



BOURNEMOUTH SCHOOL

Year 11

Knowledge Organiser 1

Autumn Term

Name: _____ Master 11

Registration Form: - _____

✓Hard Work

✓Discipline

✓Smart Appearance

✓Respect

Year 11 - Autumn Term 1

Welcome back year 11.

- **Please try and spend time on independent study every evening.**
- **Use different learning strategies for different topics but “Think it, Link it” will help with the breadth of knowledge you will need for the exams.**
- **Involve friends or parents where possible to test your knowledge and understanding.**
- **Start using knowledge organisers if you have not already done so. It is not too late.**
- **Use knowledge organisers to learn the key information for the topics you are currently studying.**
- **Remember that knowledge organisers provide the core knowledge you need, but they are only a starting point.**
- **Supplement the information in your knowledge organisers with your own revision and independent study at home.**
- **Please remember that the mock exams taking place before Christmas are significant and will come around quickly, so it is important to begin your preparation well in advance.**

Your Knowledge Organiser is the best way of learning important subject material and you will be given lots of advice and support as the year goes on.

Mr Robjohns

Director of Learning – Year 10 and 11

What is a knowledge organiser (KO)?

Below is a reminder of how to use your knowledge organiser. There are videos of examples on the school website. Search “Knowledge Organisers”.

The 4 learning strategies

There are 4 strategies that you can use to revise. They are progressively more challenging, so always start with the first in the list:

1. Look Cover Write Check

- I. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- II. **LOOK** carefully at the subject and section of your KO you want to revise and try to remember as much as you can. Remember this should be a ticked section.
- III. Now **COVER** this information so you can't read it.
- IV. **WRITE** out what you can remember word for word in your Homework Learning Journal.
- V. **CHECK** what you have written by comparing it to your KO. Tick each correct word in green pen and correct any errors you have made.
- VI. Repeat this process until you are confident you can remember everything you need.

AIM: You should be able to repeat the information by rote.

2. Self or peer quizzing

- I. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- II. Write out a list of questions you could ask either yourself or a friend about this section of the KO. Write these in your Learning Journal.
- III. If you are working on your own, cover the KO and write a full answer to each question. If you are working with a partner, swap books and copy down their questions and have a go at answering them.
- IV. Now uncover the KO and use a green pen to tick or correct your work.

AIM: You should be able to repeat the information by rote but with a good understanding

3. Playing with words and sentences

- I. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections. You now want to check how well you have learnt the information in your KO.
- II. Definitions – look at words that are used in this section. Can you write a definition in your own words?
- III. Rephrasing – can you rewrite the sentences or explanations in your own words?
- IV. Summary – can you summarise the main points of this section of the KO?
- V. Synonyms – can you write synonyms for key words and ideas?
- VI. New Sentences – can you write a sentence that includes the key vocabulary or definitions that you have learnt?

AIM: You should be able to use the information in your KO in a flexible and confident way in your writing.

4. Think it, Link it

This is a technique to use towards the end of the half term when you are revising all of the KO.

- I. Think of the links or connections between different sections of your KO.
- II. Write these out in your own words in your Learning Journal.
- III. Think about the links between a particular section of your KO and what you have learnt in your lessons. Can you expand on this section by linking it to your wider knowledge?
- IV. Write this out in your Learning Journal.

AIM: You should be able to link your home learning and your lessons to show a confident understanding of the work covered.

How to present work in your Learning Journal

1. Always write the subject and the date when you start your home learning.
2. Always write the strategy that you are going to use for your home learning.
3. Always use a ruler to underline titles and dates.
4. Use a blue or black pen to write, or a pencil if you need to draw. Drawing should never be done in pen.
5. Use a green pen to complete corrections of your work.
6. You are expected to complete half a side of your Learning Journal each evening as a minimum.
7. You can work every Monday to Thursday in room 53 until 5pm. This is a quiet room where you can complete your home learning rather than doing it at home.

Checking: Your teachers will check your Learning Journal at least once a cycle. If they are concerned that you aren't doing your home learning thoroughly, they will log a home learning referral on Arbor, and offer you support and guidance. If you don't respond to this guidance, you will be issued with an After-school Detention where you will be expected to complete your home learning.

Do Now tasks: At the start of every lesson, you should expect a Do Now task. This is a low stakes retrieval quiz on what you have learnt in lessons so far.

Maths: Your teacher will set you tasks to complete on Dr Frost Maths.

Rewards at Bournemouth School

At Bournemouth School, we want to recognise the many different ways that students contribute and succeed. Rewards are not just about getting the highest marks. They recognise **achievement, effort, progress, excellent behaviour, attendance and contribution to our school community**.

There are two main ways your success is recognised: the **Bournemouth School 100** and **Achievement Points**.

The Bournemouth School 100

Every term, you will receive a **Bournemouth School 100 score**. This gives you a score out of 100 based on five areas of school life.

Each area is worth up to **20 points**:

Area	What counts?	Maximum
Behaviour	Consistently meeting our expectations and avoiding Behaviour Points	20
Achievement	The Achievement Points you earn in lessons and through wider school activities	20
Progress	The progress you are making across your subjects	20
Attendance	Attending school regularly – 97% or above earns the maximum score	20
Community	Leadership, volunteering, peer support and getting involved in school life	20
TOTAL		100

This means there are lots of ways to build a strong score. You don't have to be the highest-attaining student in your year: excellent behaviour, strong progress, good attendance and making a positive contribution all count.

Keep track of your score

You will receive an update at the end of each half term so that you can see how you are doing and where you could improve.

The full scoring charts for each category will be published in your **Knowledge Organiser** at the start of each half term.

Your Bournemouth School 100 score will also be included in your termly report to parents/carers.

Can you make the top 25%?

At the end of the year, we will calculate your average Bournemouth School 100 score across all three terms.

If your score places you in the **top 25% of your year group**, you will receive a **Bournemouth School 100 badge** to wear during the following academic year.

The challenge is to perform consistently across the whole year and across all five areas.

Achievement Points

Staff award **Achievement Points (APs)** throughout the year to recognise excellent work, effort, improvement and positive contributions to school life.

Your points build up across the year, allowing you to work towards three reward stages.



Bronze — 230 Achievement Points

You will receive:

- a **Bronze certificate** from your tutor
- **one entry into the school raffle**



Silver — 280 Achievement Points

You will receive:

- a **Silver certificate** from your Director of Learning
- **another entry into the school raffle**



Gold — 350 Achievement Points

You will receive:

- a **Gold certificate** from SLT
- **a third entry into the school raffle**
- an **early lunch served by SLT**
- entry into the **Achievement Points Leaderboard**

Reached Gold? Keep going.

Gold isn't the end of the challenge.

Once you reach **350 Achievement Points**, you will compete to finish among the highest Achievement Point earners in your year group.

The **top 30** will be displayed and updated each week.

At the end of the year:

1st place



Achievement Cup for your year group + **gift card**

2nd–10th place



Framed certificate + gift card

11th–30th place



Framed certificate

What should you aim for?

There isn't just one way to be successful at Bournemouth School.

Work hard. Make progress. Meet our expectations. Attend regularly. Get involved. Contribute positively.

Remember our core values: Hard work, discipline, smart appearance, and respect.

Having these aims at the forefront of your mind everyday in school will help you earn recognition — and gives you something to aim for throughout the year.

A01 EXPLORE

DEVELOP

DEVELOP IDEAS

INVESTIGATE & RESEARCH
OTHER ARTISTS WORK

ANALYSE

ANNOTATE

A03 EVIDENCE

RECORD

PRESENT IDEAS

PRIMARY OBSERVATION

DRAWING, PAINTING,
PRINTING, PHOTOGRAPHY,
WRITING, PHOTOGRAPHY...

ANNOTATE

DIFFERENT MEDIA

What are Annotations?

Annotations are written explanations or critical comments added to art or design work that record and communicate your thoughts.

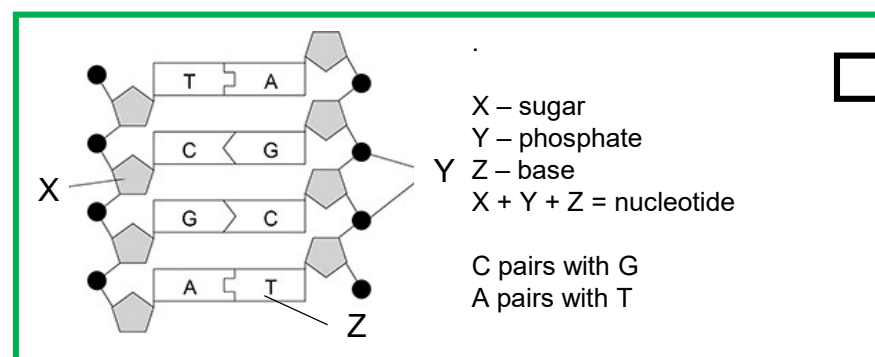
Annotating your work Use these heading to explain each piece of work you have done in your book		Tick
What?	What is it? Explain the piece of work you are annotating Examples: This is a first-hand drawing that I made of a ...This is a series of photographs I took of... This is a collection of visual research about... This is information I gathered about... This is a copy that I made of a piece of artwork by... This is a mood board of...to show ideas relating...	
Why?	Why did you make it? Explain how this piece helped you in your project. Examples: to get ideas about... to get me thinking about... to show what I have learned about... to explore the ideas of... to examine the shape/form/line/texture/pattern of... to analyse the style of... to try out the technique of... to practice... to develop my skills in...	
How?	How did you make it? Explain how you created the piece of work Examples: I drew it using... I painted it with... I constructed it from... I built it up by collaging... I photographed/drew it from life... I drew/painted it from a photography... I gathered the images from the internet... I researched the information on a site called...	
Quality	How good is it? What are you pleased with? What could you improve? Examples: I am pleased with the way I... one good element of the work is... the best feature of this work is... a section of this work that is particularly successful is...I'm not happy with... one area I could improve is... the least successful part of the work is... I wish that I had...	
Learning	What did you learn? What have you found out? What are the next steps? Examples: I improved my skills in... I got better at working in the style of... I have a better idea of... I have a clearer understanding of... I feel more confident about... Next I will try... To follow this up, I will... To build on this piece of work I hope to...	

Do's and don'ts of annotation	Tick
What to do	
Do add labels which help explain your creative process, e.g. 'Initial Ideas', 'Thumbnail Compositional Studies', 'Exploring Negative Space.'	
Do add details on techniques you might forget later, e.g. the stages you went through to achieve a particular print-making or drawing technique.	
Do record your thoughts on the success of the work – what worked and what didn't.	
Do reflect on the work of artists and designers you are influenced by and how this helped inform your ideas.	
Do write down ideas about what you would like to try next, or if there is anything you could change to improve an idea or technique.	

What not to do	
Don't write very lengthy comments. At this stage, the purpose of annotation is to allow you to record your thoughts quickly so you can explore them later	
Don't annotate in a way that distracts attention from the work, e.g. by writing over an area of a drawing in large text.	
Don't use annotations to label obvious things, e.g. 'oil pencil drawing of a bottle.'	

Vocabulary			Tick
AO1	Critical Understanding	Looking closely at how artists and designers communicate ideas, feeling and beliefs through their work. Your knowledge of the work of others should help you to develop your ideas, and this influence should be clear in your art.	
AO1	Sources	This is what inspires your art. The work of artists, the built environment, the natural world, music, literature, history, religion, traditions, politics etc	

Keyword	Learn	✓
Chromosome	Found in the nucleus of a cell, made of DNA and carries a large number of genes. Found in pairs. Humans have 46 chromosomes (23 pairs).	
DNA 	A polymer made up of two strands forming a double helix.	
Nucleotide	A sugar and phosphate group with one of four different bases attached to the sugar. (A, C, G and T)	
Gene	A small section of DNA. Each gene codes for a particular sequence of amino acids, to make a specific protein. Codes for a characteristic.	
Allele	Version of a gene.	
Genome	The entire genetic material of an organism.	
Homozygous	Two of the same allele.	
Heterozygous	Two different alleles.	
Recessive	Will only display when there are two of that allele.	
Dominant	Will always display if one (or two) alleles are present.	
Mutation	A change in the DNA.	
Phenotype	An organism's displayed characteristics. (What they look like.)	
Genotype	An organism's genetic code.	
Mitosis	Cell division that produces two identical cells. (From Year 9 - Mitosis and the Cell Cycle need to be revised.)	
Meiosis	Cell division that produces gametes (sex cells). Copies of the genetic information are made, the cell divides twice to form four gametes, each with a single set of chromosomes (23 chromosomes in humans), all gametes are genetically different from each other.	
Fertilisation	Fusion of male and female gametes: sperm and egg cells in animals, pollen and egg cells in flowering plants.	
Sexual reproduction	Gametes fusing- creates variation through mixing of genetic information.	
Asexual reproduction	No gametes - offspring are clones which all have identical genetic information.	



A sequence of three bases is the code for a particular amino acid. The order of bases controls the order in which amino acids are assembled to produce a particular protein.

Learn the advantages and examples of the different types of reproduction.

Sexual Reproduction

Variation in offspring

1. Malarial parasites in the mosquito.
2. Many fungi (as part of their life cycles).
3. Plants producing seeds.

Asexual Reproduction

Offspring are identical.

1. Malarial parasites in the human host.
2. Fungi using spores.
3. Plants by runners such as strawberry plants, or bulb division such as daffodils.

Learn the stages in the development of an embryo.

1. By meiosis, a cell divides to form gametes, with half the number of chromosomes.
2. Gametes join at fertilisation to restore the normal number of chromosomes.
3. The new cell divides by mitosis.
4. The number of cells increases.
5. As the embryo develops cells differentiate.

Uses of the Human Genome Project.

1. We can search for genes linked to different types of disease.
2. Helps us to understand inherited disorders and improve their treatment.
3. Tracing human migration patterns from the past.

Steps in protein synthesis

1. The structure of the DNA affects the protein made. The DNA remains in the nucleus.
2. A template is made. This is a copy of the DNA and is able to leave the nucleus and enter the cytoplasm.
3. Proteins are synthesised on ribosomes, according to the template.
4. Carrier molecules bring specific amino acids to add to the growing protein chain in the correct order.
5. When the protein chain is complete it folds up to form a unique shape.
6. This unique shape enables the proteins to do their job as enzymes, hormones or forming structures in the body such as collagen.

The effect of mutations

Mutations in DNA occur continuously. A change in DNA structure may result in a change in the protein synthesised by a gene.

Most mutations do not alter the protein that is synthesised, or only alter it slightly so that its appearance or function is not changed.

A few mutations, in coding sections of DNA, code for an altered protein with a different shape. An enzyme may no longer fit the substrate binding site or a structural protein may lose its strength. These changes may alter the activity of a protein.

Not all parts of DNA code for proteins. Non-coding parts of DNA can switch genes on and off, so variations in these areas of DNA may affect how genes are expressed.

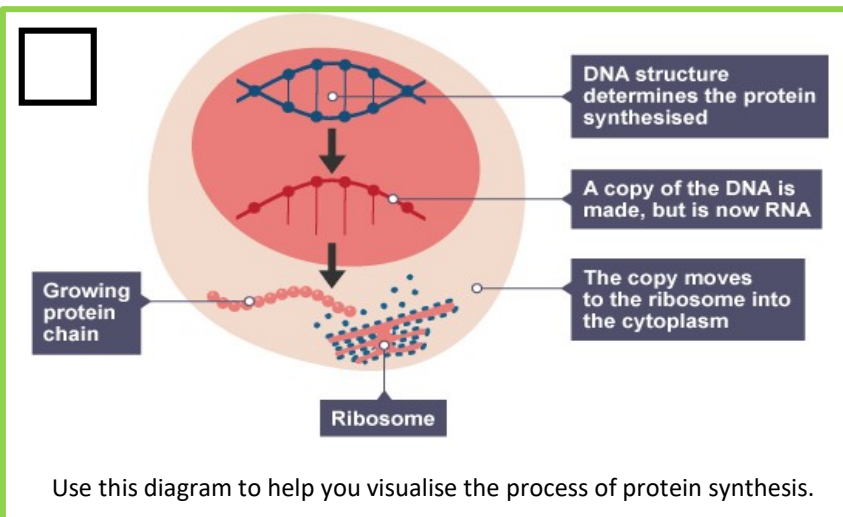
Mutations causing genetic variation may change the phenotype.

Characteristics controlled by a single gene include;

1. Fur colour in mice.
2. Red-green colour blindness in humans.
3. Polydactyly (having extra fingers or toes) is caused by a dominant allele.
4. Cystic fibrosis (a disorder of cell membranes) is caused by a recessive allele.

Most characteristics are a result of multiple genes interacting.

In humans 22 pairs of chromosomes control characteristics only, but one of the 23 pairs carries the genes that determine sex. • In females the sex chromosomes are the same (XX). • In males the chromosomes are different (XY).



Punnett squares

1. Determine the parental genotype. Use the letters in the question.
2. Split the alleles for each parent and add them into your Punnett square around the edges.
3. Work out the new possible genetic combinations inside the Punnett square.
4. Also write the phenotype in each of the squares.
5. Circle the ones that show the phenotype the question asked about.
6. Work out the probability of getting the phenotype the question asked for. (Each part of the Punnett square is worth 25%.)

	B	b	
b	Bb Brown eyes	bb Blue eyes	Mother has blue eyes , bb Father has brown eyes , Bb In this case the B allele is dominant. 50% chance that the child has brown eyes. Possible genotypes are BB, Bb and bb Possible phenotypes are brown eyes (BB or Bb) and blue eyes (bb)
b	Bb Brown eyes	bb Blue eyes	

Definitions		☒
Ethics	The moral principles that guide how a business operates.	
Ethical Objectives	A business' goals that relate to fair business practice or moral guidelines.	
Global Warming	The steady increase in the earth's temperature due to emissions and the build-up of greenhouse gases.	
Sustainability	The process of operating without damaging the environment or depleting natural resources.	
Scarce resources	When the raw materials that are available are not sufficient to meet needs.	
Air pollution	The presence or intro of harmful substances into the air causing disease, allergies or damage to humans.	
Noise pollution	A type and level of noise that is excessive and disturbing to people or animals.	
Recycling	The conversion of waste into reusable material.	
E-commerce	Business transactions carried out electronically on the internet	
M-Commerce	Business transactions are carried out electronically by mobile phone	
Digital Communication	Involves sending and receiving information electronically.	
Social media	Online communication that allows you to interact with customers and share information	
ICT	Information & communication technology includes the use of computers, phone networks & the internet	
Dynamic market	Businesses face a constantly changing business environment	

Methods of digital communication	☒
1. Social media 2. Websites 3. Email 4. Mobile apps 5. Live chats 6. Video calls/zoom	

Evaluation of E-commerce	☒
Positive 1. websites where customers can buy their products 2. reach a wider market compared to just having traditional shops	
Negative 1. Greater competition as customers can buy products from anywhere around the world 2. High costs associated with building websites & employing IT specialists.	

Why businesses need to adapt to changing technology	☒
1. Stay competitive 2. Customer expectations	

Environmental considerations	☒
1. Traffic congestion 2. Recycling 3. Disposing of waste 4. Noise and air pollution 5. Global warming 6. Use of scarce resources	

Evaluation of improved technology	☒	Should businesses be environmentally friendly?	☒
Positive: ○ Faster communication ○ Computers are more efficient ○ Improved manufacturing – technology is more accurate		Positive: Consumers are now more aware of their impacts on the environment and so consider this when buying products	
Negative: ○ High initial cost of technology ○ Machinery often becomes out of date quickly ○ increased training needed for staff to use new technology		Negative: Buying equipment & developing new processes to be environmentally friendly can be expensive	

Should businesses behave ethically?		☒
Benefits	Drawbacks	
1. Marketing as ethical helps gain sales 2. Acting ethically encourages investment	1. Ethical policies can be costly 2. difficult to find ethical suppliers	

Ethical considerations	☒
1. Avoid exploiting workers by paying them low wages or forcing long working hours 2. Paying a fair price to overseas suppliers for raw materials 3. Using appropriate methods for product development, e.g. not testing on animals	

Topic 7a – Organic Chemistry

Alkane: General formula: C_nH_{2n+2}

Alkene: General formula: C_nH_{2n}

Key term	Definition	✓
Crude oil	A fossil fuel formed from ancient biomass. It is a mixture of different sized hydrocarbons.	
Biomass	Plankton, including algae which is buried under mud under the oceans and is converted into crude oil by heat and pressure over millions of years.	
Finite resource	A resource which is being used up faster than it is replaced.	
Hydrocarbon	A chemical compound containing ONLY hydrogen and carbon atoms	
Alkane	A SATURATED hydrocarbon containing only single covalent bonds between carbon atoms (C-C).	
Homologous series	Contains compounds with the same general formula, functional group and similar chemical properties.	
Fractional distillation	A method to separate a mixture of miscible liquids with different boiling points.	
Fraction	A mixture of molecules with a similar boiling point.	
Complete combustion	Fuels are burned in excess oxygen to form carbon dioxide and water	
Incomplete combustion	Fuels are burned in insufficient oxygen, so carbon monoxide and water are formed. CO is toxic.	
Cracking	Thermal decomposition of long hydrocarbons into a shorter alkane and alkenes.	
Alkene	An UNSATURATED hydrocarbon with a double carbon-carbon bond (C=C).	
Monomer	A small molecule which can join together to make a polymer.	
Polymer	A long chain molecule made by many monomer molecules joining together (polymerisation).	
Addition polymerisation	A reaction where alkene monomers form a polymer and no other products are formed. Alkene monomers $\rightarrow$ (Poly) alkene.	

Number of carbon atoms	Alkane name and formula	Alkene name and formula
1	Methane CH_4	
2	Ethane C_2H_6	Ethene C_2H_4
3	Propane C_3H_8	Propene C_3H_6
4	Butane C_4H_{10}	Butene C_4H_8

Fractional distillation of crude oil

- Crude oil is heated at the base of a fractionating column.
- Most of the molecules vaporise and rise up the column.
- They cool as they rise due to a temperature gradient.
- Fractions condense when the temperature falls below the boiling point of the molecules.
- They are collected at different heights.

Catalytic Cracking

- Long chain alkanes are heated to vaporise them.
- They are passed over a hot catalyst of aluminium oxide.

Steam cracking

- Long chain alkanes are heated to vaporise them.
- They are mixed with steam and heated to high temperatures.

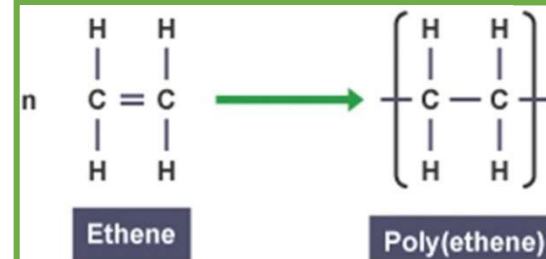
Property	Short chains	Long chains
Boiling point	Low	High
Volatility	Evaporate easily	Hard to evaporate
Flammability	Ignite easily	Hard to ignite
Viscosity	Low – flow easily	High – resistant to flow

Test for unsaturation. Mix with bromine water.

Alkene: If a C=C double bond is present, it will decolourise bromine water.

Alkane: If there is no double bond, the bromine water remains orange.

Addition Polymerisation

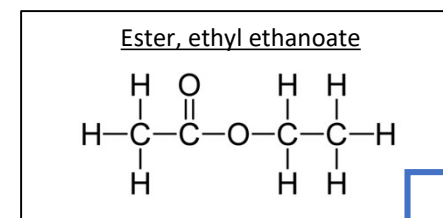
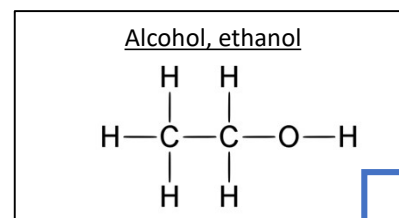
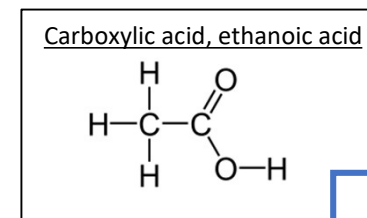
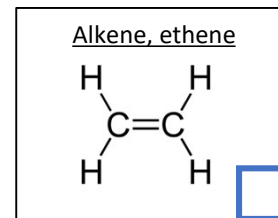
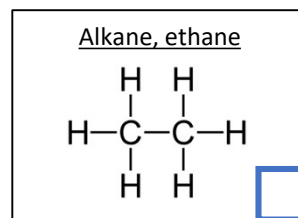


Topic 7b – Organic Chemistry

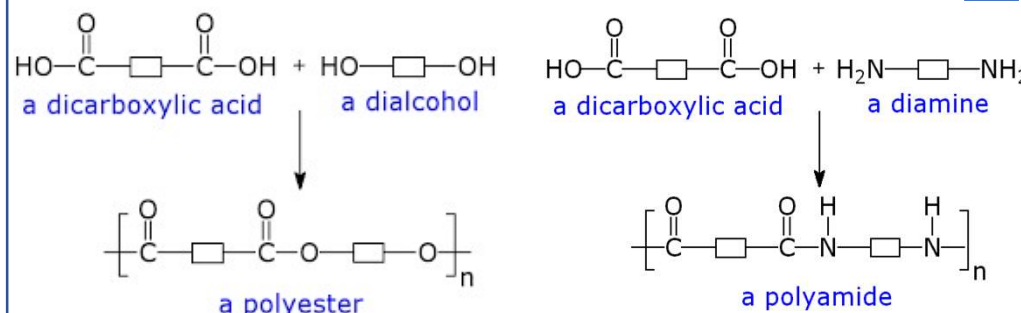
Key term	Definition	✓
Functional group	Atom or group of atoms responsible for most of the chemical reactions of a compound.	
Addition Reaction	Reactions where atoms bond to each carbon atom in a C=C double bond to form a saturated molecule.	
Hydrogenation	Alkenes react with hydrogen using a nickel catalyst at 150°C to form alkanes.	
Hydration	Alkenes react with steam at high temperature and pressure with a phosphoric acid catalyst to form alcohols.	
Halogenation	Alkenes react with halogens at room temp. to form dihaloalkanes.	
Alcohols	A homologous series containing the functional group –OH	
Combustion	Fuels react with oxygen to form either CO ₂ or CO or C, and H ₂ O when burned.	
Mild oxidation	An oxidising agent can be used to convert an alcohol into a carboxylic acid.	
Carboxylic acid	A homologous series of compounds containing the functional group –COOH.	
Weak acid	Partially ionises in water to release H ⁺ ions.	
Ester	A homologous series of compounds containing the functional group –COO-. Formed by reacting an alcohol reacting with a carboxylic acid in the presence of a strong acid catalyst.	
Condensation polymerisation	Reaction where monomers join to form polymers and also a small molecule. E.g. H ₂ O or HCl.	
Amino acid	Molecules containing both a carboxylic acid and amine functional group.	
Protein	Natural polymers made from amino acid monomers.	
DNA	A double helix made of 4 monomers (nucleotides) each consisting of a sugar, phosphate and a base (A, T, C or G).	
Starch and cellulose	Natural polymers made from glucose monomers	

Methods of producing ethanol

	Hydration of ethene Ethene + water → ethanol	Fermentation of sugar by yeast glucose → ethanol + carbon dioxide
Rate of reaction	Fast	Slow
Quality of product	Pure	Impure: requires distillation
Raw material	Crude oil	Sugar cane
Process	Continuous	Batch (stop-start)
Energy	High temperature	Low temperature



Condensation polymerisation:



1.3.2 Wired & Wireless Networks

Keyword	Definition / Example	✓
Network protocol	Defines rules for data transmission between devices on a network.	
Network standard	A set of agreed requirements for hardware and software that allows different manufacturers to make compatible products.	
HTTP	Hyper Text Transfer Protocol – used by web browsers to access websites and web servers.	
HTTPS	Hyper Text Transfer Protocol Secure – encrypts website data sent and received for security.	
TCP	Transmission Control Protocol – provides reliable, ordered, and error-checked delivery of data on a network.	
IP	Internet Protocol – directs packets to their destination across a network.	
FTP	File Transfer Protocol - used to transfer files between a client and server.	
SMTP	Simple Mail Transfer Protocol – used to send emails.	
POP	Post Office Protocol – used to retrieve email.	
IMAP	Internet Message Access Protocol – used to retrieve email and has more features than POP.	

1.6.1 Legal & Ethical

Keyword	Definition / Example	✓
Censorship	Controlling what information people can access.	
Surveillance	Monitoring what people are accessing on the internet.	
Digital divide	The inequality caused by unequal access to technology.	
E-waste	The electronic devices discarded every year.	
Computer Misuse Act 1990	Introduced to stop hacking and cybercrime.	
Copyright, Designs and Patents Act 1988	All intellectual property is automatically protected, so it's illegal to use, copy and distribute material without the correct permission.	
Data Protection Act 2018	Controls how your personal information is used by organisations, businesses or the government.	
Software licensing	A legal agreement stating how software can be used.	
Open-source software	The source code is made publicly available.	
Closed-source/proprietary software	Only compiled code is available.	

GCSE Design Technology:

CORE 1.15 Designers and companies

Can describe the unique designs or achievements of these designers and companies?

Use LCWC to check your understanding of these differing design strategies.

We need to be aware of the 'work of others' as part of the D and T curriculum. These designers and brands have been chosen by the exam board as ones we will learn about.

Tick	Name	Example	What are they known for?
	<u>Alessi</u>		Kitchenware products – which are fun and unique. A company with lots of different designers.
	Apple		Ground breaking designs which broke away from tradition. Have a loyal customer base. Design company.
	<u>Heatherwick Studio</u>		Around 200 designers, architects and makers have worked on products from perfume bottles to buildings – original and unique designs.
	<u>Joe Casely-Hayford</u>		Fashion designer. Known for original but wearable designs, using traditional English tailoring techniques.
	Pixar		Among the first to develop computer animated feature films. Design company.
	Raymond Loewy		Designer. Combined simplicity with functionality. Known for the 'teardrop' design for aerodynamics.
	Tesla, Inc.		Is the leader in producing electric cars which don't compromise on power or quality.
	<u>Zaha Hadid</u>		An architect who integrated geometric forms with expressive, sweeping fluid curves. Promoted architecture as a visual art form for aesthetic pleasure.

GCSE Design Technology:

CORE 1.16 Design strategies

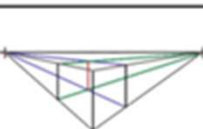
Tick	Design strategy	Definition/explanation
	User centred design	User-centred design revolves around putting your users' needs at the centre of every decision that is made throughout the whole designing process.
	Systems thinking	Used by Product Designers and Engineers to help solve complex problems and find solutions, usually using a flowchart. It is used to think about the functions of products and how users interact with them.
	Collaboration	When a team of designers come together and generate design ideas.
	SCAMPER	This is a technique used by designers to think of new ideas when developing them.
		The letters stand for:
		Substitute
		Combine
		Adapt
		Modify
		Put to another use
		Eliminate
		Reverse

Which design strategies have you used in school? Would using another have helped?

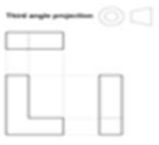
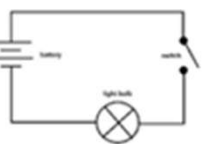
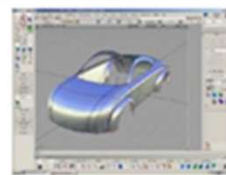


You need to be aware of the pro's and con's of the different communication techniques on the page. At what stage of the design process would each be appropriate to use?

Try and use a variety of these methods in your design work, especially when you begin your NEA in Y10/11.

Tick	Method	Example	Explanation
	Freehand sketching		Very quick sketches drawn by hand. They are used as initial ideas as they are quick to do.
	Digital photography/media		Creates and develops designs. Tracing paper can be used to trace over ideas.
	Cut and paste techniques		Images are used to create and inspire their own ideas i.e. using a mood board.
	Oblique		A style of 3D drawing, drawn at 45°.
	Isometric		A style of 3D drawing, drawn at 30°.
	One point perspective		There is 1 vanishing point anywhere around the object which all points are drawn to.
	Two point perspective		There are 2 vanishing points either side of the object. Architects use this style when developing their ideas in 3D.

Convert this table into a mind map and then get a friend or someone at home to test your recall of the information in different sections.

Tick	Method	Example	Explanation
	Orthographic projection		3 main sides; plan, front and side are drawn in line with each other.
	Exploded drawing		Draws the product disassembled, along the same axis. Usually drawn in isometric.
	Assembly drawings		A chronological set of drawings - used to show manufacturers how to make a product.
	Schematic diagrams		Electronics - circuit diagrams to show where components are placed.
	CAD (Computer Aided Design)		Computer images drawn of products using specialist software.
	Annotated sketches		Added to sketches to allow the designer to communicate their thinking i.e. materials etc.

Who uses these?

Why are symbols used and not labels?

You can find out more at:
BBC Bitesize and
DesignandTechnologybase.com

YEAR 11 LITERATURE KNOWLEDGE ORGANISER – MACBETH

				CONTEXT		EXPLANATION	
THEMES	KEY QUOTATIONS	LANGUAGE & ANALYSIS	CONTEXT LINKS	✓			
AMBITION Corrupted ambition drives Macbeth's downfall.	"Thou wouldst be great; Art not without ambition, but without the illness should attend it." (1.5) "I have no spur to prick the side of my intent, but only vaulting ambition, which o'erleaps itself" (1.7) "Stars, hide your fires; Let not light see my black and deep desires" (1.4) "Upon my head they placed a fruitless crown"	• Metaphor: illness = corruption/evil intent should accompany ambition • Metaphor "vaulting" suggests ambition is dangerous and beyond control. • Celestial imagery hides immoral desires from view. • Symbolism of the crown represents power. Suggests ambition has failed to bring fulfillment.	Jacobean belief in the Divine Right of Kings. Reflects fears of subjects overstepping their positions in society.	☐	Divine Right of Kings	Kings chosen by God; regicide = treason and sin.	☐
				Great Chain of Being	Everything has a place; disorder at the top = chaos below.	☐	
				King James I	Fascinated by witchcraft and believed in its power.	☐	
KINGSHIP & TYRANNY The natural order is corrupted by a tyrant.	"The king-becoming graces as justice, temp'rance, stableness, mercy, patience..." (4.3) "Bleed, bleed, poor country! Great tyranny!" (4.3) "...like a giant's robe upon a dwarfish thief." (5.2) "This dead butcher and his fiend-like queen" (5.9)	• Adjective "king-becoming" idealises Duncan/Malcolm. All the virtues Macbeth lacks. • Anaphora "bleed, bleed" emphasises suffering. • Simile ridicules Macbeth as unfit to rule. Motif of clothing. Malcolm's 'butcher' metaphor reduces Macbeth to a brutal killer. 'Fiend-like' associates Lady Macbeth with demonic forces	Divine Right of Kings and the Great Chain of Being: disorder in nature reflects disorder in the state.	☐	Gunpowder Plot (1605)	Recent threat of regicide against James I.	☐
				Patriarchy	Women expected to be submissive; LM subverts this.	☐	
				KEY VOCABULARY			
					TERM	MEANING	✓
GUILT & CONSCIENCE Guilt haunts and destroys the mind and body.	"Will all great Neptune's ocean wash this blood clean from my hand?" (2.2) "Out, damned spot! out, I say!" (5.1) "O, full of scorpions is my mind" (3.2) "I am in blood stepp'd in so far..." (3.4)	• Hyperbole shows guilt is overwhelming. • Imperative shows desperation and loss of control. Metaphor: mental anguish comparable to scorpions poisoning Macbeth • Blood as a metaphor for irreversible guilt.	Christian beliefs about sin and damnation. Jacobean audience accepted guilt brings divine punishment.	☐	Hamartia	Tragic flaw	☐
				Pathos	Evokes pity or sympathy	☐	
				Catharsis	Emotional release	☐	
				Dramatic Irony	Audience knows more	☐	
				Regicide	Killing of a king	☐	
				Soliloquy	Speaking thoughts aloud	☐	
SUPERNATURAL The supernatural influences events and reflects moral confusion.	"Fair is foul, and foul is fair" (1.1) "The instruments of darkness tell us truths... to betray's in deepest consequence." (1.3) "By the pricking of my thumbs, something wicked this way comes." (4.1)	• Paradox shows nothing is as it seems. • Personification: darkness as a deceitful force. • Rhyming couplet reinforces witches' magical speech. Foreshadows Macbeth's moral corruption.	Witches were believed to have power. Those who embrace the supernatural become corrupted by it.	☐	METHODS & STRUCTURAL FEATURES		
					METHOD	EXAMPLE / EFFECT	✓
				Soliloquy	Macbeth's soliloquies (e.g. 1.7; 2.1; 3.1; 5.5) reveal his inner conflict and moral decay.	☐	
				Dramatic Irony	Audience knows more than characters (e.g. Duncan's trust, Banquo's suspicions).	☐	
				Imagery	Darkness, blood, storms reflect chaos (e.g. 2.1; 3.2; 4.1).	☐	
				Motifs	Blood, sleep, nature, milk, clothing, light vs dark reinforce key ideas.	☐	
VIOLENCE Violence is normalised and escalates.	• "Unseam'd him from the nave to the chops" (1.2) • "Blood will have blood" (3.4) • "'I am in blood / Stepp'd in so far that, should I wade no more, / Returning were as tedious as go o'er.'" (3.4)	• Vivid imagery emphasises brutality. • Cyclical language suggests endless violence. • Calm tone shows desensitisation to murder. Metaphor: wading through a pool of blood – suggests that he is overwhelmed by his crimes.	Cycle of violence: one sin leads to the next. A Jacobean audience would view Macbeth as becoming increasingly damned through repeated acts of violence.	☐	Equivocation	Witches' ambiguous prophecies and characters' deception.	☐

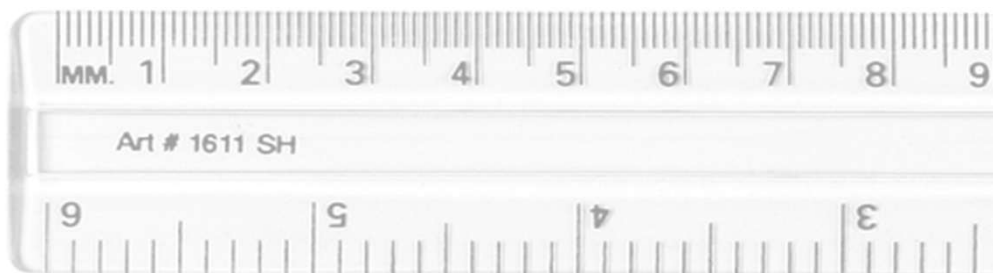
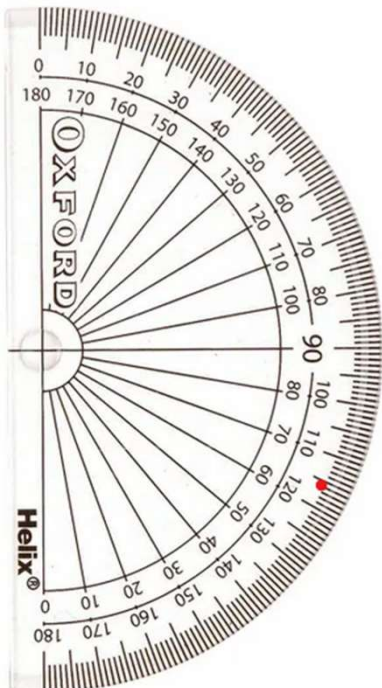
YEAR 11 LITERATURE KNOWLEDGE ORGANISER – JEKYLL & HYDE

"I am the chief of sinners, I am the chief of sufferers also." – Ch.10

THEMES	KEY QUOTATIONS	LANGUAGE & ANALYSIS	CONTEXT LINKS		METHODS & STRUCTURAL FEATURES		
REPUTATION & HYPOCRISY Victorian society values respectability above morality.	• “The very pink of the proprieties.” (Ch.1) • “No gentleman but wishes to avoid a scene.” (Ch.1) • “Ghost of some old sin” (Ch 1) • “plod in the public eye with a load of genial respectability, and in a moment, like a schoolboy, strip off these lendings and spring headlong into a sea of liberty” (Ch 10)	• Superlative “very pink” exaggerates appearance of respectability. • Metaphor: past indiscretions coming back to haunt Jekyll. • Irony: reputation matters more than justice. • the metaphor “these lendings” suggests that respectability is merely a borrowed costume rather than his true self. The verb “strip off” implies that Victorian gentility is superficial and can be removed like clothing.	Victorians valued respectability, restraint and social standing. Scandal could ruin a person’s life. Respectability is often a performance.	☐	METHOD	EXAMPLE / EFFECT	☒
					Gothic Setting	Fog, darkness, isolated streets and houses create mystery and unease.	☐
					Motifs	Fog (mystery), doors (secrecy), doubling (duality), light/dark (morality), decay.	☐
					Animal Imagery	Hyde associated with animalistic language, highlighting savagery.	☐
					Symbolism	Houses are dual (Jekyll’s respectable façade vs hidden lab); potion = temptation.	☐
DUALITY & REPRESSION The conflict between good and evil within every person.	• “Man is not truly one, but truly two.” (Ch.10) • “My devil had been long caged, he came out roaring.” (Ch.10) • “If I am the chief of sinners, I am the chief of sufferers also.” (Ch.10) • “I concealed my pleasures” (Ch.10)	• Aphorism states central idea of duality. • Metaphor of caged beast suggests repression. • Juxtaposition links sin with suffering. • Verb “concealed”: implies secrecy, shame and deliberate repression. First-person confession: gives the line honesty and self-awareness. • Euphemism: “pleasures” is deliberately vague, suggesting desires too unacceptable to name.	Stevenson suggests that suppressing desires rather than acknowledging them can make them more dangerous..	☐	Epistolary Structure	Letters, diary entries and documents build suspense and reliability questions.	☐
					Narrative Perspective	Utterson’s limited perspective increases mystery, suspense and unreliability.	☐
					KEY VOCABULARY		
SCIENCE & KNOWLEDGE Scientific ambition can lead to moral and physical destruction.	• “Unscientific balderdash!” (Ch.2) • “A new province of knowledge... new avenues of fame and power shall be laid upon you.” (Ch.9) • “Tempted to a discovery so singular and profound.” (Ch.10) • “My life is shaken to its roots.” (Ch 9)	• Dismissive adjective “unscientific”: suggests Jekyll’s work lacks credibility. Noun “balderdash”: means nonsense and conveys contempt. • Grandiose language shows ambition and hubris. • Verb “Tempted” suggests a moral conflict. • Adjective “profound” suggests an important discovery but shows deep ignorance of the consequences of scientific progress. • Metaphor: “roots” symbolise the foundations of his beliefs. Violent imagery conveys complete psychological destruction.	Victorian era of scientific advances (medicine, chemistry). Fear that science without ethics could “play God”. Dangerous knowledge has the power to destroy certainty and destabilise identity.	☐	TERM	MEANING	☒
					Hypocrisy	Pretending to have moral beliefs	☐
					Concealment	Hiding something	☐
					Duality	Having two opposing natures	☐
					Degeneration	Decline into a worse state	☐
VIOLENCE & EVIL Hyde represents unchecked, primitive evil.	• “With ape-like fury... hailing down a storm of blows.” (Ch.4) • “Trampled calmly over the child’s body.” (Ch.1) • “Like some damned Juggernaut.” (Ch.1) • “Satan’s signature upon a face.” (Ch.3)	• Simile links Hyde to primitive instincts. • Oxymoron “calmly” shows lack of conscience. • Hyde described as unstoppable. • Religious imagery reinforces evil.	Darwin’s Theory of Evolution (1859) caused fear of degeneration and regression into savagery. Hyde embodies this fear.	☐	Repression	Suppressing desires or emotions	☐
					Hubris	Excessive pride or ambition	☐
					Deceit	Dishonesty; misleading others	☐
					Aphorism	A basic observation that contains a deeper truth	☐



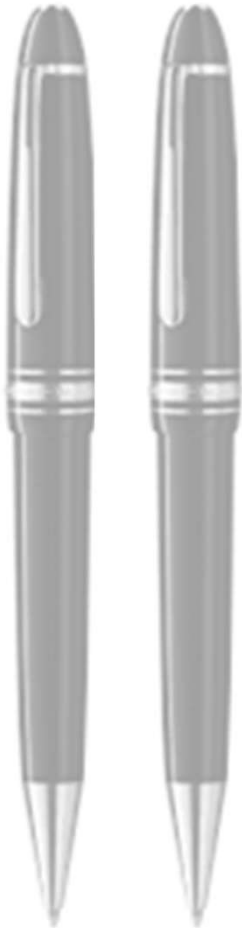
Equipment



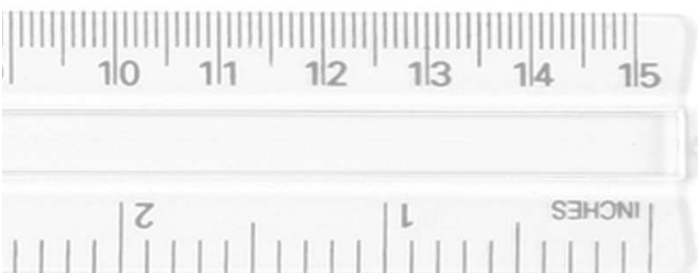
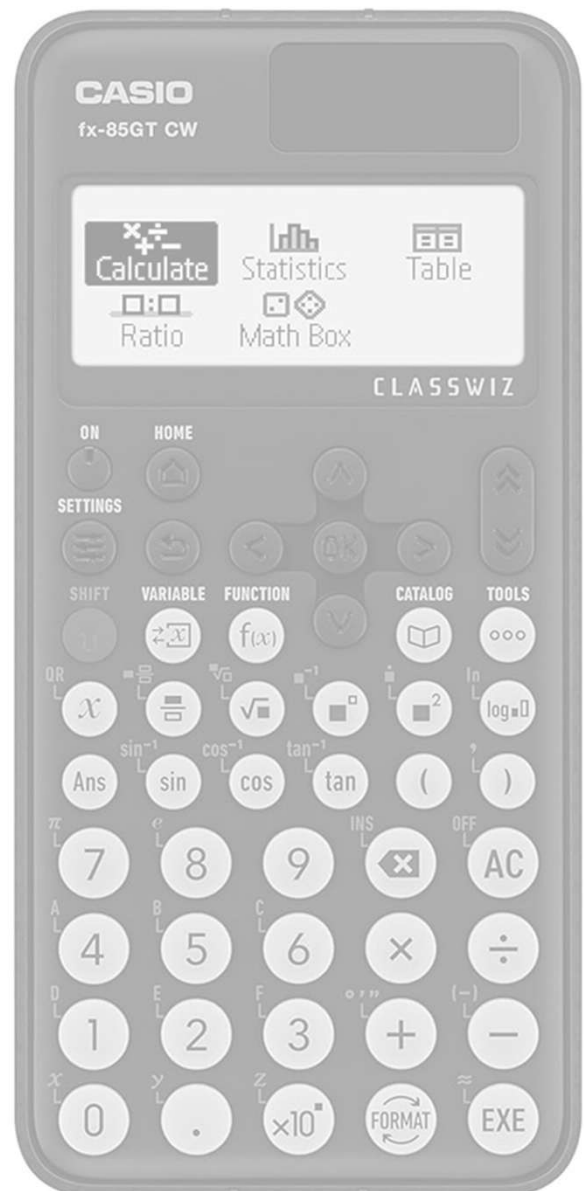
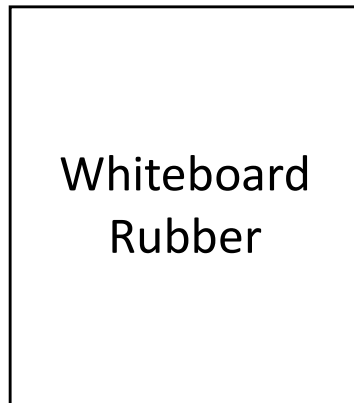
Check



- ID card
- Green and purple pens
- Whiteboard pens
- Black/blue pens
- Glue stick
- Pencil
- Ruler
- Calculator
- Whiteboard rubber



Whiteboard
Rubber



NEA 1 Investigation – 15% total GCSE

The Goal: A scientific report (1,500-2,000 words) investigating the working characteristics, functional properties, and chemical processes of ingredients through practical experimentation.

Section A: Research & Plan – 6 marks

Analyse the exam brief, unpack key technical terms, and complete targeted scientific research. You must finish this section by forming a testable **hypothesis**.

Section B: Investigation – 15 marks

Plan and run a series of practical experiments. Always use a control recipe and alter one variable (**independent variable**) at a time e.g. changing flour type. Fully document your work with annotated photographs and structured data tables.

Section C: Analysis & Evaluation – 9 marks

Analyse your results using scientific reasoning and sensory evaluation e.g. star diagrams. State clearly whether your hypothesis was correct, and explain how your discoveries apply to real-world cooking.

Fats

Shortening: Fat coats flour particles in a waterproof layer. This stops water from binding with gliadin/glutenin, preventing long gluten strands from forming and leaving a crumbly texture e.g. shortcrust pastry.

Plasticity: The ability of a fat to soften over a range of temperatures.

Emulsification: Binding two immiscible liquids (e.g. oil and water) using an emulsifier e.g. lecithin in egg yolks. Emulsifiers feature a hydrophobic head and a hydrophilic tail to hold the liquids together e.g. mayonnaise.

Carbohydrates

Gelatinisation: Starch granules are heated in a liquid (60 °C). They absorb water, swell, and burst (80 °C), releasing starch molecules that thicken the mixture into a gel on boiling (100 °C). Examples include Roux sauce, custard.

Different starches yield different finishes:

Wheat/cornflour – opaque firm gels

Arrowroot/tapioca – translucent, glossier sauces.

Acidic ingredients e.g. lemon juice break down starch into shorter chains, significantly reducing the final viscosity of the sauce.

Caramelisation: Applying wet or dry heat directly to sugar (sucrose). The sugar structure breaks down, turning brown, altering its flavour profile. Burning will occur if over heated.

Dextrinisation: Applying dry heat to starch. This breaks down starch into dextrins, causing a brown surface colour and sweeter flavour e.g. toast.

Proteins

Denaturation: The permanent, irreversible uncoiling of protein chains caused by heat, physical agitation (whisking), or acids (lemon juice).

Coagulation: Denatured protein chains trap moisture and cross-link, solidifying from a liquid into a firm structure e.g. egg whites setting.

Aeration: Physical whisking stretches protein structure to trap air pockets, producing a stable foam structure e.g. meringue.

Gluten formation: mixing a liquid (water/milk) with wheat flour allows gliadin and glutenin to form gluten. Kneading stretches these strands into an elastic network that traps CO₂ gas. Kneading time will directly alter the strength and density of the gluten network.

Different flours have different protein contents. Strong flour (12-14%) vs Plain flour (9-10%) vs Soft cake flour (7-8%).

Fat coats flour granules and repels water, shortening gluten strands. Salt strengthens gluten cross-links, while excess sugar competes with flour for water, slowing down gluten development.

Scientific Testing & Measurement

techniques

Measuring viscosity – starch gelatinisation/sauces

The viscosity test – place a spoonful of the cooked sauce on a laminated sheet of concentric circles. Time to 30 secs, measure how far the sauce spreads.

The coating test – dip a metal spoon in the sauce. If it cleanly coats the back of the spoon without running off immediately, it has achieved the nappe stage.

Measuring texture and elasticity – gluten development.

The windowpane test – stretch a small piece of dough. If it can stretch thin enough to pass light through without tearing, a strong, continuous gluten network has formed.

The spring back test – gently press a finger into the dough. If it springs back immediately, the gluten network is elastic.

Volume/height testing – use a ruler to measure exact height of baked loaf at its highest midpoint.

Sensory analysis

Star diagrams: used to map out multiple sensory characteristics e.g. crunchiness, glossiness, elasticity on a scale of 1-5. Must be completed by a panel of testers to avoid bias.

Paired comparison/triangle test: used to see if panel can detect the difference caused by your independent variable. Testers are given three samples and must identify the odd one out.



Où se trouve	Where is..
Où se trouve ta ville/ton village?	Where is your town/village?
Il/elle se trouve dans..	It is in..
Le nord/le nord-est/le nord-ouest /l'est	The north/north east/north-west/east
Le sud/le sud-est	The south/south-east
L'ouest/ le sud-ouest	The west/south west
de l'Angleterre/de la France	of England/ of France
en Angleterre/en France	In England/in France

to form negatives the ne...pas goes around the conjugated verb.	
ne...pas	not any
nejamais	never
ne...rien	nothing
ne...que	only
ne...aucun	not any, none
ne...personne	no-one
ne..ni..ni	neither...nor...
ne...plus	not any more

Vivre	To live
Je vis	I live
Tu vis	You live
Il/Elle/on vit	He/She lives
Nous vivons	We live
Vous vivez	You all live
Ils/Elles vivent	They live

Tu habites où? Where do you live?	
Tu habites dans une ville ou un village?	Do you live in a town or a village?
Y	there
Tu y habites depuis combien de temps?	How long have you lived there?
Ta ville/ton village est comment?	What is your town/village like?
Tu aimes y habiter? Pourquoi (pas)?	Do you like living there? Why (not)?

'y'
Means there. It goes before the conjugated verb

Les directions/directions	
Pour aller à /au/à la/aux	How do you get to the..
Continuez tout droit	Continue straight ahead
Tournez à gauche/à droite	Turn left/right
Traversez la place/le pont	Cross the square/bridge
Aux feux	At the traffic lights
Prenez la première/la deuxième rue à gauche/à droite...	Take the 1 st /2 nd road on the left/right
C'est loin d'ici?	Is it far from here?
C'est près d'ici?	Is it near here?
À côté de	next to
En face de	opposite
Devant	In front of
Derrière	behind
Entre	between

là où j'habite	
un petit village/une grande ville/ à Londres	a small village/big town/in London
près de la capitale	near the capital
j'habite à/ en ...depuis...ans/mois	I have lived in....for...years/months
vivre à la campagne/en ville est (parfait pour moi)	living in the countryside/town is (perfect for me)
je n'aime pas y habiter	I don't like living there
j'adore y habiter	I love living there
j'aimerais mieux habiter en ville	I would prefer to live in town
on peut y trouver	you can find...there
une vieille ville	an old town
une ville industrielle	an industrial town
de nombreux bâtiments	many buildings
une des plus grandes villes	one of the largest towns
avec des belles maisons traditionnelles	with beautiful, traditional houses
peu de	few/not many
un bel endroit	a nice/beautiful place
trop de bruit	too much noise

The adjective 'old'	
Masc sing	vieux
Fem sing	vieille
Plural	vieux
	vieilles
*m sing starting with a vowel	vieil

Make sure you use the correct word for 'in'.

dans + point of compass **dans** le sud-est
à + name of town/village **à** Londres
en + feminine country **en** France
au + masculine country **au** Portugal



Pros and Cons	
Un avantage	An advantage
Un désavantage	A disadvantage
Un pour	A for (a benefit)
Un contre	An 'against'
D'un côté	On the one hand
D'un autre côté	On the other hand
Le pire, c'est..	The worst thing is..
Le mieux, c'est..	The best thing is..
Au contraire	On the contrary
Toutefois	However
Tandis que	Whereas
Selon moi	According to me
Selon mes parents	According to my parents

Au magasin – role play

Vous cherchez quelque chose en particulier?	Are you looking for something in particular?
Je peux vous aider?	Can I help you?
Vous aimez cette chemise/cravate?	Do you like this shirt/tie?
Vous l'aimez?	do you like it?
il/elle coûte combien, svp?	How much does it cost please?
Je peux payer par carte?	Can I pay by card?
La caisse est là-bas	The till is over there
Je voudrais échanger ce Tee-shirt	I would like to exchange this T-shirt
Quel est le problème?	What is the problem?
Malheureusement,..	Unfortunately
Désolé(e), je n'en ai plus dans cette couleur	Sorry, I don't have any more of them in this colour
Avez-vous la même chose en (noir)?	Do you have the same thing in (black)?
Je peux l'essayer s'il vous plaît?	Can I try it on please?
Pas de problème	No problem

There are 4 words for this/these

Masc sing	Ce
Fem sing	Cette
Plural	Ces
*m sing starting with a vowel	Cet Eg cet oeuf (this egg)

depuis

Means since/for. In French, it is used with the present tense, which is very different to English

Au magasin- At the shop

ce chapeau/pantalon	This hat/these trousers
cette chemise	This shirt
ces chaussettes	These socks
ces chaussures	These shoes
Pour la fête/l'anniversaire de...	For someone's party/birthday
J'ai trouvé/vu ça	I found/saw that
Il/elle a coûté	It cost
La prochaine fois	Next time
j'achèterai/je choisirai	I will buy/choose
j'essayerai/j'irai	I will try/go

Comment serait ta maison idéale?

Moi, si j'avais le choix	If I had the choice
J'aimerais habiter dans..	I would like to live in...
Si j'étais riche, j'habiterais dans...	If I were rich, I would live in..
Un château ancien	An ancient castle
Un bel appartement tout neuf	A beautiful, brand new flat
J'aurais	I would have
Il y aurait...	There would be...

La maison de mes rêves – the house of my dreams

propre et bien équipé	clean and well-equipped
un bon accès pour les personnes handicapées en fauteuil roulant	good access for disabled people in a wheelchair
ma propre chambre	my own bedroom
des grandes fenêtres, pour profiter de la lumière naturelle	big windows to make most of the natural light
de nombreuses pièces avec beaucoup d'espace	lots of rooms with a lot of space
un ascenseur	a lift
un escalier	a staircase
un joli jardin plein de fleurs et d'arbres	a pretty garden full of flowers and trees
Un voisin	A neighbour
avec qui je peux parler et rire	with whom I can talk and laugh
une télévision à grand écran	a large screen TV
une maison à plusieurs étages	a house with several floors
un cinéma privé pour voir les derniers films	a private cinema to see the latest films
dehors	outside



5.3 London’s context.

Site:
Located on the Thames River, the land is flat as it is on the **flood plain**. Located on the Thames as this was a **‘bridging point’** during Roman times. Economically this meant that businesses started in the area and trade soon started.

Situation:
London is a very well connected city. It is **situated** in the south east of England, in Western Europe. The M25 runs around London. A number of other motorways lead to London. These include the M1, M11 and M23 meaning quick access to other cities across UK. There are **5 airports** meaning tourists and trade are easily attracted- London can be considered a **global hub** for air travel. Ferries and Eurotunnel allow for further increase in trade which helps to boost **FDI**.

London’s structure is more complex than both the Burgess model and the Hoyt model. It’s main economic function has shifted to the Docklands and now includes world famous building like Canary Wharf. **In some ways you could say London has 2 CBDs**, many businesses and tourists are attracted to Central London

As with the Burgess model the city because more suburban in its function as you get further out. Housing age decreases and in many areas we are seeing new development in residential areas. With the internet and transport businesses are starting to move out of town for cheaper rent, they are ‘footloose’. Environmental quality improves as you get further out, there is less traffic and pollution and population density decreases.

5.4 London changes through employment, services and the movement of people.

Pull factors (jobs, culture, infrastructure, education, health play a huge role in attracting migrants (both national and international to London).

Clusters of migrant populations occur as culture develops. New immigrants can be supported by friends and family with settling and language barriers. Most migrants are adults aged between 21-35.

- Migrants from within the UK tend to be graduates from UK universities seeking work and a London lifestyle.
- International migration consists of skilled and unskilled workers.

Skilled workers – take up well-paid jobs in the knowledge economy in London.

Unskilled workers – find work easy to get. Clusters of particular ethnic communities develop which help defend migrants from discrimination, support ethnic shops and services and help to preserve cultural distinctiveness.

While parts of London are booming and wealthy, some are very deprived. Deprivation has several causes. The government gathers information on employment, health, education, housing and services to produce an Index of Multiple Deprivation (IMD) which shows how deprived places are.



5.5 London opportunities and challenges

London has not always been a thriving city. After the closure of London’s docks in 1981, the riverside between Tower Bridge and the Thames became derelict. New container ships were larger than before, so ports moved downstream where the water was deeper. This led to...

- **DEINDUSTRIALISATION**
 - Industries that relied on the ports moved too, or closed down.
 - By 2001, only 7.1% in manufacturing in London, in 1971 it was 30%
- **DEPOPULATION**
 - Closures had massive impact on communities.
 - East London had unemployment rates over 60%.
 - People left the area in search of work – between 1971 and 1981, 500,000 people left inner London boroughs.
- Depopulation led to an increased rate of movement of people from the inner to outer suburbs. **SUBURBANISATION**.
 - This is possible due to transport within London.
- The shift to the suburbs led people to spend their money there too, instead of London. This led to **DECENTRALISATION**.
- In the 1980s in an effort to reverse the process of inner city decline the UK government set up Urban Development Corporations (known as UDCs). The aim of these UDCs was to **REGENERATE** inner city areas with large amounts of derelict and unused land by taking over planning responsibility from local councils.

People who work in London have a difficult choice to make – where to live? Choosing London means very high rent or mortgage payments. Choosing further out of London means a cheaper house, but a lot of money and time spent commuting. As a result of this, London has become a sprawling city, invading surrounding rural areas.

To limit its growth, a green belt was introduced by planners to protect the countryside. This is an area in which no major building was allowed.

Since 1991, the flow of people leaving London has reversed. Re-urbanisation has taken place.



Wir verbessern die Welt – We make the world better		
der Beruf	job/profession/occupation	
der Erfolg	success	
der Fortschritt	progress	
der Held/die Heldin	hero/heroine	
der Mensch	person	
der Schriftsteller	writer	
der Stadtplan	town plan	
der Zweck	purpose	
die Diskriminierung	discrimination	
die Erfahrung	experience	
die Geschwister	siblings/brothers and sisters	
das Buch	book	
das Leben	life	
das Projekt	project	
das Ziel	goal	

Wir verbessern die Welt – We make the world better		
entwickeln	to develop	
gründen	to found/start	
haben	to have	
informieren	to inform	
kämpfen (für)	to fight (for)/struggle	
machen	to make/do	
schreiben	to write	
behindert	disabled	
schwarz	black	
außerhalb/innerhalb	outside of/inside of	
wegen/trotz	because of/despite, in spite of	
gegen/über	against/over, about	
während	during	
wofür	for what	

Was ist dir wichtig? – What is important for you?		
wichtige Themen in der Welt	important topics in the world	
Ich habe Angst vor ...	I'm afraid of ...	
Ich bin mit ... zufrieden.	I'm happy/satisfied with ...	
Ich hoffe auf eine bessere Zukunft.	I hope for a better future.	
Ich mache mir Sorgen um ...	I worry about ...	
Ich spreche über ...	I talk about ...	
Ich arbeite an ...	I work on	
die Ausbildung/die Arbeit	education/work	
die Flüchtlinge/den Welthunger	refugees/world hunger	
das Gute/das Schlechte	good thing/bad thing	
das Wichtigste	most important thing	

Dialog ist wichtig! – Dialogue is important!		
Du hast gesagt, dass ...	You said that ...	
aber ich denke, dass ...	but I think that ...	
Das glaube ich nicht.	I do not think so.	
Das stimmt, aber ...	That's right, but/however ...	
Du hast Recht.	You are right.	
Ich bin der Meinung, dass ...	I am of the opinion that	
Das Gute ist, dass ...	The good thing is that ...	
Ich behaupte trotzdem, dass ...	Nevertheless, I maintain that ...	
Vor allem ...	Above all ...	
Viele Leute sagen, dass ...	A lot of people say that ...	
Einerseits ..., andererseits ...	on the one hand ... on the other hand ...	
Ich bin überzeugt, dass ...	I am convinced that ...	
Weder ..., noch ...	Neither ... nor ...	
Vielleicht, aber ich weiß nicht, ob ...	Perhaps, but I don't know if ...	
im Gegenteil	on the contrary	
außerdem	in addition, besides	
jedoch	however	
übrigens	by the way, what's more	

Modal verb structures		
are followed by an infinitive		
man muss	you have to	
man darf nicht	you must not	
man will	you want to	
man kann	you can	
man müsste	you would have to	
man sollte	you should	
man könnte	you could	
man würde	you would	

Picture description		
Im Bild/Im Foto	On the photo	
Ich/man kann ... sehen	I can see/you can see	
Im Bild gibt es	In the picture there is	
Auf der linken/rechten Seite	On the left/on the right	
Im Hintergrund	In the background	
Im Vordergrund	In the foreground	
Das Foto wurde ... gemacht	The photo was taken	
Sie spielen, essen, tragen	They are playing, eating, wearing	
USE PRESENT TENSE TO SAY WHAT PEOPLE ARE DOING "NO IS-ING" "AM-ING" OR "ARE-ING"		

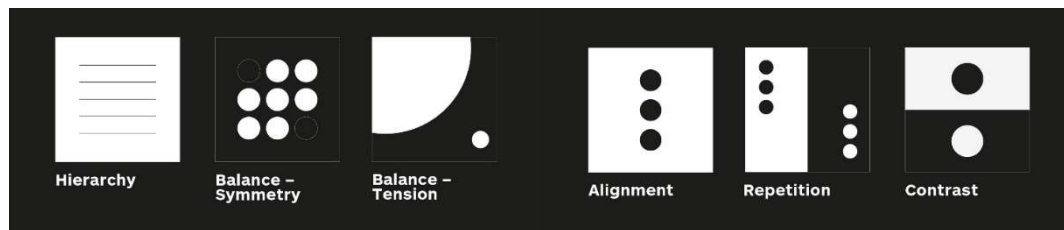
Umweltprobleme – environmental problems	
Meiner Meinung nach ...	In my opinion
Laut einer Studie ...	According to a study
der Plastikmüll	plastic waste
der Verlust von Bäumen	loss of trees
die Luftverschmutzung	air pollution
die Wasserverschmutzung	water pollution
das extreme Wetter	extreme weather
die steigenden Temperaturen	rising temperatures
die Kleinstadt	small town
die Tierarten	animal species
das Umweltproblem	environmental problem
das Verkehrsmittel	means of transport
das größte/wichtigste Problem ist	the biggest/most important problem is
die größten/wichtigsten Probleme sind	the biggest/most important problems are ...
teilnehmen an + acc	take part in
tun	to do
Ich stimme nicht zu	I do not agree
Das stimmt (nicht)	That is (not) correct/right
dagegen	against it / on the other hand
schon	already
für den Klimaschutz kämpfen	to fight for climate protection
die Klimakrise	the climate crisis
mit öffentlichen Verkehrsmitteln fahren	travel by public transport
die Lärmverschmutzung	noise pollution
den Plastikmüll vermeiden	to avoid plastic waste
erneuerbare Energiequellen entwickeln	develop renewable energy sources

Umweltprobleme mit “um ... zu” – environmental problems with in order to	
Man soll ...	You/One should
erneuerbare Energiequellen entwickeln	develop renewable energy sources
trennen/recyceln	to separate/to recycle
um zu + infinitive	(in order) to ...
um die Luftverschmutzung zu reduzieren	to reduce air pollution
um die steigenden Temperaturen zu reduzieren	to reduce rising temperatures
um Plastikmüll/ Müll zu vermeiden	to avoid plastic waste/rubbish
um Energie zu sparen	to save energy
um unsere Wälder zu retten	to save our forests
um eine bessere Welt zu schaffen	to create a better world

Wir können alle etwas machen – We can all do something	
Ich kaufe ...	I buy
nachhaltige/ umweltfreundliche Produkte	sustainable/ environmentally friendly products
billige/gebrauchte/ modische Kleidung	cheap/second-hand/ fashionable clothes
Ich spare Energie/ Strom/Wasser	I save power/ electricity/water
Ich recycle ...	I recycle
Ich werfe ... weg (wegwerfen = separable)	I throw away
Dosen/Papier/ (Plastik)Flaschen	tins, cans/paper/ (plastic) bottles
Ich trinke aus ...	I drink from
einer wiederverwendbaren (Wegwerf)Tasse	a reusable/ disposable cup
Ich mache das Licht aus	I turn the light off

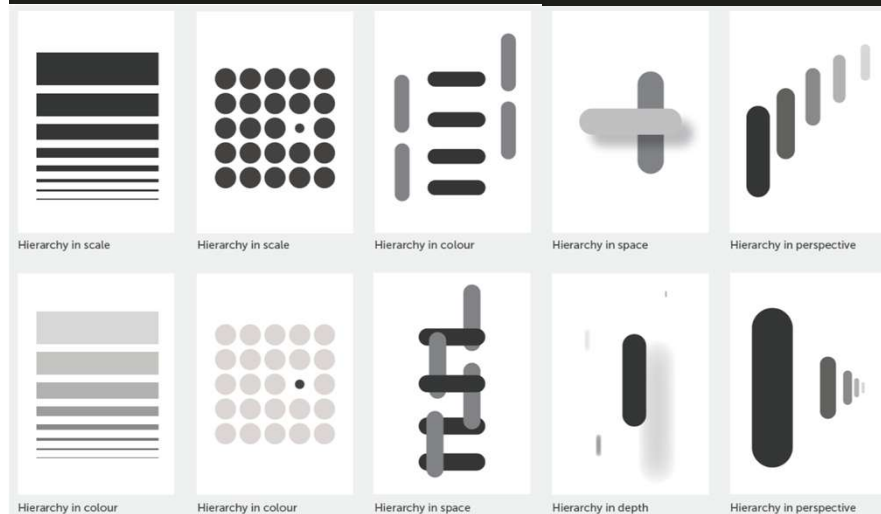
Was hast du neulich gemacht, um die Umwelt zu schützen? – What have you recently done to protect the environment?	
Ich habe den Müll getrennt.	I separated the rubbish.
Ich habe an einem Schulstreik teilgenommen.	I took part in a school strike.
Ich habe Energie gespart.	I saved energy.
Ich habe nachhaltige Produkte gekauft.	I bought sustainable products.
Ich habe Bäume gepflanzt.	I planted trees.
Ich habe keine Plastikflaschen benutzt.	I didn't use any plastic bottles.
Ich bin zu Fuß zur Schule gegangen.	I walked to school.
Mein Vater hat ein elektrisches Auto gekauft.	My father bought an electric car.
Ich habe recycelt.	I recycled.

Wir wollen eine bessere Welt – We want a better world	
der Mensch/ das Kind	person/child
der Naturschutz	protection of nature
der Rassismus	racism
der Welthunger	world hunger
das Problem/ die Lösung	problem/ solution
das Leben	life
anfangen/beenden	to begin/to end
entscheiden	to decide
helfen/verbessern	to help/to improve
organisieren	to organise
weltweit	worldwide
arm	poor



Balance In the context of graphic design, balance is of three types.

- ☐ **Symmetrical** – This type of design is formed along a vertical axis and or horizontal axis, where the weight of the elements is evenly divided into both sides of the layout.
- ☐ **Asymmetrical** – This type of balance employs scale, contrast and colour to even out the flow of a layout. It is usually found in websites, where two sides of a webpage differ from each other but contain similar elements.
- ☐ **Radial**– Here, the elements of a design are placed in a circular pattern on the layout. This provides a sense of movement and dynamism to the eyes of the viewer.



Keyword	Definition – think it - link it	tick
Typography	Typography is the visual component of the written word,". All visually displayed text, whether on paper, screen or billboard, involves typography.	
Kerning	Kerning refers to the space between two specific letters (or other characters: numbers, punctuation, etc.) and the process of adjusting that space improves legibility.	
Tracking	Tracking is similar to kerning in that it refers to the spacing between letters or characters. However, instead of focusing on the spacing between individual letters (kerning), tracking measures space between groups of letters.	

Keyword	Principles of Design – read, cover, write, review	tick
Balance	This refers to the distribution of the graphic design elements, such as shapes, text boxes and images, of a design evenly throughout a certain layout. Designers can choose between a balanced (stable) design or off-balanced (dynamic) layout.	
Emphasis	Refers to a design's focal point and the importance of each element within it	
Alignment	Having a strong point of alignment within design allows our eyes to seamlessly flow through the visual message. Aligning elements with one another so that every item has a visual connection with something else on the page, tightens a design and eliminates the haphazard, messy effect which comes from random placement of elements.	
Contrast	The contrast principle of design generates space and distinction between elements, and is the most effective way to create emphasis and impact with your design.	
Repetition	Repetition strengthens a design by tying together otherwise separate parts, and as a result, creates associations.	
Proportion	The visual size and weight of parts in composition and their correlation is referred to as proportion.	
Movement	Controlling the elements in a composition such that the eye is led from one to the next and the information is transmitted appropriately to your audience is known as a movement.	
Negative space	The empty space around the parts in your composition/layout is known as negative space. It is also known as white space.	
Hierarchy	Hierarchy creates organisation, typographic hierarchy is an essential part of any design or layout. Hierarchy is a way to visually rank your design elements.	

Key terms/definitions (4 SPaG marks on this unit, including use of a wide range of specialist terms) Here, self/peer quizzing would work best to memorise key terms from definitions, and vice versa.						Timeline of key events Here, 'look, cover, write, check' can be effective, and 'think it/link it, matching to the key terms.				✓	
Term	Definition					✓	Early 1700s: Highway robbery widespread 1723: Black Act: hunting deer, hare or rabbits and/or having a blackened face in a hunting are is made a capital crime 1736: Witchcraft laws repealed 1748: Duke of Richmond asked to help tackle smuggling gangs: by this stage 103 people are 'wanted' as smugglers 1750: Population of England and Wales: 9.5 million people 1777: John Howard publishes 'The State of Prisons in England and Wales' 1789: French Revolution 1820s and 1830s: Abolition of the Bloody Code 1823: Peel's Gaols Act 1829: Metropolitan Police Act 1833: Tolpuddle Martyrs transported to Australia 1833: Peak year of transportation to Australia: 36 ships and 6,779 prisoners sent in this year 1840s: Railways have become a major form of travel 1841: Only murder/treason remain capital crimes 1842-77: 90 new prisons built in Britain, starting with Pentonville (separate system) 1850: 70% of the population could read and write 1856: It becomes compulsory for all towns and counties to set up police forces 1878: Criminal Investigation Department set up 1880: Law passed saying that all children at school until 13 1900: Population of England and Wales reaches 41.5 million people: 95% of these people could read and write				
Reformation	Period of drastic change in religion e.g. England becoming Protestant										
Highway robbery	Crime usually committed on horseback attacking travellers										
Stagecoaches	Horse-drawn coaches stopping at intervals to allow rest										
Poaching	Illegal hunting of animals										
Capital crime	A crime punishable by death										
Gamekeepers	People paid to patrol private land to protect animals from poachers										
Black market	Illegal buying and selling of goods										
Smuggling	Bringing goods into the country illegally/not paying tax on legal goods										
Customs officers	Officials ensuring nothing illegal imported/taxes paid on legal items										
Tolpuddle Martyrs	Six farm labourers sentenced to transportation and seven years hard labour in Australia for the crime of 'taking a secret oath'.										
Transportation	Sending convicted criminals overseas										
Industrial Revolution	Period of scientific and technological development from 18 th century										
Fielding Brothers	Introduced horse patrols/Bow Street Runners to improve policing										
Robert Peel	Home Secretary (from 1822), introduced the Gaols Act (1823), and also set up the Metropolitan Police Force (1829)										
Bloody Code	Harsh laws increasing death penalty: abolished in 1820s/1830s										
John Howard	Proposed changes to prisons, with healthier accommodation/diet										
Elizabeth Fry	Highlighted poor prison conditions, influenced Peel's Gaols Act										
Pentonville	First new prison set up in 1842, aiming to reform prisoners										
Separate system	Used in Pentonville: kept prisoners away from each other										
Silent system	Harsh prison system adopted during the 1860s										
Hard board	Hard wooden bunks to sleep on: used in the 'silent system'										
Hard fare	Adequate but monotonous food offered in the 'silent system'										
Hard labour	Deliberately pointless work set in 'silent system' - e.g. turning crank										
Underlying factors affecting Crime and Punishment in this and other periods Here, 'look, cover, write, check' may well be effective, as well as 'think it/link it' as to whether these aspects are change/continuity and which fit different examination questions.											
Key factors affecting Crime/Punishment	✓	Purpose of punishments	✓	Crimes	✓	Enforcement/trials	✓	Punishments	✓		
- Poverty and Wealth, - Attitudes in society, - Institutions: Church, - Institutions: Government, - Individuals, - Science and technology, - Travel, - Towns.		- <u>Retribution</u> (revenge), - <u>Deterrence</u> (warn others not to commit the same crime), - <u>Reform</u> (improve behaviour), - <u>Removal</u> (keep criminals off streets), - <u>Compensation</u> (victim or society paid back for the trouble caused by criminal).		- Highway robbery, - Poaching (1723 Black Act), - Smuggling, - End of Witchcraft, - Unionisation (Tolpuddle Martyrs).		- Decline in community enforcement, - Rise in professional law enforcement, - Fielding Brothers: Highway robbery patrol, - Creation of the Metropolitan Police Force.		- End of the Bloody Code (1820s/30s), - Transportation: to Australia, - End of transportation: 1857, - Prisons, - Reform to prisons (e.g. Howard/Fry).			

History Department: Knowledge Organiser: Year 11: Autumn 1: Crime and Punishment 1900-present

Key terms/definitions (4 SPaG marks on this unit, including use of a wide range of specialist terms)
Here, self/peer quizzing would work best to memorise key terms from definitions, and vice versa.

Timeline of key events
Here, 'look, cover, write, check' can be effective, and 'think it/link it, matching to the key terms.



Term	Definition	
Welfare State	System of government support for poorest/most vulnerable	✓
Absolute poverty	Lacking basics (e.g. food/shelter) to survive for any length of time	
Car crime	Driving offences and/or theft of or from vehicles	
Computer crime	Mainly theft or online fraud: e.g. banking/illegally copying music	
Hate crimes	Crime: victims targeted for their race, sexual orientation, religion	
Terrorism	Violence/intimidation in pursuit of political goals	
Fraud	Deliberate act of deception resulting in personal gain	
Opportunistic thief	Thief acting on the spur of the moment when opportunity arises	
Conscientious Objector	Refuses to work in the armed forces for moral or religious reasons	
Coward/cad	Lacking in courage/behaves dishonourably	
Tribunal	Panel of people brought together to settle some type of dispute	
Pepper spray/CS gas	Sprays used by police which irritate the eyes/burn throat	
CPOs	Crime Prevention Officers: they advise people on security	
Neighbourhood Watch	Organisation set up to prevent crime in local communities	
DNA matching	Using genetic information to help trace victims and criminals	
Custody	Being locked up or incarcerated	
Ofsted	Organisation: inspects quality of education in schools/prisons	
Non-custodial	Alternative punishment to being locked up in prison	
Curfew	Time when people must be at home, not on streets or elsewhere	
Tagging	Electronic marker attached to a criminal to monitor whereabouts	
Absconding	Leaving or escaping a location to avoid arrest	
Probation officers	Manage offenders to protect public/reduce chance of re-offending	
Juvenile delinquents	Young person who habitually commits criminal acts/offences	
Human Rights	Basic rights/freedoms which belong to every person	
Sanctity of Life	Belief that all life is sacred and must be protected	

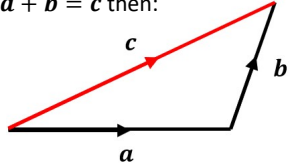
1901: Fingerprints and chemical analysis of blood samples used by police to identify suspects
 1902: Abolition of crank/treadmill within prisons
 1916: World War I conscription introduced
 1920: First female police officers
 1922: Abolition of solitary confinement within prisons
 1932: First Approved Schools set up for offenders under 15
 1933: First open prison built
 1935: Driving test introduced
 1939: World War II conscription introduced
 1947: 14 weeks training introduced for police recruits
 1948: Attendance centres introduced (non-custodial centres for offenders aged 10-21)
 1948: UN Declaration of Human Rights
 1953: Derek Bentley hanged
 1965: Death penalty in the UK abolished for all crimes except treason in times of war and piracy
 1969: Parliament voted to permanently abolish capital punishment
 1974: Police National Computer created to combine databases including fingerprints/vehicles/missing persons
 1982: Neighbourhood Watch began
 1982: Borstals abolished
 1988: First UK conviction using DNA samples
 2007: New law introduced covering 'hate crimes'
 2014: Ofsted judged over half of prisons as inadequate or requiring improvement

Underlying factors affecting Crime and Punishment in this and other periods *Here, 'look, cover, write, check' may well be effective, as well as 'think it/link it' as to whether these aspects are change/continuity and which fit different examination questions.*

Nature of crime	✓	Purpose of punishments	✓	Key factors affecting Crime and Punishment	✓	Changes in policing:	✓	Factors leading to changes in prisons:	✓
- <u>Crimes</u> against the person (e.g. murder/assault), - <u>Crimes against property</u> (e.g. theft, robbery, poaching, smuggling), - <u>Crimes against authority</u> (e.g. heresy, treason, illegal protest).		- <u>Retribution</u> (revenge), - <u>Deterrence</u> (warn others not to commit the same crime), - <u>Reform</u> (improve behaviour), - <u>Removal</u> (keep criminals off streets), - <u>Compensation</u> (victim or society paid back for the trouble caused by criminal).		- Poverty and Wealth, - Attitudes in society, - Institutions: the Church, - Institutions: Government, - Individuals, - Science and technology, - Travel, - Towns.		- Numbers/organisation, - Training/recruitment, - Transport, - Equipment, - Crime detection tools, - Record-keeping, - Main duties.		- Decrease in fear of crime, - Changing perception about causes of crime, - Arrest was a better deterrent than prison, - Increase in focus on reforming prisoners through education.	

Keyword	Definition	Example(s)
Subject	The variable that is on its own on one side of the equals sign.	F is the subject of $F = ma$
Algebraic Fractions	Fractions with algebraic terms. Can be operated in the same way as numerical fractions	$\frac{2}{3x} + \frac{x}{5} = \frac{2(5)}{15x} + \frac{x(3x)}{15x}$ $= \frac{10+3x^2}{15x}$
Cross cancelling	Before multiplying, cancel any common factors across numerators and denominators.	$\frac{x(x+2)}{3(x-2)} \times \frac{6(x-2)}{5x} = \frac{x+2}{1} \times \frac{2}{5}$ $= \frac{2x+4}{5}$
Simplifying algebraic fractions	First Factorise. Then cancel common factors on the numerator and denominator.	$\frac{x^2+3x+2}{x^2-4} = \frac{(x+2)(x+1)}{(x+2)(x-2)}$ $= \frac{x+1}{x-2}$
LCM for addition and subtraction	Factorise denominators, and find the LCM using repeated factors once.	$\frac{2}{x^2+x} + \frac{2}{x^2-1}$ $= \frac{2}{x(x+1)} + \frac{2}{(x+1)(x-1)}$ $= \frac{2(x-1)+2x}{x(x+1)(x-1)}$
Identity	An equivalence of expressions, which is true for all values of the variable.	$6x^2 - 3x \equiv 3x(2x - 1)$
Algebraic Proof	Algebraically showing a statement is true for all cases.	Prove the sum of squares of consecutive numbers is always odd. $n^2 + (n+1)^2$ $= n^2 + n^2 + 2n + 1$ $= 2(n^2 + n) + 1$ 1 more than an even number is odd
Counter-example	An example that does not fit the statement, and thus disproves it.	"All prime numbers are odd" $\rightarrow$ the number 2 is prime and even
Simplifying Surds	Writing a surd $\sqrt{a}$ in the form $b\sqrt{c}$ where c cannot be simplified further.	$\sqrt{72} = \sqrt{36 \times 2} = 6\sqrt{2}$
Rationalising denominators	Writing a fraction with a rational denominator.	1. $\frac{2}{\sqrt{5}} \rightarrow \frac{2}{\sqrt{5}} \times \frac{\sqrt{5}}{\sqrt{5}} = \frac{2\sqrt{5}}{5}$ 2. $\frac{1}{2+\sqrt{2}} \rightarrow \frac{1}{2+\sqrt{2}} \times \frac{2-\sqrt{2}}{2-\sqrt{2}} = \frac{2-\sqrt{2}}{2}$

Keyword	Definition	Example(s)
Function	A rule for finding the outputs for given values of the input.	$f(x) = 3x - 4$ $g(x) = x^2 + 1$
Composite function	Where 2 functions are applied consecutively to an input.	$fg(x)$ represents applying f to the output of $g(x)$ i.e: apply g first, then f
Inverse function	$f^{-1}(x)$ reverses the original function, $f(x)$	Using $f(x)$ from above: $f^{-1}(x) = \frac{x+4}{3}$

Keyword	Definition	Example(s)
Vector	A quantity with magnitude and direction	Forces, velocity, displacement
Displacement vector, $\overrightarrow{AB}$	How to get from A to B	$\overrightarrow{AB} = \mathbf{p}$ You must underline, $\overrightarrow{AB} = \mathbf{p}$
Magnitude of a vector, $ \mathbf{a} $	The length of a vector, found using Pythagoras	$\mathbf{a} = \begin{pmatrix} x \\ y \end{pmatrix} \rightarrow \mathbf{a} = \sqrt{x^2 + y^2}$
Scalar	The amount a vector is multiplied by.	$2\mathbf{a}$ is twice the length of $\mathbf{a}$ in the same direction $-\mathbf{a}$ is the same length as $\mathbf{a}$ in the opposite direction
Resultant vector	The sum of multiple vectors, which can be represented diagrammatically.	If $\mathbf{a} + \mathbf{b} = \mathbf{c}$ then: 
Position vector, $\overrightarrow{OA}$	How to get from the origin to A	$\overrightarrow{AB} = \overrightarrow{OB} - \overrightarrow{OA}$
Parallel vectors	Vectors in same direction. May be different lengths or the negative.	$\overrightarrow{CD}$ is parallel to $\overrightarrow{EF}$ if $\overrightarrow{CD} = k\overrightarrow{EF}$
Collinear	Points which lie on the same line	If $\overrightarrow{PR} = k\overrightarrow{PQ}$ then P, Q and R are collinear

Year 11

Unit: *Afro Celt Sound System: Release*

See set work support guide and other resources:



Bournemouth School
m s c
department



This QR code will take you to a Spotify playlist with listening for *Afro Celt*. You will find it helpful to listen to it as you learn.

Context

Release: 1999 album by Afro Celt Sound System

Dynamics

Rarely discussed in this style of music as all dynamic levels are set by mixing.

Rhythm

Celtic Reel – a dance with a 4/4 or 2/4 metre, emphasis on beats 1 and 3, and fast quaver or semiquaver patterns

Ostinato – short repeating pattern

Texture

Heterophonic – where two parts have variations of a melody at the same time as each other

Homophonic – one part has melodic interest and rest accompany

Layering – adding / removing layers, especially when using music technology

Polyphonic – two or more equally important melodies played at the same time

Structure

Breakdown – a section in which most layers of the music drop out

Build – a section in which layers are built back up again

Outro – pop music term for the ending or coda

Verse – repeating section in which the lyrics change but music is similar every time.

Melody

Pentatonic – 5 note scale – here the verse melody uses the notes C, Eb, F, G, Bb

Instrumentation

Accordion – an instrument with bellows blowing air over metal reeds and played via either buttons or a keyboard

Bodhran – Irish hand held drum played with a double headed stick called a tipper

Djembe – goblet shaped drum from West Africa

Fiddle – folk name for violin

Hurdy Gurdy – mechanical or wheel fiddle used in Celtic folk music

Kora – West African harp like instrument

Low Whistle – Irish whistle similar to a recorder

Synthesiser – an electronic musical instrument that generates and alters audio signals to create sounds

Talking drum – African drum, hourglass shaped. Strings can be tightened or released while

playing to change pitch

Uilleann pipes – Irish bagpipes

Studio effects

Filter – an audio processor that selectively removes or attenuates specific frequencies from a sound

Loop – continuous repetition of a short sample of music

Panning – assigning sound to a position (left or right) within the stereo field

Reverb – effect adding the audio reflections found in a natural acoustic

Sample – a short piece of recorded sound

Tonality

Aeolian mode – scale using A-a on the white notes. Can be transposed – here it is C, D, Eb, F, G, Ab, Bb, C

Harmony

Diatonic – harmony which uses notes within the key

Drone – continuously sounding note





Microaggressions - A statement, action, or incident regarded as an instance of indirect, subtle, or unintentional discrimination against members of a marginalised group.

Offensive language – legally this means any utterance which is obscene, indecent, insulting, hurtful, disgusting, morally repugnant, or which breaches commonly accepted standards of decent and proper speech.



Chatbots – An AI computer program designed to simulate conversation with a human user, typically through text or voice interfaces.

Conspiracy theories - A belief that some secret but influential organisation is responsible for an event or phenomenon.



Options process – In Year 12 and 13, if you stay at school, you will complete your A-Levels. You select the subjects you study in Year 11.

A-Levels - Academic qualifications focused on specific subjects (e.g., Maths, History, Biology).

T-Levels - New vocational qualifications introduced in 2020, focusing on technical skills in specific industries (e.g., Digital, Construction, Healthcare).

Apprenticeships - Paid work combined with on-the-job training and study toward a qualification.

Signposting support:

Useful helplines and charities:

[Young Minds](#). Child and adolescent mental health charity for teens struggling with any subject. Call: 0808 802 5544

[Teen Line | Teens Support hotline - Connect, talk, get help!](#)
Teen Line's highly trained teen listeners provide support, resources and hope to any teen who is struggling.

[SANE](#). National out of hours mental health charity offering emotional support, guidance and information. Call: 0300 304 7000 (4.30pm to 10.30pm)

<https://www.themix.org.uk/sex-and-relationships>
Relationships advice for young people

<https://www.womensaid.org.uk/information-support/>
Women's Aid help and support website.

<https://www.ucas.com/> For searching for colleges, universities, requirements, placements, research and much more advice.

<https://nationalcareers.service.gov.uk/> Provides careers information, advice and guidance. Helps you make decisions at all stages in your career.

<https://www.theuniguide.co.uk/> Detailed university advice and guidance site.



Autumn Term 1

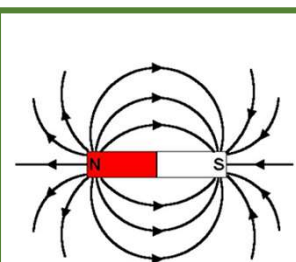
3.2.2.2 Commercialisation of physical activity and sport

The Golden Triangle: The financial relationship between Sport, Performer and Spectator

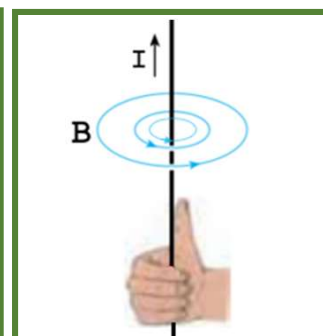
<pre>graph TD; A[Sport, Performer and Spectator] --> B[Media]; B --> C[Sponsors]; C --> A;</pre>	<pre>graph TD; A[Sport, team or performer is playing well they receive positive media] -- Positive --> B[Sponsors]; B --> C[Sport, team or performer can afford better facilities, equipment or players]; C --> A;</pre> Due to media coverage businesses invest in the sport, team or performer		<pre>graph TD; A[Sport is not shown in the media or is linked to a negative issue e.g. drugs] -- Negative --> B[Sponsors]; B --> C[Less money to spend on players, equipment and facilities]; C --> A;</pre> Due to poor media coverage businesses will not invest money in the sport, team or performer
Media Radio, newspapers, magazines, books, internet; major impact through television and social media.	Sponsorship – Usually a company which provides support to an event, activity, person or organisation, usually in the form of Financial, Equipment/Clothing and Facilities.	Sport/team/performer - Shown through media. - More money to spend on players / equipment / facilities, resulting in performances increasing in standard.	Spectators Buy merchandise / sponsors equipment or product and media products.
Five Ways Technology is used	The Effects of Commercialisation		
Making Decisions, Enhance Performance, Analysing Performance <u>Impact of Technology on Spectators</u> - Creates excitement for the audience whilst they wait on decisions so it is a positive Audience can join in / interactive element by cheering / clapping / creates atmosphere - Can frustrate spectators who do not like waiting or feel the entertainment has been interrupted - Prevents unruly behaviour / hooliganism as the decision has been made by technology / less controversial - Makes the event last longer / more value for money ☹️ Less likely to criticise officials - Performers recover quicker so spectators get to see their favourites more often - Spectators can get involved in the analysis of their favourite performers, e.g. statistics / performance analysis <u>Impact of Technology on Performers</u> - Greater care and support through the use of technology / prolonged career - Quicker recovery rate means less time on the treatment table / more time performing - Better understanding about their performance - Over reliance on technology to understand performance / recovery is a negative - Less frustrated with the official as the decision has been reviewed / proved / fairer outcome for the performers - Reliance on technology to keep up with other competitors can cost money - Easier to analyse competitors <u>Impact of Technology on Officials</u> - Help make the correct decisions and ensure fairness. - Take the pressure off having to make a decision and can ease the tension of players and spectators. - Takes away a part of the referees job and can undermine decisions made. <u>Impact of technology on the Sport</u> - Introduction of technology into the sport itself can make it more interesting and attract a larger audience and in turn bigger sponsorship deals.	<u>How Commercialisation affects the Performer</u> <u>Positive</u> - Allows athletes to earn income as a full-time job. - Performers gain maximum exposure to promote their personal brand. - Can lead to additional roles post playing career within the sport. - Relieves financial worries - Can afford / get higher quality equipment so performance will improve - Facilities, for example could be provided free of charge so can train more effectively / often <u>Negative</u> - Increased amount of pressure - Encourages deviant behaviour due to the pressure of success. This could result in performers cheating to win. - Generally, favours <u>male</u> over <u>female</u> and <u>able bodied</u> over <u>disabled</u>. - Performers may have to advertise a product that they do not like. - The performer has additional commitments that might detract from training / sponsors may make demands / loss of control; - May have to use equipment from the sponsor that might not be the best; - Any negative publicity may result in a loss of sponsorship	<u>How Commercialisation affects the Sport</u> <u>Positive</u> - Raises the profile of the sport due to increased exposure. This will result in more people wanting to participate. - Change in formats to make them more exciting. - Provides an increased level of funding / income to improve resources, coaching, equipment and facilities. - Gives the sport financial security for a period of time. - Attracts the best players in the world to that sport. - Improvement in coaching opportunities; - Standards of play / performance improves; Create more role models. <u>Negative</u> - Commercialisation tends to support the popular sports leaving the 'lesser' sports to lose out. - If sports are not in the media they do not attract sponsors resulting in less people taking part in the sport - The influence of TV has caused an increase in adverts and TV timings and lost some of sports traditions. - Media influences when games are played. - Lower attendances at events as it is seen on TV. - Negative publicity on a sport e.g. cycling and drugs, means they will struggle for sponsors. This will also lead to less people wanting to play the sport.	<u>How Commercialisation affects the Spectators</u> <u>Positive</u> - Offers a wider choice of sports available to watch; - Better facilities / stadiums to watch the sports. - Viewing experience has been enhanced due to investment into technology and audience participation e.g. large TV screens at games - More exciting games due to more money being placed into a sport. - Due to new rules, more exciting games e.g. 20 / 20 cricket. - More information given allowing in spectators being more knowledgeable. - More role models for them to see. <u>Negative</u> - Encourages spectating not participating. - Can become very expensive for fans/spectators. E.g. ticket prices, pay for view events, merchandise. - Matches can be played at times / places inconvenient for some people. - Can affect viewing experience due to increased TV breaks and time outs. - Media coverage can promote events leading to problems accommodating all of those who wish to attend e.g. difficult to get tickets for FA Cup Final or Wimbledon finals. - Media coverage can decrease the number of people attending because they can watch it in comfort at home/ e.g. large number of live football.matches on TV on Sunday and Mondays, or more televised rugby union.

Physics: P7 Magnetism and Electromagnetism

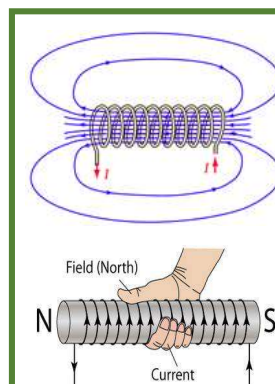
Keyword	Learn	✓
Permanent magnet	Produces its own magnetic field.	
Induced magnet	A material that becomes a temporarily magnetic when placed in a magnetic field. When removed from the magnetic field it loses its magnetism.	
Magnetic field	The region around a magnet where a force acts on another magnet or magnetic material. The direction of the magnetic field defined as the direction of the force that would act on another north pole placed at that point.	
Magnetic force	A non-contact force that is strongest at the poles of a magnet. Opposite poles (N-S) attract, like poles (N-N / S-S) repel.	
Magnetic materials	Iron, steel, cobalt and nickel. The force between a magnet and a magnetic material is always attractive.	
Magnetic field line	Directed from the north pole of a magnet to the south pole. Density of lines = strength of field.	
Current-carrying wire	The circular magnetic field weakens with distance from the wire. Higher current = stronger magnetic field.	
Current in a solenoid	The magnetic field inside a solenoid is strong and uniform. The magnetic field outside a solenoid has a similar shape to that of a bar magnet.	
Electromagnet	A solenoid (current-carrying coil of wire) with an iron core	
B	Magnetic flux density (<i>aka</i> magnetic field strength) measured in tesla, T.	
I	Electrical current measured in amperes, A	
Motor effect	The magnetic field of a current-carrying wire or coil interacts with a permanent magnetic field. They exert a force on each other. E.g. motors, loudspeakers.	
Generator effect	If a wire or coil cuts through magnet field lines a potential difference is induced. If part of a complete circuit a current is also induced. E.g. alternators, dynamos, microphones.	



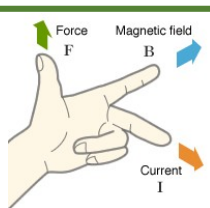
Learn to draw the shape of the field lines around a **bar magnet**. Include the field direction: from north pole to south pole.



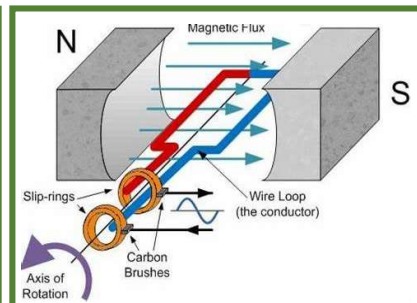
Learn to draw the circular field lines around a **current-carrying wire**. Use the right hand for wires to find the field direction.



Learn to draw the shape of the field **outside a solenoid** (similar to a bar magnet). Use the right-hand rule for solenoids to tell you which end is which pole. The field lines **inside** are parallel and equally spaced apart (uniform field).

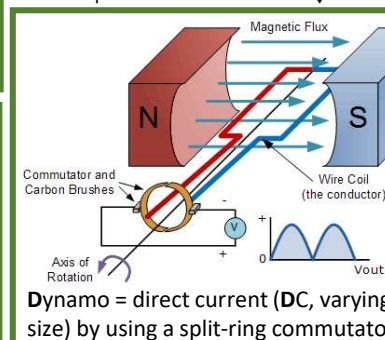


Fleming's Left-Hand Rule (*aka FBI rule*)
(1) Make a left-hand 'gun'. (2) Pull in your middle finger to put everything at right angles. (3) Acronym: **F**ederal **B**ureau **I**nvestigation



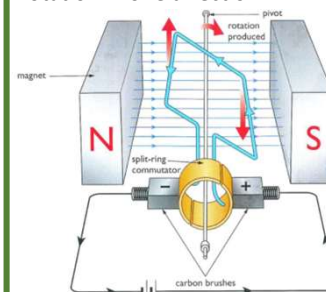
Alternator = alternating current (AC) using two slip rings. Every half-turn the current direction is reversed

↑ GENERATORS ↓



Dynamo = direct current (DC, varying size) by using a split-ring commutator

DC motor uses motor effect to exert a force on a current-carrying coil. Split-ring commutator ensures continuous rotation in one direction.



$$F = BIL. \text{ Force(N) = magnetic flux density (T) x current(A) x length of wire in magnetic field (m)}$$

**Key words:**

Good- Morally right, beneficial and to our advantage.

Evil- Extremely immoral, wicked and wrong.

Forgiveness- To grant a pardon for a wrongdoing, give up the desire to seek revenge

Freewill- The ability to make choices independently. Belief nothing is predetermined

Justice- Fairness, where everyone has equal provisions and opportunity.

Morality- Principles and standards determining which actions are right or wrong.

Punishment- A penalty given to someone for a crime or wrong they have done.

Sin- Deliberate immoral action, breaking a religious or moral law.

Suffering- Pain or distress caused by injury, illness or loss. Suffering can be physical, emotional, psychological or spiritual.

Key quotes:**Christianity:**

- ☐ 'Let Justice roll on like a river.'
- ☐ 'Love your neighbour as yourself'
- ☐ 'God created man in his own image'.
- ☐ The parable of the Good Samaritan.
- ☐ 'Father forgive them for they do not know what they are doing.'
- ☐ 'Forgive and you will be forgiven'.
- ☐ 'Do not repay anyone evil for evil'

Judaism

- ☐ 'Do not hate your brother in your heart'.
- ☐ 'One who take a life must be put to death'.
- ☐ Mishnah-death penalty can only be inflicted after trial'
- ☐ 'A person is obligated to bless upon the bad just as he blesses on the good'.

Key sources

- ☐ Epicurus
- ""Is God willing to prevent evil, but not able? Then he is not omnipotent. Is he able, but not willing? Then he is malevolent. Is he both able and willing? Then whence cometh evil? Is he neither able nor willing? Then why call him God?"

- ☐ JL Mackie inconsistent triad
- ☐ John Hick Soul Making
- ☐ The story of the Fall/original sin
- ☐ The Story of Job
- ☐ Gee Walker
- ☐ Eva Kor
- ☐ The Lord's Prayer

Key beliefs:**Irenaeus Theodicy:**

- ☐ God did not create a perfect world, but could have (omnipotence).
- ☐ God is responsible for evil.
- ☐ Everyone goes to heaven (because of the magnitude and disproportion of suffering. (omnibenevolence).
- ☐ Jesus was a perfect role model.

Other ways to defend God (theodicy).

- ☐ Devil
- ☐ Freewill
- ☐ Original sin-passed on
- ☐ Punishment for not following instructions
- ☐ Justice for victims
- ☐ Test
- ☐ Appreciate good/reward in afterlife
- ☐ God is in charge- omnipotent
- ☐ John Hick- soul making

Augustine Theodicy:

- ☐ God created a perfect world, thus maintains God's omnipotence.
- ☐ Humans are responsible for evil.
- ☐ Only believers go to heaven (The sacrificial atonement of Jesus guarantees this (omnibenevolence).
- ☐ Jesus is the only means by which anyone can be reconciled to God.

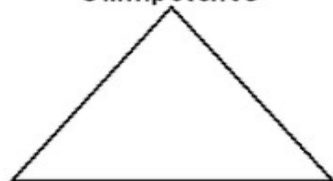
Jewish terms:

- ☐ **Yetzer ha ra**-Hebrew for human tendency to do evil.
- ☐ **Yetzer Ha tov**- Hebrew for human inclination for good

How to help those who are suffering.

- ☐ Pray
- ☐ Offer counselling
- ☐ Provide medicine, food or shelter
- ☐ Donate to a charity
- ☐ Raise awareness or Campaign
- ☐ Give your time
- ☐ Tach them skills

Omnipotence



Omnibenevolence

Evil

**Key to success:****Consider**

- ☐ What makes an act wrong?
- ☐ How do we make moral decisions?
- ☐ Why do people suffer?
- ☐ What is the origin of evil?
- ☐ Is it really possible to forgive?
- ☐ What causes crime?
- ☐ Can restorative justice work?
- ☐ Is it ever right to use the death penalty?

Consider think it link it to

- ☐ History GCSE
- ☐ Topic on Good and Evil in Christianity
- ☐ Views on human life in Issues of Life and Death.

Key exam questions:

- What is meant by the term Good (2).
- Describe the work of Prison Chaplains. (5)
- Explain beliefs about Evil and suffering and refer to either two religions or two religious traditions in your answer. (8)
- 'Retribution is the best form of punishment'. Discuss this statement. Show that you have considered more than one point of view. Refer to religious beliefs and teachings in your answer.

Note from Summer 2026 word order is slightly different.

Prison reformers-John Howard and Elizabeth Fry:

- ☐ Allow prisoners to have human rights
- ☐ Made them single sex
- ☐ Provided basic needs

Prison Chaplains:

- ☐ Counsel
- ☐ Contact family
- ☐ Forgiveness link to restorative justice
- ☐ Teach skills
- ☐ Give opportunity to reform
- ☐ Teach about faith
- ☐ Can help multiple faiths
- ☐ Read holy books/scripture to them

Key beliefs:**Where does Morality come from?**

- ☐ Conscience
- ☐ Peers
- ☐ Elders
- ☐ Law
- ☐ Religious scriptures
- ☐ Religious Leaders

Different types of Morality.

- ☐ Absolute- morality is when you stick to your morals in all circumstances.
- ☐ Relative- morality is when you hold a moral, but adapt it to certain situations.

Death Penalty/punishment

- ☐ Forgiveness- Jesus as example
- ☐ Compassion not revenge
- ☐ Use some euthanasia or abortion teachings
- ☐ Historically faiths have had death penalty
- ☐ Not legal in several countries
- ☐ Homosexuality/adultery have been seen as crimes
- ☐ No opportunity for reform

Aims of punishment:

- ☐ Retribution- revenge
- ☐ Reparation- pay through community service
- ☐ Reform- hope they change for better
- ☐ Protection- criminal/future victims and families
- ☐ Vindication- shows law should be upheld
- ☐ Deterrence- deter/put people off.

Jews and Forgiveness

- ☐ Mitzvah/commandment
- ☐ Duty
- ☐ Teshuvah- seek forgiveness and grow
- ☐ Repair damage
- ☐ Rosh Hashanah and Yom Kippur are time when Jews think out and seek forgiveness
- ☐ Prayer
- ☐ Seek advice from the Torah/Rabbi
- ☐ Holocaust survivors- God is Judge and law giver; he should decide

Christians and Forgiveness:

- ☐ Freewill
- ☐ Did God forgive Adam and Eve
- ☐ Compassion not revenge
- ☐ Confession allowed
- ☐ Jesus forgave 'Father forgive them..'
- ☐ Key figures like Pope and Martin Luther King Jnr also forgave
- ☐ Lord's prayer
- ☐ God is judge
- ☐ Cannot expect God's forgiveness if you do not forgive
- ☐ Can help restore relationships
- ☐ Help spiritual growth
- ☐ Atone

Los problemas medioambientales		
El cambio climático	Climate change	
La sequía	Drought	
El calentamiento global	Global warming	
Las inundaciones	Flooding / floods	
La contaminación	Pollution	
La deforestación	Deforestation	
El efecto invernadero	The greenhouse effect	

En la comunidad	
Para ayudar en mi comunidad	To help in my community
Para ayuda en la sociedad...	To help in society...
compro ropa de segunda mano	I buy second-hand clothes
compro productos de comercio justo	I buy fair trade products
doy / llevo comida a los bancos de alimentos	I give / take food to food banks
participo / ayudo en proyectos sociales	I take part in / help with social projects
hago campañas	I campaign
para apoyar a las personas sin hogar	to support homeless people
fui a una manifestación	I went to a protest
participé en un proyecto de conservación	I participated in a conservation project

Useful phrase	
Estaba lloviendo	It was raining

Pros & cons		
Por un lado	On one hand	
Por otro lado	On the other hand	
Una ventaja es que	An advantage is that	
Otra ventaja es que	Another advantage is that	
Una desventaja es que	A disadvantage is that	
Otra desventaja es que	Another disadvantage is that	
Lo bueno es que	The good thing is that	
Lo malo es que	The bad thing is that	
Lo que más me gusta es	What I like the most is	
Lo que menos me gusta es	What I like the least is	
Sin embargo	However	
No obstante	However	

Simple future tense		
To form the simple future, take the infinitive verb and add the endings		

-ar,er & ir verb endings - future		
-é		-emos
-ás		-éis
-á		-án

Irregular verbs in the simple future		
tendré		I will have
tendrás		You will have
haré		I will do / make
harás		You will do / make
podré		I will be able to
podrá		He / she will be able to

¿Qué haces para cuidar el medioambiente?	
Para cuidar el medioambiente en mi casa...	To look after the environment at home...
apago la luz para ahorrar energía	I turn off the light to save energy
separamos la basura	We separate the rubbish
voy en bici o a pie a menudo	I often go by bike or on foot
reciclamos el papel, las botellas de plástico y el vidrio	We recycle paper, plastic bottles and glass
me ducho, en vez de bañarme	I shower, instead of bathing
para ahorrar agua	to save water
utilizo el transporte público	I use public transport
no tiramos los alimentos a la basura	We don't throw food away
no usamos bolsas de plástico	We don't use plastic bags
tratamos de (no)	We try (not) to
intentamos no	We try (not) to

¿Qué has hecho para cuidar el medioambiente?	
Reciclé / reciclamos	I / we recycled
Separé / separamos la basura	I / we separated the rubbish
No usé botellas de plástico	I didn't use plastic bottles
No tiré los alimentos a la basura	I didn't throw food away
Intenté limitar el uso de...	I tried to limit the use of...
Fui en bici / a pie	I went by bike / on foot
Me lavé	I washed myself
Me duché en vez de bañarme	I showered instead of having a bath
Utilicé el transporte público	I used public transport
Apagué las luces	I turned off the lights
Saqué la basura	I took out the rubbish
Empecé a... (+ infinitive)	I started to (+ infinitive)

Timetable

[illegible]