

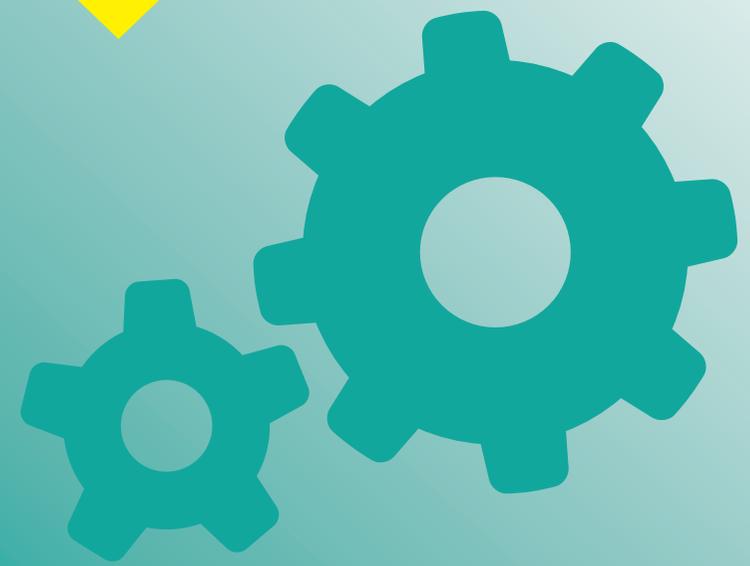
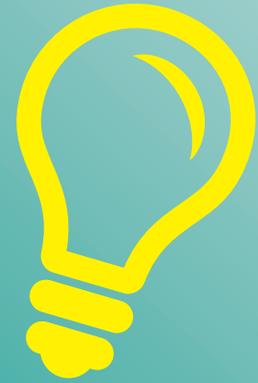
# Year 10 Knowledge Organiser

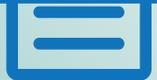
Student's name:



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# Maths



Definitions	
<b>Percentage</b>	Parts per one hundred. Percent means literally for every 100.
<b>To find 50% of an amount</b>	Divide by 2
<b>To find 25% of an amount</b>	Divide by 4
<b>To find 10% of an amount</b>	Divide by 10
<b>To find 1% of an amount</b>	Divide by 100
<b>Calculating any percentage of an amount without a calculator</b>	Use the percentages that we know how to calculate (above) to find other percentages.
<b>Calculating Percentage of an amount with a calculator</b>	Convert the percentage to a decimal multiplier. To do this, just divide the percentage by 100. Times the original amount by the multiplier.
<b>Increase/Decrease by percentage</b>	Find the % of the amount using your usual non-calculator method. For an increase, ADD this amount to the original. For a decrease, MINUS this amount from the original.
<b>Simple Interest</b>	IT is a percentage increase. It is calculated as a percent of the original loan.
<b>VAT</b>	Value added tax currently 20%
<b>Inflation</b>	A percentage Increase
<b>Deflation</b>	A Percentage Decrease



Original Amount	This is the amount before any reductions or increases have taken place.
Decimal Multiplier	<p>If you are increasing by <math>x\%</math> then your Decimal Multiplier (DM) is <math>100\% + x\%</math> written as a decimal.</p> <p>If you are decreasing by <math>y\%</math> then your Decimal Multiplier (DM) is <math>100\% - y\%</math> written as a decimal.</p> <p>Example Increase by <math>10\%</math> DM = 1.10</p>
New Amount or Final Amount	This is the amount after the Increase or Decrease has taken place.

Actual Change	Current Amount – Actual Amount
Percentage Change	Percentage Change = $\frac{\text{Actual change}}{\text{Original Amount}} \times 100$
Simple Interest	<p>If <math>n</math> = number of years and <math>p</math> = percentage interest as a decimal. Original amount + (<math>n \times p \times \text{Original amount}</math>)</p>
Compound Interest	<p>If <math>n</math> = number of years and <math>P</math> = percentage in decimal form. New Amount = Original Amount <math>\times (1 + p)^n</math></p>

Reverse percentages	<p>Using reverse percentages is a way of working backwards on a percentages problem in order to find the original amount.</p> <p>In order to do this, we:</p> <ol style="list-style-type: none"> <li>1) Either add/subtract the percentage given in the problem from <math>100\%</math> to determine what percentage we have</li> <li>2) Find <math>1\%</math> by dividing by percentage found in previous step</li> <li>3) Find <math>100\%</math> (original amount) by multiplying your answer in step 2 by <math>100</math></li> </ol>
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## How do I use my calculator to ...?

### Square

$$2^2 + 3^2 = 13$$

$$\boxed{2} \boxed{x^2} \boxed{+} \boxed{3} \boxed{x^2} \boxed{=}$$

### Cube

$$5^3 = 125$$

$$\boxed{5} \boxed{x^3} \boxed{=}$$

### Any power

$$5^7 = 78125$$

$$\boxed{5} \boxed{x^y} \boxed{7} \boxed{=}$$

### Square root

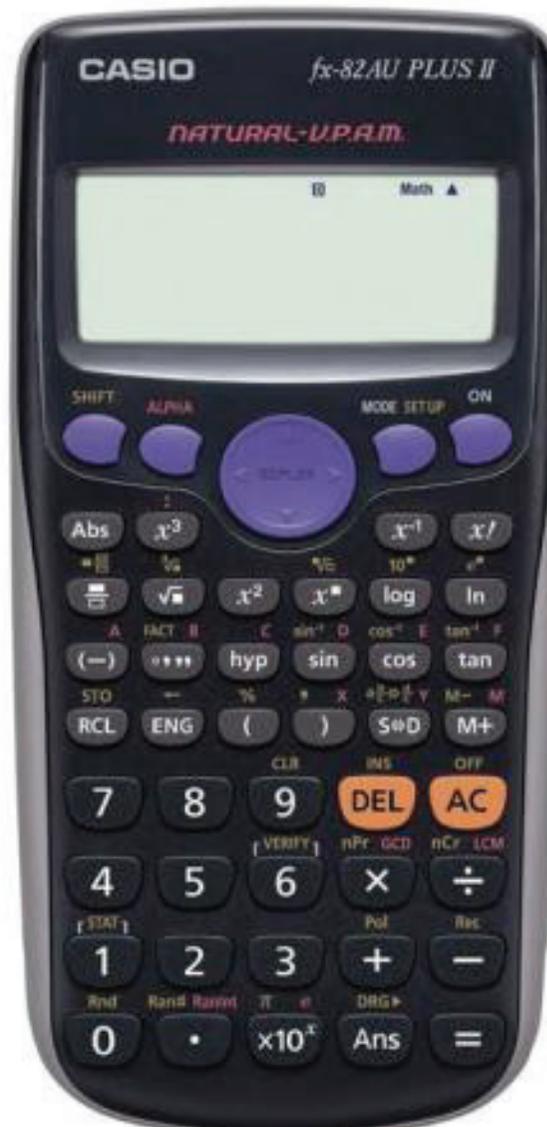
$$\sqrt{25} = 5$$

$$\boxed{\sqrt{\phantom{x}}} \boxed{2} \boxed{5} \boxed{=}$$

### Negative numbers

$$-6 + -7 = -13$$

$$\boxed{(-)} \boxed{6} \boxed{+} \boxed{(-)} \boxed{7} \boxed{=}$$



### Fractions

Simplify a fraction

$$\frac{4}{8} = \frac{1}{2}$$

$$\boxed{4} \boxed{\frac{\square}{\square}} \boxed{8} \boxed{=}$$

Convert a fraction to a decimal

$$\frac{1}{2} = 0.5$$

$$\boxed{1} \boxed{\frac{\square}{\square}} \boxed{2} \boxed{=}$$

Convert between improper fraction and mixed numeral

$$\frac{5}{4} = 1\frac{1}{4}$$

$$\boxed{5} \boxed{\frac{\square}{\square}} \boxed{4} \boxed{=}$$

### Circles (pi)

$$\pi \times 5^2 = 78.53981634$$

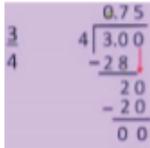
$$\boxed{\text{SHIFT}} \boxed{x10^x} \boxed{X} \boxed{5} \boxed{x^2} \boxed{=}$$

( $\pi$ )

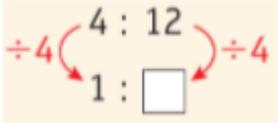


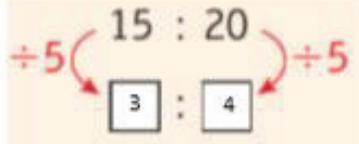
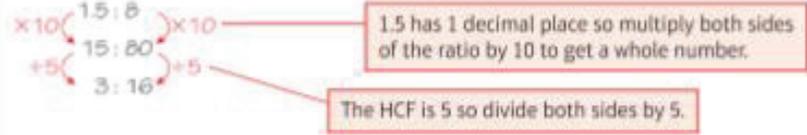
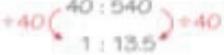
Rules for Simplifying Fractions	Whatever you multiply the numerator by you must do the same to the denominator. Whatever you divide the numerator by you must do the same to the denominator.
Proving Equivalent Fractions	If we simplify the fractions so that have the same denominator in both fractions we can see if they are equivalent.
Adding and subtracting Fractions	Both fractions must have the same denominator. Therefore you need to find the LCM of both denominators. Once we have changed both fractions so that they have the same denominator we simply add or subtract the numerators. (Not the denominators) $\text{Work out } \frac{2}{3} + \frac{1}{9}$ $\frac{2}{3} + \frac{1}{9} = \frac{6}{9} + \frac{1}{9} = \frac{7}{9}$ <p>The LCM of 3 and 9 is 9. Write the fractions with denominator 9 and then add.</p>
Calculating Fractions of an amount	Divide the amount by the denominator and multiply your answer by the numerator. $\frac{4}{5}$ of 40 = 32 $\frac{1}{5}$ of 40 = 8 $8 \times 4 = 32$
Adding and subtracting Mixed numbers	Convert Mixed Numbers to Improper fractions before adding or subtracting.
Multiplying Fractions	<u>Multiply Numerators,</u> $\frac{2}{5} \times \frac{6}{7} = \frac{2 \times 6}{5 \times 7} = \frac{12}{35}$ <u>Multiply Denominators</u> Always simplify your Answer $\frac{1}{4} \times \frac{2}{3} = \frac{1 \times 2}{4 \times 3} = \frac{2}{12} = \text{reduces to } \frac{1}{6}$

<b>Denominator</b>	The bottom number in a fraction.
<b>Numerator</b>	The top number in a fraction.
<b>Mixed Number</b>	A whole number and a fraction combined into one "mixed" number. Example: 1½ (one and a half) is a mixed number.
<b>Improper Fraction</b>	A fraction where the numerator (the top number) is greater than or equal to the denominator (the bottom number).
<b>Reciprocal</b>	The reciprocal of a number is: 1 divided by the number

Dividing Fractions	<b>KFC</b> Keep the first fraction as it is <b>F</b> lip the second fraction over <b>C</b> hange the sign
Multiplying or Dividing Mixed Numbers.	Change into Improper Fractions then multiply Or divide $1\frac{3}{4} \times 2\frac{1}{2} = ?$ $\frac{7}{4} \times \frac{5}{2} = \frac{35}{8} = 4\frac{3}{8}$ $1 \times 4 + 3 = 7$ $2 \times 2 + 1 = 5$
Fractions to Decimals	3/4 means 3 divided by 4. Use standard long division to turn Fractions into decimals. 
Fractions to percentage	Write your fraction as an Equivalent fraction over 100. The numerator is the percentage



<b>Ratio</b>	A way to compare two or more quantities eg. 3:5
<b>Proportion</b>	Compares a part with the whole
<b>Unit ratio</b>	One of the numbers is 1 eg. 1:5 

<b>Simplifying a ratio</b>	<p>Make the numbers as small as possible—divide the numbers in the ratio by their HCF</p> 
<b>Simplest form</b>	<p>Ratios in their simplest form only have whole numbers</p> <p>Write 1.5 : 8 as a whole number ratio in its simplest form.</p>  <p>1.5 has 1 decimal place so multiply both sides of the ratio by 10 to get a whole number.</p> <p>The HCF is 5 so divide both sides by 5.</p>
<b>Comparing ratios</b>	<p>Write them as unit ratios:</p> <p>Molly makes a blackcurrant drink by mixing 30 ml of blackcurrant with 450 ml of water.          Hope makes a blackcurrant drink by mixing 40 ml of blackcurrant with 540 ml of water.          Whose drink is the stronger? Explain your answer.</p> <p>Molly: blackcurrant : water = 30 : 450           Hope: blackcurrant : water = 40 : 540   <p>Simplify to a unit ratio.</p> <p>Hope's drink is the stronger because it uses less water for every millilitre of blackcurrant.   <p>Compare the quantity of water per ml of blackcurrant.</p> </p></p>



## Pie Charts

Definitions	
<u>Pie Chart</u>	A circle divided into sectors. Each sector represents a set of data.
<u>Discrete Data</u>	Can only have particular values. For example shoe sizes are usually whole numbers.
<u>Continuous Data</u>	Continuous data is measured and can have any values, for example length and time. Write inequalities for the groups with no gaps between them.
<u>Mode</u>	The Modal class (or modal group) has the highest frequency

## Probability

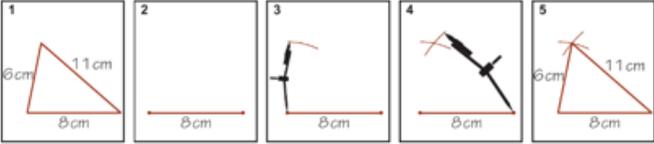
KEY FACTS	Definition / Example
Probability Values	Probability goes from 0 being impossible to 1 Being certain. It can be written as decimal, percentage or a fraction
The probability of Event A - P(A)	$\frac{\text{Number of correct outcomes (A)}}{\text{Total number of possible outcomes}}$
Frequency	How often an event occurs
Sample Space Diagram	A table showing all possible events, this is usually shown with a 2 way table for 2 Outcomes.
Experimental probability (Relative Frequency)	Probability taken from actual Experiments calculated by: $\frac{\text{Frequency of outcome}}{\text{Total number of outcomes}}$
Mutually Exclusive Events	Events that cannot happen at the same time
Probability of A or B if events are Mutually Exclusive	$P(A \text{ OR } B) = P(A) + P(B)$
Probability of not event A if Events are Mutually Exclusive.	$P(\text{Not } A) = 1 - P(A)$
Product Rule for Events If there are n outcomes for event A and m outcomes for event B	If there are n outcomes for event A and m outcomes for event B the total number of possible outcomes for the 2 events = $n \times m$
Expected number of outcomes	Number of Trials x probability
Independent Events	Events are Independent if one happening does not affect the probability of the other happening.
Probability of two Independent events A & B happening	$P(A \& B) = P(A) \times P(B)$
Probability of a repeated Independent Event happening	$P(A \& A) = P(A) \times P(A)$
Conditional Probability	The probability of Event B happening if Event A has already happened

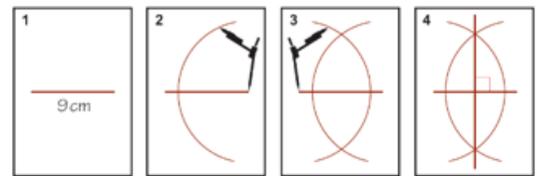


## Plans & Elevations

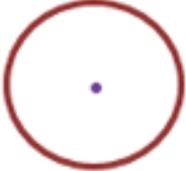
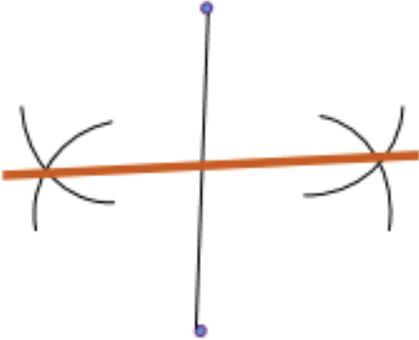
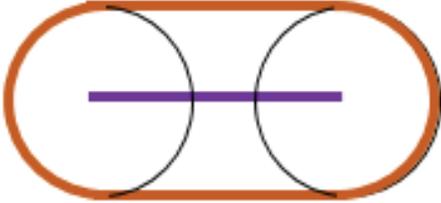
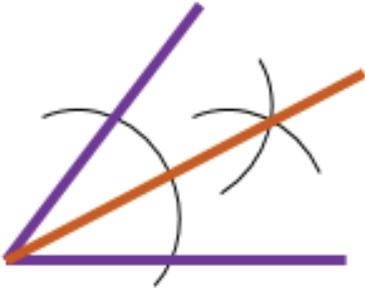
<b>Plans and Elevations</b>	Shows what a 3D object looks like from different directions
<b>Plan</b>	from above
<b>Front</b>	from the front
<b>Side</b>	from the side

## Constructions

<b>Construct</b>	Draw accurately using a compass and ruler
<b>Perpendicular Bisector</b>	Cuts a line in half in right angles
<b>Angle Bisector</b>	Cuts an angle exactly in half
<b>Construct a triangle given the three side lengths</b>	<p>Construct a triangle with sides 11 cm, 8 cm and 6 cm.</p>  <ol style="list-style-type: none"> <li>Sketch the triangle first.</li> <li>Draw the 8 cm line.</li> <li>Open your compasses to 6 cm. Place the point at one end of the 8 cm line. Draw an arc. Make sure your arcs are long enough to intersect.</li> <li>Open your compasses to 11 cm. Draw another arc from the other end of the 8 cm line.</li> <li>Join the intersection of the arcs to each end of the 8 cm line. Don't rub out your construction marks.</li> </ol>

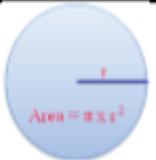
<b>Construct an angle bisector</b>	<p>Draw an angle of <math>80^\circ</math>. Construct the <b>angle bisector</b>.</p>  <ol style="list-style-type: none"> <li>Draw an angle of <math>80^\circ</math> using a protractor.</li> <li>Open your compasses and place the point at the vertex of the angle. Draw an arc that crosses both arms of the angle.</li> <li>Keep the compasses open to the same distance. Move them to one of the points where the arc crosses an arm. Make an arc in the middle of the angle.</li> <li>Do the same for where the arc crosses the other arm.</li> <li>Join the vertex of the angle to the point where the two small arcs intersect. Don't rub out your construction marks. This line is the angle bisector.</li> </ol>
<b>Construct a perpendicular bisector</b>	<p>Draw a line 9 cm long. Construct its <b>perpendicular bisector</b>.</p>  <ol style="list-style-type: none"> <li>Use a ruler to draw the line.</li> <li>Open your compasses to more than half the length of the line. Place the point on one end of the line and draw an arc above and below.</li> <li>Keeping the compasses open to the same distance, move the point of the compasses to the other end of the line and draw a similar arc.</li> <li>Join the points where the arcs intersect. Don't rub out your construction marks. This vertical line is the perpendicular bisector.</li> </ol> 

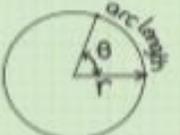


Locus/Loci	A locus is a set of points that obey a certain rule. A circle is a locus of a point, as everything around it is equidistant.	
<b>Locus of a single point</b>	Circle	
<b>Locus of two points</b>	Perpendicular bisector	
<b>Locus of a line</b>	A running track	
<b>Locus of 2 lines</b>	Angle Bisector	



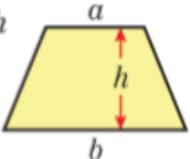
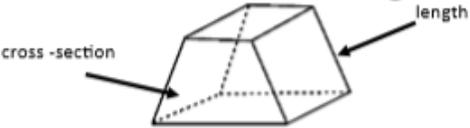
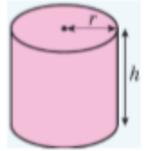
Diameter	A straight line going through the centre of a circle connecting two points on the circumference.
Radius	The distance from the centre to the circumference of a circle It is half of the circle's diameter.
Sector	A "pie-slice" part of a circle - the area between two radiuses and the connecting arc of a circle.
Arc	Part of the circumference of a circle. Or part of any curve.

Circumference	$2 \times \pi \times \text{radius}$ or $\pi \times \text{diameter}$ 
Area of a circle	$A = \pi r^2$ Area = $\pi \times \text{radius}^2$ 

Area of a Sector	$\frac{\theta \times \pi}{360} \times r^2$ <i>(when <math>\theta</math> is in degrees)</i> 
Arc Length	$\text{arc length} = 2\pi r \left(\frac{\theta}{360}\right)$ 



Area	The size of a surface. The amount of space inside the boundary of a flat (2-dimensional) object such as a triangle or circle.
Volume	The amount of 3-dimensional space an object occupies. Capacity.

Trapezium	$\frac{1}{2} \times (a + b) \times h$ 
Volume of Prism	<p>area of cross-section <math>\times</math> length</p> 
Volume of a cylinder	$V = \pi r^2 h$ <p>Volume = <math>\pi \times \text{radius}^2 \times \text{height}</math></p> 
Surface area of a cylinder	$S = 2\pi r^2 + 2\pi rh$ <p>Surface Area = <math>(2 \times \pi \times \text{radius}^2) + (2 \times \pi \times \text{radius} \times \text{height})</math></p>

Surface area of a sphere	<p>For a sphere of radius <math>r</math></p> <p>Surface area = <math>4\pi r^2</math></p> <p>Volume = <math>\frac{4}{3}\pi r^3</math></p> 
Volume of a sphere	$V = \frac{4}{3}\pi r^3$ <p>Volume = <math>\frac{4}{3} \times \pi \times \text{radius}^3</math></p>
Volume of a pyramid and cone.	$\frac{1}{3}\pi r^2 h$ <p>Volume = <math>\frac{1}{3} \pi \times \text{radius}^2 \times \text{height}</math></p> 
Curved surface area of a cone	$S = \pi r l$ <p>Surface Area = <math>\pi \times \text{radius} \times \text{length}</math></p> 
Total surface area of a cone	$S = \pi r l + \pi r^2$ <p>Surface Area = <math>(\pi \times \text{radius} \times \text{length}) + (\pi \times \text{radius}^2)</math></p> 

Frustum	Usually a pyramid or cone with the top cut off flat. But can be any part of a solid between two parallel planes.
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# English



**Question 1:** List 4 things  
You **must** choose from the  
lines specified in the  
question.

4 marks  
5 minutes

**Question 2:**  
Language analysis  
**WHAT? HOW? WHY?**

Methods

The writer creates a sense of mystery through **personification** of the protagonist's past: **"the past claws its way out."** The verb **"claws"** highlights the struggle between Amir's attempts to **"bury"** his past and the strength of his memories.

8 marks  
10 minutes

Embedded  
quotation

Evidence

Explanation

**The Kite Runner by Khaled Hosseini**  
The following extract is from *The Kite Runner*, the first novel by Afghan-American author Khaled Hosseini. Published in 2003 by Riverhead Books, it tells the story of Amir, a young boy from the Wazir Akbar Khan district of Kabul.

**Chapter One**  
**December 2001**

I became what I am today at the age of twelve, on a frigid overcast day in the winter of 1975. I remember the precise moment, crouching behind a crumbling mud wall, peeking into the alley near the frozen creek. That was a long time ago, but it's wrong what they say about the past, I've learned, about how you can bury it. Because the past claws its way out. Looking back now, I realize I have been peeking into that deserted alley for the last twenty-six years.

**Question 3:** Structural analysis

Consider key questions of the text

Possible key questions move from the **what**, to **how** and on to **why**. They could include:

1. When I first start to read the text, what is the writer focusing my attention on?
2. How is this being developed?
3. What feature of structure is evident at this point?
4. Why might the writer have deliberately chosen to begin the text with this focus and therefore make use of this particular feature of structure?
5. What main points of focus does the writer develop in sequence after the starting point?
6. How is each being developed?
7. Why is the writer taking me through this particular sequence?
8. How is this specific to helping me relate to the intended meaning(s) at these points?
9. What does the writer focus my attention on at the end of the text?
10. How is this developed as a structural feature?
11. How am I left thinking or feeling at the end?
12. Why might the writer have sought to bring me to this point of interest/understanding?

8 marks  
10 minutes

**Mark Scheme**

- Band 4:** Perceptive, detailed analysis
- Band 3:** Clear, relevant explanation.
- Band 2:** Some understanding and comment.
- Band 1:** Simple, limited comment.

**Question 4:**

*Critical Evaluation: To what extent do you agree?*

- Say whether you agree/disagree/partly agree (**evaluate**).
- Provide evidence (**quotations**) to support your evaluation.
- **Analyse** your evidence using **accurate subject terminology**.

20 marks  
25 minutes

Read the questions carefully.  
Have your highlighter ready.



## Descriptive writing

**Insidiously**, the smoke and sweat and sound **invaded** the dark, cavernous room. Their senses both heightened and confused, the dancers moved as one: **arms raised, eyes blurred, blood pumping.**

- Adverbs
- Alliteration
- Verb choices
- Personification
- Triple

Which other techniques could you employ?

**Either:** Write a story about two people who meet unexpectedly, as suggested by this picture.



**Or:** Describe a place you find exciting.

**You may have a choice of narrative or descriptive writing, BUT you may not. There may be two narrative tasks, or two descriptive tasks. Be prepared for both!**

### Mark Scheme –AO5

- Communicate clearly, effectively and imaginatively, selecting and adapting tone, style and register for different forms, purposes and audiences.
- Organise information and ideas, using structural and grammatical features to support coherence and cohesion of texts

### Mark Scheme – AO6

Candidates must use a range of vocabulary and sentence structures for clarity, purpose and effect, with accurate spelling and punctuation.

## Narrative writing



- 1<sup>st</sup> or 3<sup>rd</sup> person?
- Past or present tense?
- Drop paragraph to begin?
- Dual narrative?
- Flashback?

**Don't use too many characters. Remember, your narrative should be descriptive as well.**





### Question 1

Pick which four statements are TRUE  
Put a dot in the box  
then CHECK again  
Shade the four boxes  
of the TRUE  
statements

Summarise

### Question 2

Read question carefully –  
what is the focus?  
Summarise differences  
between texts  
Make inferences (read  
between the lines)  
In Source A...Whereas in  
Source B...  
The writer  
describes \_\_\_\_\_ as...  
This suggests/this implies/this  
makes me think/this creates a  
sense of

### Source A

Source A is taken from *The Guardian* newspaper and is an article about the historical context of the film 'The Greatest Showman', based loosely on the life of P.T. Barnum, who curated a 'freakshow' circus.

#### Hugh Jackman's new film celebrates PT Barnum – but let's not airbrush history

The actor has painted the protagonist of *The Greatest Showman* as a cheerleader for outsiders, but the 19th-century impresario found fame by exploiting circus 'freaks'.

Everyone loves a good circus movie, and everyone loves Hugh Jackman. His forthcoming PT Barnum musical, *The Greatest Showman*, looks to be a timely celebration of outsiders and inclusivity, with its bearded women, tattooed men, little people and conjoined twins. "His belief was what makes you different makes you special," Jackman has said of Barnum. "You can be discriminated for that but if you own up to it and we start to embrace everybody then it can be what makes life special and fantastic."

Compare

### Source B

Source B is taken from P.T. Barnum's autobiography and discusses his discovery of 'Tom Thumb'. In 1842 Barnum discovered one of his most famous and profitable attractions, a diminutive child of five, named Charles Stratton. Barnum successfully persuaded the boy's mother to allow him to exhibit her son and brought him to New York. Barnum declared his attraction as being eleven year's old and gave him the name "Tom Thumb."

I had heard of a remarkably small child in Bridgeport; and by my request my brother brought him to the hotel. He was the smallest child I ever saw that could walk alone. He was not two feet in height, and weighed less than sixteen pounds. He was a bright-eyed little fellow, with light hair and ruddy cheeks, was perfectly healthy, and as symmetrical as an Apollo. He was exceedingly bashful, but after some coaxing he was induced to converse with me, and he told me that he was the son of Sherwood E. Stratton, and that his own name was Charles S. Stratton. After seeing him and talking with him, I at once determined to secure his services from his parents and to exhibit him in public.

He was only five years old, and to exhibit a dwarf of that age might provoke the question, 'How do you know that he is a dwarf?' Some license might indeed be taken with the facts, but even with this advantage I really felt that the adventure was nothing more than an experiment, and I engaged him for the short term of four weeks at three dollars per week, all charges, including traveling and boarding of himself and mother, being at my expense.

### Question 4

Compare Sources A and B  
Use quotations  
Comment on language techniques and EFFECT  
Comment on TYPE of text (Eg – news article/diary/letter)  
Talk about PURPOSE (WHY has the writer written this article – to influence/persuade/entertain?)  
The writer wants us to think about...  
The writer uses the verb/phrase/rhetorical question "\_\_\_\_"  
This suggests/this implies/this creates a sense of...

### Question 3

Analyse language  
Use quotations  
Comment on word  
choices/language devices  
Talk about effect on the  
reader (WHY has the writer  
chosen these words?)  
The writer uses the  
verb/phrase/metaphor "\_\_\_\_"  
This suggests/this implies/this  
makes me think/this creates a  
sense of  
Overall, this creates a sense  
of...  
The adjectives \_\_\_\_\_,  
\_\_\_\_\_ and \_\_\_\_\_ make  
the reader feel...

Contrast



### Section B – Writing to present a viewpoint

**Purpose:**

**Audience:**

**Format:**

**Tone:**

"Unhealthy drinks and snacks should be banned in our schools. This way our young people will be healthier."

Write an article for a broadsheet newspaper to explain your views on this topic. [40 marks]

Drop Paragraph (for an article):

1. Evoke an image: *The sun streams through the window; breakfast is being noisily prepared downstairs. As you put on your white blouse, grey jumper and black shoes, the day suddenly becomes...well, greyer.*

2. Anecdote: *There are many things that make me angry: racism, sexism, global warming and the Go Compare adverts. But all of these annoyances pale in comparison to Mrs Donovan's bellowing voice, demanding: "Tuck in your shirt!"*

3. Turn positive to a negative: *Evolution is a wonderful thing. Over the millions of years, humans have progressed, creating the wonders and marvels of space exploration, eliminating disease, creating legendary music and literature. One thing stands against this catalogue of human progress and enlightenment: school uniform.*

Speech Openers:

1. Provocative question: "How do you explain why some people are able to achieve things that seem impossible?"

"What do I know that would cause me, a reticent, Midwestern scientist, to get myself arrested in front of the White House protesting? And what would you do if you knew what I know?"

2. Shocking statistic: "Sadly, in the next 18 minutes when I do our chat, four Americans that are alive will be dead from the food that they eat."

"I'm talking to you about the worst form of human rights violation, the third-largest organized crime, a \$10 billion industry. I'm talking to you about modern-day slavery."

3. Evoke an image: "Imagine, if you will — a gift. I'd like for you to picture it in your mind. It's not too big — about the size of a golf ball."

"Imagine a big explosion as you climb through 3,000 ft. Imagine a plane full of smoke. Imagine an engine going clack, clack, clack, clack, clack, clack. It sounds scary. Well I had a unique seat that day. I was sitting in 1D."

**Possible Plan:**

**Historical** – *Over the last few years, the internet has become a hotbed of crime, victimisation and cruelty...*

**Economic** (money-related) – *While millionaire Mark Zuckerberg continues to reap the rewards of Facebook, teenagers everywhere suffer trolling every time they post a 'selfie'...*

**Ethical** (right and wrong) – *We have a moral responsibility to place tighter controls on the internet...*

**Personal** – *While I personally do use social media, this is only to keep in touch with friends who live abroad.*

**AO5:** Communicate **clearly, effectively** and **imaginatively**, adapting **tone, style** and **register** for different TAP. **Organise information & ideas**, using **structural** and **grammatical** features.

**AO6:** Use a range of **vocabulary** and **sentence structures** for clarity, purpose and effect, with **accurate spelling** and **punctuation**.

#### LANGUAGE PAPER 2 QUESTION 5 WRITING TO PRESENT A VIEWPOINT

TEXT TYPE YOU MAY BE ASKED TO CREATE	FEATURES OF THE TEXT TYPE
LETTER	<ul style="list-style-type: none"> <li>The use of an address</li> <li>A date</li> <li>formal language if required (Dear Sir/Madam)</li> <li>An opening sentence to explain the purpose of writing (I am writing to you to...)</li> <li>An appropriate close (Yours sincerely/Yours faithfully)</li> <li>Clear topic paragraphs</li> </ul>
MAGAZINE ARTICLE	<ul style="list-style-type: none"> <li>The use of a title</li> <li>Subheadings (if appropriate)</li> <li>Conversational tone</li> <li>More opinion to support viewpoint</li> <li>Clear topic paragraphs</li> </ul>
NEWSPAPER ARTICLE	<ul style="list-style-type: none"> <li>The use of a title</li> <li>Subheadings if appropriate</li> <li>More formal language with more evidence to support Viewpoint</li> <li>Clear topic paragraphs</li> </ul>

SPEECH	<ul style="list-style-type: none"> <li>Clear indicators that an audience is being spoken to</li> <li>Clear opening to address the audience (eg. Ladies and gentlemen...)</li> <li>A closing to complete speech.</li> </ul>
LEAFLET	<ul style="list-style-type: none"> <li>Title</li> <li>Subheadings</li> <li>Boxes</li> <li>Bullet points</li> <li>Paragraphs</li> </ul>
ESSAY	<ul style="list-style-type: none"> <li>Introduction explaining the topic.</li> <li>A formal style (like your English essays)</li> <li>Clear topic paragraphs</li> </ul>

**PERSUASIVE DEVICES:** Direct address, Alliteration/Anecdote, Facts, Opinion, Rhetorical Question, Emotive Language, Statistics, Triples, Imperatives, Insecure language (might, could etc.), Imagery



**Context:**

**J.B. Priestley**

- 1914-18: WW1, Aged 20, Priestley serves on the front line in France and is wounded.
- 1919: awarded place at Trinity Hall, Cambridge to study Literature, History and Politics.
- 1922: begins to work as a journalist in London.
- 1934: writes 'English Journey' about the poorer parts on Britain.
- 1939-45: makes regular wartime radio broadcasts called 'Britain Speaks'.
- 1945: writes An Inspector Calls.

**1912 England**

- Work strikes
- Workers' rights
- Pre WW1
- Suffragette movement
- Class system

**1945 England**

- Post WW1 and WW2
- Social levelling
- Women's rights
- Workers' rights
- Trade unions
- National Insurance
- Welfare system
- NHS



**Depiction of wealth and pretentiousness:** 'Large suburban house'; the Birlings' dress ('tails and white tie'); luxury items ('champagne', 'cigars', 'port')

**A claustrophobic set:** the family are surrounded by three walls, with the audience peering into their private setting. This highlights their exposure and discomfort.

## Priestley's use of stagecraft

**The play is set in real time:** the audience watch the evening unfold in the same time that the characters would experience it. This allows the audience to feel the suspense and shock.

**Use of lighting:** the lighting should be 'pink and intimate' (safe, comfortable) and then 'brighter and harder' once the Inspector enters, emphasising the intrusion into their safe environment. The brightness symbolises his exposure of the truth: the family are under the spotlight.

**Key Terms:**

- ✓ Stage directions
- ✓ Dialogue
- ✓ Monologue
- ✓ Didactic
- ✓ Polemic
- ✓ Dramatic irony
- ✓ Foreshadowing
- ✓ Entrances and exits
- ✓ Props
- ✓ Sentence moods
- ✓ Social expectations
- ✓ Cliff-hanger
- ✓ Characterisation
- ✓ Dramatic device
- ✓ Timings
- ✓ Interruptions
- ✓ Tone
- ✓ Irony
- ✓ Imagery
- ✓ Symbolism
- ✓ Euphemism

**Key Concepts and Themes:**

- ✓ Mystery
- ✓ Social responsibility
- ✓ Truth and lies
- ✓ Hypocrisy
- ✓ Wealth, power and influence
- ✓ Rights and responsibilities
- ✓ Public versus private
- ✓ Morality versus legality
- ✓ Young versus old
- ✓ Capitalisation versus socialism
- ✓ Individual and collective responsibility
- ✓ Love, sex and consent

**AO1:** Who says it? Which part of the text? Does it contrast or link to any other events?

What is Priestley presenting to the audience?

**AO2:** What can you say about language? Can you identify any techniques and explain their effects?

How does Priestley present this?

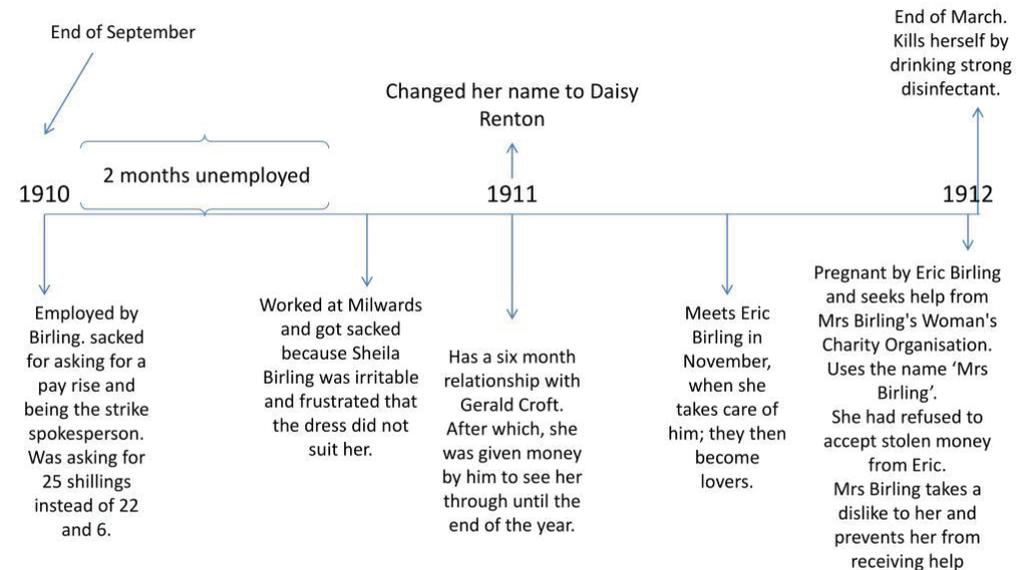
**AO3:** Which theme does this link to? Does this link to any relevant contextual knowledge? What can you say about the writer's intention.

Why does Priestley want this to be presented to the audience?



Characterisation	Key Quotes
<b>Mr Arthur Birling</b> ✓ Capitalist ✓ Arrogant ✓ Verbose ✓ Stubborn ✓ Industrialist	"Heavy looking, rather portentous man" "A hard-headed practical man of business" "Just a knighthood, of course." "A man has to mind his own business and look after himself...." "Look - there's nothing mysterious - or scandalous - about this business..."
<b>Mrs Sybil Birling</b> ✓ Judgemental ✓ Old money ✓ Traditional ✓ Insincere ✓ Controlling	"Rather cold woman... her husband's social superior." "Please don't contradict me like that" "It's disgusting to me." "Unlike the other three, I did nothing I'm ashamed of or that won't bear investigation." "He didn't make me confess - as you call it."
<b>Miss Sheila Birling</b> ✓ Intelligent ✓ Feminine ✓ Emotional ✓ Transformative ✓ Empowered	"But these girls aren't cheap labour - they're people" "I had her turned out of a job" "At least I'm trying to tell the truth. I expect you've done things you're ashamed of." "Why - you fool - he knows!" "The point is, you don't seem to have learnt anything."
<b>Master Eric Birling</b> ✓ Irresponsible ✓ Spoilt ✓ Reckless ✓ Immature ✓ Transformative	"Not quite at ease half shy, half assertive." "I wasn't in love with her or anything - but I liked her - she was pretty and a good sport -" "In a way, she treated me - as if I were a kid" "You're not the kind of father a chap could go to when he's in trouble." "You're beginning to pretend that nothing's really happened at all. And I can't see it like that."
<b>Mr Gerald Croft</b> ✓ Aristocratic ✓ Secretive ✓ Traditional ✓ Privileged ✓ Evasive	"Easy, well-bred young man-about-town." "You seem to be a nice well-behaved family" "You're just the kind of son-in-law I always wanted." "The hero... the wonderful Fairy prince." "I'm rather more upset - by this business than I probably appear to be -"
<b>Inspector Goole</b> ✓ Priestley's mouthpiece ✓ Impressive ✓ Commanding ✓ Social justice ✓ Omnipotent	"Massiveness, solidity and purposefulness." "But after all it's better to ask for the earth than to take it." "It's my duty to ask questions." "A nice promising life there, I thought, and a nasty mess somebody's made of it." "You see, we have to share something. If there's nothing else, we'll have to share our guilt." "One Eva Smith has gone - but there are millions and millions and millions of Eva Smiths and John Smiths still left with us." "Fire and blood and anguish"

## Timeline of Eva Smith

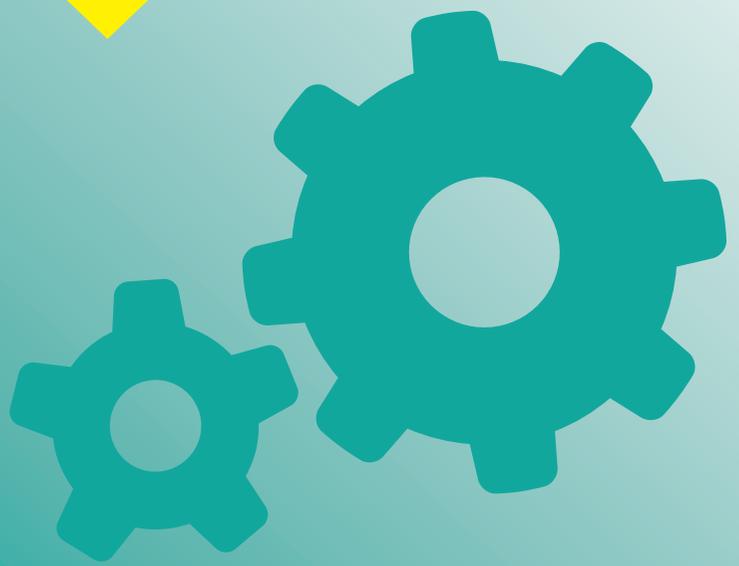


<b>Miss Eva Smith</b> ✓ Working class ✓ Determined ✓ Vulnerable ✓ Emblematic ✓ Allegorical	"A lively good-looking girl - country bred... and a good worker too." "She had a lot to say - far too much - so she had to go." "She was very pretty and looked as if she could take care of herself." "Now she had to try something else." She went away "to be alone, to be quiet, to remember all that had happened."
---	--

Why did Priestley write the play? What was his authorial intention?



"All mixed up like bees in a hive"



# Science



### Types of respiration

All living cells **respire** to release energy. Organisms need energy for everything they do (for example, making new substances, moving).

**Aerobic respiration** is a series of **chemical reactions** that can be summarised as:

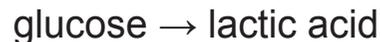


Energy is released (but is not a chemical substance and so is not shown in the word equation).

Carbon dioxide can be detected using:

- **limewater** (which it turns cloudy)
- an **indicator** (such as hydrogen carbonate) because it is acidic.

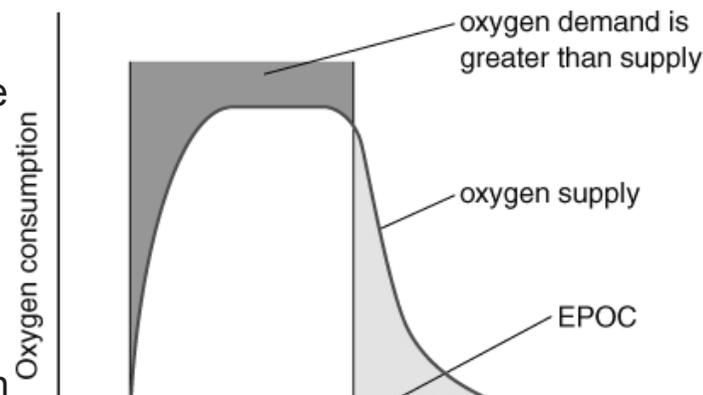
**Anaerobic respiration** does not require oxygen. In humans it is used to release energy from glucose when more energy is needed than can be supplied by aerobic respiration (for example, during strenuous exercise).



Anaerobic respiration causes muscles to tire quickly and so cannot be used for extended periods. A lot of the lactic acid travels from the muscles to the liver, where it is converted back to glucose. Anaerobic respiration releases less energy than aerobic respiration.

After strenuous exercise, the body needs extra oxygen. This **excess post-exercise oxygen consumption (EPOC)** (or 'oxygen

The effect of exercise on demand for oxygen





## The physical properties of metals

Metals	Non-metals
good conductors of heat and electricity	poor conductors of heat and electricity
shiny	dull
solids with a high melting point (except for mercury)	most are low melting point solids or gases
flexible and malleable	brittle (break easily instead of bending)

## The chemical properties of metals

The **chemical properties** of metals refers to their reactions with other substances.

For example, metals can react with many non-metals:



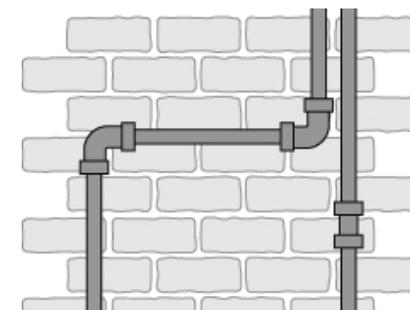
(Note: When naming a compound the ending of the non-metal is changed to **\_ide**)

Metals can also react with air (oxygen), water and acids. Some metals react very quickly; they are **reactive**. Calcium is a reactive metal. Other metals do not react quickly; they are **unreactive**.

Gold is a very unreactive metal.

## Uses of metals

Metals have many **uses** depending on their different **properties**. For example, copper is used in electrical wires as it is flexible and a good conductor of electricity. It is also used for roof sheets as it is malleable and doesn't react quickly with water.



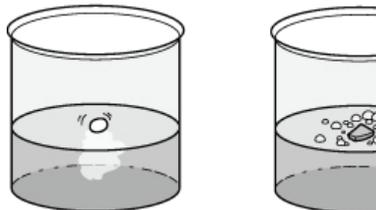


# SCIENCE

WORKING SCIENTIFICALLY

## Metals and water

Some metals can react with water.



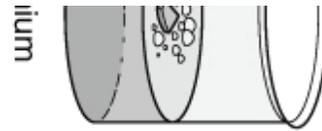
sodium

lithium

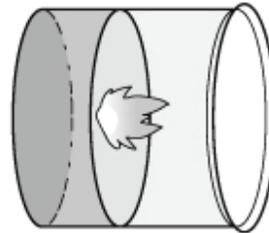
All the metals that react with water form an alkaline solution (a solution that turns red litmus paper blue).



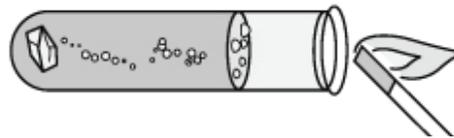
The test for hydrogen is to collect the gas in a test tube and bring a lit splint to the mouth of the test tube. The gas will burn with a 'pop' sound.



lithium



potassium



calcium

Metals that react with cold water.

# LOG



### The physical properties of metals

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good conductors of heat and electricity	poor conductors of heat and electricity
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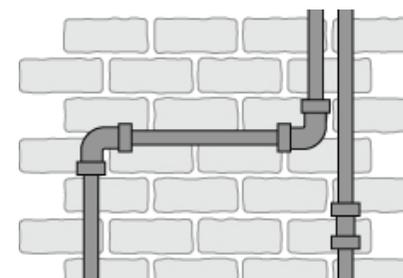
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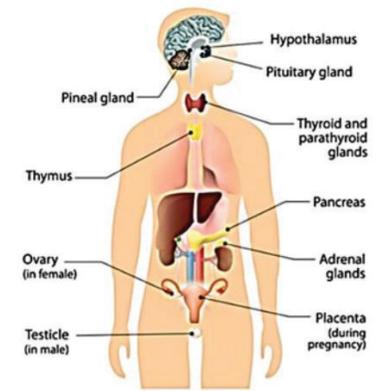




**SB7: Hormones**

- Lesson sequence**
1. Hormones
  2. Thyroxine and adrenalin
  3. The menstrual cycle
  4. Hormones and the menstrual cycle
  5. Contraception and fertility treatment
  6. Controlling blood glucose
  7. Diabetes

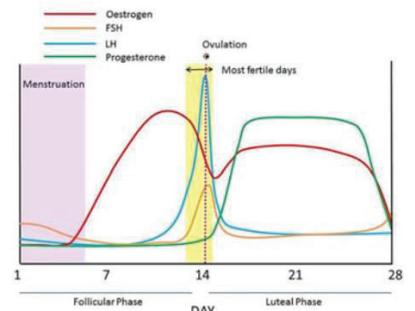
1. Hormones	
<b>Hormone</b>	A chemical messenger that changes the way a part of the body works.
<b>Important hormones</b>	Insulin, glucagon, adrenalin, oestrogen, progesterone, testosterone, thyroxine, LH, FSH, ACTH, growth hormone.
<b>Endocrine gland</b>	Parts of the body that produce hormones
<b>Important endocrine glands</b>	Pituitary gland, thyroid gland, pancreas, adrenal glands, ovaries and testes.
<b>Target organ</b>	The part of the body affected by a hormone.
<b>Important hormones</b>	Insulin, glucagon, adrenalin, oestrogen, progesterone, testosterone, thyroxine, LH, FSH, ACTH, growth hormone.
<b>Sex hormones</b>	<b>Women:</b> oestrogen and progesterone <b>Men:</b> testosterone



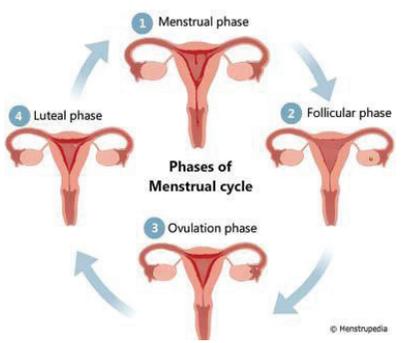
2. Thyroxine and adrenaline (HT)	
<b>Metabolic rate</b>	The rate at which the bod uses the energy stored in food.
<b>Thyroxine</b>	<b>Role:</b> To control your metabolic rate. <b>Endocrine gland:</b> Thyroid gland <b>Target organ:</b> Most of the body
<b>Negative feedback</b>	The way the body responds to high levels of something by bringing them down, and low levels by bringing them up.
<b>Negative feedback and the metabolic rate</b>	1) Low levels of thyroxine stimulates production of TRH in hypothalamus 2) This causes the release of TSH from the pituitary gland 3) TSH causes the thyroid to produce thyroxine 4) Normal levels of thyroxine inhibits the release of TRH and the production of TSH

**Adrenaline** **Role:** To prepare the body for fight or flight  
**Endocrine gland:** Adrenal glands  
**Target organ:** Heart (beats faster and stronger), blood vessels going to muscles (get wider), blood vessels going to organs (get narrower), liver (releases glucose)

3. The menstrual cycle	
<b>Menstrual cycle</b>	A (roughly) 28 day cycle that prepares a woman's body for pregnancy.
<b>Ovulation</b>	The release of an egg cell by an ovary
<b>Fertilisation</b>	When a sperm cell fuses with an egg cell to form a zygote.
<b>Days 1-5</b>	Menstruation (a period): the lining of the uterus breaks down and leaves the body through the vagina.
<b>Days 6-12</b>	The uterus lining begins to thicken again.
<b>Days 13-15</b>	Ovulation happens
<b>Days 16-28</b>	The uterus lining continues to thicken and would be able to accept an embryo if fertilisation happens.
<b>Control of the cycle</b>	The menstrual cycle is controlled by the sex hormones: oestrogen and progesterone.



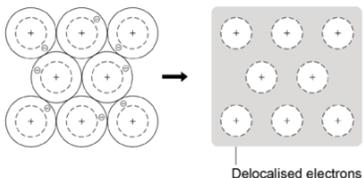
4. Hormones and the menstrual cycle (HT)	
<b>Egg follicle</b>	A layer of tissue surrounding each of the immature eggs in the ovaries.
<b>Oestrogen</b>	Causes the release of FSH and the thickening of the uterus lining. High oestrogen levels cause LH release.
<b>FSH</b>	Causes one follicle to develop and mature the egg cell within it.
<b>LH</b>	Causes ovulation when the egg is released from the follicle.
<b>Corpus luteum</b>	The follicle becomes a corpus luteum after ovulation, and releases progesterone. It breaks down over two weeks.
<b>Progesterone</b>	Maintains the thickness of the uterus lining, inhibits FSH release. Falling progesterone levels trigger ovulation.





## Metallic bonding

Metals LOSE ELECTRONS to form POSITIVE IONS



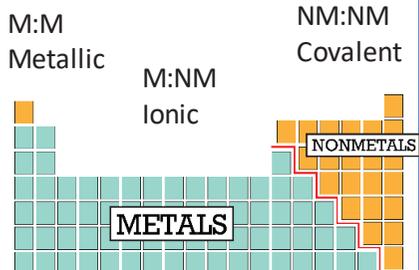
GIANT structures of atoms in a REGULAR pattern

Delocalised electrons are free to move.

What is a metallic bond?

Sharing delocalised electrons – STRONG metallic bonds.

Which type of bonding is it?



## Ionic bonding

Metals LOSE ELECTRONS to form POSITIVE IONS  
Non-metals GAIN ELECTRONS to form NEGATIVE IONS

Electrons transferred from metal to non-metal



Ions have electronic structure of a noble gas

What is an ionic bond?  
STRONG electrostatic force of attraction between oppositely charged ions

How do we quickly work out the charges on ions?

Group	Electrons in outer shell	Charge on ion
1	1	1+
2	2	2+
6	6	2-
7	7	1-

## SC5-SC7 Structure and Bonding

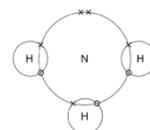
## Covalent Bonding

Two non-metals will SHARE pairs of electrons  
STRONG bond formed.

### Small molecules

A small group of atoms sharing electrons

For ammonia (NH<sub>3</sub>)



and/or

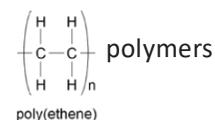
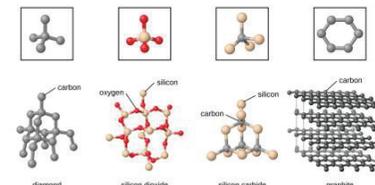


and/or



### Giant Structures

Many atoms sharing electrons



### Limitations of these models

Model	Limitations
Dot and cross	Looks like electrons aren't identical Electrons look like they are in fixed positions
Displayed formula	Doesn't show true shape of the molecule
Ball and stick	Can attempt to show 3D shape but doesn't show electrons



## Properties of Metallic Substances

Metals have high melting and boiling points **because...**

...they are **giant structures** of atoms with **strong metallic bonding**

Can be bent or shaped **because...**

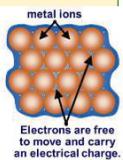
...atoms are arranged in **LAYERS** which can **SLIDE** over each other

Alloys are harder than pure metals **because...**

Alloys are a mixture of two or more elements, at least one of which is a metal

...the layers are **DISTORTED** so can't slide over each other

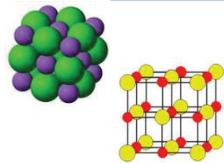
Metals are good conductors of electricity and thermal energy **Because...**



...the **electrons are free** to move and carry thermal energy and charge

## Properties of Ionic Substances

Ionic compounds have high melting and boiling points **because...**



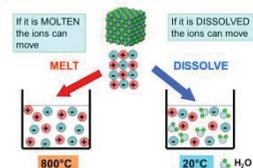
...they are giant structures of atoms (giant ionic lattice) with **strong electrostatic forces** of attraction in **ALL DIRECTIONS** between oppositely charged ions.

A large amount of **energy** is needed to break the many strong bonds.

Only conduct electricity when melted or dissolved in water **because...**

...the **ions are free** to move and so charge can flow.

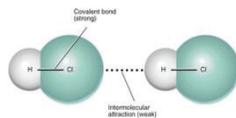
As ionic compounds are made of **CHARGED IONS**, they can **CONDUCT ELECTRICITY** but **ONLY** if the ions can **MOVE**.



## SC5-SC7 Structure and Bonding

**Small molecules**

**Small molecules** have relatively low melting and boiling points **because...**



...**intermolecular forces** are overcome on melting and boiling and these are weak forces.

The bigger the size of the molecule the higher the melting and boiling point **because...**

...intermolecular forces increase with the size of the molecules.

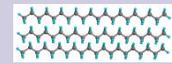
Don't conduct electricity **because...**

...the molecules have **no overall electric charge**.

## Properties of Covalent substances

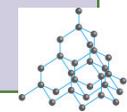
**Giant Structures**

Polymers are solids at room temperature **because...**



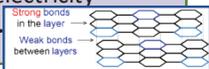
...intermolecular forces increase with the size of the molecules and polymer molecules are **very large**.

Diamond is very hard, has a very high melting and boiling point and doesn't conduct electricity **because...**



...each carbon is bonded to **4** other carbons by **strong covalent bonds**. There are **no free electrons**.

Graphite is very hard, has a very high melting and boiling point and does conduct electricity **because...**

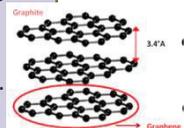


...each carbon is bonded to **3** other carbons by **strong covalent bonds**. It forms **layers of hexagonal rings** with no covalent bonds between layers. There are **free electrons**.

Giant covalent compounds have high melting and boiling points **because...**

...all of the atoms linked by **strong covalent bonds**.

Graphene is strong, light and an excellent conductor of thermal energy and electricity. **because...**



...it is a single layer of graphite so has **free electrons**.

Fullerenes (e.g. carbon nanotubes) are extremely strong and are excellent conductors of thermal energy and electricity **because...**



... they have **strong covalent bonds** and **free electrons**.



Early periodic tables arranged in order of **atomic weight**

⊖ Some elements were in the wrong groups so didn't follow the pattern



Mendeleev **left gaps** for undiscovered elements.

☺ The elements were discovered that filled the gaps and proved him right.

☺ **Isotopes were discovered** which explained why order based on weight didn't work.



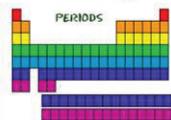
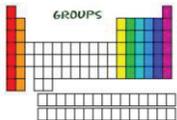
Modern periodic table—order of **atomic (proton) number**.

Elements with similar properties in columns (**groups**).

Elements in same group have the same number of electrons in their outer shell and so have similar chemical properties.

**I GROUP/FAMILY** (vertical column) have similar chemical properties

**II PERIODS/SERIES** (horizontal row) - has same core elements and number of main energy levels



## Non-metals

**Non-metals:** Many electrons in outer shell so form **negative ions**. Low melting and boiling points.

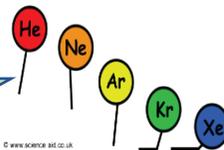
Metal										Metalloid										Nonmetal									
H																	He												
Li	Be											B	C	N	O	F	Ne												
Na	Mg											Al	Si	P	S	Cl	Ar												
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr												
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe												
Cs	Ba	La-Lu	Hf	Ta	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn													
Fr	Ra	Ac-Lu																											

**Metals:** Few electrons in outer shell so form **positive ions**. Hard, high melting and boiling points.

## Group 0

**Noble gases.** Unreactive (due to full outer shell)

Increasing atomic mass

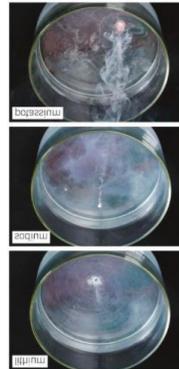


Increasing boiling point

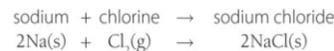
## Periodic Table

### Alkali Metals

Very reactive (due to single electron in outer shell)



- Metals
- React with oxygen to form **oxides**
- React with water to form the **hydroxide and hydrogen**
- React with chlorine to form **chlorides**



**lithium** 2,1

**sodium** 2,8,1

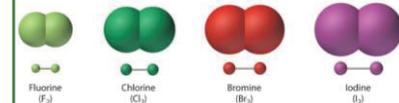
**potassium** 2,8,8,1

Alkali metals get MORE reactive

### Halogens

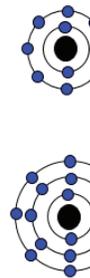
Very reactive (due to having 7 electrons in outer shell)

- Non- metals
- Exist in pairs as molecules (diatomic molecules)



- React with metals to form white solid crystals
- React with non-metals to form small molecules

Halogens get MORE reactive



# SP6 - Radioactivity



Radius of an atom  
 $1 \times 10^{-10} \text{m}$



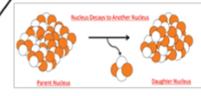
**Electrons gained**  
Negative ion

**Electrons lost**  
Positive ion

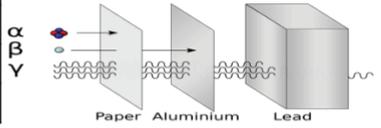
Atom	Same number of protons and electrons
Ion	Unequal number of electrons to protons
Mass number	Number of protons and neutrons
Atomic number	Number of protons

Particle	Charge	Size	Found
Neutron	None	1	In the nucleus
Proton	+	1	
Electron	-	Tiny	Orbits the nucleus

Isotope	${}^6_3\text{Li}$		${}^7_3\text{Li}$	
Different forms of an element with the same number of protons but different number of neutrons				

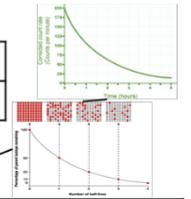
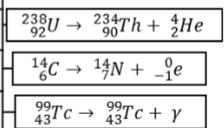


Decay	Range in air	Ionising power	Penetration power
Alpha	Few cm	Very strong	Stopped by paper
Beta	Few m	Medium	Stopped by Aluminium
Gamma	Great distances	Weak	Stopped by thick lead



Radioactive decay	Unstable atoms randomly emit radiation to become stable
Detecting	Use Geiger Muller tube
Unit	Becquerel
Ionisation	All radiation ionises

Decay	Emitted from nucleus	Changes in mass number and atomic number	
Alpha ( $\alpha$ )	Helium nuclei ( ${}^4_2\text{He}$ )	-4	-2
Beta ( $\beta$ )	Electron ( ${}^0_{-1}\text{e}$ )	0	+1
Gamma ( $\gamma$ )	Electromagnetic wave	0	0
Neutron	Neutron	-1	0



**Atoms and Isotopes**

**Atoms and Nuclear Radiation**

Contamination	Unwanted presence of radioactive atoms
Irradiation	Person is in exposed to radioactive source

## Discovery of the nucleus

Democritus	Suggested idea of atoms as small spheres that cannot be cut.
J J Thomson (1897)	Discovered electrons— emitted from surface of hot metal. Showed electrons are negatively charged and that they are much less massive than atoms.
Thomson (1904)	Proposed 'plum pudding' model – atoms are a ball of positive charge with negative electrons embedded in it.
Geiger and Marsden (1909)	Directed beam of alpha particles ( $\text{He}^{2+}$ ) at a thin sheet of gold foil. Found some travelled through, some were deflected, some bounced back.
Rutherford (1911)	Used above evidence to suggest alpha particles deflected due to electrostatic interaction between the very small charged nucleus, nucleus was massive. Proposed mass and positive charge contained in nucleus while electrons found outside the nucleus which cancel the positive charge exactly.
Bohr (1913)	Suggested modern model of atom – electrons in circular orbits around nucleus, electrons can change orbits by emitting or absorbing electromagnetic radiation. His research led to the idea of some particles within the nucleus having positive charge; these were named protons.
Chadwick (1932)	Discovered neutrons in nucleus – enabling other scientists to account for mass of atom.

## Radioactivity

## Hazards and uses of Radioactive emissions and of background radiation

**Half life**  
The time taken to lose half of its initial radioactivity

Sievert	Unit measuring dose of radiation
Background	Constant low level environmental radiation, e.g. from nuclear testing, nuclear power, waste

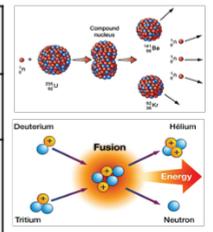
Uses	Different isotopes have different half lives	Short half-lives used in high doses, long half lives used in low doses.
Tracers	Used within body	Isotope with short half life injected, allowed to circulate and collect in damaged areas. PET scanner used to detect emitting radiation. Must be beta or gamma as alpha does not penetrate the body.
Radiation therapy	Used to treat illnesses e.g. cancer	Cancer cells killed by gamma rays. High dose used to kill cells. Damage to healthy cells prevented by focussed gamma ray gun.

Fuel rods	Made of U-238, 'enriched' with U-235 (3%). Long and thin to allow neutrons to escape, hitting nuclei.
Control rods	Made of Boron. Controls the rate of reaction. Boron absorbs excess neutrons.
Concrete	Neutrons hazardous to humans – thick concrete shield protects workers.

## Nuclear fission and fusion

## PHYSICS ONLY: Nuclear energy

Nuclear fission	One large unstable nucleus splits to make two smaller nuclei	Neutron hits U-235 nucleus, nucleus absorbs neutron, splits emitting two or three neutrons and two smaller nuclei. Process also releases energy.	Process repeats, chain reaction formed
Nuclear fusion	Two small nuclei join to make one larger nucleus	Difficult to do on Earth – huge amounts of pressure and temperature needed.	Used in nuclear power stations
			Occurs in stars





203What is the part in the middle of an atom called? 204Name two subatomic particles.  
205What are the negatively charged particles in an atom called?  
206What are the positively charged particles in an atom called?  
207Where is most of the mass of an atom concentrated?  
208Which subatomic particles have a negligible mass?  
209How did scientists discover that atoms had tiny nuclei?  
210Who investigated atoms in this way?  
211Which of the following is approximately the diameter of an atom – a hundredth of a millimetre, a thousandth of a millimetre or a millionth of a millimetre? 212What charge do electrons have?  
213How much mass do electrons have?  
214In Thompson's model, the atom was positively charged with tiny negative charges in it. What was this model called? 215Rutherford investigated the structure of the atom. What did he do?  
216What happened to most of the alpha particles in Rutherford's experiment?  
217Why did Rutherford conclude that most of the mass of the atom was in the centre?  
218What is the relative mass of a proton?  
219What are isotopes?  
220Which subatomic particle has no charge?  
221What is another name for nucleon number?  
222What is the mass number of an atom?  
223What is the atomic number of an atom?  
224What is another name for atomic number?  
225What is the relative mass of a neutron?  
226What is the relative charge on a proton?  
227What is different between two isotopes of the same element?  
228How are electrons arranged in an atom?  
229What is ionisation?  
230How are electrons arranged in an atom?  
231What happens to one or more electrons when an atom gains energy?

232Name two ways in which an atom can gain energy.  
233What happens to electrons when the atom loses energy?  
234What is ionisation?  
235What charge does an ion have when it has lost an electron?  
236Name one source of background radiation in everyday life.  
237Name one thing that can detect radiation.  
238What is ionising radiation?  
239Is most background radiation natural or from human causes?  
240Where does radon gas come from?  
241What are cosmic rays?  
242Why is background radiation different in different places?  
243What happens to photographic film when radiation hits it?  
244What is the name of a common instrument that detects radiation?  
245What is a count rate?  
246Name two types of ionising radiation that consist of particles.  
247Which high-frequency electromagnetic waves can be produced by radioactive decay? 248What is an alpha particle?  
249What is a beta particle?  
250What is the relative mass of an alpha particle?  
251What is the relative charge on an alpha particle?  
252What is the relative charge on a beta particle?  
253What is the relative charge on a positron? 254Which form of radiation is the most penetrating? 255Which form of radiation is the most ionising? 256What happens to the nucleus of an atom when it emits an alpha particle?  
257What happens to the nucleus of an atom if it ejects a neutron?  
258 What happens to the atomic number of a nucleus when an alpha particle is emitted?

259What happens to the mass number of a nucleus when an alpha particle is emitted?  
260How is a beta particle formed?  
261What happens to the atomic number of a nucleus when a beta particle is emitted?  
262How is a positron formed?  
263What happens to the atomic number of a nucleus when a positron is emitted?  
264What does the 'activity' of a radioactive source refer to?  
265What does half-life mean?  
266What is the unit for measuring the activity of a source?  
267What does 1 becquerel represent?  
268Why can we not predict exactly how many nuclei will decay each second?  
269How does the activity of a radioactive source change over time?  
270Why does the activity of a source get less over time? 271What does the half-life tell you about the activity of a sample of radioactive material?  
272What does the half-life tell you about the number of unstable nuclei in a sample of radioactive material?  
273Name one disease that can be caused by radiation.  
274Name one type of job that may involve being exposed to nuclear radiation.  
275What has happened if you are contaminated by radioactive material



# History

# Elizabethan England, c.1568-1603



- **Religion:** Elizabethan **religious settlement** was a compromise; declared herself **Governor of Church of England** which was Protestant, but allowed Catholics to worship in private. Moderate Archbishop of Canterbury appointed, Matthew Parker.
- Elizabeth was practical after the religious rollercoaster left by her father, Mary and Edward. In the Religious Settlement, the **Act of Supremacy** of 1559 gave Elizabeth control of the Church as Supreme Governor. In the **Act of Uniformity**, she would allow Catholics to worship privately but would keep England Protestant with a new **Book of Common Prayer** and an English Bible in every Church. Impact: The Middle way was designed to satisfy the majority for the sake of peace. However, it did not satisfy the extreme Catholics (Jesuits) or Protestants (Puritans)
- **Mary Queen of Scots:** Queen Elizabeth's Catholic cousin was forced to flee to England due to murky past. Placed under house arrest, but became embroiled for the rest of her life in 'attempted' plots to overthrow Elizabeth (**Ridolfi, Norfolk, and Babington**). Finally executed in 1596. Catholics now had a **martyr**,
- **Catholic challenges:** 1570, Pope **excommunicated** Elizabeth; new approach needed. 1581 law made it **treason** to attend Catholic mass or have a Catholic priest in your home. 1593 law said Catholics could not travel 5 miles away from homes. **Recusancy** fines increased to £20 and illegal to own rosary beads. Catholic reaction was to send **Jesuit priests** (from new college at Douai in Spanish Netherlands led by Cardinal William Allen) from 1580. Supported by France and Spain, despite ban on Jesuit priests in 1585. Robert Parsons (later fled England) and Edmund Campion (executed) led Jesuit mission.
- **Puritan challenge:** They were **extreme Protestants**, who began meetings called '**prophesyings**' for prayers and discussions. New Archbishop of Canterbury, **Edmund Grindal** encouraged these meetings and was suspended. Puritans attempted to set up own Churches in Norwich and London but failed. Many supporters in Parliament, including **Peter Wentworth** **Anthony Cope**, **Robert Dudley** and **Sir Francis Walsingham**. From 1583, crackdown on Puritans: Rules banned unlicensed preaching and enforced attendance at Church. **New High Commission** led by Archbishop of Canterbury, **John Whitgift**, had power to fine and imprison. Puritan printers calling for a reorganised Church without bishops (Presbyterians) were punished such as **John Stubbs**.
- **Conflict between England and Spain** occurred due to the following: Elizabeth would not agree to marry Philip II, Spain was Protestant, the Pope called for all Catholics to challenge Elizabeth in 1570, Sir Francis Drake and other English sailors attacked Spanish shipping and Elizabeth sent help to Protestants rebelling in the Spanish Netherlands.
- **English navy was a thorn in Philip's side;** it had been helped by new technology (mentioned earlier). Also adopted surprise attacks on Spanish ships and the use of fireships such as **Singeing of King of Spain's Beard** at Cadiz in 1587.
- **Spanish Armada: People:** King Philip, Santa Cruz, Duke of Parma, Duke of Medina Sidonia, Lord Howard, Francis Drake. **Pressure:** Elizabeth interference in Spanish Netherlands, piracy, raid on Cadiz. **Planning of Spanish:** Combination of Parma and Santa Cruz plans to pick up soldiers from Netherlands and land in Dover to march on London. **Weaknesses** included quality of barrels to store food, no deep sea ports to use, communication between commanders. **Planning of English:** Fast, speedy and more manoeuvrable ships, close to home, use of cannons. **Performance:** English tactics superior with use of fireships to break tight formation, the weather and Spanish mistakes (not effective warships for English Channel as too slow and unable to defend against English fire power in Battle of Gravelines, Spanish cannonballs did not fit cannons, unable to pick up troops in Netherlands, Duke of Medina Sidonia inexperienced). **Position:** Spanish soon blown off course and battered by storms off Scotland. Only 92 of 127 returned home and half never used again.

## AQA GCSE HISTORY 9-1 SUMMARY REVISION GUIDE: Elizabethan England, c.1568-1603



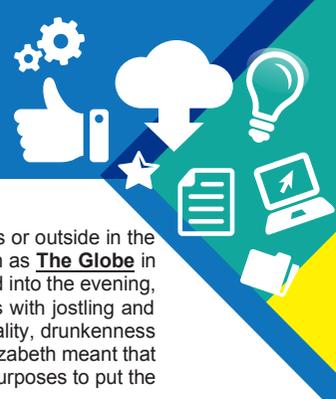
Exam Questions			
How convincing is the interpretation? (8)	Explain what was important about (8)	Write an account of... (8)	Spanish Armada question (16)
10 mins	10 mins	10 mins	20 mins

### Part 1: Elizabethan Court and Government

- **Elizabeth:** Had a difficult upbringing (she was labelled as **illegitimate** by some people) and sometimes feared for her life. In 1554 was accused of conspiring against her half-sister. Therefore, she was very cautious and only trusted close advisors. She was intelligent, confident and very well educated. With little experience, she became a very powerful and effective ruler.
- **Government:** The **Privy Council** was made up of people chosen by Elizabeth (mostly nobles) for the day to day running of the country dealing with military, religion, security and foreign affairs. **Led by Secretary of State.**
- **Parliament** made up of **Lords** (nobles, lords, bishops) and **Commons** (wealthy and educated) had power over taxation and laws.
- **Lord Lieutenants** appointed by Queen to take control over areas of country to **raise taxes, settle disputes and raise militia** for Queen. Many were also **Privy Councillors**
- **J.P.'s** ensured law and order were kept. Selected from local gentry and **ensured laws properly enforced** (had power to imprison).
- **Royal Court** made up of government officials, ladies in waiting, servants and advisors who surrounded Elizabeth. Over 1000 people; centre of political power and fashions of the day.
- Key men: **William Cecil**, who served as Secretary of State twice and Elizabeth's most trusted advisor. Played key role in **Poor Laws**.
- Key men: **Francis Walsingham**, who also served as Secretary of State and again one of her most trusted advisors from 1573 to 1590. Known as the '**spymaster**' and played a key role in **execution of Mary Queen of Scots**.

### Elizabeth's problems as a female ruler

- **The Succession:** Parliament was keen for Elizabeth to be married and have children to secure the Tudor line.
- Her heir was **Mary Queen of Scots** who was exiled to England from 1568. For many Englishmen, the prospect of a Scottish Catholic taking throne was unimaginable.
- **Religion:** Elizabeth was practical after the religious rollercoaster left by her father. Mary and Edward. She would allow **Catholics to worship privately** but would keep England Protestant. She also had to tackle Puritanism later.
- **Ireland:** Elizabeth and the Irish clashed over her claim to be **Queen of Ireland**. She spent vast sums of money without success of trying to limit Irish rebellions, particularly in 1559.
- **Foreign Policy:** Catholic countries such as France and Spain were keen to assert their influence over England. Her major concern was protecting England.
- **The importance of marriage. Pros:** Marriage could create an alliance with a foreign power, produce an heir and prevent Mary Queen of Scots from ruling England. **Cons:** Could come under control of a foreign power, Elizabeth kept her independence, childbirth was dangerous, hers sister's marriage to Philip seen as a disaster.
- **Worthy suitors:** **Robert Dudley, Earl of Leicester** – Privy Councillor, former favourite but previously married (wife's death was also controversial). **Francis, Duke of Alencon** – heir to French throne, but Catholic and public against this. **King Philip II of Spain** – most powerful man in world, but Catholic, unpopular and had already married her sister.



- Many in **Parliament** saw it their duty to discuss Elizabeth's marriage. She was furious and one member arrested for openly discussing it and sent to Tower (Peter Wentworth). Elizabeth saw it as her decision alone, so she never married.

#### Challenges to Elizabeth's rule:

- **The Northern Rebellion of 1569.** Northern Lords led by the Dukes of Westmorland and Northumberland took control of Durham Cathedral and celebrated an illegal Catholic mass. Marched south with 4,500 men but were stopped by Earl of Sussex. Leaders fled. 700 executed including Northumberland.
- **The Ridolfi Plot of 1571.** Catholic Duke of Norfolk, Queen's second cousin, had already been implicated in Northern Rebellion and put in Tower of London for a time. Now involved in a plot with Italian banker Ridolfi to encourage rebellion in the North and together with army from the Netherlands, murder Elizabeth, marry Mary Queen of Scots and put her on the throne. Coded letters found under Norfolk's doormat and executed 1572.
- **The Essex Rebellion, 1601.** He became a Privy Councillor in 1595, and given a monopoly on sweet wine in England. Achieved military success against Spanish in 1596. Seriously quarrelled with Queen over Ireland in 1598; allegedly was about to draw his sword. In 1599, made Lord Lieutenant of Ireland reluctantly. Job to crush Irish rebels but instead made a deal with them. Quickly lost favour; monopoly not renewed and faced financial ruin. Took 4 Privy Councillors hostage and with 200 followers marched to London. Cecil, his rival declared him a traitor losing him support and hostages released by his own supporters. Tried and executed Feb 1601. Several other rebels executed and others (whom he had confessed to under torture) fined. Whereas the above were motivated by religion, Essex motivated by power.
- **Why did the rebellions fail?**  
Elizabeth had a fantastic network of **spies and informers** under Francis Walsingham. The rebellions had a **lack of popular support**. Even Catholics preferred Elizabeth to Mary Queen of Scots and influence of Philip II of Spain. Elizabeth was a **skilled politician** and worked effectively with Parliament. Finally, Elizabeth was not afraid to use swift action and **punishment** against traitors, using torture and execution. However as long as England was a Protestant country, she would face threats and invasion.

#### Part 2: Life in Elizabethan times

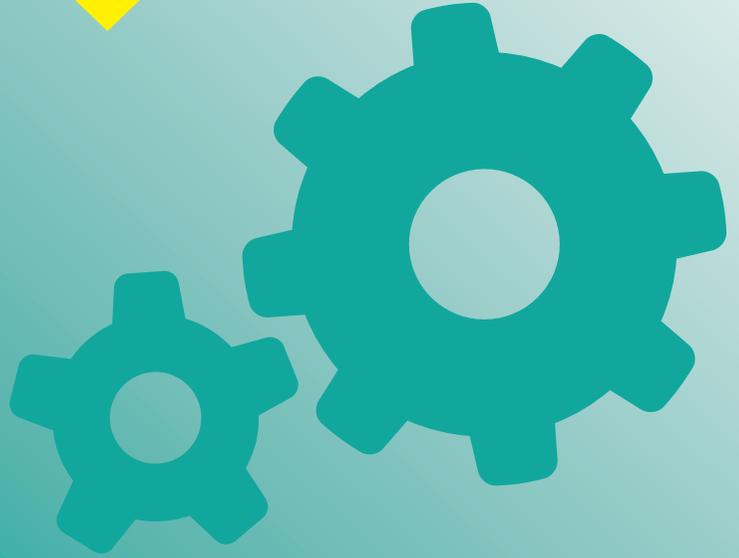
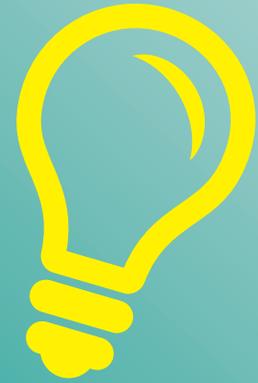
- **Great Chain of Being.** Elizabethans knew their place in society; God was at the top followed, then human beings, followed by animals and plants. Human beings were sub divided into the monarch followed by the nobles, gentry and then the peasants.
- **Wealth:** Land made money and raised social status. **Nobles** were the most respected members of society. They had titles such as **Duke, Earl or Baron**. Their average income was £6000 a year (£1m today). A member was born into it or awarded a title from the Queen. Privileges included protection from torture or public hanging. 14% of country's income came from 1% of the noble population. Queen's right to give and take away influence. **Gentry** were landlords of the countryside. Lived on rents of their tenants and did no manual labour. Income varied from £10 and £200 a year. (Up to £34,000 today). Many were **J.P.s** and served in Parliament. Titles included **knight and esquire**. People making money from trade moved into this class. **Peasants** were poorest in society. Often worked as **labourers** and struggled for work especially with a rising population.
- **Fashion:** Elizabethans liked to show off their new wealth, like Bess of Hardwick. They built **fine houses** in the countryside and lavishly decorated and furnished them. **Banquets** (meat and wine) were a way of showing off and entertaining. **Fine clothes** and **white faces** became fashionable amongst women. The **ruff** became an important fashion accessory. England had become stable and secure and this period became known as a **Golden Age**.
- **The Theatre.** Rich and poor alike visited the theatre. Famous playwrights included **William Shakespeare** and **Christopher Marlowe**. Theatre companies sponsored by a **patron** (a great way to show your culture and get in favour with the Queen) sprung up such as the **Lord Chamberlain's men** and the **Admiral's Men**. Acting was strictly a male profession. The most

famous of the day was **Richard Burbage**. Plays were at first performed in inns or outside in the yard but soon a number of **permanent** and purpose-built theatres existed such as **The Globe** in London. Plays became extremely **popular** and began at 3.00pm and continued into the evening, providing a cheap day's entertainment. The performance became like a circus with jostling and heckling. **Protests** however from **Puritans** saw the theatres as dens of immorality, drunkenness and crime. People instead should read the **Bible**; however, **patronage** from Elizabeth meant that the theatre kept growing in popularity. Elizabeth also used it for **propaganda** purposes to put the Tudors in a favourable light.

- Was it a **Golden Age?** **Pros:** Art, Exploration, Theatre, Building, Science and Technology (navigation and astrology), Theatre, Education, Literature. **Cons:** Blood sports, punishments, Life expectancy low, Poverty, Alchemy.
- **Hardwick Hall, more glass than wall:** Designed by **Robert Smythson**, emphasis on symmetry and order, such as **E shape, open courtyards** and **straight chimney columns**. **Glass** was status symbol (note how windows get larger on each level rising). Key features to mention: 1) **Location** – countryside which was peaceful 2) **Function** – residences now to show off wealth and patronage such as **Great Chamber and Long Gallery for guests** 3) **Structure and design** – new renaissance ideas such as **loggias** at front 4) **Owners** showing off wealth to Queen and rise of gentry 5) **Culture, value and fashions of the time** – **tapestries, fireplaces, Long Gallery, Great Hall, heraldry, oak panelling, paintings of Queen**.
- **Rise in Poverty** not helped by **Reformation**: The **closing of the monasteries** by HVIII left monks and nuns unemployed, unable to care and help those in need by giving them food and shelter. HVIII had banned lords keeping **private armies**, so many soldiers out of work. HVIII also **debased** the coinage to pay for wars. This led to **inflation** and a collapse in cloth industry and trade. **Bad harvests** in 1594 and 1598 led to food shortages and starvation. Landowners also started **enclosing** their land with hedges; fewer workers were needed. A **flu epidemic** of 1558 killed around 200,000 including many needed on the fields.
- **Attitudes to poverty: Deserving Poor.** Archbishop Whitgift established Almshouses in Croydon for beds and food. **Undeserving Poor** such as beggars (**Counterfeit crank, Baretop trickster, Clapham Dudgeon, Tom O'Bedlam**) dealt with by punishments such as stocks, whipped, burned or hanged.
- **Elizabethan Poor Law** taxed rich to support poor (**helpless poor** receive food and shelter, **able bodied** poor expected to work for food and drink, **idle poor** to be whipped and sent to house of correction) **Pros:** begging reduced, help to poor and not just vagrants. **Cons:** inconsistently applied and how to define categories – paupers just sent from area to area.

#### Part 3: Troubles at home and abroad

- **Exploration: Francis Drake** and his cousin **John Hawkins** became privateers. Attacking enemy ships (mostly Spanish) and taking their cargo. This made them and Elizabeth extremely rich.
- New technology in sailing helped: New **lanteen** sails made ships faster and easier to steer; the **astrolabe** allowed sailors to work out how far north or south they were and better compasses made navigation more accurate.
- Trade boomed: **The East Indian Company** was formed to trade in porcelain, spices and silks with India. Other companies had monopolies in Russia (**Muscovy Company** in 1555) and in Turkey and the Middle East (**Levant Company** in 1581).
- **John Hawkins** with Francis Drake began a **slave trade**– taking Africans to South American coast to be sold. **Sir Walter Raleigh** attempted to set up a colony called Roanoke in North America.



# Geography



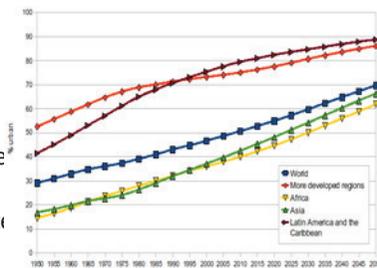
## What is Urbanisation?

This is the proportion of people living in urban areas such as towns or cities.

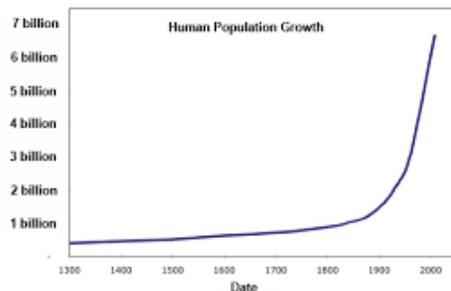
In 2007, the UN announced that for the first time, more than 50 % of the world's population live in urban areas.

*Where is Urbanisation happening?*

Urbanisation is happening all over the world but in LICs and NEEs rates are much faster than HICs. This is mostly because of the rapid economic growth they are experiencing.



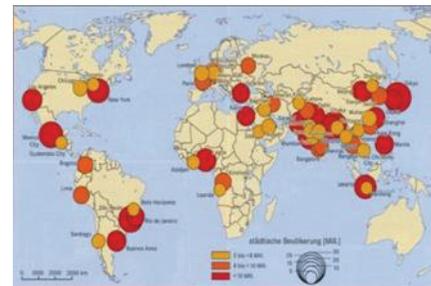
The world's population is increasing. Since 1900 this growth has been **exponential** (doubling)



## Types of Cities

### Megacity

An urban area which over **10 million people** living there.



More than two thirds of current megacities are located in either NEEs (Brazil) and LICs (Nigeria). The amount of megacities are predicted to increase from 28 to 41 by 2030.

There are 3 types of Mega cities:

**Slow Growing:** No squatter settlements EG Tokyo ( Often in HIC's)

**Growing:** Under 20% squatter settlements EG Rio De Janeiro (Often in NEE's)

**Rapid growing:** Over 20% squatter settlements. EG Mumbai ( Often in LIC's and NEE's)

## Causes of Urbanisation

### Rural - urban migration (1)

#### Push

- Natural disasters
- War and Conflict
- Mechanisation
  - Drought
- Lack of employment

### The movement of people from rural to urban areas.

#### Pull

- More Jobs
- Better education & healthcare
- Increased quality of life.
- Following family members.

### Natural Increase (2)

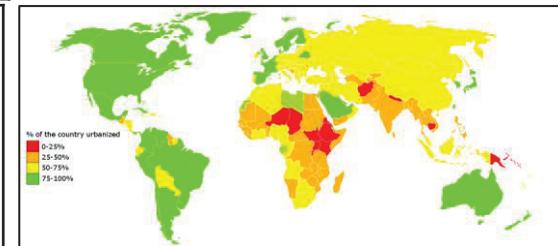
#### Increase in birth rate (BR)

- High percentage of population are child-bearing age which leads to high fertility rate.
- Lack of contraception or education about family planning.

### When the birth rate exceeds the death rate.

#### Lower death rate (DR)

- Higher life expectancy due to better living conditions and diet.
- Improved medical facilities helps lower infant mortality rate.



Urban population is growing more quickly in less developed regions than in the more developed. The largest growth in urban areas will take place in China and Nigeria. These are examples of NEE's ( Newly emerging economies)



## Location and Background

Rio is a coastal city situated in the South East region of Brazil within the continent of South America. It is the second most populated city in the country (6.5 million) after Sao Paulo.

## City's Importance

It has the second largest GDP in Brazil It is headquarters to many of Brazil's main companies, particularly with Oil and Gas.

Sugar Loaf mountain is one of the seven wonders of the world.

One of the most visited places in the Southern Hemisphere. Hosted the 2014 World Cup and 2016 Summer Olympics.

## Migration to Rio De Janeiro

The city began when Portuguese settlers with slaves arrived in 1502. Rio is now home to various ethnic groups. More recently, millions of people have migrated from rural areas. People do this to search for a better quality of life. This expanding population has resulted in the rapid urbanisation of Rio de Janeiro.

## City's Opportunities

**Social:** Standards of living are gradually improving. The Rio Carnival is an important cultural event for traditional dancing and music.

**Economic:** Rio has one of the highest incomes per person in the country. The city has various types of employment including oil, retail and manufacturing.

**Environmental:** The hosting of the major sporting events encouraged more investment in sewage works and public transport systems.

## Social Challenges and Solutions

**Health: CH** Life expectancy in the favelas is 45 and 80 in the rich areas. Infant mortality is higher in the favelas. **SL** Health visitors go into homes to check for 20 diseases

**Education: CH** Only 50% of children continue education beyond 14. Shortage of teachers. Parents need children to work.

**SL:** Grants to poor families and new private University in Rochina.

**Water Supply CH:** 12% of Rio had no running water. 37% water lost through leaks. Frequent droughts. **SL:** 300km of new pipes, by 2014 only 5% with no water supply.

**Energy CH:** Frequent power cuts, poor people in the Favelas tap into electricity illegally. **SL:** 60km of new wires, new Nuclear power plant. \$2billion spent on new HEP plant

## Economic Challenges and solutions

Economic opportunities have led to the growth of the formal economy ( Tax paid, holiday and sick pay) Rio provides more than 6% of Brazils employment and large companies are attracted to Rio. Jobs in the formal economy are mainly in public services with other areas in construction and finance. There is a large informal economy in the favelas and few people pay tax.

**Challenges are: Unemployment** is high in many favelas its over 20%. The solution is the schools of tomorrow which offer training to school leavers. **Crime** is another challenge with powerful drug gangs in the favelas. The solution is the Pacifying police force who have reclaimed the favelas from the gangs

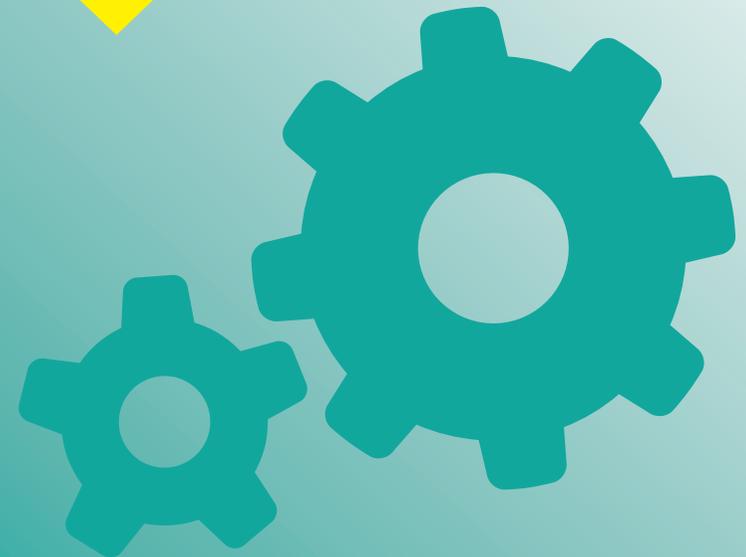
## Environmental challenges:

Air pollution and traffic congestion. There are around 5000 deaths from air pollution. Building new roads due to the steep hillsides is difficult and there is congestion . To solve this they have expanded the Metro system. Water pollution Guanabara Bay is heavily polluted. Many rivers are open sewers. The solution is 12 new sewage works. Waste Pollution many favelas are on steep slopes with no waste collection, The solution is a power plant the burns 30 tonnes of rubbish a day.

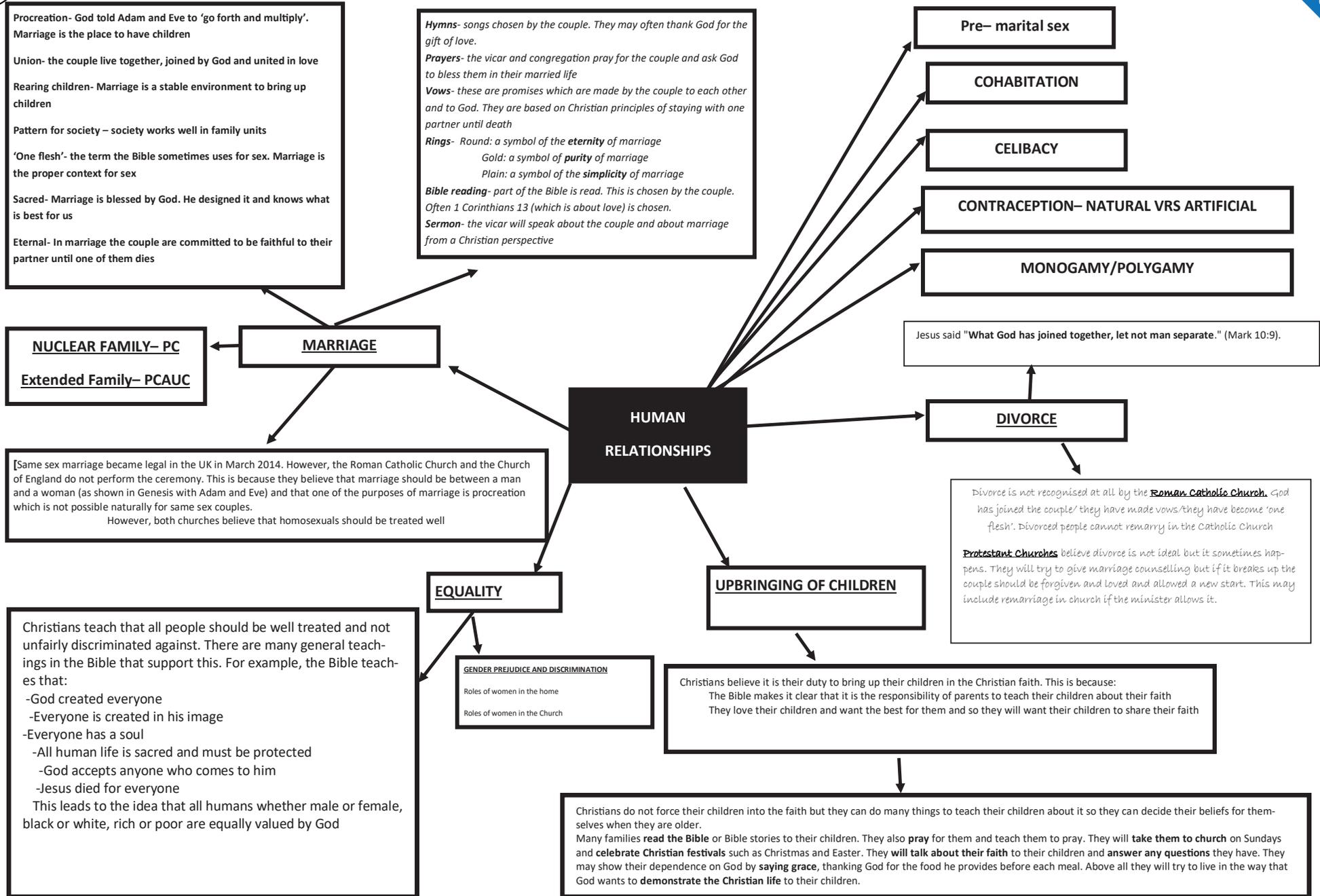
## Managing the Favelas and the urban poor

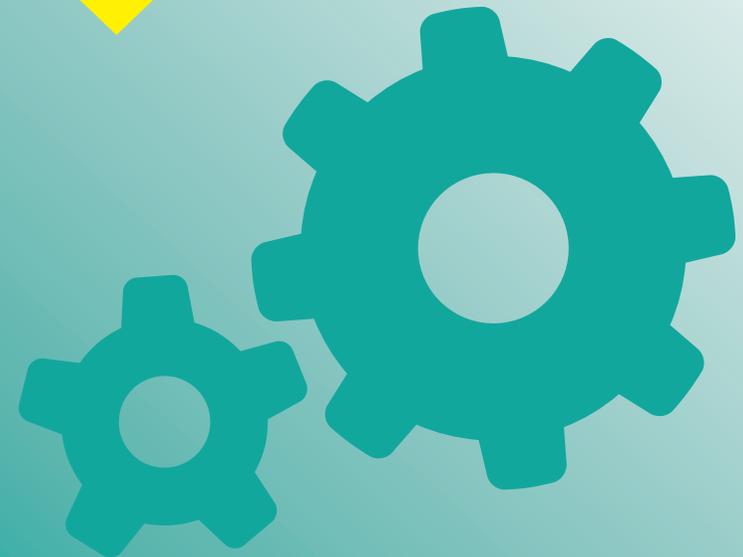
As the favelas have grown there are many challenges Crime, health, services, construction and unemployment. **The Favela Barrio** Project is a Site and service scheme. It is an area in the north zone. Roads were paved, improved sanitation, a cable car and the pacifying police all helped to improve quality of life.

A **success** is that quality of life and employment has improved. A **problem** is that residents don't have the skills to keep on top of repairs to the cable car and their homes



# Religious Studies





# Spanish



1. ¿Qué aplicaciones usas?		3. ¿Cómo es?	
a) Suelo usar Whatsapp para contactar con mis amigos.	I usually use Whatsapp to get in touch with my friends	a) Como una persona mi hermano es muy gracioso.	As a person my brother is very funny.
b) Spotify es una aplicación buena para buscar y descargar música.	Spotify is a good application to look for and download music.	b) Mi padre no es ni delgado ni gordo.	My dad is neither thin nor fat.
c) Creo que las redes sociales son muy cómodas.	I think that social networks are very convenient.	c) Nos parecemos físicamente, tenemos los ojos verdes y el pelo rubio.	We look like each other physically, we have green eyes and blonde hair.
d) Lo único malo es que te enganchan.	The only bad thing is that they get you hooked.	d) Mientras mi hermana es alta yo soy bastante baja.	Whilst my sister is tall I am quite short.
e) Mi madre dice que son muy peligrosas y adictivas.	My mum says that they are very dangerous and addictive.	<b>4. ¿Te llevas bien con tu familia?</b>	
f) Ayer usé Facebook para organizar una salida con mis amigos.	Yesterday I used Facebook to organise going out with my friends.	a) Me llevo bien con mi madre porque me escucha y nunca me critica	I get on well with my mum because she listens to me and never criticises me.
<b>2. ¿Qué te gusta leer?</b>		b) Odio mi hermano, nos llevamos como el perro y el gato.	I hate my brother, we fight like cat and dog.
a) Prefiero leer las novelas de amor porque los personajes son interesantes.	I prefer reading romance novels because the characters are interesting.	c) Normalmente me llevo bien con mi hermana, pero a veces puede ser molesta.	Normally I get on well with my sister but sometimes she can be annoying.
b) Siempre leo antes de acostarme.	I always read before going to bed.	d) Mi padre y yo nos divertimos siempre porque tenemos mucho en común.	My dad and I always have fun because we have lots in common.
c) La semana pasada leí una biografía de mi futbolista favorita.	Last week I read a biography from my favourite footballer.	<b>5. ¿Cómo es un/a buen amigo/a?</b>	
d) Es mejor leer en formato digital porque no malgasta papel.	It's better to read digital books because it doesn't waste paper.	a) Un buen amigo es alguien que te conoce bien y te apoya.	A good friend is someone that knows you well and supports you.
e) Prefiero los e-books porque son más ecológicos.	I prefer ebooks because they are eco-friendlier.	b) Conocí a mi mejor amigo al colegio.	I met my best friend at school.
f) Mis amigos dicen que soy un ratón de biblioteca.	My friends say that I am a bookworm	c) Nos hicimos amigos porque nos gustan las mismas cosas.	We became Friends because we like the same things.



<u>C</u> onnectives		<u>O</u> pinions		<u>R</u> easons		<u>T</u> ime Phrases		phrases followed by <u>I</u> nfinitives		
no obstante	nevertheless	me chifla/me flipa/me mola	I really love / I am crazy about	emocionante	exciting	anteayer	The day before yesterday	Any <b>INFINITIVE</b> can follow these phrases*	se puede* <b>jugar</b>	you can play
además	furthermore			alucinante	amazing				hace un año	a year ago
también	also	a mi modo de ver	from my point of view	entretenido/a	entertaining	la semana pasada	last week		antes de* <b>nadar</b>	before swimming
luego	then	pienso que	I think that	gracioso/a	funny	el fin de semana pasado	last weekend		despues de* <b>estudiar</b>	after studying
después	because	creo que	I believe that	inolvidable	unforgettable	la próxima semana	next week		suelo* <b>comer</b>	I usually eat
porque / ya que / dado que / puesto que	because	me interesa / n	I'm interested in	guay	cool	el fin de semana que viene	next weekend		solía* <b>beber</b>	I used to drink...
		debo admitir que	I must admit that	molesto/molesta	annoying	el año que viene	next year		tengo que* <b>correr</b>	I have to run
por lo tanto, por eso	therefore, for that	me fascina (n)	it/they fascinate me	una pérdida de tiempo	a waste of time	todos los dias	everyday		espero* <b>salir</b>	I hope to go out...
con / sin	with / without	no aguanto	I can't stand	una tontería	a joke	a menudo	often		se debe* <b>escribir</b>	you must write
ni...ni	neither ...nor	diría que	I would say that	formidable	fantastic / terrific	a veces	sometimes		tengo la intención de* <b>ir</b>	I plan to go
no solo es....sino también	not only is it .....but also	desde mi punto de vista	from my point of view	un rollo	a bore	de vez en cuando	from time to time			
				útil	useful					
tampoco	neither/nor	me da igual	I don't mind	inútil	useless	una vez a la semana	once a week			



## SPANISH GCSE VERB TENSES

### Present tense = I do

	-AR	-ER	-IR
	Hablar	Comer	Vivir
(yo)	Hablo	Como	Vivo
(tú)	Hablas	Comes	Vives
(él/ella)	Habla	Come	Vive
(nosotros)	Hablamos	Comemos	Vivimos
(vosotros)	Habláis	Coméis	Vivís
(ellos/ellas)	Hablan	Comen	Viven

### Immediate future = I am going to do

	Ir		Infinitive
(yo)	voy	a	comer
(tú)	vas		beber
(él/ella)	va		ir
(nosotros)	vamos		jugar
(vosotros)	vais		llevar
(ellos/ellas)	van		tener

### Conditional tense = I would do INFINITIVES + ENDINGS

Trabajar	
Trabajaría	<i>I would work</i>
Trabajarías	<i>You would work</i>
Trabajaría	<i>He would work</i>
Trabajaríamos	<i>We would work</i>
Trabajaríais	<i>You (pl.) would work</i>
Trabajarían	<i>They would work</i>

Ser	Soy	Poder	Puedo
Estar	Estoy	Poner	Pongo
Dar	Doy	Saber	Sé
Ir	Voy	Traer	Traigo
Hacer	Hago	Querer	Quiero
Tener	Tengo	Ver	Veo
Salir	Salgo	Conocer	Conozco
Jugar	Juego	Traducir	Traduzco

### Pure future = I will do

Tener	tendré
Hacer	haré
Poner	pondré
Poder	podré
Querer	querré
Decir	diré
Salir	saldré
Saber	sabré
Venir	vendré
Haber	habrá

### INFINITIVE + ENDINGS

Trabajar	
Trabajaré	<i>I will work</i>
Trabajarás	<i>You will work</i>
Trabjará	<i>He will work</i>
Trabajaremos	<i>We will work</i>
Trabajaréis	<i>You (pl.) will work</i>
Trabjarán	<i>They will work</i>

### Irregulars:

Hacer	haría	Poder	podría
Salir	saldría	Decir	diría
Tener	tendría	Venir	vendría
Querer	querría	Saber	sabría
Poner	pondría	Haber	habría

Haber = hay (there is / are)

### Preterite tense = I did

	tomar	comer	decidir
yo	tomé	comí	decidí
tú	tomaste	comiste	decidiste
él/ella	tomó	comió	decidió
nosotros	tomamos	comimos	decidimos
vosotros	tomasteis	comisteis	decidisteis
ellos/ellas	tomaron	comieron	decidieron

### Imperfect tense = I used to do

	AR	ER	IR
Yo	andaba	comía	vivía
Tú	andabas	comías	vivías
Él / Ella	andaba	comía	vivía
Nosotros	andábamos	comíamos	vivíamos
Vosotros	andabais	comíais	vivíais
Ellos / ellas	andaban	comían	vivían

Ser	Fui	Poder	Pude
Estar	Estuve	Poner	Puse
Dar	Di	Saber	Supe
Ir	Fui	Jugar	Jugué
Hacer	Hice	Llegar	Llegué
Tener	Tuve	Haber	Hubo

	SER (to be)	IR (to go)
I	era	iba
You	eras	ibas
He	era	iba
We	éramos	íbamos
You pl	erais	ibais
They	eran	iban

### Perfect tense = I have done

I have (auxiliary verb) + done (past participle)

He	I have
Has	You have (singular)
Ha	He/she/it has
Hemos	We have
Habéis	You (all) have
Han	They have

AR	take off the AR add -ado Hablar > hablado. Empezar > empezado
ER	take off ER or IR add -ido Comer > comido vivir > vivido.

He comido = I have eaten  
Has comprado = You have bought  
Hemos decidido = We have decided  
He hecho\* = I have done (\*irregular of hacer)



## ADJECTIVES

An **ADJECTIVE** is a word that describes a noun.

In Spanish, adjectives have different endings depending on whether the word they are describing is masculine, feminine, singular or plural.

### Making adjectives agree

The table shows the patterns that adjective usually follow to agree with the noun they are describing:

Adjectives ending in:	Masculine singular	Feminine singular	Masculine plural	Feminine plural
<b>o/a</b>	bueno	buena	buenos	Buenas
<b>e</b>	interesante	interesante	interesantes	interesantes
<b>a consonant</b>	útil	útil	útiles	útiles



**Look** at the following website for more information and practise on adjectives  
<https://www.bbc.co.uk/bitesize/guides/zr742sg/revision/1>

### Opinions and reasons with adjectives

When using adjectives to give reasons for your opinions on something they also must agree in gender and number.

E.g. Adoro el español porque es divertido (masc singular noun = masc singular adjective)

Adoro la historia porque es divertida (fem singular noun = fem singular adjective)

Adoro los deportes porque son divertidos (masc plural noun = masc plural adjective)

Adoro las ciencias porque son divertidas (fem plural noun = fem plural adjective)



# French



## La lecture = Reading

J'apprécie beaucoup les ... = *I really appreciate/like ...*

J'ai une passion pour les ... = *I'm passionate about ...*

J'ai horreur des ... = *I hate ...*

romans fantastiques/policiers = *fantasy/detective novels*

romans d'amour = *romance novels*

livres d'épouvante = *horror books*

BD = *comic books/graphic novels*

mangas = *mangas*

J'aime les illustrations/l'humour. = *I like the illustrations/humour.*

Je ne lis pas sur une tablette. = *I don't read on a tablet.*

Je préfère tenir un livre traditionnel dans mes mains. = *I prefer a traditional book*

Je ne lis plus de livres. = *I no longer read books.*

Je lis beaucoup en ligne. = *I read a lot online.*

## Le sport = Sport

Je fais ... = *I ...*

du footing = *go jogging*

du trampoline = *do trampolining*

du vélo/cyclisme = *go cycling*

de la natation = *go swimming*

de l'équitation (f) = *go horse-riding*

de l'escalade (f) = *go climbing*

de l'escrime (f) = *do fencing*

des randonnées (f) = *go hiking*

## Parler de sport = Talking about sport

les sports individuels. = *I prefer individual sports.*

les sports d'équipe. = *I prefer team sports.*

Je trouve ça ... = *I find it/that ...*

Ça me fait du bien. = *It does me good.*

Ça me détend. = *It relaxes me.*

Ça booste le moral. = *It boosts my/your mood.*

C'est bon pour le corps et le mental. = *It's good for the body and the mind.*

## Les films = Films

une comédie a *comedy*

un western a *Western*

un film fantastique, d'action, d'arts martiaux

un film d'aventure, un film d'horreur

un film de gangsters, de science-fiction

## Les passe-temps = Hobbies

Je joue ... = *I play ...*

au billard/au foot/au golf =

*snooker/billiards/football/golf*

à la pétanque = *French bowls*

aux cartes/aux échecs = *cards/chess*

du piano/du saxophone = *the piano/the saxophone*

du violon = *the violin*

de la batterie/de la guitare = *the drums/the guitar*

de l'accordéon (m) = *the accordion*

de l'harmonica (m) = *the harmonica*

## La musique = Music

le jazz/le rap = *jazz/rap*

le reggae/le rock = *reggae/rock*

la musique classique = *classical music*

la musique pop = *pop music*

J'écoute ma musique ... = *I listen to my music ...*

sur mon téléphone portable avec mes écouteurs = *on my phone with my earphones*

sur mon ordi = *on my computer*

sur une tablette = *on a tablet*

Je regarde des clips vidéo pour écouter ma musique. = *I watch music videos to listen to my music.*

Mon chanteur préfère/Ma chanteuse préférée, c'est ... car ... = *My favourite singer is ... because ...*

j'aime ses paroles = *I like his/her lyrics*

j'aime ses mélodies = *I like his/her tunes*

sa musique me donne envie de danser = *his/her music makes me want to dance*

sa musique me donne envie de chanter = *his/her music makes me want to sing*

## Une soirée entre amis = An evening with friends

Je suis allé(e) au cinéma. = *I went to the cinema.*

Je suis sorti(e) avec ... = *I went out with ...*

On est allé(e)s à un concert. = *We went to a concert.*

On a vu un film. = *We saw a film.*

J'ai pris beaucoup de photos. = *I took lots of photos.*

J'ai mis les photos sur Instagram. = *I put the photos on Instagram.*

On est allé(e)s au restaurant. = *We went to a restaurant.*

J'ai bu un coca. = *I drank a cola.*

C'était ... = *It was*



## Acheter des billets = Buying tickets

Qu'est-ce qu'il y a au cinéma? = *What's on at the cinema?*  
La séance commence à quelle heure? = *At what time does the screening start?*  
Je peux vous aider? = *Can I help you?*  
Je voudrais deux billets pour ... = *I would like two tickets for ...*  
Pour quelle séance? = *For which screening?*  
Pour la séance de 19 heures. = *For the screening at 7 p.m.*  
Ça coûte combien? = *How much does it cost?*  
Le tarif réduit, c'est 14 euros la place. = *The reduced price is 14 euros per seat.*

## Les émissions de télé = TV programmes

les documentaires (m) = *documentaries*  
les jeux télévisés (m) = *game shows*  
les magazines culturels (m) = *magazine programmes*  
les séries (f) = *series*  
les émissions de sport (f) = *sports programmes*  
les émissions de musique (f) = *music programmes*  
les émissions de télé-réalité (f) = *reality TV programmes*  
les actualités = *the news*  
parce qu'ils/elles sont ... = *because they are/it is ...*  
(trop) sérieux/-euses = *too serious*  
originaux/-ales = *original*  
Mon émission préférée s'appelle ... = *My favourite programme is called ...*  
C'est un jeu télévisé. = *It's a game show.*  
C'est une série. = *It's a drama series.*  
J'aime bien l'animateur(-trice). = *I like the presenter.*  
Les acteurs sont très doués. = *The actors are very talented.*  
Le scénario est passionnant. = *The plot is exciting.*  
J'apprends beaucoup. = *I learn a lot.*  
Je ne rate jamais cette émission! = *I never miss this programme!*

## Les vêtements = Clothes

Je porte ... = *I wear/am wearing ...*  
un blouson/un chapeau = *a jacket/a hat*  
un costume = *a suit*  
un imperméable = *a raincoat*  
un manteau/un pantalon = *a coat/(a pair of) trousers*  
un polo/un pull = *a polo shirt/a jumper*  
un sac à main/un short = *a handbag/(a pair of) shorts*  
un sweat à capuche = *a hoody*  
une casquette = *a cap*  
une ceinture = *a belt*  
une chemise/une écharpe = *a shirt/a scarf*  
une mini-jupe/une montre = *a mini-skirt/a watch*  
une robe/une veste = *a dress/a jacket*  
des baskets (de marque) = *(designer) trainers*  
des boucles d'oreille = *earrings*  
des bottes = *boots*  
des chaussettes = *socks*  
des chaussures = *shoes*  
des gants = *gloves*  
des lunettes de soleil = *sunglasses*  
en laine/en cuir = *woollen/leather*  
rayé(e)(s) = *striped*

## Au magasin de vêtements

= *In the clothes shop*  
la taille = *size*  
la pointure = *shoe size*  
les cabines d'essayage = *changing rooms*  
une taille moyenne = *medium size*  
Il y a un trou. = *There's a hole (in it).*  
Il y a une tache. = *There's a stain (on it).*  
Il/Elle est/Ils/Elles sont ... = *It is/They are ...*  
trop petit(e)(s) = *too small*  
trop grand(e)(s) = *too big*  
cassé(e)(s) = *broken*  
Il/Elle ne marche pas. = *It is not working/doesn't work.*  
Je voudrais ... = *I would like ...*  
échanger (la jupe/le pantalon etc.) = *to exchange (the skirt/trousers etc.)*  
un remboursement = *a refund*



## Faire les magasins ou faire du shopping en ligne? = *Go to the shops or shop online?*

faire les magasins = *to go to the shops*  
 faire mes achats en ligne = *to make my purchases online*  
 c'est mieux d'essayer les vêtements dans un magasin = *it's better to try clothes on in a shop*  
 je peux demander l'opinion de mes ami(e)s = *I can ask my friends' opinion*  
 il y a trop de monde dans les magasins = *there are too many people in the shops*  
 on peut trouver des vêtements moins chers = *you can find cheaper clothes*  
 c'est plus facile/plus rapide = *it's easier/faster*

## Au restaurant = *At the restaurant*

Voici la carte. = *Here is the menu.*  
 Le plat du jour, c'est ... = *The daily special is ...*  
 Vous avez fait votre choix? = *Have you made your choice?*  
 Pour commencer, je vais prendre ... = *To start, I am going to have ...*  
 Comme plat principal, je voudrais ... = *As a main course, I would like ...*  
 Je vais prendre le menu (à 30 euros). = *I am going to have the (30 euro) set menu.*  
 Et comme boisson? = *And to drink?*  
 Qu'est-ce que vous avez comme desserts? = *What desserts do you have?*  
 Vous avez besoin d'autre chose? = *Do you need anything else?*  
 On a besoin de l'addition. = *We need the bill.*  
 J'ai faim. = *I am hungry.*  
 J'ai soif. = *I am thirsty.*  
 J'ai envie d'un dessert. = *I want a dessert.*

## Les plats = *Dishes*

les entrées = *starters*  
 les brochettes de crevettes = *prawn skewers*  
 les escargots = *snails*  
 la soupe à la tomate = *tomato soup*  
 la tarte à l'oignon = *onion tart*  
 les plats principaux = *main dishes*  
 l'épaule d'agneau = *shoulder of lamb*  
 la cuisse de canard = *duck leg*  
 les lasagnes végétariennes = *vegetarian lasagne*  
 le loup de mer = *sea bass*  
 le poulet basquaise = *Basque-style chicken*  
 le rôti de veau = *roast veal*  
 les desserts = *desserts*  
 la crème brûlée = *crème brûlée*  
 la mousse au chocolat = *chocolate mousse*  
 le roulé au chocolat = *chocolate roll*  
 le sorbet = *sorbet*  
 la tarte au citron = *lemon tart*  
 la tarte aux pommes = *apple tart*  
 l'eau gazeuse = *sparkling water*

## Critiques *Reviews*

J'y suis allé(e) pour le déjeuner/le dîner. = *I went there for lunch/dinner.*  
 Le service était lent/exceptionnel. = *The service was slow/exceptional.*  
 Le serveur/La serveuse était/n'était pas (très) poli(e). = *The waiter/waitress was/wasn't (very) polite.*  
 C'était ... = *It was ...*  
 délicieux/bien cuit. = *delicious/well cooked.*  
 La nourriture était froide/trop salée. = *The food was cold/too salty.*  
 La nourriture n'était pas cuite. = *The food wasn't cooked.*  
 Je recommande/Je ne recommande pas ce restaurant. = *I recommend/I don't recommend this restaurant.*



<u>Connectives</u>		<u>Opinions</u>		<u>Reasons</u>		<u>Time Phrases</u>		phrases followed by <u>Infinitives</u>		
néanmoins	nevertheless	Je sais que	I know that	passionnant	exciting	Hier	yesterday	Any <b>INFINITIVE</b> can follow these phrases*	<b>je vais</b>	I am going to go
en plus	furthermore	À mon avis	from my point of view	ennuyeux/barbant	boring	Il y a deux ans	two years ago		<b>je voudrais</b>	I would like to see
aussi	also			génial	great	La semaine dernière	last week		<b>avant de</b>	Before going out
ensuite/puis	next/then	Je pense que	I think that	amusant/marrant	funny	Le weekend dernier	last weekend		<b>Avant de</b>	Before being able to
parce que / car	because	Je trouve que	I find that	dur	hard/difficult	L'année dernière	last year		<b>Après</b>	After having played
sauf	except	Pour ma part	As for me	chouette	cool	La semaine prochaine	next week		<b>Je dois</b>	I must work
donc/alors	therefore, and so	Je dirais que	I would say that	affreux	awful	Le weekend prochain	next weekend		<b>On peut</b>	You can visit
avec/sans	with / without	Je suis convaincu(e) que	I am convinced that	nul	rubbish	L'année prochaine	next year		<b>Il faut</b>	You need to eat
ne..ni..ni	neither ...nor			rigolo	funny	tous les jours	every day		<b>On devrait</b>	You should recycle
d'un côté	on the one hand	J'aime / Je n'aime pas	I like / I don't like	fatigant	tiring	souvent	often			
de l'autre côté	on the other hand	J'adore	I love	casse-pieds	boring/painful	quelquefois	sometimes			
				utile	useful	de temps en temps	from time to time			
				inutile	useless	une fois par semaine	once a week			



verb type	infinitive	present tense	perfect past tense	near future tense
regular <b>-er</b> verbs	jouer (to play)	je joue (I play)	j'ai joué (I (have) played)	je vais jouer (I am going to play)
regular <b>-ir</b> verbs	finir (to finish)	je finis (I finish)	j'ai fini (I (have) finished)	je vais finir (I am going to finish)
regular <b>-re</b> verbs	vendre (to sell)	je vends (I sell)	j'ai vendu (I (have) sold)	je vais vendre (I am going to sell)
key <b>irregular</b> verbs	être (to be) avoir (to have) faire (to do/make) aller (to go)	je suis (I am) j'ai (I have) je fais (I do/make) je vais (I go)	j'ai été (I have been) j'ai eu (I have had) j'ai fait (I did/made) je suis allé(e) (I went)	je vais être (I am going to be) je vais avoir (I am going to have) je vais faire (I am going to do/make) je vais aller (I am going to go)

Simple Future ce sera (it will be + adjective) il y aura (there will be + noun)		
SUBJECT PRONOUN	FUTURE ENDING	Meaning
je (I)	jouerai	I will play
tu (you - 1 friend)	travailleras	you will work
il/elle/on (he/she/we)	habitera	he/she/we will live
nous (we)	mangerons	we will eat
vous (you-plural/polite)	finirez	you will finish
ils/elles (they)	vendront	they will sell

### IRREGULARS

être (to be) → ser je serai (I will be)  
 avoir (to have) → aur j'aurai (I will have)  
 faire (to do/make) → fer je ferai (I will do/make)  
 aller (to go) → ir j'irai (I will go)

The Conditional ce serait (it would be + adjective) il y aurait (there would be + noun)		
SUBJECT PRONOUN	CONDITIONAL ENDING	Meaning
je (I)	jouerais	I would play
tu (you - 1 friend)	travaillerais	you would work
il/elle/on (he/she/we)	habiterait	he/she/we would live
nous (we)	mangerions	we would eat
vous (you-plural/polite)	finiriez	you would finish
ils/elles (they)	vendraient	they would sell

### IRREGULARS

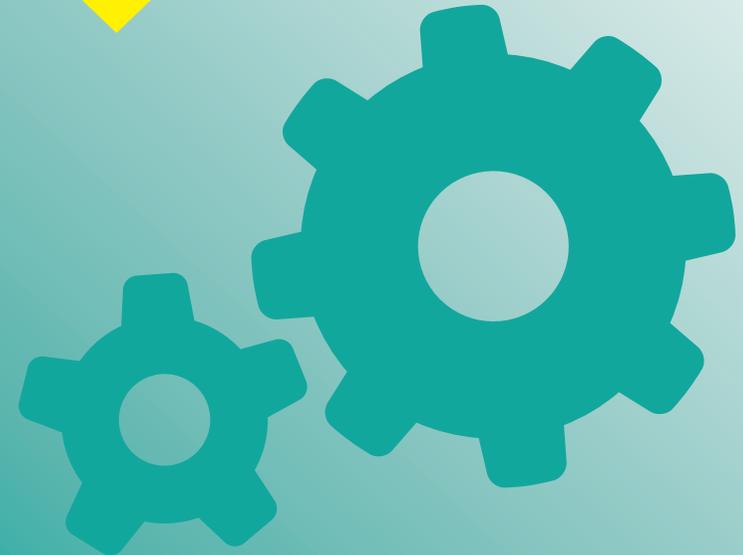
être (to be) → ser je serais (I would be)  
 avoir (to have) → aur j'aurais (I would have)  
 faire (to do/make) → fer je ferais (I would do/make)  
 aller (to go) → ir j'irais (I would go)



# IT



	MB1: 1 to 3 marks	MB2: 4 to 6 marks	MB3: 7 to 10 marks
<p><b>Use of IT Tools and Techniques</b></p> <p><b>1b</b></p> <p><b>To import and manipulate data</b></p> <p><b>(Execution 1)</b></p>	<p><b>Limited</b> use of tools and features results in potential of technology being under-utilised for the intended purpose. May use only one application but where more than one is being used they are used in isolation. <b>[1 2 3]</b></p>	<p><b>Adequate</b> use of tools and features results in potential of technology being utilised for the intended purpose. There are aspects of integration across two or more applications that are used. <b>[4 5 6]</b></p>	<p><b>Effective</b> use of tools and features results in potential of technology being fully utilised and clearly aligned to the intended purpose. Applications used are fully integrated. <b>[7 8 9 10]</b></p>
<p><b>Project Life Cycle Processes and Methods</b></p> <p><b>2b</b></p> <p><b>Importing and manipulating data</b></p> <p><b>(Execution 1)</b></p>	<p><b>MB1: 1 to 4 marks</b></p> <p>The solution allows for data to be imported and manipulated. There will be inefficiencies and inaccuracies that will impact on the quality of the data and the objectives of the solution.</p> <p>The solution is open to security and legal risks. <b>[1 2 3 4]</b></p>	<p><b>MB2: 5 to 8 marks</b></p> <p>The solution allows for data to be imported and manipulated so that most of the requirements of the project can be met. There are some inefficiencies but they will not impact on meeting the requirements.</p> <p>The security and legal risks identified in the planning phase have been carried forward into the solution and evidenced although only one or two tools and techniques are used to preserve data integrity by protecting the data from malicious intent and/or unauthorised access. Some opportunities for safe, secure and responsible practices have been missed. <b>[5 6 7 8]</b></p>	<p><b>MB3: 9 to 13 marks</b></p> <p>The solution allows for data to be imported and manipulated efficiently and effectively so that all requirements of the project can be met. The security and legal risks identified in the planning phase have been carried forward into the solution and evidenced by a range of tools and techniques used to preserve data integrity by protecting the data from malicious intent and/or unauthorised access. This takes into account both how the data will be processed and how the information will be presented. <b>[9 10 11 12 13]</b></p>



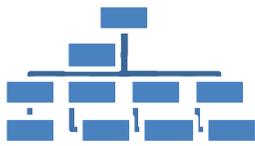
# Business



## Training and Development

- Training- Introducing employees to new concepts/ideas
- Development- Pushing employees further/giving further knowledge on an existing concept
- Training can either be:
  - Formal- In a learning environment/setting by professionals brought in to deliver
  - Informal- training that is on the job and usually delivered by regular employees
  - Self learning- giving employee the responsibility to learn outside of the work setting.
- Targets are then set and these are often reflected on in performance reviews

## Organisational Structure



**Hierarchical Structure**  
An organisation with many layers of management. There is lots of scope for promotion but issues with communication



**Flat Structure**  
An organisation with few layers of management. There is less scope for promotion but efficient communication

**Centralised structure**- where decisions are made at the top level of management and passed down

**Decentralised structure**- where decisions are made by regional/functional managers lower down the business.

**Communication**- where messages are passed between two or more people. This can be problematic if it is insufficient or excessive. Barriers - refer to factors that could prevent effective communication. These include noise, language barriers and technology.

### Ways of working

- Full time- where an employee works 37 or more hours per week
- Part time- where you work less than 36 hours per week
- Flexible- this is where the employees work different hours each week
- Remote Working- working from home through the use of computers/technology.

### Types of contract

- Permanent- when an employee has a job for the foreseeable future, with no end date.
- Temporary- when an employee has a job for a given time period (eg 3 months)
- Freelance- when an employee is hired to complete a job, once the job is completed, they leave.

## Motivation

**Motivation is the will/desire to want to work**, this can lead to:

**Attract employees**- more employees will apply to vacancies due to good reputation

**Retain employees**- employees will not leave

**Higher productivity**- increase in the amount of work each employee completes.

Financial-	Non-financial
<p><b>Remuneration</b>- a basic salary/wage</p> <p><b>Bonus</b>- money paid on top of salary/wage when targets are met.</p> <p><b>Promotion</b>- an increase in pay due to better position in management.</p> <p><b>Commission</b>- a percentage paid on top of wages based on sales made</p> <p><b>Fringe benefits</b>- small extras on top of wages such as company car, discount schemes etc</p>	<p><b>Job rotation</b>- giving employees the opportunity to perform different jobs to avoid repetition and boredom.</p> <p><b>Job enrichment</b>- allowing employees to have more responsibility, taking on more important work.</p> <p><b>Autonomy</b>- giving employees the power to be involved in decision making.</p>

## Recruitment

**Recruitment** is the process of obtaining employees into a vacant job role/position. This can be done either through the use of internal or external recruitment. Internal

Recruitment is the filling of a position with someone who already works within the business, External recruitment is the filling of a position with someone completely new from outside of the business.

**The business will provide the following documents when recruiting:**

**Person specification**- this outlines the type of person that would be ideal for the job role

**Job description**- this details all of the roles and responsibilities of the job role being filled

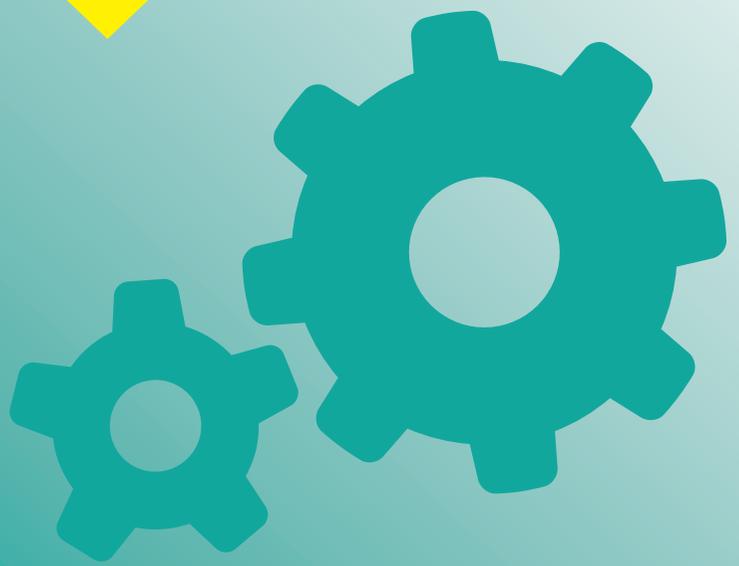
\*\* The applicant will provide a completed application form and their personal CV

Key job roles and their responsibilities:

- Directors
- Senior managers
- Supervisors
- Operational staff
- Support staff



	<b>MB1: 1 to 3 marks</b>	<b>MB2: 4 to 6 marks</b>	<b>MB3: 7 to 10 marks</b>
<p><b>Use of IT Tools and Techniques</b></p> <p><b>1a</b></p> <p><b>To initiate/plan</b></p>	<p>Limited use of tools and features results in potential of technology being under-utilised for the intended purpose. May use only one application but where more than one is being used they are used in isolation. <b>[1 2 3]</b></p>	<p>Adequate use of tools and features results in potential of technology being utilised for the intended purpose. There are aspects of integration across two or more applications that are used. <b>[4 5 6]</b></p>	<p>Effective use of tools and features results in potential of technology being fully utilised and clearly aligned to the intended purpose. Applications used are fully integrated. <b>[7 8 9 10]</b></p>
<p><b>Project Life Cycle Processes and Methods</b></p> <p><b>2a</b></p> <p><b>Analysis of brief and planning approach</b></p> <p><b>(Initiation/ planning)</b></p>	<p><b>MB1: 1 to 4 marks</b></p> <p>Objectives and requirements are stated and there is a list of tasks. Consideration of dependencies can be assumed but there is no evidence of it. Success criteria are described.</p> <p>Constraints, risks, resources and milestones have been identified although some obvious ones have been missed and no links are made between them.</p> <p>Although there are obvious gaps in planning activities, the plan is feasible. <b>[1 2 3 4]</b></p>	<p><b>MB2: 5 to 8 marks</b></p> <p>Objectives and requirements are stated. There are logical dependencies shown for some tasks and sub-tasks although it is not presented as a critical path. There is an explanation behind the choice of success criteria.</p> <p>Links between constraints, risks and resources have been identified although some links are missed or not made clear. Ways to mitigate are stated but the consequences of actions are not evidenced. <b>[5 6 7 8]</b></p>	<p><b>MB3: 9 to 13 marks</b></p> <p>Objectives and requirements are stated. A critical path is defined, with logical dependencies shown between key milestones and sub-tasks. There is a justification of the success criteria chosen.</p> <p>Links between constraints, risks and resources are clearly defined and contingencies identified. Mitigation for the plan is explained. <b>[9 10 11 12 13]</b></p>



# Art



*You need to develop and explore ideas using media, processes and resources, reviewing, modifying and refining work as it progresses.*

This assessment objective allows you to demonstrate to the examiner how creative and versatile you are. You need to start with an idea or theme and develop it, exploring lots of possible solutions using different materials and techniques and processes.

**A02** Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes

**REFINE**

**EXPERIMENT**

**EXPLORE TECHNIQUES AND SKILLS**      **SELECT**

**EXPLAIN**

**PHOTOGRAPHS**

**IDEAS**

## For every project/theme

Try out different materials and techniques.

Explore and experiment

Refine ideas and compositions

### Expectations:

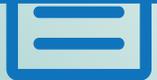
- It is expected that you will complete quite a lot of work for this course through the homework programme, approximately two hours per week
- It is advisable to attend GCSE Art club sessions each week
- You will need to hand in a sketchbook as part of your portfolio component.



- Review**
- Select**
- Organise**
- Explore**
- Experiment**
- Refine**

### Assessment

At the end of each project your work will be formally assessed by you and your teacher. However as your project progresses your teacher will assess your progress both with written and verbal feedback in lessons. This should give you a good indication of how well you have met the success criteria for each assessment objective and whether you are meeting your targets. **Please remember grades are not set in stone and any improvements you make to your work can be reassessed by your teacher.**



# Design Technology





## Knowledge Organiser – Design Technology KS4 GCSE

### 1. CAD – Computer Aided Design

Advantages of CAD	Disadvantages of CAD
Designs can be created, saved and edited easily, saving time	CAD software is complex to learn
Designs or parts of designs can be easily copied or repeated	Software can be very expensive
Designs can be worked on by remote teams simultaneously	Compatibility issues with software
Designs can be rendered to look photo-realistic to gather public opinion in a range of finishes	Security issues - Risk of data being corrupted or hacked
CAD is very accurate	 CAD Software
CAD software can process complex stress testing	

### 2. CAM – Computer Aided Manufacturing

Advantages of CAM	Disadvantages of CAM
Quick – Speed of production can be increased.	Training is required to operate CAM.
Consistency – All parts manufactures are all the same.	High initial outlay for machines.
Accuracy – Accuracy can be greatly improved using CAM.	Production stoppage – If the machines break down, the production would stop.
Less Mistakes – There is no human error unless pre programmed.	Social issues . Areas can decline as human jobs are taken.
Cost Savings – Workforce can be reduced.	



Laser Cutter



Robots



Barcode Scanner



AGV – Automated Guided Vehicle

### 3: Production Techniques

#### 3.1 Flexible Manufacturing Systems (FMS) :

involves an assembly of automated machines commonly used on short-run batch production lines where the products frequently change.

**3.2 Lean Manufacturing:** It aims to manufacture products just before they are required to eliminate areas of waste including:

- Overproduction
- Waiting
- Transportation
- Inappropriate processing
- Excessive inventory
- Unnecessary motion
- Defects

**3.3 Just In Time (JIT) :** Items are created as they are demanded. No surplus stock of raw material, component or finished parts are kept.

Advantages of JIT	Disadvantages of JIT
No warehousing costs	Reliant on a high quality supply chain
Ordered secured before outlay on parts is required	Stock is not available immediately off-the-shelf
Stock does not become obsolete, damaged or deteriorated	Fewer benefits from bulk purchasing

### 4. Scales of Production

- One off:** when you make a unique item
- Batch:** when you make a few/set amount
- Mass:** when you make thousands
- Continuous:** open ended production

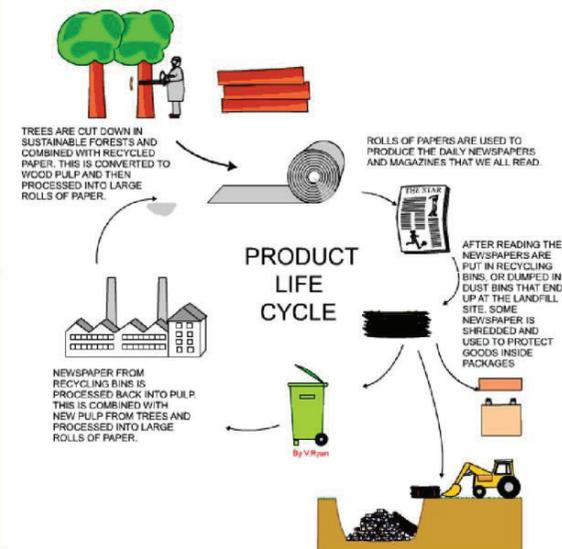
### 5: Informing Design Decisions

**5.1 Planned obsolescence -** Planned obsolescence is when a product is deliberately designed to have a specific life span. This is usually a shortened life span.

**5.2 Design for maintenance -** Products are often designed to be thrown away when they fail... This can be achieved by designing products that can be repaired and maintained.

**5.3 Disposability –** Some products are designed to be disposable.

**5.4 Product Lifecycle -**



### 7: KEY WORD FOCUS

You should be able to explain the meaning of each of these words by the end of this rotation.

CNC	Computer Numerical Control
EPOS	Electronic Point Of Sale (Barcodes)



**Knowledge Organiser – Design Technology  
KS4 GCSE**

**1: Mechanical Devices - Motion**

There are four types of motion:

<b>Linear Motion</b> is movement in one direction along a straight line.		
<b>Oscillating Motion</b> This motion is similar to reciprocating motion, but the constant movement is from side to side along a curved path.		
<b>Rotary Motion</b> Examples of circular motion include a ball tied to a rope and being swung round in a circle		
<b>Reciprocating Motion</b> , this is repetitive up-and-down or back-and-forth linear motion		

**2: Mechanical Devices – Levers**

There are three classes of levers.

**Class One**

A class one lever has its input on one side of the fulcrum and its output on the other.



**Class Two**

A class two lever has its input at one end of the lever, its output in the middle and fulcrum at the other end.

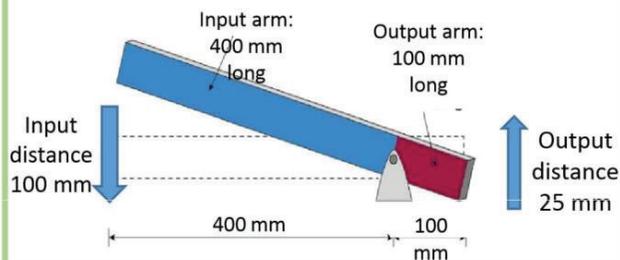


**Class Three**

A class three lever has its output at one end of the lever, its fulcrum at the other with its input in the middle.



**4: How to work out a levers distance of travel**



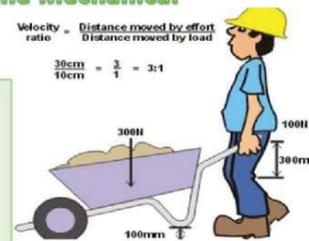
**Output ÷ Input x Input distance = Output distance**  
 $100 \div 400 \times 100 = 25 \text{ mm}$

**5: How to work out the Mechanical Advantage**

Or use the following formula:

$MA = \frac{\text{Load}}{\text{Effort}} = \frac{300N}{100N} = 3$

This is written as 3:1 or just MA of 3



**3: Mechanical Devices – Linkages**

<b>Reverse motion linkage</b>	The reverse motion linkage changes the direction of the input motion so that the output travels in the opposite direction. If the input is pulled the output pushes and vice versa. It uses a central bar held in position with a fixed pivot (fulcrum) that forces the change in direction and two moving pivots which are connected to the input and output bars.	
<b>Parallel motion or push/pull linkage</b>	The push/pull linkage maintains the direction of the input motion so that the output travels in the same direction. If the input is pulled the output is pulled and so on. It uses three linking bars, four moving pivots and two fixed pivots.	
<b>Bell crank linkage</b>	The bell crank linkage changes the direction of the input motion through 90 degrees. It can be used to change horizontal motion into vertical motion or vice versa. It uses a fixed pivot and two moving pivots.	
<b>Crank and slider</b>	The crank and slider linkage changes rotary motion into reciprocating motion or vice versa. It uses a crank which is held with a fixed pivot. A connecting rod uses two moving pivots to push and pull a slider along a set path.	
<b>Treadle linkage</b>	The treadle linkage changes rotary motion into oscillating motion or vice versa. It uses a crank which is held with a fixed pivot. A connecting rod uses two moving pivots and a further fixed pivot to create a windscreen wiper motion.	



Knowledge Organiser – Design Technology KS\$

**1: Forces and Stresses**

Force	Description	A fair test for each force/stress.	How a material / object can be adapted to resist	Examples
<b>Tension</b>	Forces pulling in opposite directions.	Apply the same weight to each material and suspended in the same manner.	Concrete can have steel bars inserted to reinforce.	
<b>Compression</b>	Forces that are trying to crush or shorten.	Insert materials into a vice/clamp and apply the same amount of twists to the handle.	Composite panels can have a honeycomb structure sandwiched in the middle to resist.	
<b>Bending</b>	Flexing force	Apply the same weight to the material.	Steel beams have an I profile to resist bending.	
<b>Torsion</b>	Twisting force.	Use clamps & stands to hold the materials and turn in opposite directions at the same angle.	The diagonals on a tower crane help the structure against torsion.	
<b>Shear</b>	A strain produced when an object is subjected to opposing forces.	Place the material between a tool that works in opposite directions. e.g. Shears	Bolts are hardened and have unthreaded shanks to help stop shearing.	

**2. Improving functionality of materials**

Process	Description	Result	Example	Visual Example
Lamination	Layering of thin materials	Depending on the direction of lamination it can make boards stiffer or actually more flexible	Plywood: Laminations at 90 degrees to each other - Rigid  Flexi-ply: laminations all the same direction - Bendy	
Bending / Folding	Folding a 90 degree edge on sheet metal / plastic	Makes the panel more rigid	Body panels on cars	
Webbing	Modern polymer fabrics woven together	Extremely strong and durable fabric	Seat belts	
Fabric interfacing	A strengthening material added to the unseen face of a fabric	Adds strength / shape	Shirt collars	

**1: The Modification of properties for specific purposes**

Process	Material	Purpose
Seasoning	Timber	Removes the moisture content so that the timber will not shrink, warp and twist
Annealing (heating)	Copper	Softens the copper to make it more malleable
Addition of Stabilisers	PVC	Stops plastic become brittle with exposure to the sun



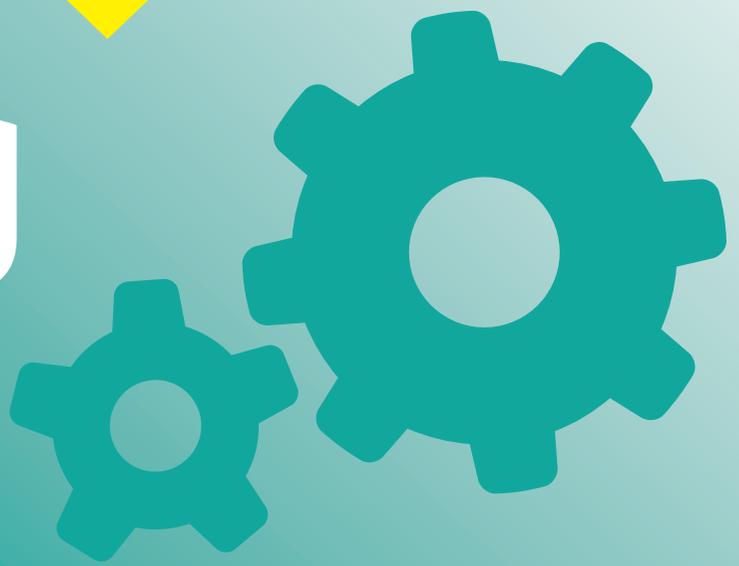
Timber being seasoned in a kiln



Copper bowl being annealed



Metal compounds (stabilisers) are added to PVC for UV protection



# Engineering Design



**Lo1 The Design Cycle**

The design cycle is a recognised way to create an Engineered Product. It enables checking at every stage of the process

**I IDENTIFY**  
Checking what has been asked of you, what the client has asked for and researching around the problem to better understand the situation  
Brief / Research / Process planning

**D DESIGN**  
The design phase involves creating a set of design rules based on the IDENTIFY section then creating designs (drawing or cad, 2d or 3d) and planning how it would be made  
Specification / Design / Manufacturing Plans

**O OPTIMISE**  
The optimise stage is making models to ensure the plans and designs will work in making. Usually this involves prototyping a one off model and testing the making process you have come up with  
Prototype / Error Proofing

**V VALIDATE**  
The validate phase is your evaluation stage, you have to test the product then comment on how effective it was  
Test / Evaluate

**Lo2 Clients & Customers**

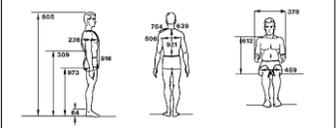
**NEEDS OF THE CLIENT**  
There will be some non-negotiables that the client needs to see involved in the design  
Corporate Branding – e.g. what colours or logos do they use  
Target Audience – who are the company focused on already

**DISCUSSION BETWEEN CLIENT AND DESIGNER**  
The discussion meeting is the engineers chance to explore the brief and work out what the client requires.  
What is possible – in terms of cost or technologies  
What can be done within budget  
Essential features – what the product MUST do/ have  
Desirable Features – what the product COULD do/ have  
Timeframes – how long is available to design and develop

**Investigating the design context**  
There are areas that can be researched to find out more about the product requirements:  
-Focus groups – talking to the likely customer  
-Surveys – getting general information from the public  
- Needs of target market – a product that fills a gap  
- Changing consumer trends – a “must have” item

**Lo2 Specification Requirements**

**aesthetics – how they might require it to look**  
  
Playstation 2  
  
Gamecube  
  
X-Box Old  
  
X-Box New  
  
X-Box 360  
  
Wii Mote  


**ergonomics – suitability for human sizes e.g. hand size, height, weight, finger length**  
**anthropometrics – Physical sizes/ measurements recorded and used to design ergonomic products**  


**-Function – the purpose of a product e.g. a television displays programmes**  
**-Features – the additions that make the product unique e.g. remote, controls, etc.**

**Engineering CAMNAT**

*Y10 Engineering KO R105*

**Lo2 Manufacturing**

**REQUIREMENTS**

**- Materials availability/supply chain –**  
**- Ease of manufacture – Processes that are easy to do and quickly produce accurate repeatable results in a very few stages. e.g. Injection moulding.**  
**- scale of production.:**  
Mass: expensive set up, cheap in high volume  
Batch: Allows regular changes in features, colour etc.  
One off: Costly, allows total automation

**- Tolerances – how accurate it must be:**  
High: can be inaccurate, less wasted products, less accurate machines  
LOW: lot of wasted products, expensive machinery, very accurate

**- maintenance – how easy it is to maintain/repair**

**EASE OF MANUFACTURE**  
Specification points covering how easy it needs to be to make and assemble:  
Standard components – using pre-made components e.g. screws  
pre-manufactured components – using pre-made parts e.g. speakers  
design for manufacturing assembly (DFMA) – less stages, less parts, standard components  
design for disassembly – to repair or if it must be recycled or reused  
manufacturing processes – if a certain process must be used: injection moulding is a popular choice as it is repeatable.



**Lo2 Regulations**

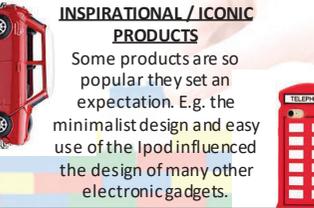
**REGULATIONS**  
**- Copyright – Protecting a piece of creative work e.g. a drawing by LAW**  
**- patents – a protected design IDEA by LAW**  
**- registered designs &**  
**- trademarks – images/logos associated with the company protected BY LAW**

**SAFEGUARDS**  
**- British Standards – Are guides to ensure QUALITY**  
**- European Conformity (EC) – are guides to ensure SAFETY**


**Lo2 Iconic Products**

**INSPIRATIONAL / ICONIC PRODUCTS**  
Some products are so popular they set an expectation. E.g. the minimalist design and easy use of the iPod influenced the design of many other electronic gadgets.



**Lo2 Sustainability**

**SUSTAINABLE DESIGN**  
Environmental considerations about the products effect on the environment. There is also pressure to be ethical and socially responsible  
Renewable energy sources – made products cost resources, energy and pollution  
Materials that are replaceable – materials that are plentiful/materials that regrow or replenish  
Recycled- Using materials from reclaimed sources  
Recyclable – Enabling a product to be recyclable – through material choice or disassembly

**LIFE CYCLE ANALYSIS**  
Product life cycle affects how well a product is designed and how long it is required to work.  
Lifespan – how long a product is intended to be used  
Lifecycle – including what happens to it afterwards  
Planned Obsolescence – A product designed on purpose to become outdated or unusable after time

**New Technologies**  
Market Pull – a need or gap needs filling – the customer wants something new e.g. longer battery life on mobile phones  
Technological Push – new technologies allow new ways of doing something – e.g. facial recognition or AR



**Lo2 Improvements in Materials**

**IMPROVEMENTS IN MATERIALS**  
Engineering often creates new materials that create opportunities for better products. E.g. Recently carbon fibre has offered better products in some areas.

**NEW PRODUCTION PROCESSES**  
Engineering often creates new ways of making that allow a product to be better or made cheaper. E.g. Recently 3D printing has created new opportunities.



# Hospitality & Catering



## LO2 Understand how Hospitality and Catering provisions operate

### AC2.1 Describe the operation of the kitchen

- layout;
- work flow;
- operational activities;
- equipment and materials;
- stock control;
- documentation and administration;
- staff allocations;
- dress code;

### Kitchen workflow

Workflow in the kitchen should follow a logical process by using different areas so that the clean stages in food production never come into contact with the 'dirty' stages

1. Delivery
2. Storage
3. Food preparation
4. Cooking
5. Holding
6. Food service area
7. Wash up
8. Waste disposal



### Workflow



Organising the kitchen into separate areas for separate jobs is the heart of hygienic kitchen design. The layout will depend upon the size of the kitchen as well as on the type of meals it prepares.

### Delivery

Ensure vehicles have access to the premises  
Space for a goods check in area before entering the kitchen



### Storage

Store close to the delivery area so delivery personnel do not enter the food preparation areas  
Bulk suppliers may have minimum orders which need a lot of storage

### Food preparation

- Food preparation area should be between storage and cooking areas
- Separate different processes eg raw meat separate from pre prepared foods.
- Separate high risk food area
- Need sinks, pot wash facilities and hand washing
- If separation by area is not possible, then do a preparation before cleaning down for cooking

### Cooking

- Consider requirements of menu and ability of staff
- Flow must suit style of service eg fryers and grill near to point of service for fast cooking and bulk cooking further away
- Need work surface beside cooking equipment so there is somewhere to put foods down
- Gas and electric supply near to cooking equipment



### Holding

- Needs to be near food service area
- Hot holding needs food to be over 63C
- Cold holding in chillers eg desserts

### Food service

- Should be located close to the cooking process so handling is minimised
- Area for plating up if A la Carte restaurant
- Replenish food during service for buffets and counters

### Washing up

- Space for sinks and dishwashers
- Area for dirty items before washing and for clean items after washing needs to be segregated to prevent cross contamination
- Ventilation to remove steam

### Waste

- Try to keep separate from food preparation area
- Storage that gives pest prevention



### Hygienic kitchen design

**Ventilation**  
Effective ventilation system to remove the heat, steam and condensation from the kitchen. Bacterial growth in moist conditions



### Sinks

For washing food and utensils. Hot and cold water, stainless sinks are the best



### Waste disposal

Waste disposal unit or separate waste bin with a lid that can be foot opened



### Hygienic kitchen design

**Work surfaces**  
Must be strong, hard wearing and easily cleaned. Stainless steel with wheels that can be moved out of the way while cleaning



### Floor

Hard wearing, easy to clean, non absorbent and non slip  
Coving with the walls prevents dirt and food particles from accumulating



### Walls

Smooth, can be tiled or lined with stainless steel as splashback light colour to show dirt easily

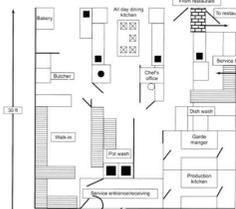
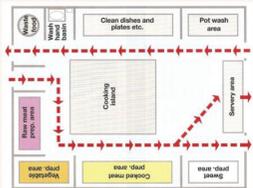


Fig 3.1 Layout of a main kitchen

### layout of a hygienic kitchen



Separation of 'Clean' and 'Dirty' areas

### Stock control

**Perishable** food and products that do not stay fresh for very long

- Fresh fruit, vegetables
- Dairy products
- Meat and fish
- Only buy enough to last a few days because they will not last
- **FIRST IN FIRST OUT** - stock rotation



### Stock control

Staple foods and supplies that are canned, bottled, dried or frozen  
These have a longer shelf life and so do not need to be purchased as frequently. Larger amounts can be bought to get cheaper prices and can be stored.



- Condiments,
- Canned vegetables
- Frozen foods including meat, fish and deserts
- Sauces
- Flour, sugar, fat, oil
- **FIRST IN FIRST OUT** stock rotation

### Documentation and Administration

**Complete kitchen documents:**

- They must be legible (readable)
- At correct interval (daily, hourly)
- Completed accurately
- They must be signed and date.



**Where do you get kitchen documentation from?:**

- Purchased from stationers
- Designed in-house
- Central purchasing



### Documentation and Administration

**Types of Kitchen Documents**

- Temperature charts – fridge, freezer, display, point of sale. Taken at least twice per day.
- Time sheets – logging staff working hours
- Accident report forms – used to report any accidents and near misses
- Food safety information – blast chill records, food related incidents and cleaning rotas
- Equipment fault reports – What was the issue and how was it dealt with.
- Stock usage reports – order books, stock control sheets, requisition books, invoice, delivery notes

### Documentation and Administration

Establishments have a legal responsibility to work safely and hygienically. Records kept to prove this and in case of due diligence proof

1. Temperature charts
2. Time sheets
3. Accident report forms
4. Food safety information
5. Equipment fault reports
6. Stock usage reports.



### Importance of documentation

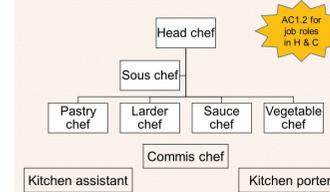
Why must they be completed?

1. Maintaining organisational procedures
2. Safety of staff and customers
3. Legal requirements
4. Complying with food safety legislation
5. Complying with accounting and taxation practices
6. Ensuring accurate payment of bills
7. Ensuring profitability of kitchen

### Remember

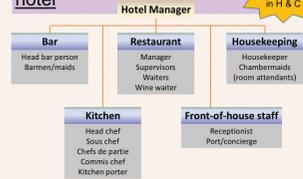
Some information is confidential or sensitive ie staff personal information  
There is a legal requirement under the data protection act to store this type of information securely

### The kitchen brigade



AC1.2 for job roles in H & C

### Traditional staff structure in a hotel



AC1.2 for job roles in H & C

### Kitchen Dress Code

A chef's uniform is more than a fashion statement  
Each component plays a specific role in protection from potential dangers common in most kitchens

### Chef's uniform

- Chef's jacket
- Chef's pants
- Hat
- Neckerchief
- Apron
- Hand towel
- Slip-resistant shoes



Where an item of clothing is for personal protection while doing the job then the employer must provide it free of charge



### AC2.1 small and large equipment

### Knives

1. Store knives safely so you don't cut yourself accidentally
2. Clean knives after each use. gently scrub the knife, then wash it off with hot water. Dry with a clean cloth
3. Use knives for the purpose that they were intended. not a replacement for a screwdriver!
5. cut with a slicing action ie forwards and backwards.



**PANS:** Use the right size pans. If any food sticks to the pan, soak in water



**TEFLON lined pans:** Avoid scrubbers which scratch, steel spoons and slicers as they cause the items to lose their non-stick quality always use a wooden spoon.



**BOWLS / DISHES** Use the right bowl for the dish. Wash and wipe dry after every use.



**WHISKS** special attention should be paid to where the wires meet at the base. Do not bang



**SIEVES / STRAINERS / COLANDERS:** Wash immediately after every use



**WOODEN:** Scrub with a brush & hot water. Dry thoroughly. If items are left wet, cracks can appear. Do not use broken wooden spoons as it can leave shavings in the food.



**PLASTIC:** Jugs, etc should not be kept near direct heat as it can discolour or melt



# Understanding how Hospitality and Catering provisions operate



## LO2 Understand how Hospitality and Catering provisions operate

### AC2.1 small and large equipment

#### Handling small equipment:

- 1) Do not apply too much pressure while handling these equipment as they can break easily.
- 2) Always wash and wipe well after each use personally. Do not put these in the wash up area as it can be misplaced or broken.
- 3) Keep in the correct and safe place of the kitchen for the others to use.

#### Large Equipment

Depending on the type of establishment the equipment may be similar size and type to domestic equipment or larger scale for mass catering. All pieces of equipment are used more than domestic kitchen ware so need to have the following qualities:

- Hard wearing
- Easy to store
- Easy to clean
- Economical to use
- Suitable size for establishment

#### Large Equipment

	Domestic	Catering
Finish	Decorative	Plain
Materials	Plastic	Metal
Size	Small	Large
storage	Stored in cupboards	Kept out to use

#### Mixing



#### Frying



#### Baking



#### Toasting



#### GENERAL SAFETY PRECAUTIONS

- 1) Equipment must be turned off before cleaning.
- 2) Use correct cleaning materials.
- 3) Any specific instructions should be observed.
- 4) After cleaning, washing & drying the equipment & parts thoroughly reassemble and check that it is ready for use.
- 5) Any attachments should be stored correctly.
- 6) Ensure there is no particle of food left in the equipment, or else it can contaminate other foods when the machine is next used.
- 7) In the event of equipment not working satisfactorily, do not ignore it; report the fault

#### OVENS/HOBS

- Avoid spills and water, it can lead to a short circuit. To clean switch off electric supply.
- Do not use more water than necessary.
- Clean thoroughly and remove parts that can be cleaned separately & fit them correctly.
- Dry thoroughly when cleaned.



#### Grilling



#### GRILLS/ SALAMANDERS

Ensure the tray beneath the bars are clean.

- Switch off electrical supply and clean the bars thoroughly, as well as the top.
- Do not clean when hot.



#### MIXERS

Ensure the parts underneath the arm are cleaned

- Switch off electrical supply and clean the blade/whisk thoroughly, as well as the top.
- Do not clean when moving



#### FRYERS

- Check the level of oil is above the heater coils.
- Avoid spilling any water in the oil.
- Do not overheat the oil.
- When cool, drain off the oil into a container
- Lift up coils and take out containers & wash thoroughly.
- Rinse & dry well. add clean oil.



#### Making coffee



#### HOT PLATES

- Avoid spilling water on surface
- switch off parts, which are not being used.
- Cool hot plates before cleaning the sides with a wet cloth and detergent.
- Dry with a cloth



### AC2.2 Describe the operation of front of house

- layout;
- work flow;
- operational activities;
- equipment and materials;
- stock control;
- documentation and administration;
- staff allocations;
- dress code;
- safety and security

See AC1.2 for more details

#### Food service

- Table service
- Counter service
- Personal service



Click on image for 30 min video clip  
<https://www.youtube.com/watch?v=1w4p4y4w10k>

#### Food service

Food can be served in many ways. The type of service depends on the following factors:

- The type of establishment or where it is
- The type of food or menu being served
- The cost of the meal or food
- The time available for the meal
- The type of customer
- The number of customers expected
- The availability of skilled serving staff



#### Restaurant manager

- The restaurant manager is in overall charge of the restaurant,
- Takes bookings, relays information to the head chef, completes staff rotas, ensures the smooth running of the restaurant

#### Maitre d'Hôte



#### Head waiter (ess)

- Second in charge of the restaurant,
- Greets and seats customers, relays information to the staff,
- Deals with complaints and issues referred by

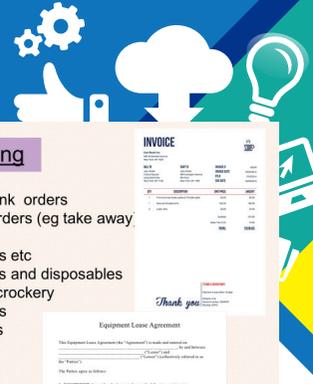
#### Wine waiter

- *Le sommelier*
- Specialises in all areas of wine and matching food, advises customers on their choices of wine,
- Wine waiters serve the wine to the customer and can

### Counter service

Method	Description	Comments
Cafeteria (free flow)	• A single long display counter but can sometimes be multiple counters	<ul style="list-style-type: none"> <li>• Queuing is often required</li> <li>• It can be fast so can produce a high turnover</li> <li>• A simple, basic experience for customers</li> <li>• There can be impulse buying from displays</li> <li>• Low skill of serving staff</li> </ul>
Buffet	<ul style="list-style-type: none"> <li>• Set up in a room usually along one long table. It can be self service or staff can serve customers.</li> <li>• Carvery service is where joints of meat are carved in front of customers and plated</li> </ul>	<ul style="list-style-type: none"> <li>• Creates a more informal function than plated or silver service meals</li> <li>• It can be fast and simple</li> <li>• Poor portion control</li> <li>• Needs efficient clearing away of crockery</li> </ul>
Fast Food	• Takeaway with eat-in areas where customers collect food from one small counter	<ul style="list-style-type: none"> <li>• A quick and simple method of service</li> <li>• Can be a very high turnover of food</li> <li>• Often a limited choice of menu</li> <li>• Use of disposable packaging and utensils because of the type of food and service</li> </ul>

# Understanding how Hospitality and Catering provisions operate



## Purchasing

- Food and drink orders
- Packaging orders (eg take away)
- Equipment
- Tables, chairs etc
- Consumables and disposables
- Cutlery and crockery
- Staff uniforms
- Leased items



## Staff allocation

The restaurant manager coordinates all activities at the restaurant.

The restaurant manager must define the tasks that staff must perform. Consider:

- The size of the restaurant,
- Flow of customers, type of clientele and
- Menu offerings
- Different skills and personnel requirements related to changes of volume and customer preferences.

## Staff allocation

Each employee must have a Clear job description which enables the restaurant manager to ensure that the duties assigned to staff members do not overlap and to control staffing costs.



The restaurant manager allocates the number of personnel to shifts according to the demand forecasts for the day.

## Staff allocation

A restaurant that experiences peak and slow seasons has a different staffing schedule than one with a steady flow of customers throughout the year. The restaurant manager determines whether to hire temporary workers supplement the permanent workers when the season is at its peak.



## Bookings and reservations

- Electronic booking system
- Electronic reservations system
- Diary with bookings and reservations
- Feedback forms

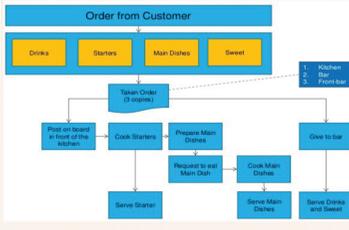


## LO2 Understand how Hospitality and Catering provisions operate

## Table service

Method	Description	Comments
Plate	<ul style="list-style-type: none"> <li>• Pre-plated meals from the kitchen</li> <li>• Can be a basic plated meal or a decorated nouveau cuisine style</li> </ul>	<ul style="list-style-type: none"> <li>• From café's to luxury restaurants</li> <li>• Good portion control methods</li> <li>• Consistent presentation of food</li> <li>• Relies more on skilled kitchen staff than the skill of serving staff</li> <li>• Time consuming for the kitchen</li> </ul>
Family	<ul style="list-style-type: none"> <li>• Dishes are put on the table where spoons are provided and the customers serve themselves.</li> <li>• Suited to ethnic restaurants such as Indian, Chinese and Spanish tapas</li> </ul>	<ul style="list-style-type: none"> <li>• Sociable</li> <li>• Less portion control</li> <li>• Easy and quick to serve</li> <li>• Suits families with young children</li> <li>• Needs big tables to fit all of the dishes on</li> </ul>
Silver	<ul style="list-style-type: none"> <li>• Food is served by the staff using spoon and fork</li> </ul>	<ul style="list-style-type: none"> <li>• A more personal customer experience</li> <li>• Can be slow service</li> <li>• Portion control may fluctuate</li> <li>• Staff costs are high as it needs more serving staff</li> </ul>
Gueridon	<ul style="list-style-type: none"> <li>• Food is served from a side table or a trolley using a spoon and fork</li> <li>• Sometimes dishes are assembled or cooked in front of the customer</li> </ul>	<ul style="list-style-type: none"> <li>• Very specialist, skilled service</li> <li>• Individual attention</li> <li>• Very high staff and menu costs</li> <li>• Time consuming</li> </ul>

### Workflow between Front of House and Kitchen



### Equipment and Materials

#### Use and care of hand equipment:

- Choose cutlery carefully – plain cutlery is easier to clean than patterned cutlery and stainless steel cutlery resists scratches.
- Cutlery should be stored carefully to avoid scratches and marks.
- Glassware should be washed, stored and handled carefully to avoid breakages.
- Cutlery should be dishwasher proof.
- Cutlery should be stacked carefully and covered if possible to prevent dust and germ settling.
- Store linen, same sizes together in a cupboard away from dust

### Equipment and Materials

#### Hand Equipment

This includes the crockery, cutlery, table linen and glassware used to lay tables, as well as serving equipment and the tables, chairs and sideboards found in food service areas.

The type used will depend upon the type of menu and service offered, the cost, and the washing up facilities. Many fast-food restaurants use disposable items and have easy to clean tables. High class restaurants on the other hand, may use fine porcelain crockery, linen tablecloths and napkins, crystal glasses and silver cutlery.



### Equipment and Materials

#### Powered Equipment

A wide range of powered equipment is used in food service areas. This includes hand-held credit or debit payment facilities, coffee machines, toasters, vending machines, flambé trolleys and hot and cold service counters.

EPOS (electronic point of sale) can be used to send orders from the restaurant and bar to the kitchen and reception – this assists staff with the customers bills.



### Equipment and Materials

#### Use and care of powered equipment

- All electrical equipment must be checked for safety every year
- All equipment on view in a food service area should be spotlessly clean and polished daily
- The temperature of hot and cold food service areas should be monitored daily
- Coffee machines should be kept clean at all times and serviced regularly

Task Find out how EPOS works

## Record keeping – administration

### Records kept

- Stock control
- Personnel records
- Health and safety, Food hygiene
- Booking/reservations
- Purchasing
- Financial vat etc

## Stock control

Monitor stock levels for re ordering  
Decide frequency of stock check  
First in First out for items with a shelf life  
Stock level checks could be for:

- Wines
- Spirits
- Coffee
- Order pads
- Garnishes
- Cutlery
- Crockery
- Drinks in bar area
- Nuts, breadsticks
- Other consumables

## Personnel records

- Hours worked
- Personal details
- Wages
- Taxation
- National insurance
- Training
- Accidents
- Staff rotas and timetables

## Health and safety, hygiene

- Fire certificate
- Staff training records
- Accident book
- Food hygiene checks
- Cleaning checks
- First aid records



## Personal service

Method	Description	Comments
Tray or Trolley	<ul style="list-style-type: none"> <li>• An assembled meal provided or a choice of food and drink from a trolley</li> </ul>	<ul style="list-style-type: none"> <li>• Available where needed</li> <li>• Trays are used in airlines, hospitals and hotel rooms (room service)</li> <li>• Trolleys are used in offices, airlines and trains</li> </ul>
Vending	<ul style="list-style-type: none"> <li>• Sold from a machine</li> </ul>	<ul style="list-style-type: none"> <li>• 24 hour service if required</li> <li>• Drinks, snacks and meals can be offered including hot meals</li> </ul>
Home Delivery	<ul style="list-style-type: none"> <li>• Delivered to house individually or on a round</li> </ul>	<ul style="list-style-type: none"> <li>• Usually Ethnic such as Indian and Chinese. Also 'Meals on Wheels'</li> </ul>

## Waiting staff

- Serve customers, clear and lay tables, check the customers are satisfied with the food and service.
- May give advice on choices from the menu and special order foods





### Uniform / dress code

- Some establishments have staff wear the same uniform; this makes them easily identifiable for staff and customers. The uniform may change depending on which area of the establishment they work in.
- Protective clothing as part of a uniform must be paid for by



## LO2 Understand how Hospitality and Catering provisions operate

### AC2.3 explain how Hospitality and Catering provision meets customer requirements

- Customer**
- leisure
  - business/corporate
  - local residents
- Requirements**
- customer needs, expectations
  - customer trends
  - customer rights, equality

### Business customers requirements

- Dedicated corporate (business) contact at establishment
- Discounted rates
- Meeting rooms
- Water, juice on tables
- Presentation equipment, projector, tv,
- Office facilities- printer, phone, fax, internet, stationery
- Tea and coffee for breaks
- Lunch or other meals- buffet or restaurant
- Accommodation if attendees are from a long distance
- Quick service for lunch meetings

### Customer trends

- Customers are influenced by
- TV
  - Magazines
  - Health
  - Travel abroad
  - Technology
  - Ratings and reviews



"Delish!"  
Reviewed 2 weeks ago via mobile  
Nice and cozy restaurant with super friendly staff. They made delicious pizza and great tasting meals. Loved it!

### leisure customers requirements

- Value for money
- Good facilities
- Families want child menus, play area, child friendly
- Tourists want local food, easy to communicate
- Older people may want more formal service
- Good customer service
- Varied choice of menu
- Dietary needs eg allergies, intolerances, vegetarian catered for without having to ask for special foods
- Facilities for physically impaired customers

### Latest trends 2016-17

- Traditional foods served new ways
- Authentic ethnic food eg Korean, Mexican, Indian
- Less sugar in foods
- Use of nuts and seeds and plant milks
- Clear lists of ingredients on menus
- Increased use of spices

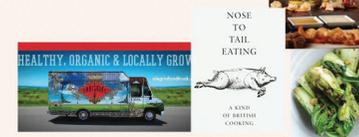


### local customers requirements

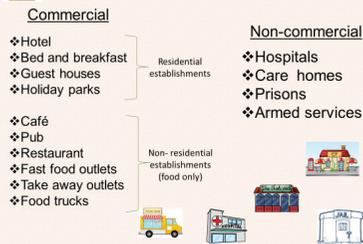
- Value for money
- good standard of customer service so they return
- Catering for local needs (culture, religion)
- Consistent dishes served
- Loyalty schemes
- Recognised by staff- feel welcome
- Menu specials
- Theme nights
- OAP discount day
- Child friendly
- Entertainment
- Mailing list or email for special offers

### Latest trends 2016-17

- New ways of cooking, barbeque, teppenaki
- Nose to tail – using less conventional parts of animal so none is wasted
- Premium local foods
- Food truck style dishes
- More vegetable dishes



### Types of establishments-recap



### Types of customer

Leisure	Local residents	Business / corporate
Customers who visit the establishments in their leisure time e.g. a meal with friends, a family day out, tourists,	Customers who live in the local area who visit the establishment often eg regular Sunday lunch, or get together	e.g. business lunches. Use business facilities in establishment for meetings or presentations. Courses and conferences

### Safety and security



### Health and safety

All businesses should carry out a regular health and safety risk assessment. This involves looking at your business and identifying potential hazards that may affect staff or members of the public. Your risk assessment should tell you whether you are doing enough to mitigate these risks.

See AC3.1 for more details

Must have a comprehensive health and safety policy that demonstrates to your staff how hazards and other issues are to be dealt with, and that you are able to produce this policy for an inspector.

### Health and safety

As there are risks to the public ie customers of the establishment as well as staff, the establishment should have both public liability insurance and employers liability insurance. As well as complete risk assessments for the public areas of the

See AC3.1 for more details



### Describe The Front of House Operation

Task = Design the front of house operation for a new café that is opening in your town. Incorporate the; style of the restaurant and work flow, equipment and materials needed, how you will control stock, documentation used, staff allocation and dress code and safety and security.

= Visit a local café (or watch a you tube clip) describe the operation layout and work flow, equipment and materials needed, how you will control stock, documentation used, staff allocation, dress code and safety and security.

### Why is customer service so important in the hospitality industry?

Customer service is what an establishment does in order to meet the **expectations** of their customers and generate customer satisfaction.

- So customers return.** - People will not return to a place where they were not satisfied with the service. Repeat business means a successful business.
- Exceeding expectations.**-This makes repeat business more likely
- Growth of the business.**- If customers receive a high standard of service and return, they will spend more money and also tell other people about the business

### What is good customer service?



### Customer rights.

- The right to be protected (against hazardous goods)
- The right to be informed (about quality, quantity, allergies etc)
- The right to have their complaints be heard
- The right to seek redressal (compensation.)
- the right to receive satisfactory goods that match their product description



**\*A restaurant hasn't kept my booking, can I claim compensation?** When you book a table, a restaurant has a contractual obligation to provide it. If it fails to, you may be entitled to compensation.

**\*Do I have to pay a service charge if the service is poor?** If you go out for a meal and receive poor service you have rights that protect you from having to pay any service charge.

**\*I got food poisoning while eating out, can I get my money back?** Under the Consumer Rights Act, you can claim compensation or a refund if you get food poisoning from a restaurant.

**\*I had poor quality food at a restaurant, should I have paid?** You have a right to expect food of satisfactory quality and 'as described' on the menu. If it is not, you shouldn't have to pay for it.

### Equality and discrimination



You must be treated equally with regard to

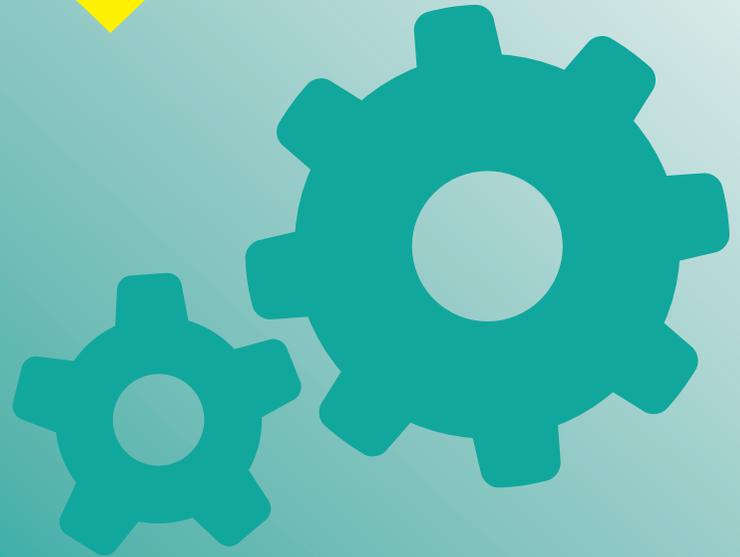
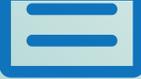


- Age (except where too young)
- Disability and ability to access
- Gender or gender reassignment
- pregnancy and maternity
- Race
- Religion or belief
- Sexual orientation

7. The James family want to stay in a hotel in London. Mr James is a wheelchair user, and he has two children, one aged 6 years and the other 15 months. This is the family's first visit to the city and they want to make the most of the attractions on offer.



- (a) Explain how the accessibility in this hotel will meet the needs of the James family. [8]
- (b) Explain how the free Wi-Fi service in this hotel will meet the needs of the James family. [4]



# Music



You should create four brief musical ideas that try to capture a range of moods or atmospheres suitable for any four of the following:  
TV and Film

- Haunted House
- Detective
- Romance



These ideas can be short (under 30 seconds) but should make use of appropriate textures and timbres and have some melodic and rhythmic interest. Your ideas should be varied and have at least two different musical starting points.

Commercial

- Smartphone game
- Perfume or aftershave
- Running shoes
- Romantic holiday for 2
- Popular soft drink

Take ideas from at least two of the following starting points:

- melodic ideas and fragments 
- rhythmic patterns – layered rhythmic patterns 
- chords and chord progressions – 1, 4, 5 and 6 (I, IV, V, vii)
- Textures – interweaving melodies, melody with chords, bass line and percussion, singing with harmony backing vocal.
- riffs and hooks –repetitive ideas. E.g. mission impossible bass line and “We will rock you” drum rhythm.
- improvisation and experimentation – made up solo over chord progression in jazz music. Call and response patterns.
- non-musical starting points such as themes, texts and images.
- **Record all your ideas as audio. You can use software like Audacity, Bandlab or Sibelius to do this. Store your pieces as MP3's on the Google Drive in school.**

## Example ideas

**Haunted House:** Low pitched strings with long held notes. Minor key. (experimentation) No pulse or tempo. High tinkly bells or piano played quietly (use of riff). Menacing chords come in later. Staggered texture with layers building up to create tension.

**Detective:** Ride cymbal swing rhythm with acoustic bass riff. Mute trumpet or saxophone jazzy melody with added blues scale notes. See “Theme from Pink Panther” Listen to the first 42 seconds.

<https://www.youtube.com/watch?v=lp6z3s1Gig0>



**Romantic:** Perhaps a chord progression using an acoustic guitar. ( I, IV, V and vii) This could be broken chords with a slow tempo. A flute or oboe melody in a major key over the top. Question and answering even phrases in the melody. No percussion.

**Advert-Running shoes:** Continuous bass line perhaps using a synth bass. Fixed jogging tempo or faster. Chords play over the top but bass remains the same like the runners rhythm. Chords on a synth pad sound or strings. Use of drum beat track. Dramatic use of dynamics (louds and softs) in chords to keep the audience listening. E.g. Chariots of Fire Theme

<https://www.youtube.com/watch?v=CSav51fVIKU>



**Learning Aim B: Select two contrasting ideas from your original four to develop further. In both, you should develop and extend them harmonically and melodically, to create and maintain your intended mood.** (Melody=tune Harmony= accompaniment/backing/chords)

You should develop pieces by use of appropriate melodic and harmonic compositional techniques such as:

• <b>repetition</b>	Melodies can be repeated but with some variation and decoration.
• <b>variation</b>	Drum beats can continue but with changes to percussion instruments. Bass lines can be extended with slight changes to the original idea.
• <b>Modulation and changing tonality (major to minor)</b>	Music can change key, commonly into the dominant (5 <sup>th</sup> higher), relative minor key or just up a semitone like a pop song sometimes does.
• <b>melodic transformations</b>	Melodies can be written out backwards, inverted in pitch if this fits the genre.
• <b>instrumentation</b>	Use of different instruments from music already composed in learning aim A.
• <b>textures.</b>	Parts could be doubled by new instruments. Played an octave higher as well. Change in accompaniment style from chords to broken chords. Counter melodies can be added as harmonies to a voice.

One of the extended musical ideas should be developed into a **fully completed composition**. You should consider techniques commonly used to shape musical ideas into full compositions.

Binary	Sections A with a contrasting B section.
Ternary	ABA but often there is variation in the returning A section.
Rondo	ABACAD etc where A keeps repeating followed by new sections.
Introductions/ Codas (endings)	These sections can be added on later as part of development of the structure.
Song structures	E.g. 12-bar blues or verse chorus structures.

**Effective use of repetition and contrast- do the changes create enough interest and momentum?**



Any music product you create planning needs to be evidenced from the start.

### Management skills to help develop your product and how to evidence it

Management skill	Evidence
<b>Focus/preparedness to work:</b> the more work you put into a product the more you will get out of it	Diary/log
<b>Time management:</b> each task needs a deadline	Diary/log, minutes
<b>Sharing responsibility/supporting colleagues:</b> share out tasks so each person in your group has the ability to work effectively and to their strength.	Minutes E-mails
<b>Motivation:</b> keep busy, keep going!	Diary/log
<b>Listening to feedback/respecting the opinions of others:</b> keep talking to your target audience and peers. Ask them for feedback at each stage of your product.	Questionnaires Screen shots
<b>Adaptable/trying out new things:</b> if something is going according to plan make some changes	Diary/log
<b>Communication:</b> speak to people who can help deliver your product, make sure communication is effective, polite and mature.	E-mails, minutes
<b>Research:</b> important to gauge the success of similar products	Written documents
<b>Monitoring progress:</b> regularly review progress, adjust plans where necessary to ensure deadlines are met	Diary/log, minutes

### Target Audience

It is extremely important you identify your target audience and involve them in the planning of your product.

1. Research what your target audience would like to listen to. Ask them and/or research using the internet
2. Get your target audience involved by:
  - Asking opinions of song choices
  - Asking for feedback on draft versions of your product

### Other Evidence

Rehearsal schedules  
Audio/visual evidence



### PROMOTIONAL MATERIAL

- Press release
- Poster
- Website
- Audio advert
- Video advert
- Merchandise
- Album/single cover (recording)
- Letter/email to friends and family

**INDUSTRY PRACTICE** The Music Industry is constantly changing and to be aware current promotional strategies research is essential.

### STEPS TO SUCCESSFUL MARKETING

- 1) Look at successful products, similar to yours, and research how the product was promoted.
- 2) Choose one method of promotion for your own musical product
- 3) Find many examples of your chosen method of promotion and find commonalities in communicating essential information and industry practice.
- 4) Research which way is best to communicate information to your target audience.
- 5) Using all this information create your promotional material
- 6) Evaluate, on a regular basis, if your promotional material is successful.

### INDUSTRY PRACTICE

From promotional material the target audience must be able to access your music product. However, audiences may also appreciate accessing information via a website/social networking.

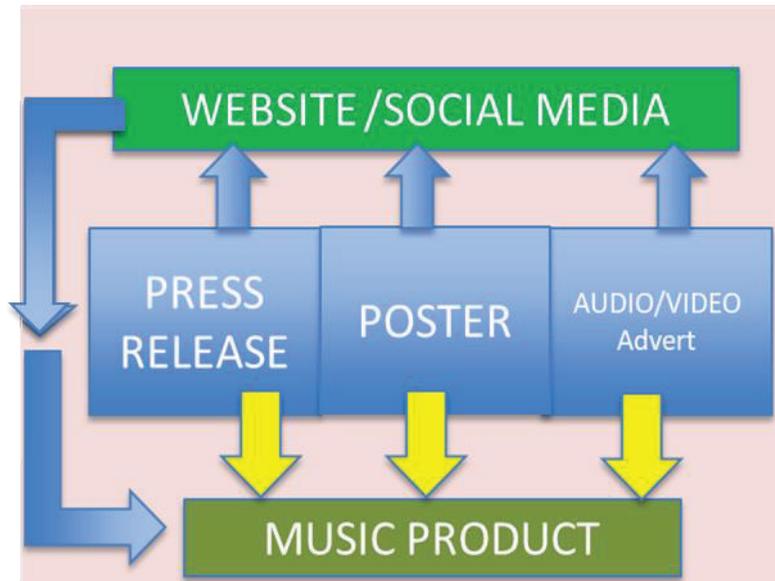
### HELPFUL WEBSITES

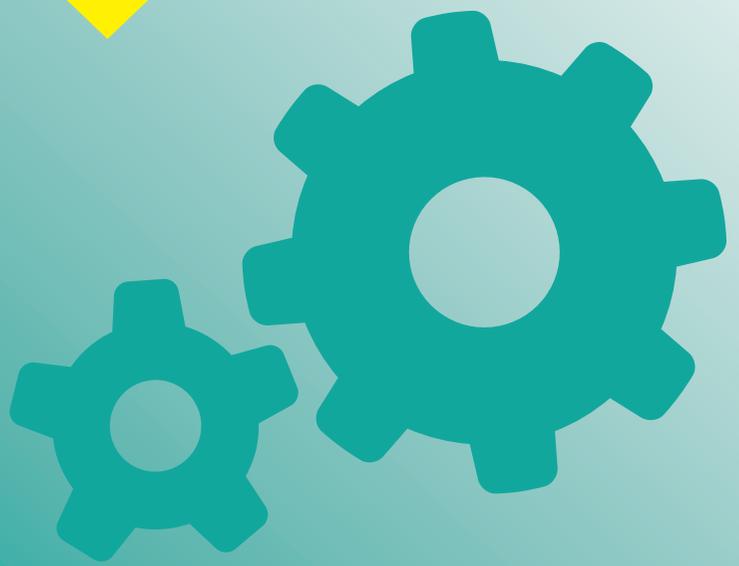
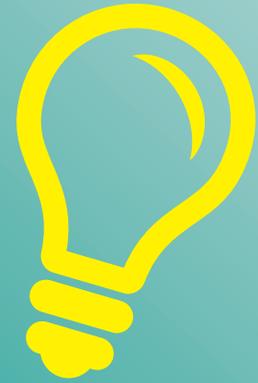
**Designing CD Covers**

<http://www.musicbizacademy.com/knab/articles/cdcover.htm>

**Promoting a concert**

<https://www.attendstar.com/how-to-promote-a-concert/>





# Sport



## Agility

**DEFINITION:** THE ABILITY TO CHANGE DIRECTION AT SPEED, WITHOUT LOSING BALANCE OR TIME

**EXAMPLE:** A FOOTBALLER TRYING TO BEAT AN OPPONENT WILL CHANGE DIRECTION QUICKLY TO AVOID THE OPPOSITION

## Coordination

**DEFINITION:** THE ABILITY TO USE PARTS OF THE BODY TOGETHER TO MOVE SMOOTHLY AND ACCURATELY.

**EXAMPLE:** HAND EYE – TENNIS PLAYERS

FOOT-EYE – FOOTBALL PLAYERS

HAND TO HAND – BASKETBALL PLAYERS



## Reaction Time

**DEFINITION:** "THE TIME TAKEN FOR A SPORTS PERFORMER TO RESPOND TO A STIMULUS AND THE INITIATION OF THEIR RESPONSE"

**EXAMPLE:** A GOALKEEPER REACTING TO A SHOT. A SPRINTER REACTING TO THE STAR GUN



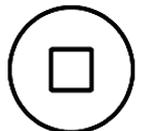
## Balance

**DEFINITION:** THE ABILITY TO MAINTAIN CENTRE OF MASS OVER A BASE OF SUPPORT

**EXAMPLE:** THERE ARE 2 TYPES; STATIC BALANCE AND DYNAMIC BALANCE.

**STATIC** – MAINTAINING BALANCE IN A STATIONARY POSITION, E.G A GYMNAST HOLDING THE HEADSTAND

**DYNAMIC** - MAINTAINING BALANCE IN MOTION, E.G A GYMNAST PERFORMING A CONTROLLED CARTWHEEL.



FINISH



## FREQUENCY

The number of training sessions completed over a period of time, usually per week. It should be increased gradually over time."



## INTENSITY

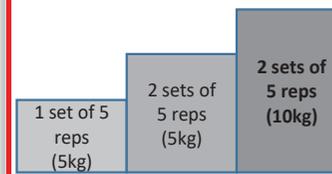
"This is about how hard you train. It should be increased gradually over time."



F...  
I...  
T...  
T...

## TIME

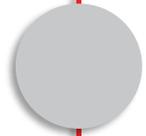
This is about how long you train for. It should gradually increase over time."



## TYPE

This is related to the principle of specificity. If a training method is selected to improve a specific component of fitness there is more likely to be a positive improvement in performance."





## Specificity

Training should be specific to or should match the individual's sport or activity.

## Progressive Overload

Training must be demanding enough to cause the body to adapt. In order to make fitness gains training must get harder over time.

## Adaptation

The way your body increases its ability to cope with training loads

## Reversibility

Fitness can be lost if training is stopped, for example due to injury or if the intensity of training is not sufficient to cause adaptation.

## Rest and Recovery

Rest is the period of time provided for Recovery to take place. Recovery allows damage to be repaired and energy to be replenished.

## Individual Needs

Training needs to be different depending on and individuals needs, such as age, fitness levels, availability of time, injury, health etc.

## Variation

It's important to vary training routines to avoid boredom and maintain enjoyment



## Basic Principles of Training

**Frequency** - the number of training sessions you complete over a period of time. Aim for 3-5 sessions per week.

**Intensity** - how hard you train. Intensity can be prescribed using HR or RPE.

**Time** - how long you train for. Aim for 15 to 60 minutes of activity, depending on the intensity. If you have low levels of fitness, then reduce intensity and increase time.

**Type** - how you train. The appropriate method(s) of training should be selected according to your needs and goals. For example, to train for muscular strength, endurance and power, you could do circuit training, or use free weights in the gym.

### Applying the Principles of Training - Example

An athlete who is looking to develop their aerobic endurance will apply the principles of training to their training programme.

**F** - initially they will start with 3 sessions a week and this will gradually increase to at least 5 sessions over the course of the training programme

**I** - the athlete will initially begin training at 60% of their MHR and this will gradually increase to 85% of MHR over the course of the training programme

**T** - the athlete may initially begin at 15 minutes per session and this will gradually increase to 60 minutes of continuous exercise over the course of the training programme

**T** - as they are looking to develop their aerobic endurance they will use continuous, fartlek and interval training.

**Specificity** - training should be specific to your preferred sport or activity, or developing physical/skill related fitness goals

**Individual differences/needs** - the programme should be designed to meet your training goals, needs, ability, level of fitness, skill level and exercise likes/dislikes.

**Reversibility** - if you stop training, or the intensity of training is not sufficient to cause adaptation, training effects are reversed. Reversibility is also known as de-training.

**Rest and recovery** - these are essential to allow the body to repair and adapt, and for renewal of body tissues. If your body doesn't get a chance to recover then the rate of progression can be reduced.

**Adaptation** - this occurs during the recovery period after the training session is complete. Adaptation is how your body increases its ability to cope with training loads.

**Progressive overload** - in order to progress, training needs to be demanding enough to cause your body to adapt, improving performance.

**Variation** - it is important to maintain interest; this helps an individual to keep to their training schedule. Vary your training programme to avoid boredom and maintain enjoyment.

### Applying the Principles of Training - Example

An athlete who is looking to develop their aerobic endurance will apply the principles of training to their training programme.

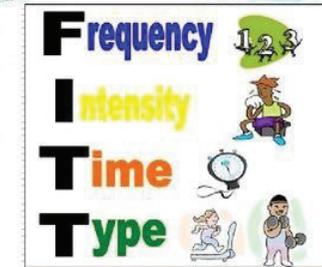
**Specificity** - continuous (long distance runners, beginners), interval training (long distance runners, games players), fartlek training (cross country, games players)

**Individual differences/needs** - the athlete finds continuous training boring as it does not relate to their sport. This would mean that their training programme would focus on other methods as it is more suited to the athlete

**Variation** - throughout the course of the week/training programme the athlete should use a range of methods to prevent boredom

**Progressive overload** - see FITT

(acronyms)

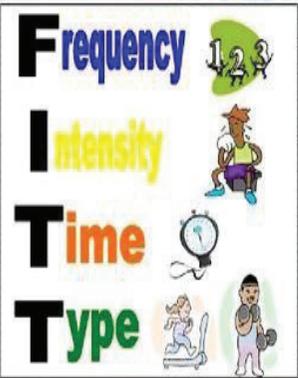


SIR RAP V

# FITT Principles

The FITT principle makes up the basic principles of training.



<p><b>Frequency</b></p> <p>Frequency is the number of training sessions you complete over a period of time. You should aim to complete 3-5 sessions per week.</p>	<p><b>Intensity</b></p> <p>Intensity is how hard you train. Intensity can be prescribed using heart rate (HR) or rated perceived exertion (RPE)</p>	<p><b>Time</b></p> <p>Time is how long you train for. Aim for 15-60 minutes depending on the intensity. If you have low levels of fitness, reduce intensity and increase time</p>	<p><b>Type</b></p> <p>Type refers to how you train. The appropriate method of training should be selected e.g. for speed you could use acceleration or hollow sprints or interval training.</p>
<p><b>Scenario</b></p> <p>Kelly has designed a training session which she is going to deliver to her classmates. The aim of her circuit is to improve muscular endurance. She has 8 stations in the circuit and participants will work for 30 seconds at each station.</p> <p><i>Frequency</i> - this would gradually increase from 3 sessions per week to 5 sessions per week.</p> <p><i>Intensity</i> - Kelly could increase the intensity of the circuit by increasing the work period or increasing the number of stations/circuits</p> <p><i>Time</i> - Kelly could increase the length of the session by increasing the time spent at each station. She could also reduce the rest period.</p>	<p><b>Scenario</b></p> <p>Rudi has joined his local gym with the aim of improving his strength. Rudi has chosen to use free weights as his method of training.</p> <p><i>Frequency</i> - Rudi would gradually increase the number of times he goes to the gym from 3-5 times per week</p> <p><i>Intensity</i> - as Rudi is aiming to improve his strength he should be working at a high intensity and with low repetitions. He would begin at around 75% of 1RM and gradually build to 90% 1RM. Initially he may increase the reps and keep the weight the same. When the weight increases he may reduce the reps.</p> <p><i>Time</i> - Initially he may increase the reps and keep the weight the same. When the weight increases he may reduce the reps. Over time the number of sets will increase</p>	<p><b>Scenario</b></p> <p>Sam is training to run in his first half marathon later on in the year. He has chosen to use interval training as one of his training methods to improve his aerobic endurance. He initially begins training 3 times a week, running for 2 minutes (60% HRmax) and walking/jogging for 1 minute. He repeats this until he has completed 30 minutes.</p> <p><i>Frequency</i> - Sam would gradually increase the number of training sessions from 3 to 5</p> <p><i>Intensity</i> - Sam would gradually increase his working intensity from 60% HRmax to 85% HRmax. He could also increase the intensity by reducing the rest period</p> <p><i>Time</i> - Sam would gradually increase the time of the work periods, decrease the time of the rest periods and increase the number of intervals per session</p>	 



<p><b>Specificity</b> Specificity means that training should be specific to your preferred sport, activity or developing physical/skill-related fitness goals</p> <p>For example, a distance runner who is training for a cross country event is more likely to undertake fartlek training than continuous training.</p>	<p><b>Individual differences/needs</b> Individual differences/needs means that the programme should be designed to meet your training goals, needs, ability, level of fitness, skill level and exercise likes/dislikes.</p> <p>For example, a person with a low level of fitness will start with lower intensity and gradually build up.</p>	<p><b>Reversibility</b> Reversibility means that if you stop training, or the intensity of training is not sufficient to cause adaptation, training effects are reversed. Reversibility is also known as de-training.</p> <p>For example, if someone was to get injured and miss a prolonged period of time their fitness levels would decrease.</p>	<p><b>Rest and recovery</b> Rest and recovery are essential to allow the body to repair and adapt, and for the renewal of body tissues. If your body doesn't get a chance to recover then the rate of progression can be reduced.</p> <p>For example, if you train 7 days a week there is a chance injury could be caused from over-training.</p>
<p><b>Adaptation</b> Adaptation occurs during the recovery period after the training session is complete. Adaptation is how your body increases its ability to cope with training loads.</p> <p>For example, if you are taking part in strength training the adaptation over a period of time will be hypertrophy of the muscles.</p>	<p><b>Progressive overload</b> In order to progress, training needs to be demanding enough to cause your body to adapt, improving performance. Increase your training workload gradually. This can be done by increasing frequency, intensity or time, or by reducing recovery times. Do not use all of these methods at once, as the increase in workload may lead to over training resulting in injury or illness</p>	<p><b>Variation</b> It is important to maintain interest; this helps an individual keep to their training schedule. Vary your training programme to avoid boredom and maintain enjoyment.</p> <p>For example, if you are training 3 times a week to improve aerobic endurance, you could use the 3 different methods of training (fartlek, continuous, interval)</p>	<p><b>Memory acronym</b></p>  <p><b>SIR RAP V</b></p>

**Exam tip:** If you are asked a question about the additional principles of training, you should explain what the principle of training is, why it should be applied to a training programme and the effect this will have on the performer.



## Continuous Training

Training without a rest period, where the work rate is between 60-80% of the maximum heart rate.



## Fartlek Training

Training where the intensity changes and also the speed changes, e.g. walk, jog, run, sprint.

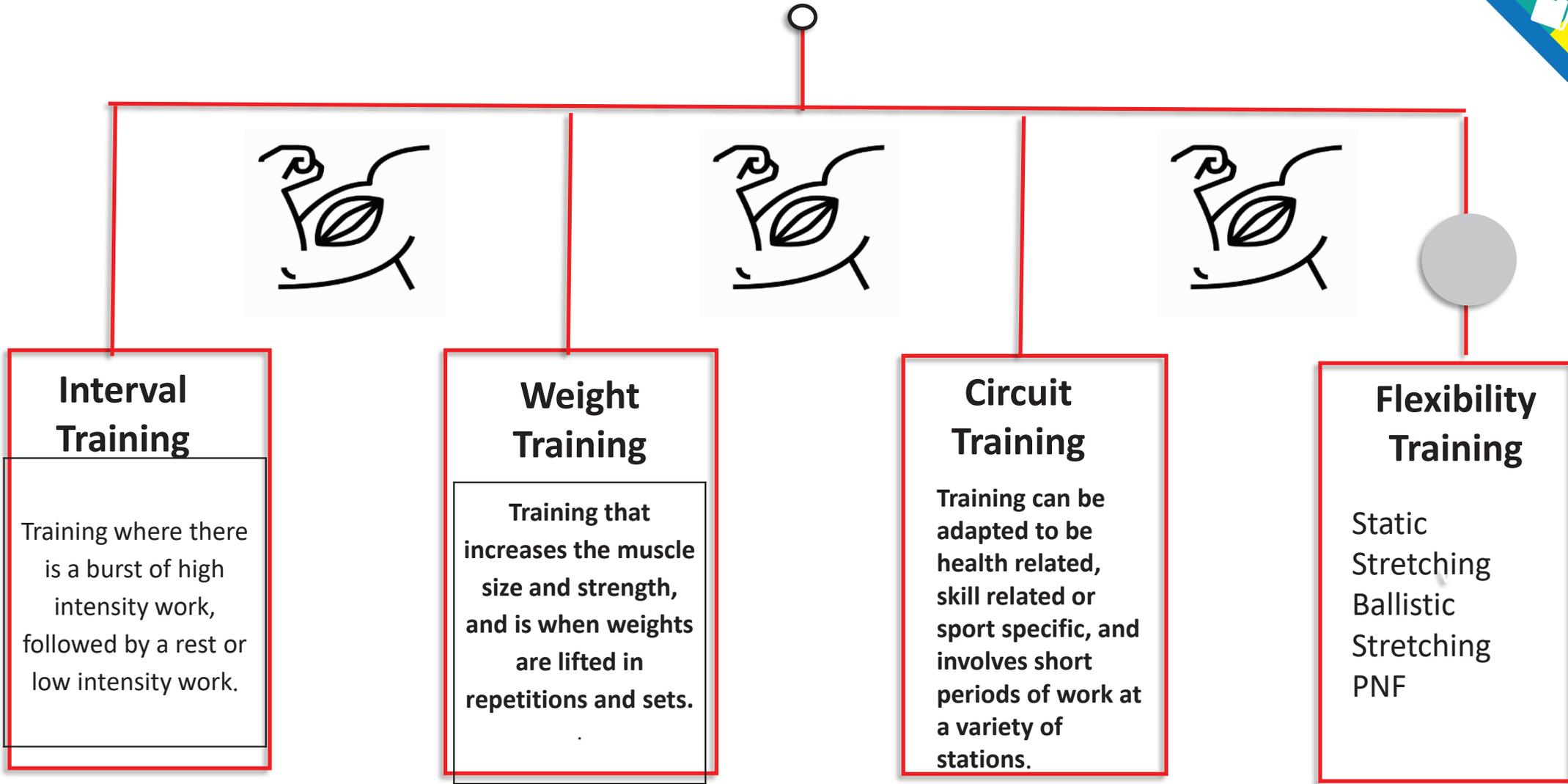


## Speed Training

Acceleration Sprints  
Hollow Sprints  
Interval training

## Plyometric Training

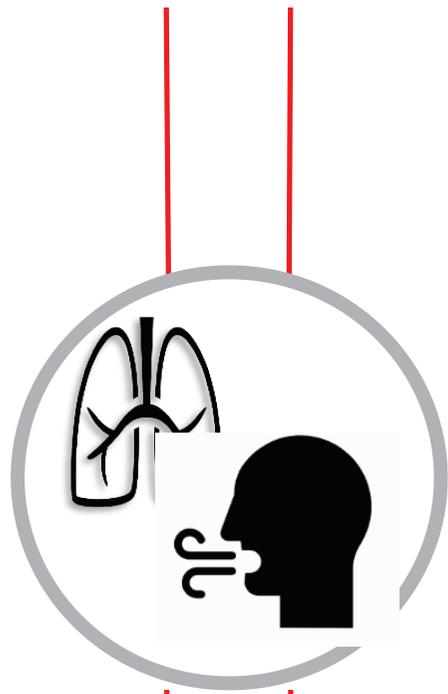
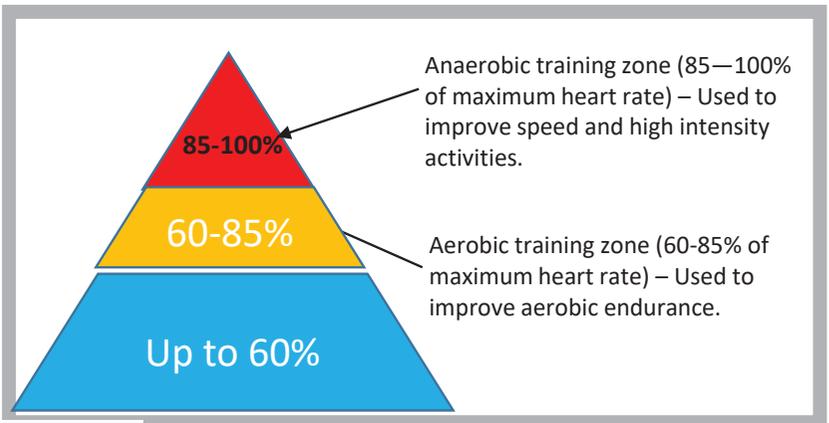
Is used to develop power and strength, involves explosive movements.





### Exercise Intensity

- Heart rate can be measured at the wrist or at the side of the neck.
- Heart rate is measured in 'beats per minute'
- During training, athletes use a target heart rate to improve their fitness.

### BORG (RPE) SCALE

RPE = Rating of Perceived Exertion

6	No exertion
7	
8	
9	
10	
11	Light
12	
13	Somewhat hard
14	
15	Hard (heavy)
16	
17	Very hard
18	
19	
20	Maximal exertion

- Used to measure how hard an athlete thinks they are working
- Scale 6-20 (6 = no effort, 20 = maximum effort)
- Can be used to estimate heart rate to monitor whether they are in the correct training zone.
- Anywhere between 12 and 14 on the scale is moderate level of intensity and will improve aerobic endurance

To predict heart rate use the formula:  
 $RPE \times 10 = \text{Heart rate}$   
 e.g. billy has been playing football, he rates his exercise intensity as 13 on the Borg scale.  $13 \times 10 = 130 \text{ bpm}$

Maximum heart rate.  
 You need to be able to calculate your maximum heart rate as this will help you to work out your training zones.  
 To work out your maximum heart rate, use the following formula.

**Maximum heart rate = 220 - age**  
Training Zones  
 To improve AEROBIC ENDURANCE = 60 to 85% of max HR  
 To improve high intensity activities (ANAEROBIC) = 85 to 100% of max HR.





## Heart Rate

Heart rate is measured in beats per minute (bpm). You can find your pulse in two locations:

- Radial artery (thumb side of your wrist)
- Carotid (either side of your neck)

When you find your pulse, you should count for 60 seconds.

## Heart Rate Training Zones

To be able to calculate your heart rate training zones, you first need to calculate your maximum heart rate.

$$\text{HRmax} = 220 - \text{age (years)}$$

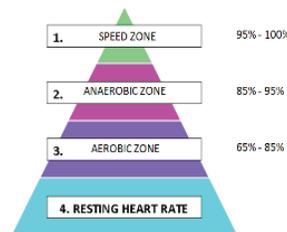
Example =  $220 - 15 = 205$  bpm

The lower heart rate training zone is 60% of your HRmax.

$$\begin{aligned} 205/10 &= 20.5 \text{ (10\%)} \\ 20.5 \times 6 &= 123 \text{ bpm} \\ 60\% \text{ HRmax} &= 123 \text{ bpm} \end{aligned}$$

The upper heart rate training zone is 85% of your HRmax

$$\begin{aligned} 205/10 &= 20.5 \text{ (10\%)} \\ 20.5/2 &= 10.25 \text{ (5\%)} \\ 20.5 \times 8 &= 164 \text{ (80\%)} \\ 164 + 10.25 &= 174.25 \text{ or } 174 \text{ bpm} \\ 85\% \text{ HRmax} &= 174 \text{ bpm} \end{aligned}$$



## Rating of Perceived Exertion (RPE) - Borg Scale

This is another way of determining exercise intensity. The scale starts at 6 and goes up to 20. 6 means no exertion at all and 20 is maximal exertion. It requires practice to learn how to use the scale correctly.

6	No exertion
7	
8	
9	
10	
11	Light
12	
13	Somewhat hard
14	
15	Hard (heavy)
16	
17	Very hard
18	
19	
20	Maximal exertion

## Relationship between RPE and HR

You can use the RPE scale to predict the exercise HR of an individual using the following relationship:

$$\text{RPE} \times 10 = \text{HR (bpm)}$$

For example, if someone says they are working at 12 on the scale then  $12 \times 10 = 120$  bpm.

## Memory Technique (memory story)

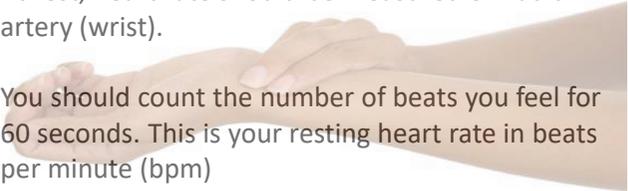
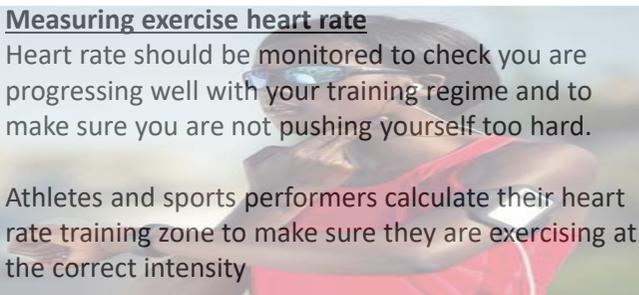
### Maximum HR

My mum is **40 years old**. For her 40th birthday she wanted a nice ring. The ring cost **£220** but this was out of my budget. I asked the shop keeper if he could take **£40** off since it was her 40th birthday. Kindly he agreed and said that was the **maximum** he could take off. So the ring now cost **£180 (220 - my mums age)**.

### Exercise Intensity

I was trying to buy some bluetooth headphones. They were currently on sale at **60%** of the max price. However, the following week it was going to be Black Friday when the sale was going to increase to **85%**. That was a deal too good to miss!!



<p><b>Measuring heart rate</b> Heart rate is measured in beats per minute (bpm). A person's resting heart rate is a good indication of their fitness levels</p> 	<p><b>Measuring resting heart rate</b> At rest, heart rate should be measured on radial artery (wrist).  You should count the number of beats you feel for 60 seconds. This is your resting heart rate in beats per minute (bpm)</p> 	<p><b>Measuring exercise heart rate</b> Heart rate should be monitored to check you are progressing well with your training regime and to make sure you are not pushing yourself too hard.  Athletes and sports performers calculate their heart rate training zone to make sure they are exercising at the correct intensity</p> 
<p><b>Maximum heart rate</b> To work out your heart rate training zone, you first need to know your maximum heart rate (HRmax).</p> <p><b>HRmax = 220-age (years)</b></p> <p><i>Example:</i> Anna is 30 years old HRmax = 220-30 = 190 bpm</p>	<p><b>Heart rate training zones</b> Lower heart rate training zone = <b>60% of HRmax</b> (0.6 x HRmax)  Upper heart rate training zone = <b>85% of HRmax</b> (0.85 x HRmax)  When training for aerobic fitness you should be between these two numbers</p>	<p><b>Example</b> Adnan is 20 years old  Adnan's HRmax: 220-20 = 200bpm  Adnan's lower heart rate training zone (60% of HRmax): 0.6 x 200 = 120 bpm  Adnan's upper heart rate training (85% of HRmax): 0.85 x 200 = 170 bpm</p>

**Exam tip:** If it asks you about training zones in the exam, it will ask you to show your working out. It is vital that you show your step by step working out. For example, if it asks you to calculate someone's lower heart rate training zone you should show the following steps:

1. 220-age = HRmax
2. 0.6 x HRmax = \_\_\_\_ bpm
3. Lower heart rate training zone (60% HRmax) = \_\_\_\_ bpm



<p><b>Using the RPE scale to measure exercise intensity</b> One way to determine exercise intensity is to use the Rating of Perceived Exertion (RPE) scale.</p> <p>The scale can be used to rate an individual's level of physical exertion during physical activity or exercise</p>	<p><b>Relationship between RPE and HR</b> You can use the RPE scale to predict the exercise HR of an individual.</p> <p><math>RPE \times 10 = HR \text{ (bpm)}</math></p> <p><b>Example</b> RPE = 14 <math>14 \times 10 = 140 \text{ bpm}</math></p>	<p><b>Exam Question</b> Frida wants to work at 70% of HRmax. Using the table, work out which type of exercise would give her this HR training zone.</p> <p>Frida's HR max = <math>220 - 33 = 187 \text{ bpm}</math></p> <p><math>0.7 \times 187 = 130.9 \text{ bpm}</math></p> <p>Frida should work on the exercise bike to work in this training zone</p> 
<p><b>How to use the scale</b> The scale starts at 6 and goes up to 20. 6 means 'no exertion at all' (rest) and 20 is 'maximal exertion'.</p> <p>When giving a rating the individual needs to consider all sensations of physical stress, effort and fatigue that they are feeling.</p>	<p><b>Example</b> Frida is 33 years old and is exercising in the gym. She records her RPE during the following activities:</p>	

**Exam question: Describe the relationship between heart rate and the RPE scale**

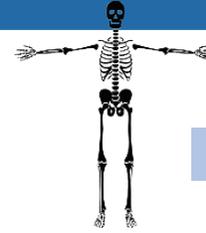
The RPE scale is a way of predicting a person's HR. A person's heart rate can be predicted by using the following calculation:  $RPE \times 10 = HR \text{ (bpm)}$

**Tip:** When answering a question like this, try and break down your description to show a clear understanding.

# Fitness Testing - What you need to Know



## TYPES OF BONES



## SKELETON



**SHAPE OF BONES** CAN DETERMINE TYPE OF MOVEMENT:  
**FLAT BONE / IRREGULAR BONE:** PROTECTS ORGANS  
**LONG BONE:** GROSS MOVEMENTS LIKE **RUNNING**  
**SHORT BONE:** FINE MOVEMENTS LIKE WRIST BREAK BOWL

**AXIAL SKELETON:** FORMS THE LONG AXIS OF THE BODY AND INCLUDES THE BONES OF THE SKULL, SPINE AND RIB CAGE  
**APPENDICULAR SKELETON:** THE BONES OF THE UPPER AND LOWER LIMBS AND THEIR GIRDLES THAT JOIN TO THE AXIAL SKELETON  
**MAIN BONES**

## CONNECTIVE TISSUE



## TYPES OF JOINT



**CARTILAGE:** SHOCK ABSORBER AT ENDS OF BONE  
**LIGAMENT:** STRONG FIBROUS MATERIAL ATTACHES BONE TO BONE  
**TENDON:** STRONG NON-ELASTIC MATERIAL ATTACHES MUSCLE TO BONE

**MOVEMENTS YOU WILL NEED TO KNOW:** FLEXION, EXTENSION, ADDUCTION, ABDUCTION, ROTATION, CIRCUMDUCTION, DORSI FLEXION, PLANTAR FLEXTION.

**HINGE:** THE KNEE AND ELBOW  
**BALL AND SOCKET:** THE SHOULDER AND HIP  
**GLIDING:** BETWEEN THE VERTEBRAE OF THE SPINE  
**PIVOT:** RADIO ULNA  
**CONDYLOID:** WRIST

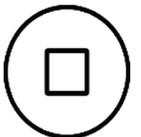
**COMPONENTS OF A SYNOVIAL JOINT YOU WILL NEED TO KNOW:** SYNOVIAL MEMBRANE, SYNOVIAL FLUID, JOINT CAPSULE, BURSAE, CARTILAGE, LIGAMENTS

**SAGITTAL:** DIVIDES THE BODY INTO LEFT AND RIGHT  
**FRONTAL:** DIVIDES THE BODY INTO ANTERIOR AND POSTERIOR  
**TRANSVERSE:** DIVIDES THE BODY INTO SUPERIOR AND INFERIOR PARTS

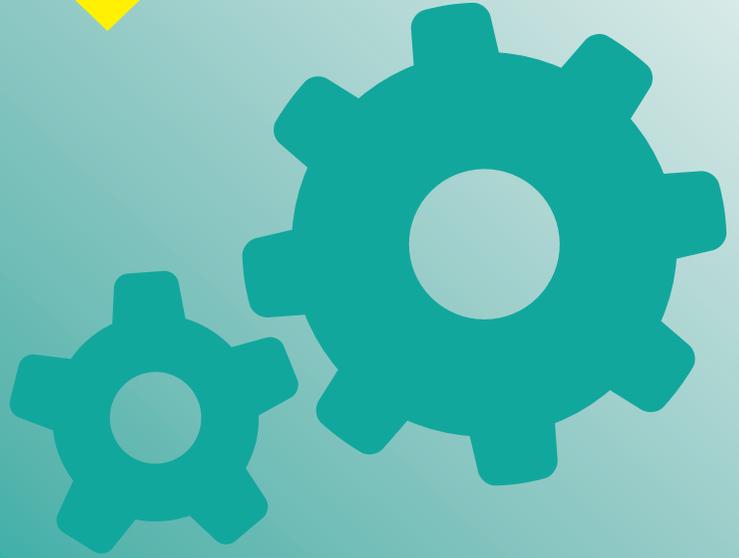
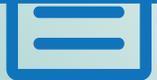
## STRUCTURE OF A SYNOVIAL JOINT



## PLANES OF MOVEMENT



FINISH



# Dance



## Factfile

**Choreographer;** Christopher Bruce  
**Company;** Various, including Rambert Dance Company  
**First performance;** 3 July 1981  
**Dance Style;** A blend of contemporary (Graham-influenced)  
**Choreographic style;** Thematic and episodic with narrative elements. Strong Characterisation.  
**Theme;** Political oppression in Chile  
**Starting point;** The music and South American Rituals  
**Structure;** Seven sections. Each characterised by a different piece of music or song  
**Dancers;** Five women and six men  
**Accompaniment;** South American songs and folk tunes by Inti-illamani (arranged by Nicholas Mojsiejenko) and wind effects.  
**Costume;** Belinda Scarlett  
 Ghosts wear wigs and rags and have skull-like masks and bodies painted to suggest bones and muscles. The Dead wear gender-specific, everyday clothes suggesting different walks of life, each wears a unique costume.  
**Lighting-** Nick Chelton  
 Gloomy and shadowy, side lighting highlights the ghosts. Brighter for folk-type dances performed by the dead. Light changes signify deaths.  
**Set –** Christopher Bruce  
 The painted backdrop represents a rocky plain and a cave opening. In the distance there is water and mountains. There are rock-like structures on stage.  
**Staging –** Proscenium

## Meet the choreographer

Christopher Bruce was born on the 3<sup>rd</sup> October 1945 in Leicestershire. He is a famous British performer and choreographer. He was Artistic Director of the [Rambert Dance Company](#) until 2002.

Bruce was appointed a CBE for a lifetime's service to dance because he was one of Britain's leading choreographers

Bruce often creates an impressive work by mixing the modern dance and classical ballet in his performance



In 1989, he became a resident choreographer for Houston Ballet.

He often used popular music as the background of his performance. He chose Rolling Stones and Bob Dylan

There are various productions that Bruce made. Those included 'Rooster' (1991), 'Swansong' (1987), 'Ghost Dances' (1981), 'Cruel Garden' (1977), Sergeant Early's Dream, and Moonshine.



*'I want people to be moved and feel something for these people. They may not be able to do much, but public opinion in the end means something, and that is a way that I, as an artist, can do my bit for humanity'* **Christopher Bruce**  
<https://www.rambert.org.uk/explore/news-and-blog/news/story-i-wanted-tell-christopher-bruce-ghost-dances/>

## What's it about?

GHOST DANCES IS A WORK THAT – AS MUCH AS ANY ARTISTIC CREATION CAN – ACHIEVES THE REMARKABLE AND TENDER-HEARTED FEAT OF GIVING A VOICE TO THE DEAD.

MADE BY [CHRISTOPHER BRUCE](#) FOR RAMBERT IN 1981, IT WAS INSPIRED BY BRUCE'S MEETING WITH DANCER JOAN JARA, WHOSE TEACHER HUSBAND VICTOR WAS ONE OF THE 35,000 CHILEANS MURDERED BY [PINOCHET](#) AFTER HIS 1973 COUP.

THE BRITISH CHOREOGRAPHER WANTED IT TO SPEAK FOR THE BLOODILY PURGED OF ALL COUNTRIES, WHILE ALSO WEAVING IN PLENTY OF SPECIFICALLY LATIN AMERICAN IMAGERY, IN PARTICULAR, THE RITUALS AND COSTUMES ASSOCIATED WITH THE [DAY OF THE DEAD](#).

## Purpose of Ghost Dances

Do you think the purpose is	Yes/No	Explain your view
To educate	Yes	It shows the audience how different cultures celebrate dance.
To Inform	Yes	It informs people that many people are dying every day and for people to make the most of their lives. Also the oppression which occurred in Chillan towns.
To entertain	Yes	The dance pieces have been created to entertain their audience. It may not always be joyful to watch but they are still being entertained by the dancers.
To challenge viewpoints	Yes	We get to see life from the villagers view point and death from the ghosts viewpoint
To raise awareness	Yes	To raise awareness that death is always waiting for us. And to show that political oppression was a huge part of life in Chile.
To Celebrate	Yes	To celebrate life and making the most of it. And to celebrate death.



## Bruce choreographic approach

<b>Dramatic themes linked to the human condition (political or social)</b>	<b>A range of styles; contemporary, ballet, folk, popular dance.</b>	<b>Movement must be appropriate to the piece and dancers</b>
<b>Human rights themes have provided him with a good source of inspiration</b>	<b>Christopher Bruce's signature movement style is grounded in modern dance techniques with a combination of classical and contemporary dance language</b>	<b>A number of his early works were performed without accompaniment or had music added after they were choreographed</b>
His personal range of stimuli is extensive including a wide range of literature and music.	Most of his productions have an underlying emotional content.	Most performances are deliberately open to a range of interpretations rather than having a fixed storyline

## Bruce Inspiration

South American Folk Music

Instruments included; Marimba, pan flute, percussion, Recp-reco, bombo leguero and siku

Meeting with Joan Jara

Joan was a widow. Her husband was a musician and a composer called Victor. He was tortured and killed by Pinochet's forces. This meeting led him to choreograph Ghost Dances.

Human Rights

Christopher Bruce based many of his dances around human rights. He based Ghost Dances on the oppression in Chile.

Day of the Dead and Ritual Masks

**Day of the dead** is an American holiday. It brings together family and friends to pray for and remember loved ones that have passed away. This holiday was an inspiration for Christopher Bruce. The skulls the dancers wear are based on the sugar skulls in the day of the dead.



## Bruce Style

Stemming from his own training, Christopher Bruce's signature movement style is grounded in modern dance techniques with a combination of classical and contemporary dance language termed "neo-classical".

Bruce does not prepare movement before entering the studio, preferring to wait and work with the dancers so that he can be influenced by them. For Bruce, as well as being appropriate to the piece, the movement must also sit well on the dancers.

Bruce's choreography reflects a range of styles: ballet, contemporary, folk and popular dance. He deals with themes linked to the human condition, political or social issues and tends to portray them through dramatic, emotive and theatrical elements.

Ghost Dances was created for Ballet Rambert (as Rambert Dance Company was then known) and first performed on 3rd July 1981 at the Bristol Theatre Royal (Old Vic). It remained in the Company's repertoire for four consecutive seasons and was revived by Rambert on 24th June 1999 at the Theatre Royal, Norwich. It was nominated for the 1982 Society of West End Theatre Awards as the Outstanding Achievement of the Year in Ballet. It has also been performed by Nederlands Dans Theater, Australian Dance Theatre, Cullberg Ballet, Zurich Ballet, Ballet Gulbenkian, Houston Ballet and Ballet du Grand Théâtre de Genève.

Ghost Dances is a one-act dance work in which three skeletal Ghost Dancers await a group of Dead who will re-enact moments from their lives before passing on.

I made this ballet for the innocent people of South America, who from the time of the Spanish Conquests have been continuously devastated by political oppression. I would like to give my thanks to Joan Jara for all her help and to Inti-Ilumani for the inspiration of their performances. CHRISTOPHER BRUCE

<https://www.rambert.org.uk/wp-content/uploads/2015/08/Ghost-Dances-Study-Notes-1.pdf>



## Lighting

- Backdrop is lit from the front
- Lighting changes with mood of music- lighter music more light on the stage
- Lighting creates structure as end of each section main lighting dims and death is highlighted
- Focus of light on death and the skeletons- this spotlight comes from different angles and compliments idea
- Placement of lights also helps understanding of dance. At end diagonal light shines on the dancers as they move towards it, very strong image. The skeletons then turn to face upstage left and the light shines on them.
- Lighting creates shadows with the dancers
- You cannot always see what is on the backdrop which makes it seem more sinister
- Lighting highlights moments – sometimes lights go down gradually. At other times they go down sharply.

## Set Design

- At times the dancers appear very small against the vast scenery – could this mean they are like forgotten people
  - It is set at night
- Stage space is clear and uncluttered
- Backdrop compliments the dancers
- Dark colours of grey set the mood and atmosphere
- Christopher Bruce designed his own set
- Mood and atmosphere created
- Structures on stage e.g. rocks, which dancers use and help create different levels
- One backdrop for the whole dance
  - Realistic design
- Set in a location – South Africa
- Looks a barren place, poor people

## Meet the Characters



### The Ghost Dancers

The Ghost Dancers (sometimes referred to as White Ghosts) are three skeleton-like men with skull masks and long, matted hair. They are present on stage throughout the production from the moment the curtain rises to the point at which it falls, apparently awaiting their next consignment of the Dead.

Christopher Bruce described them as having 'hung around for millions of years, and lying on rocks, like... animals. They'd become birds and lizards as well as men. These are symbolic creatures who may be said to be spirits, oppressors, murderers, forces of dictatorship, or death itself.

### The Dead

The Dead are five women and three men who throughout the work experience contrasting forms of death. The Dead enter as a group upstage left soon after the music begins, all remain on stage during the work, and exit together downstage right at the end.

The precise relationship between characters is open to individual interpretation by the viewer but as they arrive and depart together, and are all present on stage from the point of their entry to that of their departure, there is a clear sense that they form a community.

The clothes worn by the Dead suggest a variety of social backgrounds. Bruce described this group as 'on their way to Heaven or Hell', wandering 'from life to death. It is like their last remembrances, their last statements, before they go very proudly at the end, to death'

## Styles

The styles of dance in *Ghost Dances* are very tribal and playful, mixed with country and jazz. The music is South American folk played on pan pipes and ukuleles. It transports the audience into a new world where the dead are roaming with the living. The performance is fun to watch and although the characters are dead, the dance is full of life.



## Costume Design

### Female Costume

One of the female dancers is wearing a white dress. The colour white symbolises purity. Her hair is half up with a ribbon in it. This suggests she is young in age. The use of a mid length dress creates the ability to flow with her movements and flirt with the other boys. Her movements and costume suggest she is young and looking for love.



### Male Costume

Some of the men wear a suit. They contribute to the dance because it gives us an insight into their lifestyle, it shows us that they are professional, it also tells us they may be wealthy as they are walking around in suits rather than normal clothes.

There is one man on stage who is clearly wearing sack like clothing. This suggests he is less wealthy and possibly younger than the men wearing profession type suits. This tells us that the people were from a range of backgrounds

<https://www.rambert.org.uk/wp-content/uploads/2015/08/Ghost-Dances-Study-Notes-1.pdf>

### The Ghosts

The ghosts are figures of death. Near naked bodies are painted with water based make up. The use of body paint extenuates the dancer's muscles and bones structure to make them appear more like skeletons. Apart from their masks the dancers costumes consist of black bands of loose rags and feathers round their waists, upper arms, wrists and just below their knees.

Skull like masks covers the full face. The use of masks helps them appear more ghostly and giving the dancers a more skull shaped head. Attached to the masks are textured bits of fabric. This suggests the last remains of flesh. The straggly flowing hair is made from shredded hemp dyed black.



## Set Design

A single set is used for the production. This, and the constant presence of the three Ghost Dancers, gives a unity to the work. The sombre set was designed for a proscenium arch stage and consists of a skilfully painted backcloth suggesting an arid landscape with clear sky, which appears to be the view from the mouth of a cave. The dark mouth of the cave (suggesting an entry to the Underworld) looks over a barren rocky plain to mountain peaks on the horizon. Viewers have perceived the location in different terms. For the critic, John Percival, 'the distinguished decor was a stony landscape like the valley of the shadow of death, where even the rocks look like skulls or coffins'. Other viewers, perhaps basing their impressions on simply watching the video which emphasises the green wash of light over the scene, have described it as suggesting a lake in the middle distance which could be interpreted as the Styx (the river of the ancient Greek Underworld). On the stage are seven (originally just three) rock like structures at the back and sides of the stage. These provide changes of levels for the Ghost Dancers and places for the Ghost Dancers and Dead observing the action to sit or recline. Because the setting was based on a photograph it has a surprising realism for an essentially symbolic production. This realism, broken down to suit the production, is also found in the costumes for the Dead.

## Lighting

Once the Dead have entered, the lighting is the one changing feature of the production. The design is by Nick Chelton, with whom Bruce had first collaborated on his productions in 1980 for Kent Opera and who had already lit Bruce's Preludes and Song for Rambert. He also subsequently lit Bruce's Berlin Requiem for Rambert in 1982. The lighting serves to enhance the action, drawing the audience's attention to specific details of the narratives. Except for the sudden changes at moments of dramatic deaths, the viewer is not necessarily aware of the alterations, or how their viewing of the work is being manipulated by light as the changes are slow, occurring over 10 to 20 seconds, rather than suddenly. The overall impression is of a shadowy place. As each number is performed the stage becomes brighter while the linking sections, in which the Ghost Dancers are most active, are gloomier with a green wash over the backcloth, adding to the eeriness of the work.

### Rambert Ghost Dances Study Notes p16

The Ghost Dancers' opening and closing sections are largely side-lit which enhances the sculptural effect of their bodies. A green light suggestive of melodrama emphasises the deaths at the end of the first group dance, the Huajra, while cold blue overhead light focuses on the deaths at the ends of the duets. The only death not emphasised by lighting effects is the undramatic, almost gentle, removal of the young peasant boy at the end of the Papel de Plata quintet.



## Whole production - Overview

### 1. Ghosts

#### Action

Ghost dancers perform slow animalistic movements. In canon and unison. Bird and lizard like actions. Moments of stillness suddenly to show ghosts are listening.

Outspread arms like wings.

#### Relationships

The ghosts perform together to show their strength and power

#### Space

The ghost dancers are always close together in the space

#### How death arrives

The Ghosts never leave the stage



### 2. Group

#### Action

Folk style actions. They follow each other. Slow walks. Step patterns. Angular shapes using bold plies and squats. Actions in unison. Small steps which progress to weightier, larger, stronger steps.

#### Relationships

The men dance with the women. 3 men and 3 women dancers. They are all together in groups.

#### Space

They split off into separate groups. The use of circular pathways. They run through each other. Backline frequently move to front of stage.

#### How death arrives

Quickly. They arrive as one group. The ghosts merge with the people (death), they all of a sudden run through villagers. Ghosts intrude throwing the men to the ground violently.



### 3. Duet

#### Action

Reaching forward 'hopefully' motif. A danced conversation. Lots of embracing. Lifts that get higher to show support.

#### Relationships

The duet encapsulates the experience of Joan and Victor. The male is showing his support.

#### Space

The space is quite close together. They move forward in the space as if they are trying to get away. They run towards each other in the space. Diagonal pathways are also used.

#### How death arrives

The male is lifted high in the air. He performs cycling movements with his legs. It is watched by the female.



### 4. Quintet

#### Action

The actions are playful and youthful e.g. small, neat folk steps. The actions are flirtatious.

#### Relationships

They enjoy being together and look happy. The man first watches them and then joins in.

#### Space

Close contact with each other. The dancers move across the stage. There are lots of changes of direction. Female bodies are turned sideways to the audience.

#### How death arrives

The male comes face to face with a ghost. He is led away.





## Whole production - Overview

### 5. Duet (llama)

#### Action

Very playful actions that get faster and then slow down. An innocent duet with lots of holding hands and walking towards each other. Lifts and embraces to show their love. Llama like walk and gazes towards each other.

#### Relationships

They are playful towards each other. They walk towards each like they are coming into view – like a memory. There is a pleasure of a couple in love.

#### Space

They stay close by but use the stage to move around. They walk towards each other in the space.

#### How death arrives

There is a sudden fall backwards by the female dancer, from a piggy back position. She falls into the arms of a ghost dancer. The man then picks up her body and carries her away.



### 6. Group

#### Action

Basic phrase is repeated. It gets faster each time. Unison and canon are used.

#### Relationships

The dancers create a positive and hopeful mood. More people add into the dance.

#### Space

Lots of space used. Dancers are in two lines. Chain dance effect at times.

#### How death arrives

Ghosts lurk upstage watchful but do not take part.



### 7. Ghosts

#### Action

Slow movements and the basic phrase performed. Ghosts repeat trio motif. Shuffling walk by the dead.

#### Relationships

Unity and unison of the ghosts. The dead have faces without expression- eyes fixed ahead.

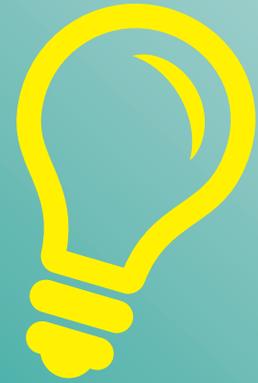
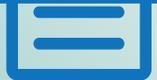
#### Space

Ghosts are behind the rocks. The dead people are grouped close together. They walk downstage at the end.

#### How death arrives

Ghosts walk through the dead slowly and they drop without any physical contact. Standing victims crumble. The dead re group and shuffle off stage. Ghosts take up their starting positions waiting for their next prey.





# Child Development



## Links between areas of development

### Communication and language development

#### POSITIVE IMPACT

##### Intellectual development

Knowing the words for things can help children to understand new concepts and remember more. They can begin to identify more and make sense of how things work.

#### POSITIVE IMPACT

##### Social development

Language to play and make friends.  
Interact more, be co-operative and kind  
Communicate, their feelings and ideas.  
Form friendships and relationships.

#### NEGATIVE IMPACT

##### Emotional development

Children with a language delay (have a slower development in their language) are more likely to be frustrated as they cannot express themselves appropriately. They cannot express how they feel and might find it hard to play with others. This can lead to them showing aggressive and frustrated behaviours.

### Physical development

#### POSITIVE IMPACT

##### Intellectual development

- Range of movements = see and explore new things.
- Learn more as can get around, hold and explore objects.

#### POSITIVE IMPACT

##### Social development

A child will be able to join in and play with others if they are able to move around and join in the activities, such as in the playground or even playing with play-doh.

#### NEGATIVE IMPACT

##### Social development

Delayed physical development. A child may find that they physically cannot keep up with other children, they may not be able to join in with their play such as climbing on the climbing frame, playing games or different activities that use gross and fine motor skills. Because they cannot join in, they may not have the social skills to develop friendships with other children (isolated).

#### POSITIVE IMPACT

##### Emotional development

- More independent
- Explore new areas, try new skills = confidence and a higher self-esteem.
- Prevent frustration.

##### Key Question

Can you think of any other examples of how physical development or communication & language development may affect other areas of development?

Can you turn the positive impacts into negatives?

##### Mini Case study

Laura is 3 years old, she has excellent communication skills, she can easily communicate her ideas in full sentences, interact with others and asks questions if she does not understand. What impact will Laura's **high level of communication skills** have on her.....? What areas of development does this link to?



## Links between areas of development

### Intellectual development

#### NEGATIVE IMPACT

##### Communication and language development

- Children learn from reading and listening to other people.
- If Oliver cannot understand what the book is about or what other children are talking about this may lead to frustration, poor learning and his own communication skills may not develop further.
- It is through language that children express their thoughts and develop problem solving skills.

#### NEGATIVE IMPACT

##### Social development

- With limited cognitive skills Oliver may not be able to cope with his own feelings, he may become frustrated and he may not be able to think through his actions. This links to his emotional development.
- This can impact how he interacts with other people and how they respond to him. He may find it hard to build friendships and relationships.

#### POSITIVE IMPACT

##### Social development

Understand what others are saying = develop friendships. Develop important social skills. Understanding of others feelings. This also links to emotional development.

### Emotional development

#### POSITIVE IMPACT

##### Social development

Understanding and having feelings for others = friendships with others.  
Manage her own feelings and emotions  
She can recognise other people's feelings = empathetic and sympathetic = better friendships.

#### NEGATIVE IMPACT

##### Social development

May not be able to understand other children's feelings = more difficult to make friends, accept or understand how others may be feeling  
If had a low self-esteem and low confidence = hard to make friends because she may feel she is not good enough. Could be shy and withdrawn.

#### POSITIVE IMPACT

##### Physical development

- Confidence and high self-esteem = try out new skills
- Helps physical development.

### Social development

#### NEGATIVE IMPACT

##### Communication and language development

- Not wanting to spend time with other children, may affect his communication and language development.
- Not be able to develop new vocabulary from his social interactions

#### POSITIVE IMPACT

##### Emotional development

Being with other helps children to feel good about themselves and gives them enjoyment. This can raise their confidence and self-esteem. It also helps them to learn to express emotions appropriately.

**Mini Case study** Lucien is 4 years old. He is not very confident and prefers his parents to do things for him. When faced with new activities, he waits for an adult to come and help him. He is quite unsure of doing anything that is different.

1. Give an example of how Lucien's lack of confidence could be affecting his physical development
2. Explain how Lucien may be missing out on some aspects of cognitive development.



## Physical factors that affect growth and development

### Prenatal

Genetics and how genetic abnormalities occur

Maternal nutrition and exercise

Effects of parental drug or substance abuse



Mothers mental health

Premature birth

### Health status

Health  
Asthma / Epilepsy / Cancer / Sepsis

### Diet & Exercise

A healthy diet  
Proteins / Dairy / Fats / Vitamins and Minerals

Exercise  
Activity / weight / wellbeing



## Environmental factors that affect growth and development

### Housing

Housing needs

Deprivation / Moving house / Safety

### The home

Abuse and neglect

Physical / Sexual abuse / Neglect / Emotional

Parental conflict

Conflict / Aggression / Anxiety



### Drugs, alcohol and smoking

Drugs

Accidents / Mental health / Dangerous behaviour

Smoking

Respiratory / Cancer / Infection



## Socio-economic factors that affect growth and development

### Discrimination

Treated differently  
Gender / Race / Age / Social background / Ability

Social Exclusion  
Low income / Lack of opportunities

Race and Culture  
Discrimination / Poor attachments / Minority

### Income and poverty

Poverty  
Relative poverty / Absolute poverty

Unemployed and Workless Households  
State benefits / Early education experiences

### Relationships with significant adults

Warmth and affection - babies  
Cuddles / Trust / Security

Giving children attention  
Eye contact / Communication / Interest





# Health & Social Care

# Component 1 - Human Lifespan Development



## Learning Aim A: Understand human growth and development across life stages and the factors that affect it

How do people grow and develop throughout their lives? How can factors such as lifestyle choice, relationships affect this? Understanding these processes is essential knowledge and understanding for health and social care practitioners.

A1. Growth and development across life stages		A2. Factors affecting growth and development	
<b>Lifestages</b> <ol style="list-style-type: none"> <li>1. Infancy (0-2 years)</li> <li>2. Early childhood (3-8 years)</li> <li>3. Adolescence (9-18 years)</li> <li>4. Early adulthood (19-45 years)</li> <li>5. Middle adulthood (46-65 years)</li> <li>6. Later adulthood (65+ years)</li> </ol> 	<b>Holistic Development</b> <ol style="list-style-type: none"> <li>1. Physical development - physical growth and physiological change</li> <li>2. Intellectual development - developing thinking and language skills and common activities that promote learning and development</li> <li>3. Emotional development - developing feeling about self and others</li> <li>4. Social development - forming relationships</li> </ol>	<b>1. Physical factors</b> <ol style="list-style-type: none"> <li>a) Genetic inheritance</li> <li>b) Diet and lifestyle choice</li> <li>c) Experience of illness and disease</li> <li>d) Appearance</li> </ol> 	<b>2. Economic factors</b> <ol style="list-style-type: none"> <li>a) Income / Wealth</li> <li>b) Material possessions</li> </ol>
		<b>3. Social, cultural and emotional factors</b> <ol style="list-style-type: none"> <li>a) Educational experiences</li> <li>b) Culture e.g. community involvement, religion, gender</li> <li>c) Influence of role models</li> <li>d) Influence of social isolation</li> <li>e) Personal relationships with family and friends</li> </ol> 	

## Learning Aim B: Investigate how individuals deal with life events

B1. Different types of life events	B2. Coping with change caused by life events
<b>1. Physical events</b> <ol style="list-style-type: none"> <li>a) Accident / injury</li> <li>b) Ill health</li> </ol>	<b>2. Life circumstances</b> <ol style="list-style-type: none"> <li>a) Moving house, school or job</li> <li>b) Exclusion from education</li> <li>c) Redundancy</li> <li>d) Imprisonment</li> <li>e) Retirement</li> </ol>
<b>3. Relationship changes</b> <ol style="list-style-type: none"> <li>a) Entering a relationship</li> <li>b) Marriage</li> <li>c) Divorce</li> <li>d) Parenthood</li> <li>e) Bereavement</li> </ol> 	<b>1. How individuals adapt to these changes</b> <ol style="list-style-type: none"> <li>2. Sources of support           <ol style="list-style-type: none"> <li>a) Family, friends, partners</li> <li>b) Professional carers and services</li> <li>c) Community groups, voluntary and faith based organisations</li> </ol> </li> <li>3. Types of support           <ol style="list-style-type: none"> <li>a) Emotional</li> <li>b) Information advice</li> <li>c) practical help e.g. financial assistance, child care, transport</li> </ol> </li> </ol> 
	

### Use connectives to extend your sentences and link each paragraph....

<b>Explain an idea</b> <ul style="list-style-type: none"> <li>• Although</li> <li>• Except</li> <li>• Unless</li> <li>• However</li> <li>• Therefore</li> </ul>	<b>Sequencing</b> <ul style="list-style-type: none"> <li>• Firstly</li> <li>• Secondly</li> <li>• Next</li> <li>• Finally</li> <li>• Since</li> </ul>	<b>Give examples</b> <ul style="list-style-type: none"> <li>• Such as</li> <li>• In the case of</li> <li>• For example</li> <li>• As revealed by</li> <li>• For instance</li> </ul>
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<b>Adding to</b> <ul style="list-style-type: none"> <li>• And</li> <li>• Also</li> <li>• As well as</li> <li>• Moreover</li> <li>• Too</li> <li>• Furthermore</li> </ul>
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<b>Cause and Effect</b> <ul style="list-style-type: none"> <li>• Because</li> <li>• So</li> <li>• Therefore</li> <li>• Consequently</li> <li>• Thus</li> <li>• As a result of</li> </ul>
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<b>To compare</b> <ul style="list-style-type: none"> <li>• Likewise</li> <li>• Equally</li> <li>• In the same way</li> <li>• Similarly</li> </ul>
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<b>Contrasting</b> <ul style="list-style-type: none"> <li>• Whereas</li> <li>• Instead of</li> <li>• Alternatively</li> <li>• Otherwise</li> <li>• In another way</li> <li>• Then again</li> </ul>
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<b>To Emphasise</b> <ul style="list-style-type: none"> <li>• Above all</li> <li>• Ultimately</li> <li>• Especially</li> <li>• Significantly</li> </ul>
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<b>Elaborating your ideas. Ask "So what?"</b> <ul style="list-style-type: none"> <li>• This suggests</li> <li>• This shows</li> <li>• This signifies</li> <li>• This implies</li> <li>• This means</li> <li>• Therefore</li> <li>• However</li> <li>• Furthermore</li> </ul>
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<b>What do you think? language</b> <ul style="list-style-type: none"> <li>• In conclusion...</li> <li>• It is clear that...</li> <li>• From looking at...</li> <li>• The evidence suggests...</li> <li>• Overall...</li> </ul>
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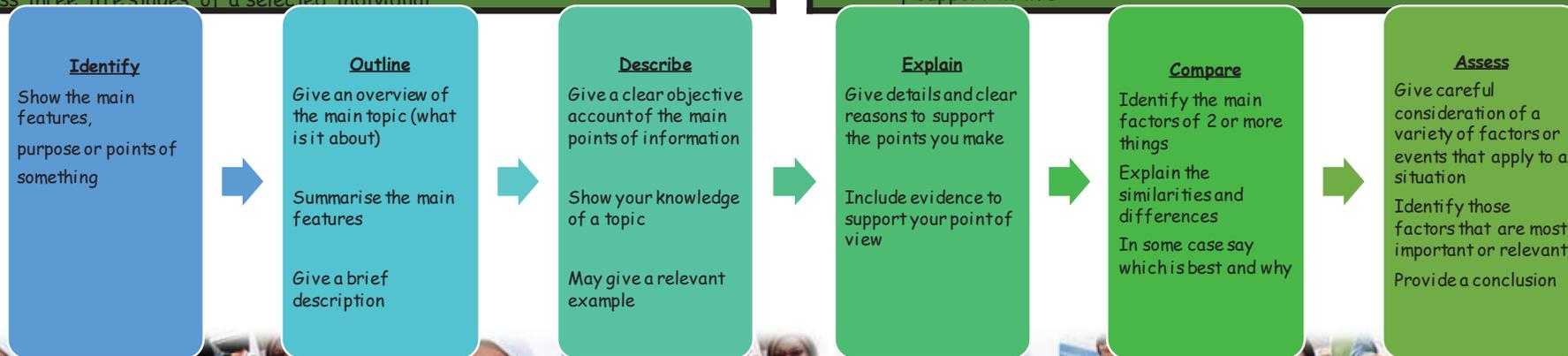


## Learning Aim A

A.1P1	Identify aspects of growth and development for a selected individual.
A.1P2	Identify factors that have had an effect on growth and development of a selected individual.
A.1M1	Outline different aspects of growth and development across three life stages for a selected individual.
A.1M2	Outline the ways that different factors have affected growth and development of a selected individual.
A.2P1	Describe growth and development across three life stages for a selected individual.
A.2P2	Explain how different factors have affected growth and development of a selected individual.
A.2M1	Compare the different factors that have affected growth and development across three life stages for a selected individual.
A.2D1	Assess the changing impact of different factors in the growth and development across three life stages of a selected individual.

## Learning Aim B

B.1P3	Identify relevant information about a life event experienced by two individuals
B.1P4	Identify sources of support that were available to two individuals experiencing a life event
B.1M3	Outline the impact of a life event on the development of two individuals
B.1M4	Outline what support was given to two individuals experiencing a life event
B2.P3	Explain the impact of a life event on the development of two individuals
B2.P4	Explain how two individuals adapted to a life event, using support
B2.M2	Compare the ways that two individuals adapted to a life event and the role that support played.
B2.D2	Assess how well two individuals adapted to a life event and the role and value of support in this





<b>Learning Aim A: Understand the different types of health and social care services and barriers to accessing them</b>	<b>Learning Aim B: Demonstrate the care values and review own practice</b>
<i>Providing good health and social care services is very important and a set of 'care values' exist to ensure this happens. Care values are important because they enable people who use H&amp;SC services to get the care they need and to be protected from different sorts of harm.</i>	
<b>A1. Health and Social Care services</b>	<b>B1. Care values</b>
<ol style="list-style-type: none"> <li><b>Different health care services and how they meet service user needs</b> <ol style="list-style-type: none"> <li><u>Primary care</u> e.g. dental, optometry, community health care</li> <li><u>Secondary and tertiary care</u> e.g. specialist medical care</li> <li><u>Allied health professionals</u> e.g. physiotherapy, occupational therapy, speech and language therapy, dieticians</li> </ol> </li> <li><b>Different social care services and how they meet service user needs</b> <ol style="list-style-type: none"> <li><u>Services for children and young people</u> e.g. foster care, residential care, youth work</li> <li><u>Services for adults or children with specific needs</u> (learning disabilities, sensory impairments, long term health issues) e.g. residential care, respite care, domiciliary care</li> <li><u>Services for older adults</u> e.g. residential care, domiciliary care</li> <li><u>Role of informal social care</u> provided by relatives, friends and neighbours</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li><u>Empowering and promoting independence</u> by involving individuals, where possible, in making choices</li> <li><u>Respect</u> for the individual by respecting service users' needs, beliefs and identity</li> <li><u>Maintaining confidentiality</u></li> <li><u>Preserving the dignity</u> of individuals to help them maintain privacy and self-respect</li> <li><u>Effective communication</u> that displays empathy and warmth</li> <li><u>Safeguarding and duty of care</u></li> <li><u>Promoting anti-discriminatory practice</u> by being aware of types of unfair discrimination and avoiding discriminatory behaviour</li> </ol>

<b>A2. Barriers to accessing services</b>
<ol style="list-style-type: none"> <li><b>Types of barriers and how they can be overcome by the service provider and users</b> <ol style="list-style-type: none"> <li><u>Physical barriers</u> e.g. issues getting into and around the facilities</li> <li><u>Sensory barriers</u> e.g. hearing and visual difficulties</li> <li><u>Social, cultural and psychological barriers</u> e.g. lack of awareness, differing cultural beliefs, social stigma, fear of loss of independence</li> <li><u>Language barriers</u> e.g. differing first language, language impairments</li> <li><u>Geographical barriers</u> e.g. distance of providers, poor transport links</li> <li><u>Intellectual barriers</u> e.g. learning difficulties</li> <li><u>Resource barriers for service provider</u> e.g. staff shortages, lack of local funding, high local demand</li> <li><u>Financial barriers</u> e.g. charging for services, cost of transport, loss of income whilst accessing services</li> </ol> </li> </ol>

<b>B2. Reviewing own application of care values</b>
<ol style="list-style-type: none"> <li><b>Key aspects of a review</b> <ol style="list-style-type: none"> <li>Identifying own strengths and areas for improvement against the care values</li> <li>Receiving feedback from teacher or service user about own performance</li> <li>Responding to feedback and identifying ways to improve own performance</li> </ol> </li> </ol>

Use connectives to extend your sentences and link each paragraph....		
<b>Explain an idea</b> <ul style="list-style-type: none"> <li>Although</li> <li>Except</li> <li>Unless</li> <li>However</li> <li>Therefore</li> </ul>	<b>Sequencing</b> <ul style="list-style-type: none"> <li>Firstly</li> <li>Secondly</li> <li>Next</li> <li>Finally</li> <li>Since</li> </ul>	<b>Give examples</b> <ul style="list-style-type: none"> <li>Such as</li> <li>In the case of</li> <li>For example</li> <li>As revealed by</li> <li>For instance</li> </ul>

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To Emphasise
<ul style="list-style-type: none"> <li>Above all</li> <li>Ultimately</li> <li>Especially</li> <li>Significantly</li> </ul>

Elaborating your ideas. Ask "So what?"
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What do you think? language
<ul style="list-style-type: none"> <li>In conclusion...</li> <li>It is clear that...</li> <li>From looking at...</li> <li>The evidence suggests...</li> <li>Overall...</li> </ul>



## Assessment criteria and command words..

### Learning Aim A

A.1P1	Identify health and social care services that meet some of the needs of individuals in a given scenario.
A.1P2	Identify barriers that might prevent individuals accessing a health or social care service.
A.1M1	Outline ways in which health and social care services meet the needs of individuals in a given scenario.
A.1M2	Outline barriers that would affect the use of one health or social care service for an individual in a given scenario.
A.2P1	Explain how health and social care services meet the needs of individuals in a given scenario.
A.2P2	Explain how barriers could affect the use of one health or social care service for an individual in a given scenario.
A.2M1	Analyse the extent to which health and social care services meet the needs of individuals in a given scenario, explaining how barriers for one service can be overcome.
A.2D1	Assess the suitability of health and social care services for individuals in a given scenario, making justified and realistic suggestions for how barriers can be overcome.

### Learning Aim B

B.1P3	Demonstrate some care values in a health or social care context, making use of notes as support.
B.1P4	Summarise briefly some key points from feedback.
B.1M3	Demonstrate the care values in a health or social care context, making use of notes as support.
B.1M4	Outline positive aspects of own demonstration of care values and respond to feedback.
B.2P3	Demonstrate the care values independently in a health or social care context.
B.2P4	Describe positive and negative aspects of own demonstration of the care values and comment on aspects of feedback.
B.2M2	Demonstrate the care values independently in a health or social care context, making suggestions for improvements of own application of the care values that incorporate feedback.
B.2D2	Demonstrate the care values independently in a health or social care context, making justified and appropriate recommendations for improvements of own application of the care values that incorporate feedback.

