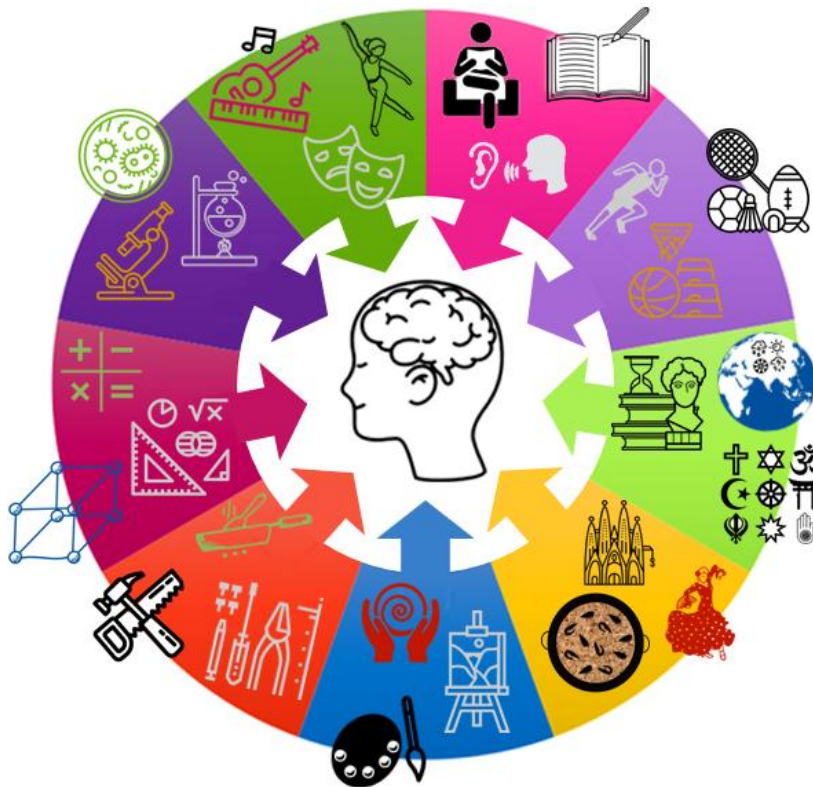


# 100% book - Year 11 Grammar

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

## Term 1



### Swindon Academy 2025-26

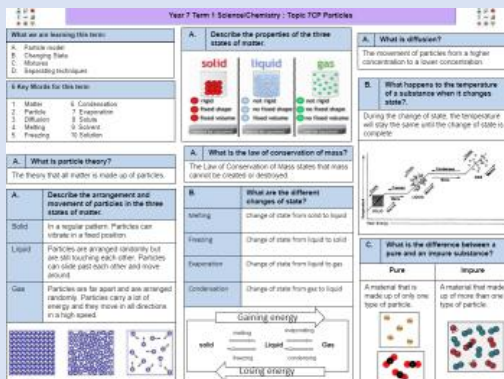
Name:	
Tutor Group:	
Tutor & Room:	

"If you are not willing to learn, no one can help you.

If you are determined to learn, no one can stop you."

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

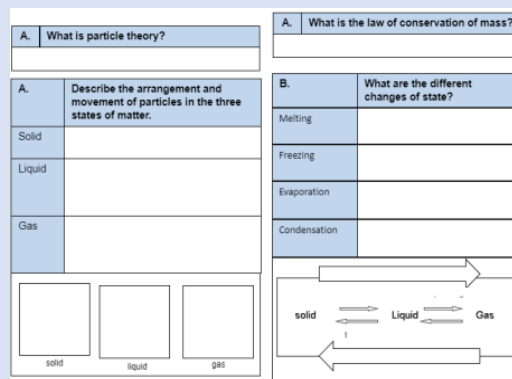
## Knowledge Organisers



Knowledge Organisers contain the essential knowledge that you **MUST** know in order to be successful this year and in all subsequent years.

They will help you learn, revise and retain what you have learnt in lessons in order to move the knowledge from your short-term memory to long-term memory.

## Quizzable Knowledge Organisers



These are designed to help you quiz yourself on the essential Knowledge.

Use them to test yourself or get someone else to test you, until you are confident you can recall the information from memory.

### Top Tip

Don't write on your Quizzable Knowledge Organisers! Quiz yourself by writing the missing words in your prep book. That way you can quiz yourself again and again!

## Expectations for Prep and for using your Knowledge Organisers

1. Complete all prep work set in your subject prep book.
2. Bring your prep book to every lesson and ensure that you have completed all work by the deadline.
3. Take pride in your prep book – keep it neat and tidy.
4. Present work in your prep book to the same standard you are expected to do in class.
5. Ensure that your use of SPAG is accurate.
6. Write in blue or black pen and sketch in pencil.
7. Ensure every piece of work has a title and date.
8. Use a ruler for straight lines.
9. If you are unsure about the prep, speak to your teacher.
10. Review your prep work in green pen using the mark scheme.

# How do I complete Knowledge Organiser Prep?

## Step 1

Check Epraise and identify what words /definitions/facts you have been asked to learn.  
Find the Knowledge Organiser you need to use.

## Step 2

Write today's date and the title from your Knowledge Organiser in your Prep Book.

## Step 3

Write out the keywords/definitions/facts from your Knowledge Organiser in FULL.

## Step 4

Read the keywords/definitions/facts out loud to yourself again and again and write the keywords/definitions/facts at least 3 times.

## Step 5

Open your quizzable Knowledge Organiser.  
Write the missing words from your quizzable Knowledge organiser in your prep book.

## Step 6

Check your answers using your Knowledge Organiser. Repeat Steps 3 to 5 with any questions you got wrong until you are confident.

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

# An Inspector Calls Grammar

1. Context			2. Key Characters		4. Key Vocabulary	
<p><b>Playwright:</b> John Boynton Priestley (1894-1984)</p> <p><b>Dates:</b> Written in 1945</p> <p><b>First performed:</b> In Moscow, Russia, in 1945</p> <p><b>Era:</b> Edwardian</p> <p><b>Genre:</b> Drama</p> <p><b>Set:</b> Fictional town Brumley ‘an industrial city in the north Midlands’ in 1912</p> <p><b>Structure:</b> Three Act Play</p>		<p><b>Biography of Priestley</b></p> <ul style="list-style-type: none"><li>Born in Yorkshire in 1894.</li><li>Fought in the first world war and became politicised by the suffering of it</li><li>Became concerned with the effects of social inequality in Britain in 1930s</li><li>Set up a new political party in 1942, The Commonwealth Party. It merged with the labour Party and was integral in developing the welfare state</li></ul>		<p><b>Inspector Goole:</b> An enigmatic (mysterious) figure who serves as Priestley’s mouthpiece and advocates social justice. He serves as the Birling’s conscience and exposes their sins.</p> <p><b>Mr Arthur Birling:</b> A capitalist and business owner who opposes social change and greater equality. He is a self-made man and lacks the refined manners of the upper classes. Made a fool by Priestley to highlight the arrogance and absurdity of his views.</p> <p><b>Mrs Sybil Birling:</b> Her husband’s social superior, Mrs Birling is involved in charity work but contradictorily believes in personal responsibility and looking after one’s-self. Fails to understand her own children.</p> <p><b>Sheila Birling:</b> Young and initially enthusiastic, Sheila grows and changes throughout the play, embracing the views of the Inspector and challenging the social indifference of her parents. She becomes wiser and more cautious in her relationship with Gerald.</p> <p><b>Eric Birling:</b> In his early twenties, he drinks too much and forces himself upon Eva Smith. Whilst she is pregnant with his child, he steals from his father to attempt to support her. Grows and changes, realises his own wrongs along with everyone else’s. Critical of parents.</p> <p><b>Gerald Croft:</b> A businessman engaged to Sheila, Gerald a relationship with Daisy Renton (Eva Smith). Even though he sits between he two generations he is politically closest to Birling and fails to embrace the Inspector’s message, instead seeking to prove he wasn’t real.</p> <p><b>Eva Smith:</b> Doesn’t appear in the play, but her suffering and abuse represents that of all the working classes. She also calls herself both Daisy Renton and Mrs Birling. The older characters begin to question whether she really is one person.</p>		<p><b>Capitalist</b></p> <p>Believing in private wealth and business aimed at making profit for business owners. Independent and self-reliant.</p> <p><b>Socialist</b></p> <p>Believing in shared ownership, collective responsibility for one another and social equality for all.</p> <p><b>Ideology</b></p> <p>A political viewpoint or set of beliefs, for example socialism.</p> <p><b>Responsibility</b></p> <p>Being accountable or to blame for something, or having a duty to deal with something.</p> <p><b>Hierarchy</b></p> <p>A ranking of status or power e.g. the strict class hierarchy of Edwardian England.</p> <p><b>Patriarchy</b></p> <p>A society in which power lies with men.</p> <p><b>Prejudice</b></p> <p>An opposition to or opinion about something/someone based upon what they are e.g. working class, female etc.</p> <p><b>Morality</b></p> <p>The belief that some behaviour is right and some is wrong.</p> <p><b>Proletariat</b></p> <p>The working class.</p> <p><b>Bourgeoisie</b></p> <p>The capitalist class in possession of the means of acquiring wealth.</p> <p><b>Aristocracy</b></p> <p>The highest class in society and often holding titles passed from father to son, for example Lord and Lady Croft.</p> <p><b>Façade</b></p> <p>A false front or surface-level illusion, for example the façade of family happiness in the opening scene of the play.</p> <p><b>Catalyst</b></p> <p>Someone or something that speeds up or triggers an event.</p> <p><b>Antithesis</b></p> <p>When something is the opposite of something else.</p>
<p><b>Pre and Post War</b> – Before the first world war there was deemed to be a general air of complacency regarding the prospect of any war taking pace. There were strong distinctions between upper and lower classes, society was deeply patriarchal. After the second world war ended in 1945, class distinctions had been greatly reduced by the two wars and women had earned a more valued place in society After 1945 there was a desire for more sweeping social change.</p>		<p><b>Socialism</b> – Socialism is an approach to economic and social systems that is characterised by social ownership, democratic control and high levels of equality. Socialism is generally concerned with ensuring that disparities between wealth and social status are erased from society. After the two World Wars British society was far more open to socialist ideas. In <i>An Inspector Calls</i>, the Inspector harbors socialist attitudes.</p>				
<p><b>Social and Moral Responsibility</b> – Attitudes towards social and moral responsibility changed rapidly in the time between when the play was set (1912) and the time the play was written (1945). In 1912 the general attitude of those with social status and wealth was towards looking after one’s own. By the mid-1940s however, the Labour party under Attlee won a landslide election reflecting a wave of enthusiasm towards communal responsibility for everyone in society.</p>		<p><b>The Titanic</b> – RMS Titanic was a British passenger liner that sank in the North Atlantic ocean in the morning hours of 15<sup>th</sup> April 1912, killing around 1500. The Titanic was designed to be the pinnacle of both safety and comfort, and due to its enormous size and quality was frequently labeled ‘unsinkable’. In <i>An Inspector Calls</i> Birling claims this, thus immediately losing the respect of the audience. It can serve as a symbol of the hubris and arrogance of man.</p>				
FORM – The play fits into three possible forms:			3. Central Themes			
<p><b>Well-Made Play</b></p> <ul style="list-style-type: none"><li>A popular type of drama from the 19<sup>th</sup> century</li><li>The events build to a climax</li><li>Primarily concerned with events that happened before the play</li><li>Plot is intricate and complex</li></ul>		<p><b>Morality Play</b></p> <ul style="list-style-type: none"><li>Most popular during 15<sup>th</sup> and 16<sup>th</sup> centuries</li><li>They taught the audience lessons that focused on the seven deadly sins</li><li>Characters who committed those sins were punished</li></ul>		<p><b>Crime Thriller</b></p> <ul style="list-style-type: none"><li>Involves a gripping tale based around a crime</li><li>The audience receives clues and must guess what has happened before the end</li><li>All is revealed by the climax</li></ul>		

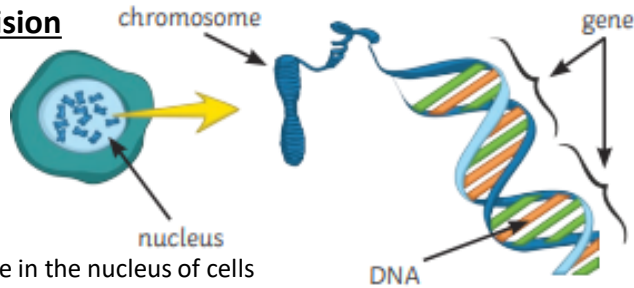
## An Inspector Calls Grammar

The Big Ideas	Notes	The Methods	Notes
Priestley promotes a socialist ideology in which he <b>argues for collective social responsibility</b> .		1. Priestley uses <b>contrasts</b> in character, setting and language to emphasise the different conflicts at work in society.	
Priestley suggests that change is possible, and that <b>hope lies with the younger generation</b> .		2. Priestley uses the <b>characterisation</b> of the Inspector and the family as a means of highlighting his view of different groups in society.	
Priestley <b>challenges existing social hierarchies</b> of class and gender.		3. Priestley uses <b>entrances, exits, beginnings and endings</b> as a means of building and maintaining dramatic tension.	



# T1 Y11 Grammar Biology: B6 Reproduction

## Cells and cell division



The chromosomes are in the nucleus of cells

Humans have 46 chromosomes.

Chromosomes contain genes, which code for proteins.

In body cells, chromosomes are in pairs – one from each parent.

In sex cells (gametes) they are not in pairs and there is half the number of chromosomes (e.g. 23 in humans)

## Cell division – two types:



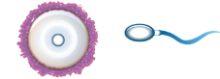
Mitosis (in all body cells)	Meiosis (in testes and ovaries)
2 daughter cells	4 daughter cells
Daughter cells = genetically identical	Daughter cells = not genetically identical
Cell divides once	Two divisions
Daughter cells <b>have same number</b> of chromosomes as original cell	Daughter cells <b>have half</b> the chromosomes as original cell
Used for growth and repair.	Produces gametes for sexual reproduction

## Reproduction

Two types of reproduction – sexual and asexual.

	Sexual	Asexual
Number of parents	2	1
gametes used?	Yes	no
Variation in the offspring	lots	None (unless mutations occur) Offspring are clones

## Sexual reproduction



The sperm and egg have half of the genes for the offspring. (in humans 23 chromosomes)

At fertilisation, the sperm and egg nuclei join. ( $23 + 23 = 46$  chromosomes)

There are two genes for any one characteristic – one on the chromosome from mum and one from Dad

Different forms of the same gene are called **alleles**

If the alleles are the same, the person is **homozygous**

If the alleles are different the person is **heterozygous**

E.g.:

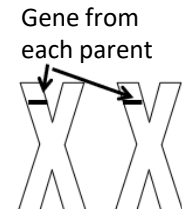
**B = brown hair (dominant)**

**b = red hair**

BB = homozygous, brown hair

Bb = heterozygous, brown hair

bb = homozygous, red hair



## T1 Y11 Grammar Biology: B6 Reproduction

1. Put these in order from smallest to biggest:

Allele, Cell, Chromosome, Gene, Nucleus

2. What are the two types of cell division?
3. When does mitosis take place?
4. Where does meiosis take place?
5. How does the number of chromosomes in a gamete differ from those of a body cell?
6. What do genes do?

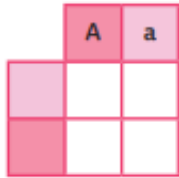
1. What are the two types of reproduction?
2. How many parents are needed for asexual reproduction?
3. What are the offspring of asexual reproduction known as?
4. What is the term for when a sperm and an egg join?
5. How many genes do we have for any single characteristic?
6. What term is used to describe a person that has two alleles that are the same for a particular characteristic?

# T1 Y11 Grammar Biology: B6 Reproduction

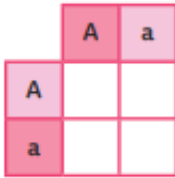
## How to complete a punnet square

If A = blue eyes, a = green eyes

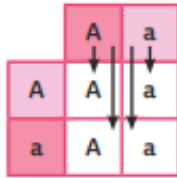
Calculate the probability of two heterozygous people having a green eyed child



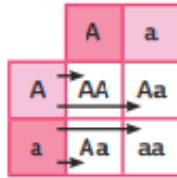
Step 1  
Put one  
parents alleles  
into the boxes  
at the top



Step 2  
Put the other  
parents  
alleles into the  
boxes  
down the side



Step 3  
Write the  
alleles from  
parent one in  
all boxes  
underneath



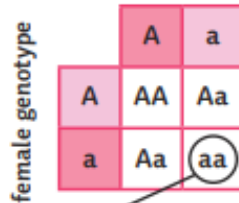
Step 4  
Put the alleles  
from the  
second  
parent into  
the boxes to  
the right

## Probability

A green eyed child would have aa genotype.

One of these four has the type aa – that's  $\frac{1}{4}$ , 25% or 0.25.

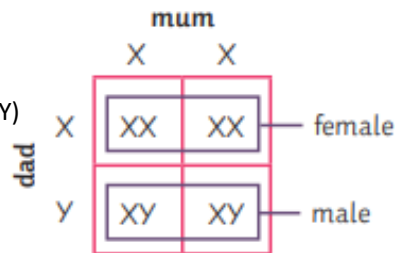
male genotype



## Sex Determination

Females carry two X chromosomes (XX)

Males carry one X and one Y chromosome (XY)  
50% chance of male and female.



## Inherited disorders

### Cystic fibrosis

Disorder of cell membranes

Caused by a recessive allele

Causes thick mucus to form in membranes

Main organs affected are lungs, digestive & reproductive organs – pancreas and intestines.



Alveoli get blocked with mucus

Increases diffusion path so less

O<sub>2</sub> gets into the blood

### Polydactyly



Mother



Father

	C	c
C	CC	Cc
c	Cc	cc

Disorder of the hands and feet

Caused by a dominant allele

Causes extra digits, fingers and toes.

### Embryo screening

Parents that have inherited disorders may opt for embryo screening

1. Multiple embryos are made in IVF
2. One cell is removed from each embryo
3. The cells are screened for faulty genes
4. Only embryos without the genes for disorders are transferred to the womb of the mother.

+ Babies born free of that inherited disorder

- no guarantee child will be free of other health issues
- Many embryos are destroyed, which are potential human lives



## T1 Y11 Grammar Biology: B6 Reproduction

1. What two sex chromosomes do females carry?

2. What two chromosomes do males carry?

3. What is the probability of having a boy?

4. Complete the punnet square:

	D	d
d		
d		

5. What is the chance of having an offspring with the allele pair dd?

1. What is cystic fibrosis a disorder of?

2. Is the allele for cystic fibrosis dominant or recessive?

3. Why do cystic fibrosis sufferers struggle to get oxygen into the body?

4. What is polydactyly?

5. Is the allele for polydactyly dominant or recessive?

6. Give one advantage of embryo screening

7. Give one disadvantage of embryo screening

# T1 Y11 Grammar Chemistry C7 – Organic Chemistry

## Crude oil

Crude oil = a mixture of **hydrocarbons**.

- It is a **non-renewable resource (fossil fuel)**
- Made from remains of dead sea creatures **compressed** over millions of years

**Hydrocarbons** - molecules containing **hydrogen** and **carbon only**.

Two types of hydrocarbons are **alkanes** and **alkenes**.  
The hydrocarbons in crude oil are mostly alkanes.

## Alkanes

- Alkanes = **saturated** hydrocarbons.
- Held together by **single covalent bonds**.
- General formula =  $C_nH_{2n+2}$
- Have different boiling points – longer the chain, higher the boiling point

**You need to remember the names, and formulas of the first 4 alkanes.**








Name of Alkane	Structural Formula	Molecular Formula
methane	$\begin{array}{c} \text{H} \\   \\ \text{H}-\text{C}-\text{H} \\   \\ \text{H} \end{array}$	$\text{CH}_4$
ethane	$\begin{array}{c} \text{H} \quad \text{H} \\   \quad   \\ \text{H}-\text{C}-\text{C}-\text{H} \\   \quad   \\ \text{H} \quad \text{H} \end{array}$	$\text{C}_2\text{H}_6$
propane	$\begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\   \quad   \quad   \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{H} \\   \quad   \quad   \\ \text{H} \quad \text{H} \quad \text{H} \end{array}$	$\text{C}_3\text{H}_8$
butane	$\begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \quad \text{H} \\   \quad   \quad   \quad   \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{C}-\text{H} \\   \quad   \quad   \quad   \\ \text{H} \quad \text{H} \quad \text{H} \quad \text{H} \end{array}$	$\text{C}_4\text{H}_{10}$

## Fractional Distillation

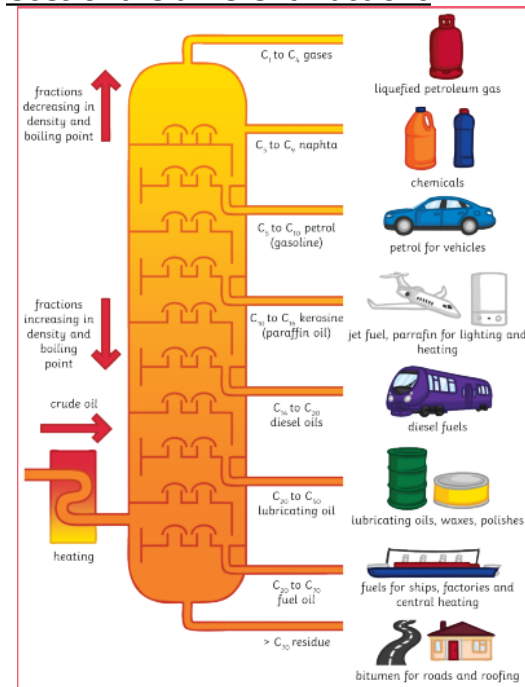
- Used to **separate** the mixtures of hydrocarbons in **crude oil**.

### Steps in Fractional Distillation

1. Crude oil enters **fractioning column** and is heated to boiling point so the hydrocarbons evaporate.
2. It is **cooler** at the **top** of the fractionating column and **hotter** at the **bottom**.
3. Vapours rise up the column and, as they rise, they cool
4. The different hydrocarbons condense at different **boiling points**
5. The different 'fractions' have different **properties**

Short-Chain Molecules	Increasing Chain Length	Long-Chain Molecules
		
thin	As chain length increases, the <b>boiling point</b> of the hydrocarbon chains also increases.	thick
	Viscosity describes how easily a substance can flow e.g. treacle is very viscous; it is thick.	
	Flammability is a measure of how easily a substance burns.	

## Uses of the different fractions



## Supply and demand

Product	Supply in tonnes	Demand in tonnes
petrol	100	300
diesel	200	100
heating oil	250	50

After fractional distillation, we find:

- we have more of the long chain hydrocarbons than we need
- There are not enough short chain hydrocarbons.
- Short chain are more useful as they are more flammable so can be used as fuels.

## T1 Y11 Grammar Chemistry C7 – Organic Chemistry

<ol style="list-style-type: none"><li>1. What is crude oil?</li><li>2. What is a hydrocarbon?</li><li>3. What type of hydrocarbons are alkanes?</li><li>4. State the general formula for alkanes.</li><li>5. Name the first four alkanes.</li><li>6. What sort of bonding is found in hydrocarbons?</li></ol>	<ol style="list-style-type: none"><li>1. What is the name for the process that results in the separation of the fractions of crude oil?</li><li>2. What happens to the boiling point of hydrocarbons as the chain length <b>increases</b>?</li><li>3. What happens to the viscosity of hydrocarbons as the chain length <b>increases</b>?</li><li>4. What does flammable mean?</li><li>5. What are the two changes of state that occur during fractional distillation?</li><li>6. Which physical property is used to separate the fractions?</li></ol>	<ol style="list-style-type: none"><li>1. What is one use for the hydrocarbons that are between 14 and 20 carbons long?</li><li>2. What is the range of lengths of hydrocarbons in fuel oil?</li><li>3. What are the smallest hydrocarbons used for?</li><li>4. What happens to the flammability of hydrocarbons as the chain length <b>increases</b></li><li>5. What is the range of hydrocarbon lengths found in petrol?</li><li>6. What is the problem with supply and demand of the different hydrocarbon chains?</li></ol>
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# T1 Y11 Grammar Chemistry C7 – Organic Chemistry

## Cracking

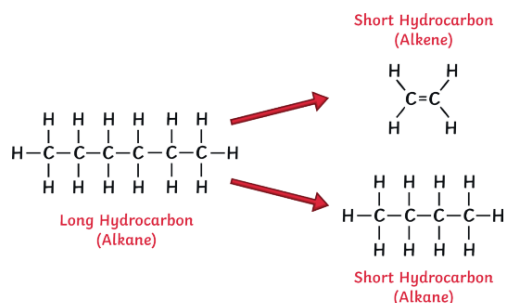
- This is done to solve the problem of having too many long chain hydrocarbons and not enough short ones
- Long hydrocarbons are **broken down** into smaller, more useful hydrocarbons.
- Short chain hydrocarbons are more useful as they are more flammable

**Two types of cracking: catalytic and steam cracking.**

**Catalytic cracking** – needs a **high temperature** and a **catalyst**.

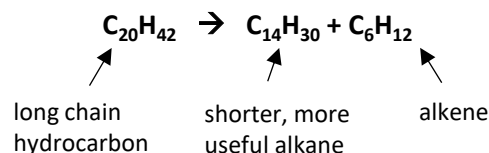
**Steam cracking** – **high temperature** and **steam**

- Cracking produces a **short-chain alkane** and an **alkene**.



## Cracking equations

Same number of carbon and hydrogen atoms on both sides of the equation:



## Alkenes

- Alkenes are **unsaturated** hydrocarbons.
- Contain carbon-carbon **double bonds**.

### Test for Alkenes

Use bromine water to test for alkenes.

If an alkene is present, the bromine water turns from orange/brown to colourless.

Alkanes do not react with bromine water.

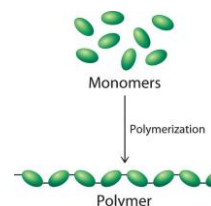


### Uses for alkenes:

- Can be used as fuels
- Can be used as a starting material for other chemicals
- Can be used to make polymers (e.g. plastic)

### Polymers

- Polymers are large molecules made of many repeating units (monomers)
- Alkenes (small molecules) are joined together to make polymers



**Poly(ethene)** – plastic bags/drinks bottles

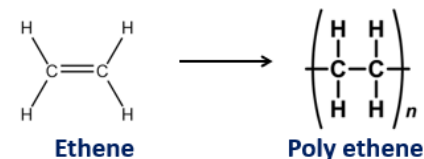
**Poly(propene)** – strong tough plastics

## Drawing and naming polymers

1. Redraw the **monomer given**, but without the double bond. Make sure to copy all other elements exactly.
2. Put brackets around the monomer and extend joining bonds out through the brackets on both sides
3. Add an 'n' at the bottom right of the bracket
4. To name the polymer, you put **poly** in front of the monomer name

E.g.:

Draw and name the polymer made from the monomer ethene:



## Combustion of Hydrocarbons

Combustion means burning.

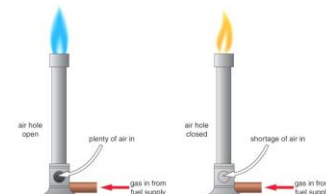
**Complete combustion** - when there is a good supply of **oxygen** for a fuel to burn.

**Fuel + oxygen → carbon dioxide + water**

**Incomplete combustion** - **not enough oxygen**

Products are **carbon monoxide** and water.

**Carbon monoxide = poisonous gas**



## T1 Y11 Grammar Chemistry C7 – Organic Chemistry

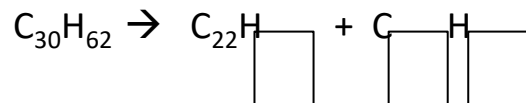
1. What is cracking?

2. Why is cracking done?

3. What are the two types of cracking?

4. What conditions are needed for catalytic cracking?

5. Complete this cracking equation by putting numbers in the boxes:



6. What two types of hydrocarbons are formed during cracking?

1. Why are alkanes called 'unsaturated'?

2. Which chemical is used to test for alkenes?

3. What is the colour change for a positive alkene test?

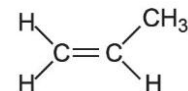
4. Give two uses for alkenes

5. What are polymers?

6. What is the name for the small molecules that make up polymers?

1. What is the name of the polymer formed from the monomer butene?

2. Draw the polymer made from the monomer propene given below:



3. Name the polymer made in question 2

4. What is combustion?

5. When does incomplete combustion happen?

6. What are the waste products of complete combustion?

7. Which toxic gas is formed during incomplete combustion?

# T1 Y11 Grammar Physics P7 – Magnetism and Electromagnetism

## Magnets

- Have two poles - **north** and **south**.



- **Like poles** will **repel** each other (e.g. N-N or S-S)
- **Opposite poles** will **attract** (e.g. N-S)
- Magnetism is a **non-contact** force – magnets do not need to be touching for effect to be observed.

**Magnetic materials:** only **iron/steel**, **cobalt** and **nickel** are magnetic.

## Types of magnets

### Permanent magnet

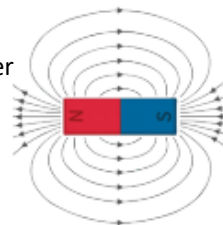
- Produces its own magnetic field.
- Magnetism cannot be turned on or off.

### Induced magnet

- Induced magnet = a material which becomes magnetic when placed in a magnetic field.
- Induced magnets only attract other materials and lose magnetism when removed from the magnetic field.

## Magnetic Fields

**Magnetic field** = the area surrounding a magnet where the force will act on another magnet or magnetic material.



- Magnet field is strongest at the **poles** where the field lines are **closest together**.

- Field lines always go away from **magnetic north** and towards **magnetic south**.

## Earth's Magnetic Field

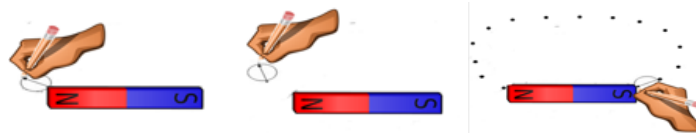
- Earth produces a magnetic field.
- Magnetic compasses use this to help navigation.
- The core of the Earth is made of **iron** (magnetic).

## Plotting Magnetic Field Lines

A magnetic compass can be used to plot and draw the magnetic field lines around a magnet.

**You need to be able to describe this method!**

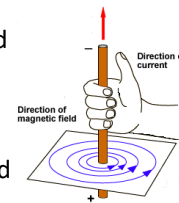
1. Place the bar magnetic in centre of paper.
2. Place a plotting compass at one end of the magnet.
3. Put a pencil dot at the place the compass arrow is pointing to
4. Move the compass to line up the tail of the compass needle to the dot you just made.
5. Repeat until you reach the other end of the magnet



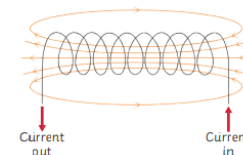
6. Join the dots using a line – this is the magnetic field line. Mark on the direction the arrow pointed – it should run **N→S**

## Electromagnetism

- When a current passes through a wire, a **magnetic field** is produced
- The direction of the field can be found by the right hand thumb rule
- curl the fingers of the right hand around the wire and point the thumb in the direction of the current (+ to -)
- The direction of the circular field is shown by the fingers
- Strength of magnet can be increased by increasing the current
- When the current is switched off, the magnetic field is lost



Coiling the wire will form a **solenoid**.



To increase strength of magnetic field around a solenoid you can:

- Add an **iron core**
- **Increase number of turns** in coil
- **Increase the current** passing through wire

## Electromagnets

- Electromagnet is a solenoid with an iron core.
- Are **induced magnets** (can be turned on and off)

Uses = electric motors, loudspeakers, electric bells, scrapyards.



## T1 Y11 Grammar Physics P7 – Magnetism and Electromagnetism

1. Name the two poles on a magnet.
2. What will like poles do?
3. What will opposite poles do?
4. Why is magnetism a 'non-contact' force?
5. Which metals are magnetic?

1. What is a magnetic field?
2. Where is the magnetic field the strongest?
3. Which direction do the field lines go?
4. Draw the magnetic field around a bar magnet.
5. What is the Earth's core made of?
6. What can the Earth's magnetic field be used for?

1. What is produced when a current flows through a wire?
2. How can you increase the strength of a magnetic field of a straight wire?
3. What is produced when you coil the wire?
4. How can you increase the magnetic field around a solenoid? (3 ways)

1. What are the two types of magnets?
2. Name two differences between these two types of magnets.

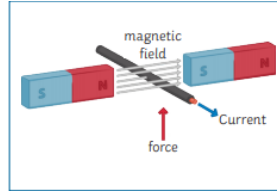
1. Describe a method to plot the magnetic field of a bar magnet.

5. What is an electromagnet?
6. What is meant by induced magnet?
7. State 2 uses of electromagnets.

# T1 Y11 Grammar Physics P7 – Magnetism and Electromagnetism

## The Motor Effect (HT only)

- When a wire carry a **current** is placed in a magnetic field, the two magnetic fields interact and a **force** is exerted on the wire. .
- This is called **motor effect**.
- The force produced by the motor effect can be calculated using:



$$\text{Force (N)} = \text{magnetic flux density (T)} \times \text{current (A)} \times \text{length (m)}$$
$$F = B \times I \times l$$

For example:

A current of 8A is flowing through a wire that is 75cm long. The magnetic field acting at a right angle on the wire is 0.5T. Calculate the force.

Remember: the equation uses length in m. The question has given you the length in cm so you need to convert it before you answer.

$$F = 0.5 \times 8 \times 0.75$$

$$F = 3\text{N}$$

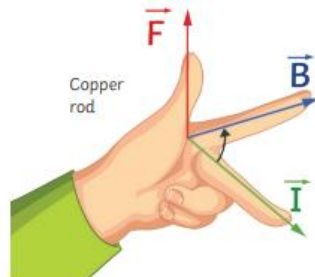
- If current flowing through wire is **parallel** to magnetic field, **no force** is produced.

## Fleming's left-hand rule.

- You may be asked a diagram and asked to indicate direction of force.
- You can use Fleming's left-hand rule to do this (picture)

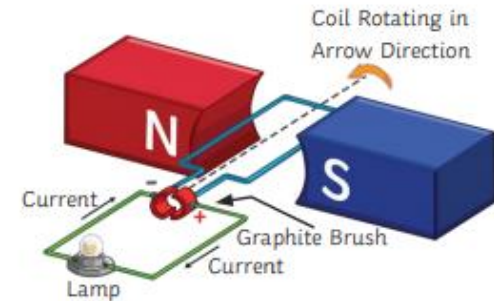
Remember ( **F B I** ):

- Use your **left hand**!
- The angle between index and middle should be **right angle**.
- Thumb = direction of **force**
- First finger = direction of **magnetic field**
- Second finger = direction of **current** through wire.



## Electric Motors (HT only)

- When wire carrying current is **coiled**, the motor effect causes wire to **rotate**.
- This is how an **electric motor** works.



- Current flows force produced acts in **opposite directions** causing coil to **rotate** overall.

- When coil reaches a **vertical position**, force is parallel so would be zero – stops rotating.

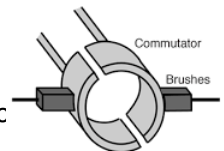
- A gap in the **split ring commutator** in the motor cuts the current temporarily.

- Momentum ensures the coil carries on mc

- The commutator reconnects and **changes the direction of the current** to maintain a **constant rotation** in one direction overall.

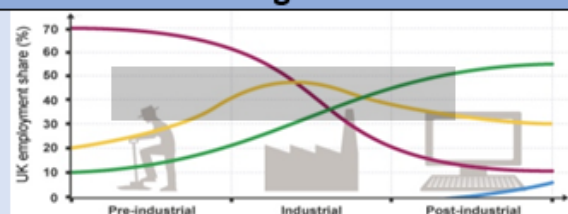
- Increase speed of rotation by increasing the:

- current
- strength of magnet
- number of turns on the coil



## T1 Y11 Grammar Physics P7 – Magnetism and Electromagnetism

- |  |   |
|--|---|
| <ol style="list-style-type: none"><li>1. What is the 'motor effect'?</li><li>2. State the equation for calculating the force produced by the motor effect.</li><li>3. What happens to the force if the current flowing through the wire is parallel to the magnetic field?</li><li>4. What is Fleming's left-hand rule used to indicate?</li><li>5. What does your thumb represent?</li><li>6. What does your first finger represent?</li><li>7. What does your second finger represent?</li></ol> | <ol style="list-style-type: none"><li>1. What happens when a wire carrying a current is coiled?</li><li>2. How does an electric motor work?</li><li>3. Why is a <b>split ring commutator</b> used?</li><li>4. How can we increase the speed of rotation of the motor?</li></ol> |
|--|---|

**1. Economic change in the UK**

Primary	↓ due to mechanisation.
Secondary	↑ due to industrial revolution then ↓ due to de-industrialisation.
Tertiary	↑ due to wealth (↑ disposable income)
Quaternary	High-tech jobs including research and IT. ↑ due to government policies and the increase in technology.

**Why has our economy changed?**

De-industrialisation	The decline of a country's traditional manufacturing industry due to exhaustion of raw materials, loss of markets and competition from NEEs.
Government policies	A plan decided by a government to manage issues in a country.
Globalisation	The process which has created a more connected world; with increases in the movement of goods/people worldwide

**2. Post industrial economy**

Tertiary and quaternary sector employed 81% in 2011.	
IT	Employs over 60,000 people.
Services	Retail is the largest sector. Employs 4.4mill
Finance	London is the world's leading centre. HSBC
Research	Government invested £30bill in 2013.
Science parks	Groups of <u>high tech</u> industries and those doing scientific research. Located near universities (for graduates, share facilities).
Business parks	Purpose built areas of offices and warehouses (on edge of cities as less congestion, cheaper, good transport links).

**3. Environmental impact of industry**

Air and water pollution. Soil degradation.	
Releases CO <sub>2</sub> increasing the rate of global warming.	
Transport of materials is by road → air pollution.	
<b>Example of modern industry being environmentally sustainable</b>	
Google	London Landscaper started 2018.
686 bikes spaces	Encourages cycling to work.
4 car spaces	< congestion/CO <sub>2</sub> emissions.
Solar panels.	Reduces fossil fuel consumption and reduces carbon footprint.
19,800 kWh	
Rooftop gardens	Urban greening. < CO <sub>2</sub> . Collects rainwater. Encourages wildlife.

**4. Changes in the rural landscape**

Population decline	Outer Hebrides (away from cities, limited opportunities).
Social changes	↓ Declined by >50% since 1901. ↓ ↑ aging population = care issues. ↓ Less children > schools shut.
Economic changes	↓ Services close ie post offices. ↓ ↑ tourists but infrastructure not there. ↓ Government subsidies cost of ferries.
Population growth	South Cambridgeshire (near large cities, people can commute).
Social changes	↓ Migrants from Cambridge, some now from Eastern Europe too. ↓ Proportion of elderly increasing (>65). ↓ 80% car ownership = > congestion. ↓ Young people are costed out.
Economic changes	↓ ↑ house prices. Less affordable housing ↓ Petrol prices ↑.

**5. Improvements in infrastructure**

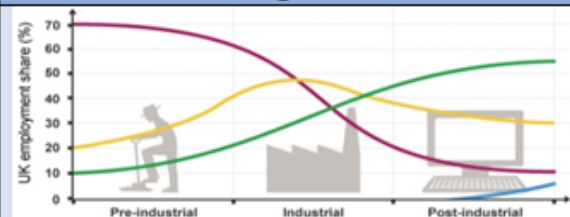
Road	Upgrading 'Smart motorways' M4. Variable speeds, reducing accidents, extra lanes. 2014 Road investment strategy £15 bill. New construction jobs, boost economy.
Rail	Crossrail in London. Puts extra 1.5 million within 45 mins commute of capital city. HS2 to reduce journey times. London to Manchester in 1 hr 8 minutes.
Port	Liverpool 2. Doubles capacity to over 1.5 million containers a year. 96% of UK imports/exports through ports.
Airports	Heathrow expansion. 3 <sup>rd</sup> runway £18.6bill

**6.. North-South divide**

Causes	Decline of heavy industry in North (coal) Investment in finance and service industry in the South Investment in infrastructure in South
Impacts in north	Higher unemployment / lower wages (40%) Poor health, lower life expectancy (10 yrs) Poor education. There are SOME exceptions

**Strategies attempting to resolve regional differences**

Devolving more powers	Give more power to local councils and Welsh and Scottish governments. Plan best how to use their money.
Northern Powerhouse	A plan to attract investment to north. Improve transport links to northern cities. e.g. HS2, Liverpool2. BUT just a CONCEPT not a plan.
Enterprise Zones	55 EZs to encourage businesses to set up in areas of high unemployment. Reduce taxes, simple planning rules, superfast broadband to the area. Created more than 15,000 jobs.

**1. Economic change in the UK**

Primary	
Secondary	
Tertiary	
Quaternary	

**Why has our economy changed?**

De-industrialisation	
Government policies	
Globalisation	

**2. Post industrial economy**

Tertiary and quaternary sector employed 81% in 2011.

IT	
Services	
Finance	
Research	
Science parks	
Business parks	

**3. Environmental impact of industry****Example of modern industry being environmentally sustainable**

Google	
686 bikes spaces 4 car spaces	
Solar panels. 19,800 kWh	
Rooftop gardens	

**4. Changes in the rural landscape**

Population decline	
Social changes	
Economic changes	
Population growth	
Social changes	
Economic changes	

**5. Improvements in infrastructure**

Road	
Rail	
Port	
Airports	

**6.. North-South divide**

Causes	
Impacts in north	

**Strategies attempting to resolve regional differences**

Devolving more powers	
Northern Powerhouse	
Enterprise Zones	









### 3. The Spanish Empire 1528-1555

#### Pizarro – First Expedition

Pizarro was with Balboa when they

November 1524 – First expedition

#### Impact of Gold and Silver on Spain



Used to make 8 sided coins – ‘pieces of eight. Widely accepted in Europe due to high silver content.

The Crown took 25% of bullion coming into Spain .

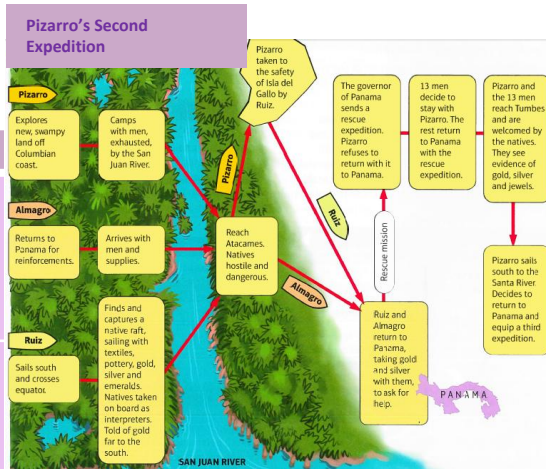
75% of wealth went to Spanish merchants and conquistadors.

European traders put up prices for the wealthy Spanish merchants.

High prices led to inflation – workers demanded higher wages in Spain.

Charles I invested money in the military – not industry and business.

Spanish were getting wealthy by finding bullion instead of making products and selling.



#### Governing the Empire

The Spanish needed to find a way to govern the discovered territories to restore peace and stability. They needed to make sure basic essentials were available, laws were in place, conquistadors didn't fight among themselves and ensure daily life was managed effectively.

#### Bartolome de las Casas –

#### The New Laws:

#### The role of the Viceroy:

#### The role of the **encomienda** system:

#### Significance of the New Laws 1542:

#### Pizarro's appeal to the Spanish King Charles I

#### Pizarro and the Conquest of the Inca Empire

Date	Event
Dec 1518	
Sept 1520	
1525-1527	
1527	
1529	
April 1532	
Nov 1532	
July 1533	
1533	

#### Founding of La Paz, 1548

#### Discovery of silver in Bolivia and Mexico

By 1550 silver had been discovered in Potosi (Bolivia) and in Guanajuato and Zacatecas (Mexico). Some was sent back to Spain but most was kept by the conquistadors. Large mining towns developed to house workers for the mines. Colonisation of the New World increased as adventurers, merchants, speculators and their employees came in search of wealth. 25% of silver shipped to Spain went straight into the treasury.

#### Conquistador Revolt in Peru 1544

A serious revolt took place as the encomenderos were unhappy with the New Laws. This revolt was led by Gonzalo Pizarro, brother of Francisco Pizarro. It was a success and Gonzalo ruled over the Inca territory for 2 years. The arrival of a Spanish army resulted in his execution and the restoration of Spanish authority. The revolt raised the issue of control. Spain needed to govern its territories and control the rebellious conquistadors and encomenderos. This led to the founding of La Paz in 1548.

#### Pirates and Privateers

Spanish treasure was a target for Pirates and Privateers (funded by government/monarchy).

The ships were easy to find as they took well-defined and predictable routes across the Atlantic.

War with France (1542-46) meant Spain had to adapt ships and develop systems to deal with French privateers.

Galleons patrolled the sea routes and started carrying treasure as they were well armed.

Treasure fleet system developed: the **Tierra Firme** (went to S. America) and the **New Spain** (went to Mexico).



#### Revolt of the Incas 1536

#### The Siege of Cuzco 1536-1537

#### Growth of Seville

#### The Slave Trade

#### Casa de Contratacion (House of Trade)

#### Council of the Indies

# Year 11 Spanish Knowledge Organiser

## Term 1

### Module 6



Use this knowledge organizer to help you with revision for GCSE Spanish. You can make flashcards with the words, create vocab lists and write sentences with the words putting the vocabulary into content. This KO contains all the important words from Module 1 GCSE Spanish.

**Any questions please ask your Spanish Teacher 😊**

### En Colombia todo es posible (pages 132–133):

¿Qué hay en tu país/región? *What is there in your country/region?*

En (el norte de) mi país/ región ...	<i>In (the north of) my country/ region ...</i>
(no) hay ...	<i>there are / there aren't ...</i>
(no) tenemos ...	<i>we (don't) have ...</i>
mucho campo	<i>lots of countryside</i>
muchos lagos	<i>lots of lakes</i>
unos bosques / unas playas.	<i>some forests / beaches</i>

un <b>paisaje</b> / <b>río</b>	<i>a spectacular landscape/ river</i>
espectacular	
comunidades *indígenas	<i>indigenous communities</i>
mucha *diversidad	<i>lots of diversity</i>
*selva tropical / *volcanes	<i>rainforest / volcanoes</i>

Se encuentra(n) en ...	<i>It is / They are found in ...</i>
Está(n) en ...	<i>It is / They are in ...</i>
el norte/sur	<i>the north/south</i>
el este/oeste	<i>the east/west</i>
el centro	<i>the centre</i>

### Medellín, ciudad inteligente (pages 134–135):

¿Has visitado ...? *Have you visited ...?*

(Ya) He/Has/Hemos ...	<i>I/You/We have (already)...</i>
También he/has/hemos ...	<i>I/You/We have also ...</i>
Todavía no he/has/hemos ...	<i>I/You/We haven't ... yet.</i>
alquilado / probado...	<i>rented / tried ...</i>
bebido / comido ...	<i>drunk / eaten ...</i>
ido (al museo)	<i>been (to the museum)</i>
subido / visto ...	<i>gone up / seen ...</i>
<b>descubierto</b> ...	<i>discovered ...</i>
viajado (en metro)	<i>travelled (by underground)</i>
visitado (el parque famoso)	<i>visited (the famous park)</i>

¿Dónde está el centro  
comercial más cercano?

Está ...	<i>It is ...</i>
al lado de ...	<i>next to ...</i>
delante de / detrás de ...	<i>in front of / behind ...</i>
cerca de / lejos de ...	<i>close to / far from ...</i>

*Where is the nearest  
shopping centre?*

la estación (de metro)	<i>the (underground) station</i>
el banco	<i>the bank</i>

Mira el plano.	<i>Look at the map.</i>
Pasa / Cruza ...	<i>Go past / Cross ...</i>
el puente / la plaza	<i>the bridge/square</i>
Toma la primera/segunda/ tercera calle ...	<i>Take the first/second/third street ...</i>
a la derecha/izquierda	<i>on the right/left</i>
Está a la derecha/izquierda.	<i>It is on the right/left.</i>

¿Qué hacemos mañana?

	<i>What are we doing tomorrow?</i>
Me encantaría / Quiero ...	<i>I would love to / I want to ...</i>
Podemos ...	<i>We could ...</i>
Voy/Vamos a ...	<i>I am / We are going to ...</i>
ir de excursión / en autobús	<i>go on an outing / by bus</i>
tomar el metro	<i>take the underground</i>



## Medellín ahora y antes (pages 136–137):

### ¿Cómo es?

este lugar / esta calle  
estos árboles / estas tiendas  
ese espacio (público)  
esa carretera  
esos parques / esas zonas  
**aquel** barrio  
**aquella** biblioteca  
**aquellos** castillos  
**aquellas** vistas  
En **aquellos** tiempos ...

### What is it like?

this place/street  
these trees/shops  
that (public) space  
that road  
those parks/areas  
that neighbourhood (over there)  
that library (over there)  
those castles (over there)  
those views (over there)  
In those days ...

### Ahora, ¿cómo es?

Ahora ...  
está limpio/a / sucio/a  
hay / tiene ...  
más árboles / menos  
violencia  
tanto/a cultura/arte  
tantos problemas

### What is it like now?

Now ...  
it is clean / dirty  
there is/are / it has ...  
more trees / less violence  
  
so much culture/art  
so many problems

es ...

más **sostenible** / **seguro/a**  
completamente diferente  
tan cara/o

it is ...

more sustainable / safer  
completely different  
so expensive

### Antes, ¿cómo era?

**Antes** había ...

muchos **delitos**  
menos edificios modernos  
mucha/tanta **basura**

### What was it like before?

Before there was/were ...

lots of criminal offences  
fewer modern buildings  
lots of/so much rubbish

**Antes** era ...

más pequeño/a / tranquilo/a  
menos moderno/a  
más \*industrial / peligroso/a

it was ...

smaller / quieter  
less modern  
more industrial/dangerous

Ha cambiado mucho porque...

han abierto/creado ...  
han limpiado/mejorado ...

It has changed a lot because ...

they have opened/created ...  
they have cleaned/improved ...

**han construido** ...

\*han plantado ...  
\*han renovado ...

they have built ...

they have planted ...  
they have renovated ...

## ¡A comprar! (pages 138–139):

### ¿Dónde prefieres ir de compras?

**Por un lado, ... / Por otro lado, ...**

(No) Me gusta / Me encanta ...  
Prefiero / Odio ...

### Where do you prefer to go shopping?

On one hand, ... / On the other hand, ...

I (don't) like / I love ...  
I prefer / I hate ...

**Suelo/Solemos** ...

ir a las tiendas de mi barrio.  
  
comprar ropa de segunda mano  
comprar por Internet / en línea  
ir al centro comercial

I/We usually ...

go to the shops in my neighbourhood  
buy secondhand clothes  
  
buy on the internet / online  
go to shopping centre

Es/Son ...	It is / They are ...	Quiero devolver/cambiar ...	I want to return/exchange ...
menos/tan ...	less/so ...	este jersey/vestido/traje	this jumper/dress/suit
barato/a(s)	cheap	esta camisa/camiseta	this shirt/T-shirt
económico/a(s)	cheap	esta corbata/falda	this tie/skirt
caro/a(s) / fácil(es)	expensive / easy	estos pantalones	these trousers
<b>práctico/a(s)</b>	practical	estos calcetines/zapatos	these socks/shoes
<b>sostenible(s)</b>	sustainable	estas zapatillas de deporte	these trainers
más barato/a(s) / caros	cheaper / more expensive	porque es/son demasiado ...	because it is/they are too ...
Hay <b>tanta</b> /demasiada gente.	There are so/too many people.	pequeño/a(s).	small
(No) Se puede <b>probar</b> la ropa.	You can/can't try on the clothes.	largo/a(s)	long
Los precios son más bajos.	Prices are lower.	grande(s)	big
Las tiendas son muy pequeñas.	The shops are very small.	<b>ajustado/a(s)</b>	tight
(No) tengo que hacer <b>cola</b> .	I (don't) have to queue.	porque es/son de mala calidad	because it is / they are poor quality
<b>¿En qué puedo servirle?</b>	<b>How may I help you?</b>	porque no me gusta el color	because I don't like the colour
Ayer / Hace una semana compré ...	Yesterday / A week ago I bought ...		

### ¿Dónde prefieres vivir? (pages 140–141):

¿Prefieres vivir en el campo o en la ciudad? *Do you prefer to live in the country or in the city?*

Prefiero vivir en la ciudad/el campo porque ... *I prefer to live in the city/countryside because ...*  
es más/menos ... que ... *it is more/less ... than ...*  
hay más/menos ... que ... *there is more/less ... than ...*  
es imposible aburrirse *it is imposible to be bored*

¿Qué es lo bueno/malo de vivir en ...? *What is the good/bad thing about living in ...?*

Lo bueno/malo de mi pueblo... *The good/bad thing about my town...*

Lo positivo/negativo de mi ciudad ... *The positive/negative thing about my city ...*

es que ... *is that ...*  
tiene mucha polución/gente *it has a lot of pollution/people*

(no) es ... *it is (not) ...*  
divertido/a / tranquilo/a *fun / quiet*

está en la costa / las montañas *it is on the coast / in the mountains*

no hay más posibilidades de trabajo *there aren't more job prospects*

**hay tanto tráfico**

**hay tanta** gente

la gente (no) \*se conoce

conozco a todos mis

**vecinos**

hay una gran **variedad** de tiendas

siempre hay algo que hacer

*there is so much traffic*

*there are so many people people (don't) know each other*

*I know all my neighbours*

*there is a large variety of shops*

*there is always something to do*

Cuando **tenga** más dinero, ...

Cuando **sea** mayor, ...

Cuando **tenga** dieciocho años, ...

compraré una casa pequeña

viviré con mi novio/a

compartiremos un piso

*When I have more money, ...*

*When I am older, ...*

*When I am eighteen, ...*

*I will buy a small house.*

*I will live with my boyfriend/girlfriend*

*we will share a flat*

¿Cambiarías algo de tu zona?

Cambiaría/Mejoraría ...

Me encantaría/gustaría ...

Preferiría / **Construiría** ...

*Would you change anything about your area?*

*I would change/improve ...*

*I would love/like ...*

*I would prefer/build ...*



### Un intercambio cultural (pages 142–143):

¿Qué es lo mejor de tu pueblo/ciudad?	What is the best thing about your town/city?
Mi pueblo/ciudad es ...	My town/city is ...
divertido/a / moderno/a	fun / modern.
<b>preciosa</b> / muy *dinámico/a	a beautiful city / very dynamic.
Lo bueno/ <b>mejor</b> es ...	The good/best thing is ...
la gente/comida	the people/food
¿Cuál es tu lugar favorito de tu pueblo/ciudad/zona?	What is your favourite place in your town/city/area?
Mi <b>lugar</b> favorito es el mercado/parque.	My favourite place is the market/park.
¿Qué hiciste ayer / la semana pasada?	What did you do yesterday / last week?
Ayer / La semana pasada ...	Yesterday / Last week ...
alquilamos unas bicicletas.	we rented some bicycles.
compré ...	I bought ...
mucha fruta	lots of fruit
unos zapatos nuevos	some new shoes

fui ...	I went ...
a la playa / al estadio	to the beach/stadium
a un concierto/restaurante	to a concert/restaurant
¿Qué vas a hacer este fin de semana?	What are you going to go this weekend?
Primero / Luego ...	First / Later/Afterwards ...
Me/ <b>Nos</b> gustaría ...	I/We would like to ...
Podremos ...	We could/will be able to ...
Quiero/Queremos ...	I/We want to ...
Voy/Vamos a ...	I am / We are going to ...
salir a comer / ir de compras	go out to eat / go shopping
ir a la playa	go to the beach
visitar el castillo / sitios históricos	visit the castle / historic places
comprar helados	buy ice creams
participar en muchos eventos	participate in lots of events
Jugaré a ...	I will play ...
Iré (a la playa) para ...	I will go (to the beach) (in order) ...
celebrar / disfrutar de ...	to celebrate / enjoy ...
tomar el sol	to sunbathe

## 1. Methods of growth

**When a market is growing, it is important for a business to grow in order to retain market share.**

Method of growth	Explanation
<b>Internal/organic growth</b>	A business can grow by creating new products, entering new markets, increasing their advertising and opening new premises.
<b>External/inorganic growth</b>	A business can grow by merging with another company or by winning a takeover of another company.

## 2. Finance for growth

**A business must find sources of capital to pay for growth.**

Term:	Definition:
<b>Internal sources of financing.</b>	A business can use 'retained profit' (capital they have saved from profit) or they could 'sell assets' (selling old or unused machinery/equipment). Internal sources of funding are from an internal sources such as an existing business owner or the business itself rather than from someone or an organisation outside of the business.
<b>External Sources of financing.</b>	A business could take out a loan (loan capital), or sell shares (share capital). External sources of funding are from an external sources such as a bank or an investor rather than from the business owners or the business itself.

## 3. Why do aims & objectives change?

**As businesses evolve, they need to adapt their aims and objectives to changing circumstances.**

<b>Changing market conditions</b>	Controlled by customer behaviour, what do customers want?
<b>Changing technology</b>	As technology changes, business needs to adapt to how customers use technology.
<b>Changes in performance</b>	If costs increase, the chances are the profit margin of the business will decrease. A business needs to be clear on whether they are aiming for quality or price.
<b>Changes in legislation</b>	If the law changes, this can bring uncertainty as the business may have to stop manufacturing/selling a certain product or be unable to predict future trends.
<b>Internal Reasons</b>	Changes in management or changes to the culture of the company.

**1. Methods of growth**

When a market is growing, it is important for a business to grow in order to retain market share.

Method of growth	Explanation
Internal/organic growth	
External/inorganic growth	

**2. Finance for growth**

A business must find sources of capital to pay for growth.

Term:	Definition:
Internal sources of financing.	
External Sources of financing.	

**3. Why do aims & objectives change?**

As businesses evolve, they need to adapt their aims and objectives to changing circumstances.

Changing market conditions	
Changing technology	
Changes in performance	
Changes in legislation	
Internal Reasons	

**4. Globalisation**

The increasing tendency for countries to trade with each other and to buy global goods such as Coca-Cola or services such as Costa Coffee.

Imports	Goods brought into one country from another.
Exports	Goods sold to one country from another

**4. Globalisation**

Barriers to trade	Definition: Measures put in place by a government to control the numbers of goods imported into a country.
Tariffs	Import taxes – taxes on imported goods.
Trade blocs	An agreement between some countries to trade freely without any tariffs, but countries not within the agreement will be charged tariffs.

**5. Ethics & business**

How the behaviour of a business is judged against human morals.

Term	Definition
Fair Trade	A global scheme that states that farmers or producers are paid a fair price for their goods. Business costs are higher, but customers will pay more for Fair Trade products.
Environmental	Businesses are constantly monitored for their environmental impact. Behaving in an environmentally ethical manner means to not pollute or damage the local/national/global environment – sea, land or sky.
Labour	Human morals dictate that a business should pay its workers fairly and that working conditions should be safe and clean. If a business sub-contracts work to international manufacturers in Asia, human morals dictate that those workers of the contractor are paid fairly and work in safe, clean conditions also.

**6. Ways to extend the Product Life Cycle of a Product**

Idea:	Explanation
Find new uses for the product	If a product can be used for multiple purposes, ensure that your target audience is aware of this
Change the appearance, format or packaging	Changing the appearance of a product can give it a new lease of life and allow the customer is perceive it as new again.
Encourage use of the product on more occasions	If a product can be used for multiples different occasions make sure the customer base is aware of this
Adapt the Product	Continue to make small adaptations to products to improve the quality of the product on offer.

**4. Globalisation**

The increasing tendency for countries to trade with each other and to buy global goods such as Coca-Cola or services such as Costa Coffee.

Imports

Exports

**4. Globalisation**

Barriers to trade

Tariffs

Trade blocs

**5. Ethics & business**

How the behaviour of a business is judged against human morals.

Term

Fair Trade

Environmental

Labour

**6. Ways to extend the Product Life Cycle of a Product**

Idea:

Explanation

Find new uses for the product

Change the appearance, format or packaging

Encourage use of the product on more occasions

Adapt the Product

### 1. Product (Part of the Marketing Mix)

**When designing a new product, the key is to design a product that matches the needs or wants of your chosen target market.**

**Every product needs the right balance between:**

Product strategy	Explanation
<b>Economic Manufacture</b>	Making sure that the design of the product to be made cost effectively. A complex or expensive design can lead to increased costs.
<b>Function</b>	The design of the product is crucial. The product must work/function effectively
<b>Aesthetics</b>	How much does the design of the product appeal to the senses. When designing a product it is crucial to consider the way it looks

### 2. Product (Key Terms)

**At the heart of the marketing mix is the product**

Term:	Definition:
<b>Product Differentiation</b>	The extent to which consumers see your product as being different from its rivals
<b>Product Life Cycle</b>	The theory that every product goes through the same four stages of introduction, growth, maturity and design

### 4. Ways to extend the Product Life Cycle of a Product

Idea:	Explanation
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<b>Adapt the Product</b>	Continue to make small adaptations to products to improve the quality of the product on offer.



### 3. Stages of the Product Life Cycle

Term:	Explanation:
<b>Introduction</b>	First a company needs to spend time researching the product and the marketplace. The product will be developed, tested, and launched.
<b>Growth</b>	At this stage the product becomes known in the market. At this stage customer awareness increases, prices will still be high.
<b>Maturity</b>	At this point the market may become saturated as 'me too' products are launched into the market. Advertising is increasing to remind consumers about the quality of the product. Brand image needs reinforcing with its customers. The market is highly competitive, and prices are lower as a result
<b>Decline</b>	The product's sales and profit's start to fall. The product is no longer offering what customers want or new technology has made the product obsolete.



**5. Promotional Strategy (Part of the marketing mix)**

**Promotional strategy is the plan for how to communicate effectively with customers in order to meet sales revenue targets.**

Promotional Strategy:	Explanation:
Advertising	Advertising is how a business promotes its products and communicates with its customers.
Sponsorship	Sponsorship is where a business pays to have a brand or company name attached to an activity that has credibility with its customers.
Branding	Branding is a way that businesses can give their products an identity that appeals to its target audience.
Product Trials	A product trial means giving potential customers a free taste of a new product. This may entice new customers.
Special Offers	Businesses can use special offers such as 'buy one get one free' to entice customers to purchase their products.
Using Technology	In recent years, online advertising through social media and other platform such as websites and e-newsletters has become commonplace for firms.

**6. Pricing Strategy**

**Pricing strategy is vital for any business – pricing your products can be the difference between business success and business failure.**

Market Segment:	Pricing Strategy
Mass Market	In mass markets where both competition and customer consumption are high. These markets are generally characterised by low prices and very similar products.
Niche Markets	A niche market is based on a type of customer needs or wants something different to the majority. Generally these markets have few competitors but high prices.

**Pricing at each stage of the Product Life Cycle**

<b>Introduction</b>	Pricing at the introduction phase of the product life cycle in some cases will be low to entice new customers to sample the product.
<b>Growth</b>	Once a product is established within a market and has a customer base, businesses will sometimes increase prices to increase revenue.
<b>Maturity</b>	When product growth is at an end, new pricing decisions may be needed. Business will ensure that pricing is competitive to ensure continuous revenue, other firms may decide that the brand may be in irreversible decline and will keep prices high to make a short-term profit.
<b>Decline</b>	When sales have made a decisive step downwards, firms tend to lower prices to ensure a steady stream of revenue. However some firms with a loyal customer base may decide to increase prices in an attempt to gain short term profits.

## GCSE Business. Paper 2.

### 7. Placing Strategy

This element of the marketing mix is about how to get the product from the producer to the customer. There are three main distribution channels – traditional, modern and direct.

Type of Distribution	Explanation:
Direct Distribution	This is where a product is distributed directly from the producer to the consumers. An example of this is buying things directly from firms on the internet.
Modern Distribution	This method is common in the grocery sector, where producers will deliver to distribution depots and then the products will be taken to stores to be sold. This method became popular when supermarkets became common place in the 1980s
Traditional Distribution	This method, in the first instance involves a wholesaler buying goods directly from the producers. From there the wholesaler will sell the products directly to firms who will then sell onto the consumers.

### 8. Placing Strategy – Key Terms

Term	Definition
Distribution	How ownership changes as a product goes from producer to customer
E-Tailer	An electronic retailer; in other words selling products electronically, either by e-commerce or, more likely these days, mobile commerce.
Retailer	A shop or chain of shops, usually selling from a building in a high street or shopping centre

### 9. Marketing mix and Business Decisions – Key Terms

Business decisions are always about the future. So, when the marketing mix is being used to inform and carry out business decisions.

Term	Definition
Budget	A ceiling on the amount of money that can be spent; a marketing budget of £1 million means the marketing manager can spend up to that figure, but no more.
Informed Decisions	Evidence that can be used to make a better decision; a company can gain a better understanding of its customers through the 4p's, which helps in decision making



## Year 11 PRODUCT DESIGN Term 1



### A. New and emerging technologies

Companies are trying to **save money**, **improve products**, **develop new materials** and become more **efficient**. New technologies are developed to positively **impact** the **manufacturing industry** and **society**.

**Crowdfunding** Uses websites to advertise products as investment opportunities, where people can choose to back a project with a financial donation

**Virtual marketing and retail** Promotion of products online and sharing experiences, reviews and recommendations

**Cooperatives** Cooperatives are organisations with lots of people working together towards common goals.

**Fair trade** Fair trade is a trading partnership that ensures workers in developing countries are given suitable working conditions and are paid a fair wage.



### B. Sustainability

If materials are not reused or recycled, the planet will run out of them. If trees are not replanted as quickly as they are felled, we will run out of timber. A material is said to be sustainable if it can be replaced continuously or if it can be recycled or reused indefinitely.

### What we are learning this term:

A. New and emerging technologies B. Sustainability  
C. Impact on environment D. Impact on People E. Informing design decision

### C. Impact on the environment

Modern companies are encouraged to be less wasteful and more considerate of how they affect the natural environment.

### Continuous improvement

Continuous improvement is the practice of continually making small adjustments to production techniques to improve speed and quality and save resources.

### Efficient working

It is important to ensure that companies work in an efficient manner. This includes increasing the speed of production, reducing errors and reducing waste, which can be done by utilising **automation** or **computer aided manufacture (CAM)**.

### Pollution

Pollution is caused when harmful substances are released into the natural environment. Pollution can occur in the air, water or natural land. Legislation has been brought in to help with this issue.

### Global warming

- Manufacturing processes in factories or the use of day-to-day products like cars can cause harmful chemicals, such as carbon monoxide and nitrogen oxides.
- These chemicals pollute the air and natural land.

### D. Impact on people

People influence how technology is developed to suit their own wants and needs; however, technological developments can change people's lifestyle and behaviours.

### Technology push

- Research and development in science and industry can lead to new discoveries
- This is known as technology push, and it happens before there is consumer demand for a product.
- SMART phones are a good example of technology push

### Market Pull

- Market pull is when product ideas are produced in response to market forces or customer needs.

### Changes in culture

- Fashion trends continue to be influenced by changing technology.
- Wearable items embrace new technology, such as high-tech watches, while textile technology utilises electrically-conductive material or 3D-printing technology.

### E. Informing design decision

### Physical Disability

Products aimed at users with physical disabilities will ensure they can use the product with ease.

- User needs are met by understanding the nature of the physical disability, eg visual impairment, mobility restrictions or motor control.

### Elderly

When designing products aimed at elderly users, it is important to understand –

- The difficulties this user group may experience, such as mobility issues, visual impairment and hearing loss.

### Religious Groups

Religious groups have a variety of preferences that can be addressed through design. The use of certain symbols, dietary restrictions and clothing requirements all need to be considered so that beliefs are upheld.

### User centred design

**User-centered design (UCD)** is a design process in which designers **focus on the users** and **their needs** in each **phase of the design process**. In UCD, design teams **involve users** throughout the design process via a **variety of research and design techniques**, to create highly **usable and accessible** products for them.

### Universal Design

**Universal Design:** focuses on serving the broadest range of users as possible (90%), rather than trying to address individual accessibility or inclusion objectives.



## Year 11 PRODUCT DESIGN Term 1



### A. New and emerging technologies

Companies are trying to \_\_\_\_\_  
\_\_\_\_\_ **improve products**, \_\_\_\_\_  
\_\_\_\_\_ and become more \_\_\_\_\_. New  
technologies are developed to positively  
**impact** the \_\_\_\_\_ and **society**.

Crowdfunding

Virtual  
marketing and  
retail

Cooperatives

Fair trade



### B. Sustainability

### What we are learning this term:

A. New and emerging technologies B. Sustainability  
C. Impact on environment D. Impact on People E. Informing design decision

### C. Impact on the environment

Modern companies are encouraged to be  
\_\_\_\_\_ and more considerate of how  
they affect the \_\_\_\_\_.

### Continuous improvement

### Efficient working

### Pollution

### Global warming

### D. Impact on people

People influence how technology is  
developed to suit their own \_\_\_\_\_ and  
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developments can change people's  
\_\_\_\_\_ and \_\_\_\_\_.

### Technology push

### Market Pull

### Changes in culture

### E. Informing design decision

### Physical Disability

### Elderly

### Religious Groups

### User centred design

### Universal Design

Universal Design:



## Year 11 Food & Nutrition Term 1



### What we are learning this term:

A. Proteins    B. Carbohydrates    C. Fibre & Water    D. Fats    E. Minerals    F. Vitamins

A. Proteins – contain amino acids		B. Carbohydrates – used for energy		D. Fats		F. Vitamins	
	Used for growth, repair and maintenance of the body.		<b>Sugars</b> – digested quickly & energy released quickly. Monosaccharides or Disaccharides		Needed for energy, vitamins, insulation (warmth) and protecting your bones & organs, making cholesterol.		Micronutrients which help the body to function.
Source 	Seeds, meat, fish, dairy, nuts and beans. <b>Alternative:</b> soya, mycoprotein, TVP & tofu.	Source 	Fruit or added to food.	<b>Saturated Fats</b>	<b>Unsaturated Fats</b>	<b>Fat Soluble Vitamins</b>	
Excess 	Strain on liver and kidneys. These organs process the proteins consumed.		<b>Starch</b> – digested slowly & slow released of energy. Polysaccharides.	Usually come from animal sources	Mostly from vegetable sources.	Found in fatty food. Stored in fat tissue if not used up.	
Deficiency 	Slows growth, weak immune system, oedema, kwashiorkor, poor hair /skin / nails.	Source 	Potatoes, cereals. Have a lot of nutrients & fibre.	Excess 	Obesity, Type 2 Diabetes, higher Cholesterol (increased risk Coronary Heart Disease).	A	For good eyesight, healthy immune system / skin
High Biological Value Proteins 	<b>These contain ALL the essential amino acids.</b> These come from mainly animals sources (as well as soya and quinoa).	Excess 	Gets converted into fat (may lead to obesity), tooth decay, type 2 diabetes.	Deficiency 	Vitamin deficiency, weight loss, less insulation / bone & organ protection.	D	Helps absorb minerals (especially calcium)
Low Biological Value Proteins 	<b>These are missing <u>one or more</u> of the essential amino acids.</b> These come from plant sources.	Deficiency 	Low blood sugar (hunger, dizziness, tiredness), body starts to use up fat & protein (weight & muscle loss).	<b>E. Minerals</b>		E	For healthy skin, eyes & immune system
<b>Protein Completion:</b> when you combine LBV proteins to get all the essential amino acids.		<b>Glycaemic Index (GI):</b> show how quickly carbohydrates affect blood sugar levels.		Calcium	Strong bones & teeth, healthy nerves & muscles, blood clotting	K	Helps heal wounds, keeps immune system / bones healthy
<b>C. Fibre &amp; Water</b>				Iron	Forms part of haemoglobin in red blood cells	<b>Water Soluble Vitamins</b>	
				Sodium	Controls body's water content, helps nerves / muscle function	Vitamins that dissolve in water & lost through urine – need to take daily! They are also lost when fruit and vegetables are exposed to air.	
Fibre		Water		Phosphorus	Healthy bones & teeth	B	Keep the nervous system healthy
<ul style="list-style-type: none"> <li>Helps with digestion</li> <li>Prevents constipation</li> <li>Found in fruit, pulses, nuts, veg, wholegrain foods</li> </ul>		<ul style="list-style-type: none"> <li>Helps get rid of waste &amp; digest food</li> <li>Controls body temperature</li> <li>6-8 glasses of water a day</li> <li>More during a hot day or exercising</li> </ul>		Fluoride	Helps strengthen teeth & prevent tooth decay	B1, B2 & B3	Help with energy release
				Iodine	Helps make some hormones	B9 & B12	Help make red bloody cells.
						C	Protects body from infection, heals wounds
						<b>Antioxidants</b>	
						Vitamins A, C & E are antioxidants which may protect cells from <b>free radicals</b> - chemicals you encounter every day.	



## Year 11 Food & Nutrition Term 1



### What we are learning this term:

A. Proteins    B. Carbohydrates    C. Fibre & Water    D. Fats    E. Minerals    F. Vitamins

<b>A. Proteins – contain amino acids</b>		<b>B. Carbohydrates – used for energy</b>		<b>D. Fats</b>		<b>F. Vitamins</b>	
			<b>Sugars</b>				
Source 		Source 		<b>Saturated Fats</b>	<b>Unsaturated Fats</b>	<b>Fat Soluble Vitamins</b>	
Excess 			<b>Starch</b>	Excess 		A	
Deficiency 		Source 		Deficiency 		D	
High Biological Value Proteins 		Excess 		<b>E. Minerals</b>		E	
Low Biological Value Proteins 		Deficiency 		Calcium		K	
Protein Completion:-.		Glycaemic Index (GI): .		Iron		<b>Water Soluble Vitamins</b>	
<b>C. Fibre &amp; Water</b>				Sodium		B	
Fibre	Water			Phosphorus		B1, B2 & B3	
• -	• -			Fluoride		B9 & B12	
• -	• -			Iodine		C	
• -	• -					<b>Antioxidants</b>	





## What we are learning this term:

- Client briefs and building specifications
- Product analysis
- Design generation and analysis
- Planning production

## A. Client briefs and building specifications

As an engineer you may be given a **brief** of what the customer wants from their product. The steps to analyze this are:

- Highlight the **key information**, what are they actually asking for?
- Consolidate the information into a **bullet point list**
- Rank** the list in terms of importance, most important first. Make those points the focus of your design.

**Specifications:** Documents listing the specific properties a design should have. These are most useful when given as **quantitative information**, as you can more easily check if you have completed it. **Quantitative information** – can be measured/counted i.e number of wheels on a car, how much it weighs. **Qualitative information** – opinions based/ descriptive i.e how beautiful something is

## C. Design generation and analysis

S	C	A	M	P	E	R
Substitute	Combine	Adapt	Modify	Put to another use	Eliminate	Reverse
Replace a part, material, or process with something else.	Join elements, ideas, or functions together in new ways – or find a new element you can merge with.	Modify something to better suit a new purpose, person or context.	Enlarge, reduce, change the shape, or alter attributes. Can a small change have a big effect?	Rather than changing the thing itself, consider changing the context it exists in.	Remove elements, simplify, or pare down to essentials.	Flip the script, re-order your priorities, invert cause and effect, and turn it all upside-down.

## Strengths

- key features that match the design brief
- Key features that match the specification
- Things that the target market would like

## Weaknesses

- Limitations of the idea
- Things the target market might not like
- Points on the specification it did not meet

## SWOT evaluation for new design ideas

## Opportunities

- The ways in which the design could be improved
- New ideas or technology that could change the way the product could be used

## Threats

- Other products in the market that are similar
- Extra resources needed to make it
- Extra money / time/ skills needed to make it

## B. Product analysis

**A** is for **Aesthetics**



**Aesthetics** means **what does the product look like?**  
What is the: Colour? Shape? Texture? Pattern? Appearance? Feel? Weight? Style?

**C** is for **Cost**



**Cost** means **how much does the product cost to buy?**  
How much does it: Cost to buy? Cost to make?  
How much do the different materials cost? Is it good value?

**C** is for **Customer**



**Customer** means **who will buy or use your product?**  
Who will buy your product? Who will use your product?  
What is their: Age? Gender?  
What are their: Likes? Dislikes? Needs? Preferences?

**E** is for **Environment**



**Environment** means **will the product affect the environment?**  
Is the product: Recyclable? Reusable? Repairable? Sustainable?  
Environmentally friendly? Bad for the environment?  
**6R's of Design:** Recycle / Reuse / Repair / Rethink / Reduce / Refuse

**S** is for **Size**



**Size** means **how big or small is the product?**  
What is the size of the product in millimeters (mm)? Is this the same size as similar products? Is it comfortable to use? Does it fit?  
Would it be improved if it was bigger or smaller?

**S** is for **Safety**



**Safety** means **how safe is the product when it is used?**  
Will it be safe for the customer to use? Could they hurt themselves?  
What's the correct and safest way to use the product? What are the risks?

**F** is for **Function**



**Function** means **how does the product work?**  
What is the product's job and role? What is it needed for? How well does it work? How could it be improved? Why is it used this way?

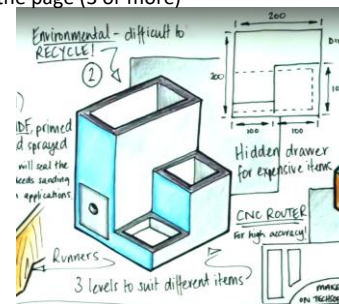
**M** is for **Material**



**Material** means **what is the product made out of?**  
What materials is the product made from? Why were these materials used? Would a different material be better? How was the product made? What manufacturing techniques were used?

## C. Design generation example

Is part of a range of ideas on the page (3 or more)



Notes link designs to the brief and specification

Very clear drawings, use of rendering to show depth

Notes on material/production choices and why

## D. Planning production

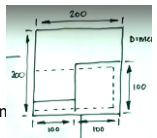
Calculating the cost of a product:

- Calculate area/volume of material used
- Research what **stock** is used and what price a **unit** of stock is
- Calculate how many **whole products** can be made from that unit of stock
- Divide the cost of the unit of stock by the number of **whole products** can be made from it

## Worked example

Calculate the cost of the 20x20cm component if it is Made from a sheet of 100x100cm plywood that cost £4.

- Component area =  $20 \times 20 = 400 \text{ cm}^2$
- Stock =  $\text{£}4 \text{ for } 10000 \text{ cm}^2$
- $10000 / 40 = 25$
- $\text{£}4 / 25 = 400p / 25 = 16p$





### A. Client briefs and building specifications

#### What we are learning this term:

- A. Client briefs and building specifications
- B. Product analysis
- C. Design generation and analysis
- D. Planning production

Analyse this brief. Show you can: Highlight the **key information**, **bullet point list** the info, **Rank** the list.

*A company which sells products online is creating a new range of designs. Create a concept for a pendant light. The light must be low cost to manufacture so suitable processes and materials should be considered. To keep transportation costs down, the light must be lightweight. The dimensions of the light must not exceed 45cm in any direction.*

**Ranked Bullet points:**

### C. Design generation and analysis

Use the SWOT tool to analyse the design of the existing lampshade.

#### Strengths

#### Weaknesses

#### Opportunities

#### Threats

Draw below how you would **adapt** the design to be more lightweight or attractive

### B. Product analysis

A

C

C

M

E



Analyse this collapsible plywood shade using ACCESSFM

F

S

S

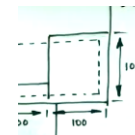
### D. Planning production

Calculating the cost of a product:

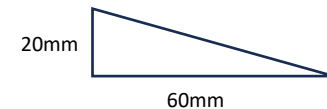
1. Calculate area/volume of material used
2. Research what **stock** is used and what price a **unit** of stock is
3. Calculate how many **whole products** can be made from that unit of stock
4. Divide the cost of the unit of stock by the number of **whole products** can be made from it

**Practice questions:**

1. What is the cost of the 100x100mm component if it is made from 1000x1000mm plywood that costs £4?



2. What is the cost of this component if it is made from 1000x1000mm plywood that costs £4?



What we are learning:	
A.	Key words
B.	What are the different types of health care services?
C.	What are the different types of social care services?
D.	What barriers are there to accessing care services?

A.	Key words for this Unit
Primary care	First point of contact when seeking health care
NHS	National Health Service – Tax funded health care in the UK.
Secondary care	Specialist health treatment and/or care
Tertiary care	Advanced specialist health treatment and/or care.
Allied health professionals	Professionals who are involved in patient care from diagnosis to recover
Clinical support staff	Support allied health professionals with the treatment and care of patients.
Foster care	A stable family home where care is provided on either a short or long-term basis.
Residential care	Accommodation and care for a number of children, young people or adults living together in one building.
Respite care	Short-term care which provides relief for family member who are carers.
Domiciliary care	Care received in the person's own home.
Sensory impairment	Difficulties with senses, most commonly vision and hearing.
Braille	Raised lettering to help visually impaired.
Occupational therapist	Offers support to develop independence for daily living activities.

B	What are the different types of health care services?
Primary Care	<ul style="list-style-type: none"> <li>Primary care is the first point of contact a patient is likely to have with the NHS – you can refer yourself to primary care providers.</li> <li>Primary care providers include pharmacists, Registered GPs/doctors, walk-in centres, accident and emergency departments (A&amp;E), dentists and Opticians.</li> </ul>
Secondary Care	<ul style="list-style-type: none"> <li>Secondary care is specialist treatment or care. A primary care provider will refer a patient for secondary care if they feel it is necessary for the patient to receive further advice, tests or treatment.</li> <li>Secondary care providers include cardiologists (heart), gynaecologists (female reproduction), paediatrics (children), obstetrics (childbirth and midwifery), psychiatry (mental health) and dermatology (skin).</li> </ul>
Tertiary Care	<ul style="list-style-type: none"> <li>Tertiary Care is advanced specialist treatment or care. A secondary care provider will refer a patient for tertiary care for long-term treatment and/or care.</li> <li>Tertiary care areas include spinal, cardiac (heart), cancer care, chronic pain, burns and neonatal (premature and ill new born babies).</li> </ul>
Allied Health Professionals	<ul style="list-style-type: none"> <li>Allied health professionals work in a range of specialities They support patients through all stages of care – from diagnosis to recovery. To work with the public they must register with the Health and Care Professions Council (HCPC).</li> <li>Allied health professionals include art therapists, dieticians, paramedics, physiotherapists, speech and language therapists and radiographers.</li> </ul>
Clinical Support Staff	<ul style="list-style-type: none"> <li>Clinical support staff work within a range of departments under the guidance of allied health professionals. They are trained in their roles but are not required to register with the HCPC.</li> <li>Clinical support staff include theatre support workers, prosthetic technicians, dietetic assistant, phlebotomist (collects blood samples), hearing aid dispensers and maternity support workers.</li> </ul>

C.	What are the different types of social care services?
Children and young people	<ul style="list-style-type: none"> <li>Children and young people may need support on a temporary or permanent basis because their parent or carer is ill; they have family problems, they have behavioural issues or additional needs.</li> <li>Types of support for children and young people include foster care, residential care and youth work.</li> </ul>
Children or adults with specific needs	<ul style="list-style-type: none"> <li>Children and adults may need support with specific needs including learning disabilities, sensory impairments and long-term health issues.</li> <li>Types of support for children and adults with specific needs include residential care, respite care and domiciliary care.</li> </ul>
Older Adults	<ul style="list-style-type: none"> <li>Older adults may need support with a range of needs including arthritis, cardiovascular disease, dementia and depression.</li> <li>Types of support for older adults include residential care, carers and personal assistants.</li> </ul>
Informal Social Care	<ul style="list-style-type: none"> <li>Not all carers get paid for what they do – they are known as informal carers and social services would really struggle without them.</li> <li>Informal carers include a spouse or partner, children, friends and neighbours.</li> <li>Informal carers do practical household duties, shopping, laundry, walk the dog and help with personal care.</li> </ul>











What we are learning:	
A.	Key words
B.	What are the different types of health care services?
C.	What are the different types of social care services?
D.	What barriers are there to accessing care services?









A.	Key words for this Unit
Primary care	
NHS	
Secondary care	
Tertiary care	
Allied health professionals	
Clinical support staff	
Foster care	
Residential care	
Respite care	
Domiciliary care	
Sensory impairment	
Braille	
Occupational therapist	

B	What are the different types of health care services?
Primary Care	
Secondary Care	
Tertiary Care	
Allied Health Professionals	
Clinical Support Staff	

C.	What are the different types of social care services?
Children and young people	
Children or adults with specific needs	
Older Adults	
Informal Social Care	










D.	What barriers are there to accessing care services?
<b>Physical Barriers</b> 	<ul style="list-style-type: none"> <li>• Difficulty accessing care due to mobility and/or disability.</li> <li>• Obstacles include uneven and rough pavements and services, narrow doorways, no lift and transport.</li> <li>• Access could be improved by planning journeys in advance and reporting any problems to the council.</li> </ul>
<b>Sensory Barriers</b> 	<ul style="list-style-type: none"> <li>• Sensory impairments can be a barrier to accessing care.</li> <li>• A person with poor vision may need glasses or documents in large print. Profound sight problems may benefit from Braille.</li> <li>• A person with a hearing impairment may benefit from a hearing aid or sign language interpreter.</li> </ul>
<b>Social, Cultural and Psychological Barriers</b> 	<ul style="list-style-type: none"> <li>• Social, cultural and psychological barriers may leave people feeling nervous about accessing support.</li> <li>• These can include: religion/cultural barriers, negative experience, self-diagnosis, substance misuse, opening hours.</li> <li>• Care services can give individuals opportunities to share their concerns, offer different gender practitioners, facilities to worship and show respect and understanding.</li> </ul>
<b>Language Barriers</b> 	<ul style="list-style-type: none"> <li>• Language can be a barrier to accessing care services because individuals and care providers may struggle to understand each other.</li> <li>• Support for individuals could include translated documents, translators and interpreters and support from family members.</li> </ul>
<b>Geographical Barriers</b> 	<ul style="list-style-type: none"> <li>• Individuals may struggle to reach care services because public transport may not run regularly, specialist treatments may require long distance travel and travel can be expensive.</li> <li>• Support could include being provided with direct travel or having travel costs reimbursed.</li> </ul>
<b>Intellectual Barriers</b> 	<ul style="list-style-type: none"> <li>• If an individual has a learning disability it can cause difficulty in them accessing care services.</li> <li>• Support might include a learning disability nurse, speech and language therapist or occupational therapist.</li> </ul>
<b>Resource Barriers</b> 	<ul style="list-style-type: none"> <li>• As the population ages and more disorders are being successfully treated, there is a huge strain on health and social care resources – at times it might seem that not everyone can access what they need.</li> <li>• There are huge staff shortages which puts strain on people that work in the health and social care sector.</li> </ul>
<b>Financial Barriers</b> 	<ul style="list-style-type: none"> <li>• Seeing a GP or using emergency services are free but some services, such as optical and dental care, often involve some payment.</li> <li>• This can be difficult for people if they are from a low-income household as they may not feel they can afford to access the care they need.</li> </ul>

D.	What barriers are there to accessing care services?
<b>Physical Barriers</b> 	
<b>Sensory Barriers</b> 	
<b>Social, Cultural and Psychological Barriers</b> 	
<b>Language Barriers</b> 	
<b>Geographical Barriers</b> 	
<b>Intellectual Barriers</b> 	
<b>Resource Barriers</b> 	
<b>Financial Barriers</b> 	



What we are learning:	
E.	Define the key words
F.	What are the care values and how can they be implemented?








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

F.	What are the care values and how can they be implemented?
Empowering and promoting independence 	<ul style="list-style-type: none"> <li>Empowerment is when an individual feels in control of their own life and have a say in what happens to them.</li> <li>Some people might need help with empowerment because of their age, circumstances or confidence e.g. elderly people, children, adult with learning disabilities.</li> <li>You can promote empowerment and independence by involving individuals, where possible, in making choices about their treatment.</li> </ul>
Respect for others 	<ul style="list-style-type: none"> <li>You can show respect for the individual by respecting their privacy, needs, beliefs and identity.</li> <li>Show respect by being patient when someone takes longer to perform simple tasks due to their age, disability or injury.</li> <li>Do not leave personal files around for others to see or discuss your patients' case with friends.</li> <li>Gain permission before entering a room, provide private place for personal conversations.</li> </ul>
Maintaining confidentiality 	<ul style="list-style-type: none"> <li>It is a person's right by law to have information about them kept confidential.</li> <li>Care workers and not allowed to talk about one service user to another, or someone who is not involved in helping them get better. This involves not having those private conversations in public places where other can overhear.</li> <li>Paper and electronic files are to be kept confidential and only shared with care workers which are involved in the treatment of the patient.</li> </ul>
Preserving dignity 	<ul style="list-style-type: none"> <li>Preserving the dignity of individuals to help them maintain self-worth, privacy and self-respect.</li> <li>You do this by involving the person in their own care; helping them go to the bathroom; giving the person time they need, checking what they would like to be called; closing door or curtain when they are changing; making sure their clothes are clean; dealing with embarrassing situations sensitively and professionally.</li> </ul>
Effective communication 	<ul style="list-style-type: none"> <li>In health and social care it is important to communicate effectively with service user in order to build trusting relationships. These can be lost if the care worker appears not to care or listen.</li> <li>Recognising different communication needs and trying to overcome them shows that care workers respect the individual e.g. when visually impaired providing a leaflet in braille; if can't speak English well, have a translator organised beforehand.</li> <li>Show you value the person through showing empathy, asking questions, not judging, smiling, using their name, giving appropriate eye contact, open body language, giving time to process.</li> </ul>
Safeguarding and duty of care 	<ul style="list-style-type: none"> <li>Health and social care workers have a legal duty to protect service users from harm, neglect or abuse. They must recognise the signs and symptoms of abuse so they can protect people.</li> <li>Signs of abuse include low self-esteem, STDs, unexplained injuries or bruises, insomnia, change in appetite, change of personality, self-harming, fear of being alone etc.</li> <li>What to do: report the abuse, never promise to keep the abuse secret, make it clear that you will have to tell someone e.g. your supervisor or the police.</li> </ul> <p><b>DUTY OF CARE</b></p> <ul style="list-style-type: none"> <li>Care workers must work in ways that never put individuals at any risk or harms. They need to know their responsibilities, procedures, deliver care as the care plan states and always report and record any concerns about the service user even if they appear minor.</li> </ul>
Promoting anti-discriminatory practice 	<ul style="list-style-type: none"> <li>Discrimination can be obvious but sometimes it can be subtle and hidden, and The Equality Act 2010 makes it illegal to discriminate against people because of their e.g. age, gender, race, disability, religion, sexual orientation, marital status etc.</li> <li>You can promote anti-discriminatory practice by: having patience with someone who doesn't speak English well; communicating in a way that the person will understand; showing tolerance towards people who have different beliefs and values from you; challenging unkind behaviour.</li> </ul>

**What we are learning:**

- E. Define the key words
- F. What are the care values and how can they be implemented?

E.	Define the key words
Self-respect	
Person centred approach	
Empowerment	
Confidentiality	
Dignity	
Safeguarding	
Discrimination	
Compassionate	
Competence	
Consequences	
Review	
Empathy	
Insomnia	


F.	What are the care values and how can they be implemented?
Empowering and promoting independence 	
Respect for others 	
Maintaining confidentiality 	
Preserving dignity 	
Effective communication 	
Safeguarding and duty of care 	
Promoting anti-discriminatory practice 	

What we are learning:	
G.	How to apply care values in a compassionate way.
H.	Identifying own strengths and areas for improvement against the care values

G	How to apply care values in a compassionate way?
Show empathy and care by:	<ul style="list-style-type: none"> <li>• Being patient</li> <li>• Showing sensitivity</li> <li>• Understanding</li> <li>• Actively listening</li> <li>• Having a positive outlook</li> <li>• Being encouraging</li> <li>• Having genuine concern for other people.</li> </ul>
Care workers can check themselves against the ' <b>Six C's of Compassionate Care</b> ' checklist to make sure they are applying care values with compassion.	
Care	Helps to improve an individual's health and wellbeing. Care should be tailored to each person's needs and circumstances
Compassion	Shows the care worker understands what the individual is experiencing. Being empathetic to their situation shows care and value to the individual
Competence	Shows that care workers can safeguard and protect individuals from harm
Communication	How to adapt to individuals and their circumstances to ensure important information is given and shared- keeping the individual at the heart of everything that is done
Courage	Protecting individuals by speaking up if you think something is wrong; being brave enough to own up if you have made a mistake.
Commitment	Carrying out your duties to care for others to the best of your ability.

H	Identifying own strengths and areas for improvement against the care values
Working together	<ul style="list-style-type: none"> <li>• All care works have the responsibility to uphold care values. If everyone works together, doing their 'bit', service users and colleagues alike will all be able to have positive experiences.</li> <li>• Put any feelings aside, some clients can show anger or aggressions towards you, continues to work in a way that respects each of the care values.</li> </ul> <p>Staff training:</p> <ul style="list-style-type: none"> <li>• Staff training keeps everyone updated. Even if they also ready had care values training it is important to have it again and remind them of their importance.</li> </ul>
Making mistakes	<ul style="list-style-type: none"> <li>• Everyone sometimes make mistakes. It is crucial that staff own up to mistakes that they have made, not matter how small. This is part of the duty of care to safeguard individuals, it demonstrates respect.</li> <li>• You need to be honest about your mistake, do not pretend it never happened and do not blame someone else.</li> <li>• You can: <ul style="list-style-type: none"> <li>• Tell your supervisor, admit it and apologise</li> <li>• Be honest and accurate about what happened,</li> <li>• Suggest ways to avoid it happening again</li> <li>• Earn back the trust of the person involved</li> <li>• Prove you can do the job</li> <li>• Do no be too hard on yourself; seek help and guidance from others.</li> </ul> </li> </ul>
Reviewing own applications of care values	<ul style="list-style-type: none"> <li>• One way to improve skills is to look carefully at the areas you are good at, what you are able to do well and things that you find difficult.</li> <li>• Knowing your strengths will allow you to take on task with ease and make you feel confident that you are doing a good job.</li> <li>• Knowing your weaknesses and what needs improving will help you work on them and develop. It is important to be open with yourself and others in order to progress further and be better at your job.</li> <li>• Regularly review your strengths and weaknesses because they change overtime</li> </ul>
Receiving feedback	<ul style="list-style-type: none"> <li>• The purpose of feedback is to let you know what you are doing well and the areas you need to improve.</li> <li>• This can be formal- like reports and following an observation at work and Informal- like chatting to colleagues at break time.</li> <li>• Both types encourage you to feel pleased with what you have done well and motivate you to improve in weaker areas, perhaps even provide a way forward.</li> <li>• Remember: when giving and receiving feedback, positives must be noted so that you know what you are doing well and continue to do so. Negatives are hard to uncomfortable to hear, but do not take them personally, you need them to get better at your job and feel more confident.</li> </ul>
Using feedback	<ul style="list-style-type: none"> <li>• Create yourself a SMART action plan to set yourself Specific, Measurable, Achievable, Realistic and Time-related targets or goals to help plan for your improvements</li> </ul>

What we are learning:	
G.	How to apply care values in a compassionate way.
H.	Identifying own strengths and areas for improvement against the care values

G	How to apply care values in a compassionate way?	
		
Care		
Compassion		
Competence		
Communication		
Courage		
Commitment		

H	Identifying own strengths and areas for improvement against the care values	
Working together		
Making mistakes		
Reviewing own applications of care values		
Receiving feedback		
Using feedback		

### What we are learning in LAA:

- A. Key words
- B. Definitions of health and wellbeing
- C. Genetic inheritance

#### A. Key words for this Unit

Genetic inheritance	The genes a person inherits from their parents
Predisposition	Someone is more likely to suffer from a particular condition
Chronic	Gradual illness that is long term (longer than 3 months) and generally can be treated but not cured
Acute	A short-term illness that can be cured
Monitor	To check progress over a period of time.
Person-Centred	Planning care around the wants and needs of a service user
Bereavement	The process of coming to terms with the death of someone close.
Circumstances	Events that change your life, over which you have no control
Physiological	Relates to how a person and their bodily parts function normally.
Interpret	understand an action, mood, or way of behaving as having a particular meaning
Collaboratively	Working well together with other people or services
Obstacles	Difficulties a person might face when they implement a plan.
Goal	What you want to achieve in the long term
Norm	Something that is usual, typical or standard
Targets	Challenges to help you reach your goal

### B Definitions of health and well-being

#### Positive Definition



Looks at how physically fit and mentally stable a person is. You have a positive attitude towards health and wellbeing if you realise that there is something you can do to improve your health and wellbeing and do it.

#### Negative definition



Looks at the absence of physical illness, disease, and mental distress. You have a negative attitude towards your health and wellbeing if you:

- Base your attitude on not having anything wrong with you.
- Continues as you are- Inc. keeping bad habits like smoking.
- Assume that because you currently feel fine you will stay healthy in the future.

#### Holistic definition



It is a combination of physical health and social and emotional wellbeing. It is not just the absence of disease or illness; it looks at all aspects of a person's health and wellbeing. You have a holistic attitude towards health and wellbeing if you look after your:

##### • Physical Health:

By meeting the needs we have to keep our bodies working as well as they can, e.g. Food, water, shelter, warmth, clothing, rest, exercise and good personal hygiene.

##### • Intellectual health:

By meeting the needs we have to develop and keep our brains working as well as possible; these include mental stimulation to keep us motivated and interested.

##### • Emotional aspects of wellbeing:

By meeting the needs we have that make us feel happy and relaxed, e.g. being loved, respected and secure. Knowing how to deal with negative emotions, having positive self-concept and being respected by others.

##### • Social aspects of wellbeing:

By meeting the needs we have to help us develop and enjoy good relationships with others, including mixing with others in appropriate environments and having access to leisure facilities/ activities.

#### C.

#### Genetic inheritance

##### Inherited physical Characteristics

- Children inherit their physical; characteristics from their parents e.g. height, skin and eye colour and hair type and colour.
- These characteristics can affect social and emotional wellbeing because they influence a person's self-concept (self-image and esteem).

##### Genes and environment

- Chromosomes carry genes that determine aspects of persons physical makeup.
- Gene is a section of DNA that carries a code. Different versions of a gene are called **alleles** (they can be faulty).
- Environmental factors such as diet, also influence physical appearance. For example, a person may not grow to their full, genetically determined height if they do not have enough food.

#### Allele type

##### Dominant:

If a gene is dominant a child inheriting it from only one birth parent will have the condition, e.g Huntington's disease.

##### Recessive:

If the gene is recessive a child would only develop the condition if it was inherited from both birth parents, e.g. Cystic fibrosis.

#### Effects of inherited disorders

- Physical health: Body systems, growth and mobility
- Intellectual wellbeing: learning, thinking, problem solving and decision making.
- Emotional wellbeing: how people feel about themselves.
- Social wellbeing: the ability to build relationships and maintaining them.



**What we are learning in LAA:**

- A. Key words
- B. Definitions of health and wellbeing
- C. Genetic inheritance

**A. Key words for this Unit**

Genetic inheritance	
Predisposition	
Chronic	
Acute	
Monitor	
Person-Centred	
Bereavement	
Circumstances	
Physiological	
Interpret	
Collaboratively	
Obstacles	
Goal	
Norm	
Targets	

**B****Definitions of health and well-being**

Positive Definition



Negative definition



Holistic definition

**C.****Genetic inheritance****Inherited physical Characteristics****Genes and environment**

Allele type

Effects of  
inherited  
disorders

### What we are learning in LAA:

- D. Balanced diet
- E. Chronic and acute illness
- F. What are the effect of exercise?
- G. What are the effect of excessive substance use?





D.	Balanced diet
<b>What is a balanced diet?</b>	<ul style="list-style-type: none"> <li>Diet that contains the correct nutrients in the right proportions to keep out bodies and minds healthy.</li> <li>It is also a lifestyle choice</li> <li>Choosing to eat too much or too little might make us less able to take all the opportunities that life offers.</li> </ul>
<b>Overweight or underweight may:</b>	<p>A person over weight or under weight may:</p> <ul style="list-style-type: none"> <li>Be prone to illness and conditions</li> <li>Have their life expectancy reduced</li> <li>Be less able to exercise effectively</li> <li>Miss out on learning experiences</li> <li>Miss out on some sporting activities</li> <li>Be less successful in job interviews</li> <li>Feel embarrassed and self-conscious about their appearance in social situations.</li> </ul>
<b>Essential parts of a healthy diet:</b>	<ul style="list-style-type: none"> <li>Fats (saturated and unsaturated)</li> <li>Carbohydrates (sugars and starches)</li> <li>Minerals</li> <li>Vitamins</li> <li>Proteins</li> </ul>
<b>Eat well guide says you should eat:</b>	<ul style="list-style-type: none"> <li>Eat at least 5 portions of a variety of fruit and vegetables every day.</li> <li>Base meals on potatoes, bread, rice, pasta or other starchy carbohydrates; choosing wholegrain versions where possible.</li> <li>Have some dairy or dairy alternatives (such as soya drinks); choosing lower fat and lower sugar options.</li> <li>Eat some beans, pulses, fish, eggs, meat and other proteins (including 2 portions of fish every week, one of which should be oily).</li> <li>Choose unsaturated oils and spreads and eat in small amounts.</li> <li>Drink 6-8 cups/glasses of fluid a day.</li> </ul>
<b>If you eat <u>more</u> than you need:</b>	<ul style="list-style-type: none"> <li>The body will store food as fat and this can lead to:</li> <li>Obesity, heart disease, high blood pressure, Strokes, Tooth decay or cancer</li> </ul>
<b>If you eat <u>less</u> than you need</b>	<ul style="list-style-type: none"> <li>The body does not get enough nutrients to grow and develop properly and this can lead to:</li> <li>Eating disorders, stunted growth, anaemia, heart failure, depression, tiredness, cancer or rickets.</li> </ul>

E	Chronic or Acute Illness
<b>Chronic illness-</b> Illness comes on gradually, is long term (more than 3 months) and generally can be treated but not cured. E.g Asthma, Diabetes, epilepsy, bipolar disease, Alzheimer's disease	<b>Acute illness-</b> Illness comes on quickly, is short term and can be cured. E.g. Cold, flue, broken bones, heartburn, appendicitis or Diarrhoea.
Some chronic conditions are acute but may develop because of chronic conditions. For example: osteoporosis (a chronic condition that weakness bones) making their bones fragile and more likely to break. Broken bones are then an acute condition.	
Possible negative effects of chronic illness	
<b>Physical:</b> <ul style="list-style-type: none"> <li>poor rate of growth</li> <li>Unusual physiological change during puberty</li> <li>Restricted movement</li> </ul>	<b>Emotional:</b> <ul style="list-style-type: none"> <li>Negative self-concept</li> <li>Stress</li> <li>Decision making</li> </ul>
<b>Intellectual:</b> <ul style="list-style-type: none"> <li>Disturbed learning because of missing school</li> <li>Difficulties in thinking and problem solving</li> <li>Memory problems.</li> </ul>	<b>Social</b> <ul style="list-style-type: none"> <li>Isolation</li> <li>Loss of independence</li> <li>Difficulties developing relationships</li> </ul>

F.	What are the effect of exercise?
<b>Positive effects of exercise</b>	<p><b>Physical:</b> maintain a healthy weight, reduce BMI, boosting energy levels. Improved flexibility, stamina, endurance and stronger bones and muscles. Reduce risk of heart disease and diabetes.</p> <p><b>Intellectual:</b> improved brain function like mental and thinking skills.</p> <p><b>Emotional:</b> improves confidence and mood and reduces stress. Aid relaxation and sleep and lead to better self concept.</p> <p><b>Social:</b> encourages social interaction, reducing isolation and improving social skills.</p>
<b>Negative effects of exercise</b>	<p><b>Physical:</b> Obesity and associated health problems.</p> <p><b>Intellectual:</b> Reduced pain performance, hard to concentrate and retain information.</p> <p><b>Emotional:</b> poor self-concept and reduced ability to cope with stress.</p> <p><b>Social:</b> Fewer opportunities for social interactions.</p>

G.	What are the effect of excessive substance use?
<b>Negative effects of excessive alcohol consumption</b>	<p><b>Physical:</b> Alcohol dependence, damage to major organs: liver, heart, kidneys, pancreas. Cancers: mouth, throat, oesophagus, liver, breast. Infertility and impotence, weight gain.</p> <p><b>Intellectual:</b> difficulty in making decisions, depression and anxiety, chance of stroke and brain damage, impaired brain development of unborn baby.</p> <p><b>Emotional:</b> poor self-concept, poor judgement leading to a risk of accidents and unsafe sex, can have an impact on relationships, depression.</p> <p><b>Social:</b> breakdown of relationships, domestic violence, social isolation</p>

- |   |                                 |
|---|---------------------------------|
| <b>E</b>  | <b>Chronic or Acute Illness</b> |
|   |                                 |
|   |                                 |
| <b>Possible negative effects of chronic illness</b> |                                 |
|   |                                 |
|   |                                 |
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|--|---|
| <b>F.</b>  | <b>What are the effect of exercise?</b> |
| Positive effects of exercise<br><br> |   |
| Negative effects of exercise   |   |
- 
- |   |  |
|---|--|
| <b>G.</b>   | <b>What are the effect of excessive substance use?</b> |
| Negative effects of excessive alcohol consumption<br><br> |  |

## What is a balanced diet?

**Overweight  
or  
underweight  
may:**

## Essential parts of a healthy diet:

**Eat well  
guide says  
you should  
eat:**

If you eat more than you need:

If you eat less than you need

<b>E</b>	<b>Chronic or Acute Illness</b>
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### Possible negative effects of chronic illness

**F. What are the effect of exercise?**

## Positive effects of exercise



## Negative effects of exercise

**G. What are the effect of excessive substance use?**

## Negative effects of excessive alcohol consumption



**What we are learning in LAA:**

- H. The effects of social interactions on wellbeing
- I. What are the effects of stress on health and wellbeing
- J. What are the hazards of smoking
- K. What are the effects of personal hygiene

**H. The effects of social interactions on wellbeing**

Social integration	When people feel they belong to a group and can interact with others. Social interactions can happen between family members and friends, work colleagues, school learners, members of a community or interest groups.
Social isolation	Occurs when people do not have regular contact with others. This may be because they don't go out much because of physical illness, reduced mobility or unemployment. They might have a difficulty in communicating if they have a mental illness, depression or learning difficulties. Lastly, a person might be discriminated against because of culture, religion or disability.

**Positive effects of relationships**

**Physical:** physical support and day to day care and practical assistance.  
**Intellectual:** shared experiences, supported learning and thinking  
**Emotional:** unconditional love, security and encouragement, positive self-concept, feeling content, ability to build relationships with people outside the family, independence and confidence.  
**Social:** Companionship, social circle increases.

**Negative effects of social isolation**

**Physical:** poor lifestyle choices like smoking and drinking, poor diet that can cause eating disorders.  
**Intellectual:** reduced ability to use thinking skills, missing school/work  
**Emotional:** feelings insecure, depression, anxiety, negative self-concept, feeling of hurt, loneliness and distrust, lack of independence, difficulty in controlling emotions.  
**Social:** difficulties in building relationships as lack skills.

**I. What are the effects of stress on health and wellbeing**

Physical effects	Intellectual effects	Emotional effects	Social effects
Increased heartbeat Increased breathing rate Tense muscles Sweaty palms Dry mouth High blood pressure Loss of appetite Sleeplessness Digestive problems	Forgetfulness Poor concentration Difficulty in making decisions	Difficulty in controlling emotions Feeling insecure Negative self-concept Feeling anxious and frightened Loss of confidence	Difficulty in making friends and building relationships Breakdown of close relationships Social isolation

**J. What are the hazards of Smoking**

**Heart disease and poor circulation mean:**

- increased blood pressure
- increased risk of heart attack
- narrowing of the arteries.

**Carbon monoxide causes:**

- decreased oxygenation
- poor growth
- extra work for the heart
- increased risk of thrombosis.

**Exposure in childhood means that children:**

- are prone to chest infections and asthma
- tend to be smaller and weaker
- do less well at school.

**Irritant particles cause:**

- bronchitis
- emphysema
- asthma
- smoker's cough.

**Nicotine causes:**

- addiction
- increased blood clotting leading to thrombosis.

**Conditions such as:**

- stroke
- gum disease.

**Tar causes** cancers of the nose, throat, tongue, lungs, stomach and bladder.

**Smokers':**

- breath and clothes smell of smoke
- hands and nails are nicotine stained
- faces often become wrinkled from the effects of smoking.

**The hazards of smoking**

**Exposure in pregnancy causes:**

- smaller babies
- more stillbirths
- more miscarriages.

**K. What are the effects of Personal Hygiene?**

Positive effects of good personal hygiene



- Helps prevent the spread of infection
- Improves self-concept
- Reduces number of bacteria that lives on us.

**You must:**

- Brush you teeth
- Shower daily or bath
- Wash your hair regularly
- Keep fingernails and toenails clean and trimmed

Negative effects of poor personal hygiene

**Physical:** catching and spreading disease like food poisoning, sore throat, meningitis and athlete's foot. Bad body odour, bad breath and tooth decay.

**Emotional:** loss of friendships and social isolation. Might be bullied and poor self-concept.

**Social:** low social interactions as people don't want to be friends with someone that neglects their hygiene. Social isolation.

When caring for others:

- Bad hygiene can stop effective communication.
- Negative effect on the person being cared for and their health and wellbeing- pass on infection
- Discomfort for the person being cared for because of the odour or visible dirt under fingernails.

### What we are learning in LAA:

- H. The effects of social interactions on wellbeing
- I. What are the effects of stress on health and wellbeing
- J. What are the hazards of smoking
- K. What are the effects of personal hygiene

### H. The effects of social interactions on wellbeing

Social integration

Social isolation

Positive effects of relationships



Negative effects of social isolation



### I. What are the effects of stress on health and wellbeing

Physical effects

Intellectual effects

Emotional effects

Social effects

### J. What are the hazards of Smoking

The hazards of smoking

### K. What are the effects of Personal Hygiene?

Positive effects of good personal hygiene



Negative effects of poor personal hygiene

When caring for others:



What we are learning in LAA:	
L.	What are the barriers to seeking help.
M.	What are the effects of unexpected life events on health and wellbeing
N.	What are the effects of economic factors (e.g, income) on health and wellbeing
O.	What are the effects of expected life events on health and wellbeing
L.	What are the barriers to seeking help.
<b>Culture</b>	<p>Accessing HSC services can be influenced by values, traditions, way of life and beliefs of the society or group.</p> <ul style="list-style-type: none"> <li>Some may have received discrimination when accessing other services.</li> <li>Some may not speak English well enough.</li> <li>Values and traditions not understood e.g. eye contact means respect in some cultures but not others.</li> <li>Some cultures a woman must be treated only by a female professional.</li> <li>Alternative therapies are used in some cultures</li> </ul>
<b>Gender</b>	<p>Research shows that men are less likely to talk about their health and wellbeing than women. This is because men are:</p> <ul style="list-style-type: none"> <li>Often less open about their feelings</li> <li>Sometimes reluctant to appear vulnerable by asking for help</li> <li>Not aware of poor health signs as health campaigns target women's health more</li> <li>Unhappy to be examined by a female health worker.</li> </ul>
<b>Education</b>	<p>Research shows that people who are better educated are more likely to seek help. This is because:</p> <ul style="list-style-type: none"> <li>They like to research symptoms and know when help is needed</li> <li>Understand the importance of early diagnosis and treatment</li> <li>Know how and where to access services.</li> </ul>
<b>Stigma</b>	<p>In some cultural groups there is a stigma attached to certain conditions like depression. Stigma is a word used to describe something that people feel embarrassed about. Therefore, they wouldn't seek help.</p>

M.	What are the effects of unexpected life events on health and wellbeing	
Life event	Negative Effects:	Positive Effects:
<b>Imprisonment</b>	<ul style="list-style-type: none"> <li>Depression</li> <li>Loss of contact with family and friends</li> <li>Social isolation</li> <li>Restrictions on physical activity</li> </ul>	<ul style="list-style-type: none"> <li>Opportunity to study</li> <li>Improvement in health through balanced diet, lack of alcohol, reduced use of nicotine</li> </ul>
<b>Redundancy</b>	<ul style="list-style-type: none"> <li>Poor self-concept</li> <li>Anxiety about finances</li> <li>Fewer opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Opportunities to study or train for a new job</li> <li>More time to spend with family and friends</li> </ul>
<b>Exclusion or dropping out of education</b>	<ul style="list-style-type: none"> <li>Loss of contact with friends</li> <li>Social isolation</li> <li>Poor self-concept</li> <li>Lack of learning opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Catalyst for change of behaviour</li> <li>Opportunities for more suitable study or work situation</li> </ul>

N.	What are the effects of economic factors (e.g, income) on health and wellbeing	
	Positive Effects:	Negative Effects:
<b>Physical</b>	<ul style="list-style-type: none"> <li>Better financial resources can result in good housing conditions and healthy diet</li> <li>Manual jobs may improve muscle tone and stamina.</li> </ul>	<ul style="list-style-type: none"> <li>Low wages can affect diet and housing, leading to poor health.</li> <li>Manual jobs can cause muscular and skeletal problems</li> <li>Desk jobs lead to less activity and weight gain.</li> </ul>
<b>Intellectual</b>	<ul style="list-style-type: none"> <li>Better financial resources can result in more leisure time for intellectual activities</li> <li>Work, education or training helps to develop problem solving and thinking skills</li> </ul>	<ul style="list-style-type: none"> <li>Some people work very long hours to improve their financial position, leading to less leisure time and reduced learning opportunities.</li> <li>Being unemployed can result in poor mental health.</li> </ul>
<b>Emotional</b>	<ul style="list-style-type: none"> <li>A well-paid job gives a feeling of security.</li> <li>Being financially secure promotes positive self-concept</li> </ul>	<ul style="list-style-type: none"> <li>Financial worries can result in stress and breakdown of relationships.</li> <li>Unemployment or low-status work can lead to low self-concept</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>Better financial resources provide opportunities for socialising.</li> <li>Work gives opportunities for socialising with colleagues.</li> </ul>	<ul style="list-style-type: none"> <li>Lack of financial resources reduces opportunities for socialising.</li> <li>Unemployment reduces opportunities for relationships, leading to social isolation.</li> </ul>

O.	What are the effects of expected life events on health and wellbeing	
Life event	Positive Effects:	Negative Effects:
<b>Starting school, college or uni</b>	<ul style="list-style-type: none"> <li>Build new relationships</li> <li>Extend knowledge and learning</li> <li>Develop new skills</li> <li>Improve confidence</li> </ul>	<ul style="list-style-type: none"> <li>Anxiety about new routines and meeting new people</li> <li>Insecurity about leaving parents and other families</li> </ul>
<b>Start a new job or career</b>	<ul style="list-style-type: none"> <li>Develop independence</li> <li>Improve thought processes</li> <li>Improve self-concept</li> </ul>	<ul style="list-style-type: none"> <li>Stress about learning new skills and routines</li> <li>Anxiety about meeting new people</li> </ul>
<b>Moving to a new house or area</b>	<ul style="list-style-type: none"> <li>Excitement</li> <li>Develop new friendships and relationships</li> </ul>	<ul style="list-style-type: none"> <li>Unhappiness at loss of old life</li> <li>Stress of moving</li> <li>Social isolation</li> </ul>
<b>Retirement</b>	<ul style="list-style-type: none"> <li>Reduced stress</li> <li>Time to socialise with family and friends</li> <li>Opportunities for leisure or physical activities</li> </ul>	<ul style="list-style-type: none"> <li>Loss of relationships with colleagues</li> <li>Possible loss of fitness and mobility</li> <li>Loss of intellectual stimulation and status</li> </ul>

**What we are learning in LAA:**

- L. What are the barriers to seeking help.  
 M. What are the effects of unexpected life events on health and wellbeing  
 N. What are the effects of economic factors (e.g, income) on health and wellbeing  
 O. What are the effects of expected life events on health and wellbeing

**L. What are the barriers to seeking help.**

**Culture**

**Gender**

**Education**

Stigma

**M. What are the effects of unexpected life events on health and wellbeing**

**Life event Negative Effects: Positive Effects:**

**Imprisonment**

**Redundancy**

**Exclusion or dropping out of education**

**N. What are the effects of economic factors (e.g, income) on health and wellbeing**

**Positive Effects:**

**Negative Effects:**

**Physical**

**Intellectual**

**Emotional**

**Social**

**O. What are the effects of expected life events on health and wellbeing**

**Life event**

**Positive Effects:**

**Negative Effects:**

**Starting school, college or uni**

**Start a new job or career**

**Moving to a new house or area**




**Retirement**

### What we are learning in LAB:

- A. Physiological health indicators
- B. What are health indicators?
- C. Interpreting lifestyle data

A.	Physiological health indicators
<b>Pulse</b>	<p><b>Resting pulse rate</b> is measured when a person has been still for about 5 minutes. Health reading for an adult is 60-100 bpm.</p> <p><b>Pulse rate during exercise:</b> 220bpm minus the person's age.</p>
<b>Blood pressure</b>	<ul style="list-style-type: none"> <li>This is the pressure exerted by blood against the artery walls.</li> <li>It is measured in millimetres of mercury (mm Hg) and is shown in two numbers: <ul style="list-style-type: none"> <li>Systolic pressure: (the top number) is the maximum pressure in the blood vessels as the heart pushes out blood.</li> <li>Diastolic pressure: (the bottom number) as the minimum pressure in the vessels when the heart relaxes between the beats.</li> </ul> </li> </ul>
<b>Peak flow</b>	<ul style="list-style-type: none"> <li>Measured how quickly you can blow air out of your lungs.</li> <li>it is measured in litres per min (L/min).</li> </ul>
<b>BMI</b>	<ul style="list-style-type: none"> <li>Measures the amount of fat on your body in relation to your height to tell you if your weight is healthy.</li> </ul>

B.	What are health indicators?
<b>Importance of understanding indicators</b>	<ul style="list-style-type: none"> <li>Detect health problems at an early stage</li> <li>Track improvements or deterioration in health</li> <li>Make recommendations about health and treatments</li> <li>Give advice about future health risks</li> <li>Support individuals to make different lifestyle choices.</li> </ul>
<b>What are lifestyle indicators?</b>	<ul style="list-style-type: none"> <li>These indicators can be used to assess risks to an individual's health and wellbeing now and in the future.</li> <li>Professionals collect information about lifestyle choices by asking about a person's: <ul style="list-style-type: none"> <li>Weekly alcohol consumption</li> <li>Smoking habits</li> <li>Levels of physical activity and exercise.</li> </ul> </li> </ul>
<b>What are physiological indicators?</b>	<ul style="list-style-type: none"> <li>They show how well the body's systems are functioning.</li> <li>Health professionals check a person's health by taking measurements.</li> <li>They compare the results with published guidance.</li> </ul>




C.	Interpreting lifestyle data
<p><b>Interpreting data on smoking</b></p> 	<ul style="list-style-type: none"> <li>Smoking causes around 96,000 deaths in the UK annually.</li> <li>Smoker under the age of 40 are 5 times more likely to have a heart attack than non-smoker.</li> <li>Smoking causes 80% of deaths from lung cancer, 80% of bronchitis and 14% of deaths from heart disease.</li> <li>More than 25% of all cancer deaths are caused by smoking.</li> <li>On average a smoker will die 10 years earlier than a non-smoker.</li> <li>Smokers are more likely to develop facial wrinkles.</li> <li>Smoking is a cause of impotence and can lead to sperm abnormalities.</li> </ul>
<p><b>Interpreting data on alcohol</b></p> 	<ul style="list-style-type: none"> <li>Strongly linked to at least 7 types of cancer</li> <li>Alcohol-related liver disease accounts for 37% of liver disease and deaths.</li> <li>2/3s of cases of chronic pancreatitis are caused by heavy drinking</li> <li>You are between 2 and 5 times more likely to have an accident or injury</li> <li>Each drink per day increases the risk of breast cancer in woman between 7-13%</li> <li>Men and woman should not drink more than 14 units a week and not all in one go.</li> </ul>
<p><b>Interpreting data on inactivity</b></p> 	<ul style="list-style-type: none"> <li>Increased risk of breast cancer by 17.8% and colon cancer by 18.7%</li> <li>Increased risk of type 2 diabetes by 13%.</li> <li>Increased risk of coronary heart disease by 10.5%</li> <li>Leads to obesity and joint pain</li> <li>16.9% of all premature deaths are caused by inactive lifestyle.</li> <li>Active people have a lower risk of premature death.</li> <li>People who are inactive visit their GP more often and they spend 38% more time in hospital.</li> </ul>

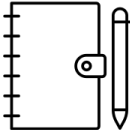
**What we are learning in LAB:**

- A. Physiological health indicators
- B. What are health indicators?
- C. Interpreting lifestyle data

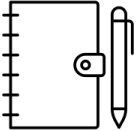
A.	Physiological health indicators
Pulse	
Blood pressure	
Peak flow	
BMI	

B.	What are health indicators?
Importance of understanding indicators	
What are lifestyle indicators?	
What are physiological indicators?	

C.	Interpreting lifestyle data
<p>Interpreting data on smoking</p> 	
<p>Interpreting data on alcohol</p> 	
<p>Interpreting data on inactivity</p> 	

What we are learning in LAC:		C.	Recommended action to meet health and wellbeing improvement goals	
A. What is a person-centred approach B. Health improvement plan C. Recommended action to meet health and wellbeing improvement goals D. SMART targets for health improvement plan E. Sources of support			<b><u>To lower blood pressure:</u></b> <ul style="list-style-type: none"><li>• Eat five or more portions of fruit and veg a day</li><li>• Cut out salt</li><li>• Use relaxation techniques to reduce stress</li><li>• Join a gym</li><li>• Drink water alongside alcohol to reduce consumption</li></ul>	<b><u>To reduce BMI:</u></b> <ul style="list-style-type: none"><li>• Reduce fat and sugar intake</li><li>• Do not exceed the recommended daily calories intake</li><li>• Get off the bus a stop early and walk the rest of the way</li><li>• Drink water instead of sugary drinks.</li></ul>
<b>Person-centred approach</b>	A holistic approach that puts the individual at the heart of health care planning, so that the whole range of physical, intellectual, emotional and social health needs are met.		<b><u>To increase peak flow reading:</u></b> <ul style="list-style-type: none"><li>• Half the number of cigarettes smoked each day</li><li>• Use nicotine replacement therapies</li><li>• Join an exercise or dance class.</li></ul>	<b><u>To reduce pulse rate and improve recovery time after exercise:</u></b> <ul style="list-style-type: none"><li>• Walk for half an hour at lunchtime</li><li>• Drink decaffeinated drinks</li><li>• Take up a physically active hobby</li><li>• Join a yoga group.</li></ul>
<b>When planning for health improvements include:</b>	<ul style="list-style-type: none"><li>• The needs: physical, intellectual, emotional and social.</li><li>• The wishes: likes, dislikes, choices and desired health goals.</li><li>• Circumstances: illness or disability, access to facilities, previous experiences, family and relationships, responsibilities.</li></ul>			
<b>Benefits of person-centred approach:</b>	<ul style="list-style-type: none"><li>• Will feel involved</li><li>• Is more likely to trust a health professional who listen to them</li><li>• Will feel more secure</li><li>• Is more likely to follow the plan and achieve the targets</li><li>• Will take responsibility for their own health.</li></ul>			
<b>B.</b>	<b>Health improvement plan</b>			
<b>What is it?</b>	Health and wellbeing improvement plans are often based on an individual's physiological and lifestyle indicators. Plans should be person-centred and include goals, actions and targets and possible sources of support.			
<b>The plan will identify:</b>	<ul style="list-style-type: none"><li>• The health issues and goal</li><li>• The recommended actions to take</li><li>• A set of targets for health improvement</li><li>• The supports that are needed</li><li>• Possible obstacles to progress and way to overcome them.</li></ul>			
<b>Positive effects of a health improvement plan</b>	<ul style="list-style-type: none"><li>• Be fitter</li><li>• Lose weight</li><li>• Have improved self-concept</li><li>• Lower blood pressure, healthier heart</li><li>• Reduced risk of cancer</li><li>• Taking control of their health outcomes and reaching health goals</li></ul>			
<b>D.</b>		<b>SMART targets for health improvement plan</b>		
<b><u>Specific</u></b>		The target must be clearly stated. It should say exactly what you mean, such as to 'lose 2 kg in weight in a week'. The target should be clear and not open to any misunderstanding.		
<b><u>Measurable</u></b>		A target of to 'lose weight' is too vague. A specific amount must be stated so you can prove you have met your target.		
<b><u>Achievable/attainable</u></b>		If you are following a health and wellbeing improvement plan you must feel it is possible to achieve it. If you do not, you will probably give up before you have even started. An achievable target is to 'lose 1kg this week'. An unachievable target would be to 'lose 20kg this week'.		
<b><u>Realistic</u></b>		The target set must be realistic in that you must be able to physically do it. It is not realistic to expect a person who is older and not very fit to run for 30 minutes a day to help weight loss, but it is realistic to ask the same of a fitter, younger person.		
<b><u>Time-related</u></b>		The target must have a deadline, so that you know when you need to achieve the target by, and progress can be assessed.		
<b>E.</b>		<b>Sources of support</b>		
<b>Informal support</b>		Informal support is the support an individual receives from partners, family and friends. It is usually the first form of support an individual experiences after and expected or unexpected life event. Informal support can provide reassurance, encouragement, advice, a sense of security, someone to talk through options with and practical help.		
<b>Professions (formal) support</b>		Formal support may be provided by statutory care services (the state), private care services and charitable organizations. Professional support may include counsellors, teachers, careers advisers, occupational therapists, social workers and health specialists. Professional support may be needed to help people with a health condition, regain mobility, deal with life changes and emotions, get advice and information or change their lifestyle.		
<b>Voluntary support</b>		Organizations offering voluntary support are charities, community groups and religious groups. At voluntary support services, many staff are volunteers ( they work for free), but they also employ qualified people who are paid by donations. Community groups work at a local level to meet the needs of people living in a specific neighbourhood i.e. foodbanks. Religious groups are formed by people who share the same religious or spiritual beliefs but they help all people in need regardless of their beliefs and background i.e. a church run soup kitchen for the homeless.		



What we are learning in LAC:		C.	Recommended action to meet health and wellbeing improvement goals	
A. What is a person-centred approach B. Health improvement plan C. Recommended action to meet health and wellbeing improvement goals D. SMART targets for health improvement plan E. Sources of support				
A.	What is a person-centred approach.			
Person-centred approach				
When planning for health improvements include:				
Benefits of person-centred approach:				
		D. SMART targets for health improvement plan		
		Specific		
		Measurable		
		Achievable/attainable		
		Realistic		
		Time-related		
		E. Sources of support		
		Informal support		
		Professions (formal) support		
		Voluntary support		
B.	Health improvement plan			
What is it?				
The plan will identify:				
Positive effects of a health improvement plan				

F.	What are the potential obstacle to implementing plans?	G.	What are the possible obstacles to accessing services?		
Emotional/ psychological- Lack of motivation	<ul style="list-style-type: none"><li>• A conflict between choices such as worrying that giving up smoking could result in weight gain</li><li>• Other priorities in a person's life- such as getting married or bereavement.</li><li>• Having negative attitude- believing change will be too difficult</li><li>• Lack of progress for example losing eight quickly in the first weeks but then slowing down.</li><li>• Having a blip- thinking there is no point in continuing the plan after briefly returning to an old lifestyle.</li></ul>	Type of obstacle	Possible obstacles	Suggestions to overcome obstacles	
Emotional/ psychological- Low Self- concept	<ul style="list-style-type: none"><li>• People with low self-concept don't value themselves,</li><li>• Feel powerless to change their lifestyle or that there's no point in starting because the task seems too big.</li><li>• Some thin that because they were unsuccessful in other aspects of their life, they won't achieve their health goals.</li><li>• They may not feel they have support and approval from family and friends even if they really do.</li></ul>	Geographical	<ul style="list-style-type: none"><li>• Service is difficult to get to because of poor bus or train services.</li></ul>	<ul style="list-style-type: none"><li>• Arrange hospital transport</li><li>• Suggest telephone helplines or internet support groups.</li></ul>	
Emotional/ psychological- Acceptance of the current state	<ul style="list-style-type: none"><li>• People my accept their present health problems or lifestyle choices, as it Is easier to stay the same than to make changes.</li><li>• Have no incentive to make a change because they do not understand the health risks.</li><li>• Have no desire to change, for example, if they are happy with their weight or don't want to give up smoking.</li></ul>	Financial	<ul style="list-style-type: none"><li>• Charges to use the services</li><li>• Time off from work would mean loss of pay</li></ul>	<ul style="list-style-type: none"><li>• Check for entitlements, such as medicines and treatments</li><li>• Direct the person to advice on benefits and employee rights.</li></ul>	
Time constraints	People find that they do not have the time to achieve their health improvements targets because of: <ul style="list-style-type: none"><li>• Care of young children, family members that are not well.</li><li>• Regular and additional work and study commitments</li><li>• Domestic chores</li><li>• Medical appointments</li></ul>	Psychological	<ul style="list-style-type: none"><li>• Fear of being judged because there is stigma around a health problem (mental health, obesity)</li></ul>	<ul style="list-style-type: none"><li>• Talk about concerns and reassure</li><li>• Direct the person to a charity that supports people with a particular health problem.</li></ul>	
Availability of resources	Financial obstacles: <ul style="list-style-type: none"><li>• Gym memberships, entry fee for a swimming pool</li><li>• Cost of attending exercise classes</li><li>• Cost of travel to the gym. pool or to attend health appointments</li><li>• Higher costs of some healthy foods.</li><li>• Lack of and the cost of exercise equipment</li></ul>	Physical	<ul style="list-style-type: none"><li>• Difficulty getting into the buildings where the service is provided (no wheelchair access).</li><li>• No where to park near the service</li></ul>	<ul style="list-style-type: none"><li>• Be aware of services that are adapted for easy access</li><li>• Ask a friend or family member to drop the person off at the service</li></ul>	
Unachievable targets	<ul style="list-style-type: none"><li>• Expectations too high</li><li>• Targets are not clear</li><li>• There are too many targets</li><li>• Timing is wrong/poor</li><li>• Targets are not suitable for the individual</li><li>• Fear of not being able to meet targets</li><li>• Not being in the right frame of mind to commit to the plan, e.g. due to depression.</li></ul>	Personal needs	<ul style="list-style-type: none"><li>• Communication difficulties because of pool language skills, sensory or learning disability .</li><li>• Concern that cultural needs are not understood</li></ul>	<ul style="list-style-type: none"><li>• Provide support services that meet the person's needs, such as a BSL signer, interpreter, advocate</li><li>• Use anti-discriminatory practice and encourage others to do so</li></ul>	
Lack of support	<ul style="list-style-type: none"><li>• Diet- find it difficult if a person on a healthy eating plan is surrounded by others that eat junk food or tempted by the chocolate and biscuits in the cupboard, Family and friends go out for meals instead of doing other activities.</li><li>• Smoking- friends and family smoking and offering them cigarettes. Lacking will power to quit.</li><li>• Alcohol consumption- someone that is used to drinking with family and friends will find it difficult to stop without their support. It would be hard to quit if the family and friends drink wine with their meals, friends centre a night out around heavy drinking at pubs and clubs.</li></ul>	Resources	<ul style="list-style-type: none"><li>• Limits on services, such as support aids and equipment</li><li>• Staff shortages, leading to long waits for appointments and support.</li></ul>	<ul style="list-style-type: none"><li>• Suggest sources of second-hand equipment</li><li>• Look for alternative strategies, for example an exercise DVD if there are no places at an exercise class.</li></ul>	
Ability, disability and addiction	<ul style="list-style-type: none"><li>• Understand what they need to do</li><li>• Learn how to make the required changes in their lives.</li><li>• Any places the person uses are wheelchair accessible</li><li>• Any exercise advised is wheelchair friendly.</li><li>• If stop smoking, then can put on weight- put people off.</li><li>• Like the way alcohol makes them feel but cant admit that they have a problem</li></ul>				

F.	What are the potential obstacle to implementing plans?	G.	What are the possible obstacles to accessing services?		
Emotional/ psychological- Lack of motivation		Type of obstacle	Possible obstacles	Suggestions to overcome obstacles	
Emotional/ psychological- Low Self- concept		Geographical			
Emotional/ psychological- Acceptance of the current state		Financial			
Time constraints		Psychological			
Availability of resources		Physical			
Unachievable targets		Personal needs			
Lack of support		Resources			
Ability, disability and addiction					

# JS Bach: Badinerie

## Form and structure:

The piece is in **Binary** form (**AB**).  
Section A is 16 bars long.  
Section B is 24 bars long.  
Each section is repeated (**AABB**).

## Dynamics:

Mostly **forte** throughout, although no markings appear on the score.  
On some recordings, **terraced dynamics** (sudden changes) are included.

## Background details:

Composed by **Johann Sebastian Bach** (1685 – 1750), one of the main composers of the **Baroque** era in music.

Badinerie is the last of seven movements from a larger piece called **Orchestral Suite No.2**.

The piece was composed between **1738-1739**.

## Tonality:

Section A begins in **B minor** (tonic) and ends in **F# minor** (dominant minor).

Section B begins in **F# minor** (dominant minor) and ends in **B minor** (tonic).

Section A modulates from B minor through **A major** before arriving at F# minor.

Section B modulates from F# minor through **E minor**, **D major**, **G major** and **D major** before arriving at B minor.

## Harmony:

**Diatonic**; mixture of root position and inverted chords; uses V7 chords and a Neapolitan sixth chord.

Imperfect and perfect cadences are clearly presented throughout. Both sections end with a **perfect cadence**.

## Metre and rhythm:

**Simple duple time** – 2/4 – with two crotchet beats in every bar.

Uses **ostinato rhythms** which form the basis of two short musical ideas (X and Y), consisting almost totally of **quavers and semi-quavers**.

## Instrumentation:

**Flute, string orchestra and harpsichord.**

The score has five parts (flute, violin 1, violin 2, viola and cello). The harpsichord player reads from the cello line and plays the notes with their left hand whilst filling in the chords with their right hand.

## Melody:

The movement is based on **two musical motifs**.



Both motifs begin with an **anacrusis**. Motif X is entirely **disjunct** whilst motif Y **combines disjunct and conjunct** movement.

Typical **ornaments and compositional devices** of the period are used including **trills**, **appoggiaturas** and **sequences**.

## Texture:





**Homophonic**: melody and accompaniment.

The flute and cello provide the main musical material; however, the 1<sup>st</sup> violin participates occasionally.

The 2<sup>nd</sup> violin and viola provide harmony with less busy musical lines.

## Tempo:

The tempo is **Allegro** (quick, lively, bright), although not marked on the score.

Question	Answer	Question	Answer
This piece is in <b>Binary form</b> . Explain what <b>binary form</b> means.		Which <b>key term</b> best <b>describes</b> the <b>dynamics</b> (even though they aren't written on the score)	<b>Piano</b>  <b>Forte</b>
How many <b>bars long</b> is <b>section A</b> ?		How many <b>bars long</b> is <b>section B</b> ?	
Each section in Badinerie is repeated, circle the correct symbol that shows this	  	Define <b>terraced dynamics</b>	
Define <b>simple duple time</b>		Both <b>motifs</b> begin with an <b>anacrusis</b> , what does this mean?	
<b>State</b> the name of the <b>Minor key</b> this piece of music is in		<b>Section A modulates</b> through which key? Underline the correct answer	<b>A minor</b> <b>A major</b> <b>D major</b> <b>G major</b>
Give an <b>appropriate tempo</b> for this piece		<b>What year</b> was this piece <b>composed</b> ?	
Which <b>two note values</b> form the basis of <b>motif X</b> and <b>Y</b> .		From which larger work does this belong to?	
<b>Section A</b> begins in <b>B minor (tonic)</b> and ends in <b>F# Minor</b> , state the relationship between these two keys.		<b>Give the full name of the composer</b> of this piece.	

# Sentence Stems: Year 10 to Year 13



## Listen and Mark

Pay close attention to others and point out important moments.

- I notice you used the word / phrase \_\_\_\_, which implies \_\_\_\_.
- When you said \_\_\_\_, it anchored the idea that \_\_\_\_.
- Did anyone notice what \_\_\_\_ said about \_\_\_\_? This seems important because \_\_\_\_.

## Defend and Unpack

Defend your perspective and explain your thought process.

- I understand your perspective on \_\_\_\_, but have you thought about \_\_\_\_?
- I actually think this because \_\_\_\_\_. (Furthermore, finally).
- Actually, [evidence] suggests that \_\_\_\_\_.

## Introduce and Invite

Begin your contribution and encourage others to participate.

- I suggest that \_\_\_\_ because \_\_\_\_.
- \_\_\_\_, what is your perspective on \_\_\_\_, and why?
- We should discuss \_\_\_\_ because \_\_\_\_.

## Build and Support

Add to others' ideas and bolster points by giving evidence.

- Your point about \_\_\_\_ implies \_\_\_\_, and I would like to further this by saying \_\_\_\_.
- \_\_\_\_ supports the idea that \_\_\_\_.
- Drawing upon points made by \_\_\_\_ and \_\_\_\_, we can conclude that \_\_\_\_ because \_\_\_\_.

## Challenge and Verify

Disagree and ask others to prove or clarify information.

- You said \_\_\_\_ . How do you know?
- I think you said \_\_\_\_, which implies that you believe \_\_\_\_ . Is that right?
- I disagree with what you said about \_\_\_\_ because \_\_\_\_.

## Summarise and Map

Draw together big themes and track the discussion.

- Our main findings were \_\_\_\_.
- On the whole, we believe that \_\_\_\_.
- Initially, we thought \_\_\_\_, but we eventually decided \_\_\_\_.





# SWINDON ACADEMY READING CANON

## Year 7



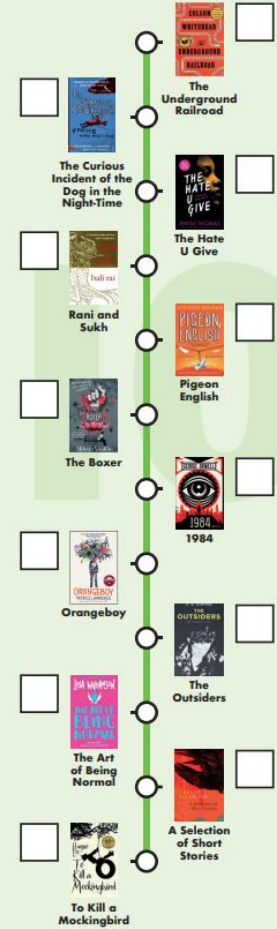
## Year 8



## Year 9



## Year 10



#ReadingisPower