. **What is the rate at which energy is transferred or work is done?**
   Power

6. **Write two equations to calculate power.**
   Power = $\frac{\text{energy transferred}}{\text{time}}$ or P = $\frac{E}{t}$

   And

   Power = $\frac{\text{Work done}}{\text{time}}$ or P = $\frac{W}{t}$

7. **What is the unit for Power?**
   Watts

8. **What can be transferred usefully, stored or dissipated, but cannot be created or destroyed?**
   Energy

9. **Write the equation for calculating the energy efficiency of any energy transfer.**
   Efficiency = $\frac{\text{useful output energy transfer}}{\text{total input energy transfer}}$

   And

   Efficiency = $\frac{\text{useful power output}}{\text{total power input}}$

10. **What are the three main forms of fossil fuels used as energy resources?**
    Coal, oil and (natural) gas

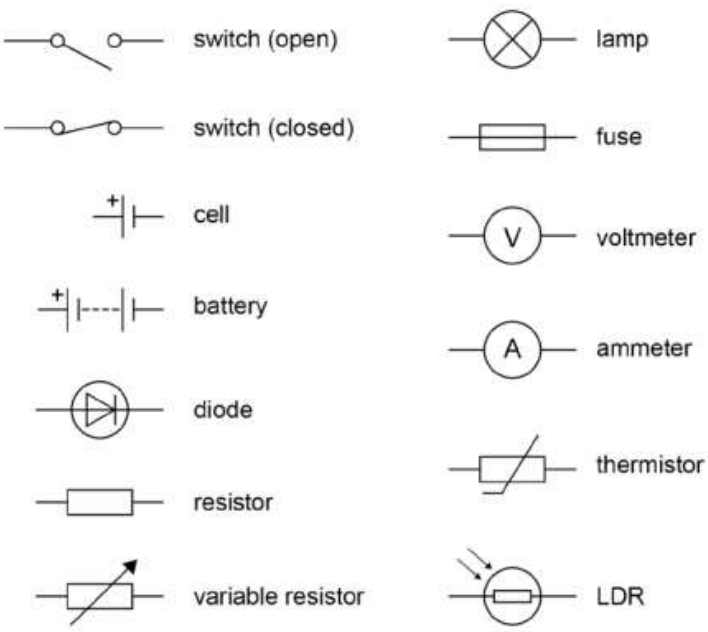
11. **State the three principle uses of energy resources.**
    Transport, electricity generation and heating

12. **Name seven renewable energy resources available for use on Earth.**
    Biofuel, wind, hydro-electricity, geothermal, the tides, the Sun, and water waves

13. **What is a renewable resource?**
    One that can be replenished as it is used

Electricity

14. **State what the following symbols show:**



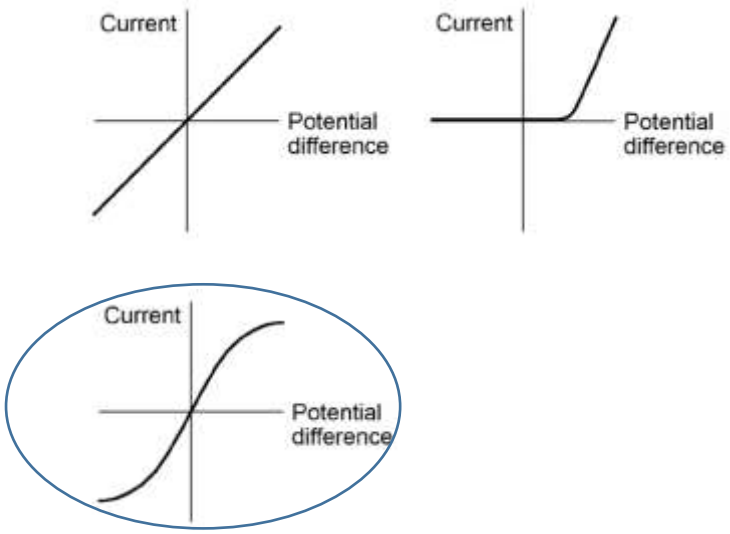
15. Write the equation used to calculate current, potential difference or resistance.

Potential difference = current × resistance or V = I R

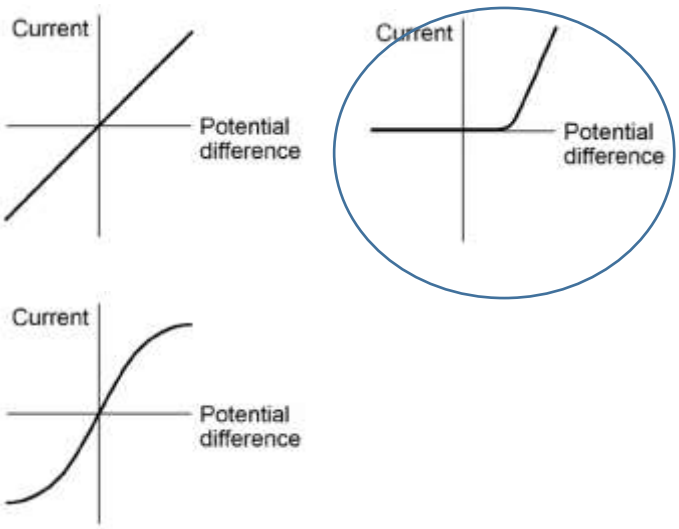
16. What is the unit for resistance?

Ohms, Ω

17. Which of the following graphs shows resistance in a filament lamp?



18. Which of the following graphs shows resistance in a diode?



19. What happens to the resistance of a thermistor as the temperature increases?

It decreases

20. What happens to the resistance of an LDR as the light intensity increases?

It decreases

21. Describe the current in a series circuit.

It is the same through each component.

22. Describe the potential difference in a series circuit.

It is shared between components

23. Describe resistance in a parallel circuit.

It is less than the resistance of the smallest individual resistor

24. Describe domestic mains electricity supply in the UK.

It is ac (alternating current), has a frequency of 50 Hz and is about 230V

25. What colour is the insulation on wires in a plug?

Live wire – brown

Neutral wire – blue

Earth wire – green and yellow stripes

26. Write two equations for calculating power transfer in an electric circuit.

Power = potential difference × current

$P = V I$

Power = $(\text{current})^2 \times \text{resistance}$

$P = I^2 R$

27. What does the amount of energy an appliance transfers depend on?

How long the appliance is switched on for and the power of the appliance

28. What are the two equations for calculating the amount of energy transferred by electrical work?

Energy transferred = power × time

$E = P t$

Energy transferred = charge flow × potential difference

$E = Q\,V$

29. **How is electrical power transferred from power stations to consumers?**
    The national grid

Particle model of matter

30. **What is the equation for calculating density?**
    $\text{density} = \frac{\text{mass}}{\text{volume}}$

    $\rho = \frac{m}{V}$

31. **True or False: changes of state are physical changes?**
    True

32. **What is the total kinetic and potential energy of all particles that make up a system known as?**
    Internal energy

33. **Which three factors affect the increase in temperature of a substance?**
    Its mass, the type of material and the energy input

34. **What is the amount of energy required to raise the temperature of a substance by 1°C known as?**
    Specific heat capacity

35. **What is the energy needed for one Kg of a substance to change state without a change in temperature known as?**
    Specific latent heat

36. **Describe the motion of molecules of a gas.**
    Constant random motion

37. **What happens to the pressure exerted by a gas, held at constant volume, when the temperature is increased?**
    It increases

Atomic Structure

38. **What happens to an atom when it has an outer electron removed (e.g. by ionising radiation)**
    It forms a positive ion

39. What is the name given to the process when radiation is released as an unstable nucleus becomes more stable?

Radioactive decay

40. What is radioactivity measured in?

Bequerels (Bq)

41. What is an alpha particle?

It consists of two neutrons and two protons – a helium nucleus

42. What is a beta particle?

A high speed electron

43. What change takes place in a nucleus when a beta particle is emitted?

A neutron turns into a proton

44. Which electromagnetic radiation can be released from the nucleus of a radioactive sample?

Gamma rays

45. How is an alpha particle represented in nuclear equations?

$^{4}_{2}\mathrm{He}$

46. How is a beta particle represented in nuclear equations?

$^{0}_{-1}\mathrm{e}$

47. What is the time taken for the number of nuclei of an isotope in a sample to halve known as?

Half life

48. What is the presence of radioactive materials on or in other objects known as?

Radioactive contamination

49. What is the process of exposing an object to nuclear radiation without causing it to become radioactive known as?

Irradiation

50. What is the equation for calculating density?

density = $\frac{\text{mass}}{\text{volume}}$

Paper 2

FORCES

1. **A quantity that only has magnitude is a …**
   Scalar

2. **A quantity with magnitude and direction is a …**
   Vector

3. **Write the equation used to calculate the weight if an object.**
   Weight = mass × gravitational field strength
   $W = m\,g$

4. **Write the equation to calculate the force applied to a spring.**
   Force = spring constant × extension
   F = k e

5. **Write the equation to calculate the elastic potential energy of a spring.**
   Elastic potential energy = 0.5 × spring constant × extension²
   Eel = ½ k e²

6. **Write the equation to calculate the moment (turning force) of an object.**
   Moment of a force = force ×distance
   M = F d

7. **Why are levers used?**
   Levers can be used to exert a force that is greater than the effort

8. **Write the equation to calculate the pressure on the surface of an object.**
   $$\text{pressure} = \frac{\text{force normal to a surface}}{\text{area of that surface}}$$
   $$\left[p = \frac{F}{A}\right]$$

9. **Write down the equation to calculate the pressure in a column of liquid.**
   Pressure = height of the column × density of the liquid × gravitational field strength
   p = h ρ g

10. **Write down the equation used to calculate speed.**
    Distance travelled = speed× time

$s = v\,t$

11. On a distance-time graph, if the line is horizontal what is the object doing?
It is stationary.

12. On a distance-time graph, if the line is a straight line sloping upwards, how is the object behaving?
It is travelling at a steady speed.

13. Write down the equation to calculate the acceleration of an object:

$$\text{acceleration} = \frac{\text{change in velocity}}{\text{time taken}}$$

$$\left[a = \frac{\Delta v}{t} \right]$$

14. What does a positive gradient on the velocity-time graph represent?
Acceleration

15. What does the area under the line of a velocity-time graph represent?
The distance travelled

16. Write down the equation to calculate the resultant force of an object.
Resultant force = mass × acceleration
$F = m\,a$

17. The unit of force is the …
Newton, N

18. What is an objects centre of mass?
It is the point where it's mass can be thought of as concentrated.

19. Write down the equation needed to calculate the momentum of an object. (HT)
Momentum= mass× velocity
$p = m\,v$

WAVES

20. What are sound waves?
Vibrations that travel through a medium (Substance)

21. Why can't sound waves travel through a vacuum?
There are no particles to transfer the energy

22. Write down the equation to calculate the period of a wave.

$$\text{period} = \frac{1}{\text{frequency}}$$

$$\left[T = \frac{1}{f} \right]$$

23. Write down the equation used to calculate the speed of a wave.

Wave speed = frequency × wavelength

$v = f \lambda$

24. What do waves transfer?

Energy and information

25. What is a transverse wave?

Transverse waves oscillate perpendicular (90 degrees) to the direction of the energy transfer of the wave. E.g. ripples on the surface of the water or electromagnetic waves

26. What is a longitudinal wave?

Longitudinal waves oscillate parallel to the direction of the energy transfer (same direction). E.g. sound waves.

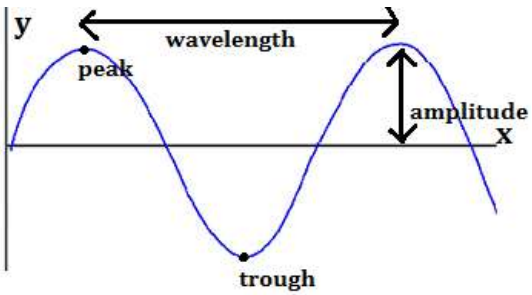
27. What is the frequency of a wave?

The number of waves that pass a point in 1 second.

28. What do mechanical waves need to travel?

A medium

29. Draw and label a wave.



30. The maximum displacement of a point in the wave from its undisturbed position such as the height of the wave crest from the position at rest is called the …

Amplitude

31. The distance from one point on a wave to the same point on the next wave is the …

Wavelength

32. What is the order of the electromagnetic spectrum?

Radio waves, microwaves, infrared radiation, visible light, ultraviolet, x-rays, gamma rays

33. What is infrared radiation used for?
Carrying signals from remote control handsets and inside optical fibres

34. What are microwaves used for?
To carry satellite TV programmes and mobile phone calls.

35. What are x-rays used for?
To make images of internal body parts, and destroying tumours near the surface of the body

36. What are gamma rays used for?
Destroying tumours and sterilising hospital equipment.

MAGNETISM

37. What are the ends of a magnet called?
Poles

38. When magnetism is created in an unmagnetised magnetic material when that material is place in the magnetic field it is called …
Induced magnetism

39. Why is steel used to make permanent magnets?
Steel does not lose its magnetism as easily as iron.

40. A solenoid that has an iron core. It consists of an insulated wire wrapped around a soft iron core.
An electromagnet

41. What are electromagnets used for?
Electromagnets are used in scrapyard cranes, circuit breaker, electric bells and relays

SPACE (TRIPLE ONLY)

42. Which force pulled dust and gas together to form our solar system?
Gravity

43. What is a protostar?
A concentration of gas and dust that becomes hot enough to cause nuclear fusion.

44. Gravitational forces acting inwards balance the forces of nuclear fusion energy in the core acting outwards causing a star to be …

Stable

45. Why do stars eventually become unstable?
They have no more hydrogen nuclei that they can fuse together.

46. What is the life cycle of an average sized star like our sun?
Protostar → main-sequence star → red giant → white dwarf → black dwarf

47. What is the life cycle for stars much more massive than the Sun – life sequence:
Protostar → main-sequence star → red supergiant → supernova → neutron star (or black hole if enough mass).

48. The explosion of a red supergiant after it collapses is called a …
Supernova

49. Distant galaxies moving away from us is evidence that the universe is …
Expanding

50. When wavelengths of light are stretches as distant galaxies are moving away from us this causes …
Red Shift