



My
**Knowledge
Organiser**
and Planner

Autumn 1

Year 10

Basic *Expectations* *Every Day*

Right Uniform
Right Equipment
On time
No Disruption
Best Effort

College Day

8:40 to 9-00	Tutor time
9 to 9:55	Period 1
9-55 to 10:50	Period 2
10-50 to 11:25	BREAK
11-25 to 12-20	Period 3
12-20 to 1-15	Period 4
1:15 to 1-50	LUNCH
1-50 to 2-45	Period 5
2-45 to 3-05	KS3 DEAR time. KS4 and 5 extension /homework

Can I write in paragraphs?

The TIPTOP rule

You move onto a new paragraph when you change time, place, topic or person.

1. I always start an essay with an **introduction** which addresses the question.
2. I finish an essay with a **conclusion** to summarise the main points of my argument and to address the question again.
3. I use **connectives** in each paragraph to link my ideas and to put them in a logical order.

- | | | |
|----------------|------------|-------------|
| ○Furthermore | ○But | Meanwhile |
| ○Whereas | ○Since | Nonetheless |
| ○Nevertheless | ○Yet | However |
| ○Alternatively | ○Therefore | Although |
| ○Consequently | ○Besides | Moreover |

Have I used the correct grammar?

I am aware that I must use language that is appropriate to my reader.

- ❖ No slang *that lesson was bangin'*
- ❖ No informal language *I'm gonna do my homework now*
- ❖ **Other things to consider:**
- ✓ I am clear about the purpose of this piece of writing
- ✓ I know who my audience is
- ✓ I will use a suitable layout and text type



literacy mat

My work

I am proud of my work because...

- I have written clearly so that my reader can understand my writing easily.
- I have checked my **spelling** and corrected any errors.
- I have used full sentences with a subject and a verb.
- I have used correct **punctuation** and **grammar**.
- I have paragraphed my work using **TIPTOP**.
- My writing is suitable for the person I am writing for.

Can I spell familiar words accurately?

Common contractions

We must use an apostrophe to replace any letter(s) we have left out.

11 o'clock	I'd	They're	Who'll
Aren't	I'll	Wasn't	Who's
Can't	I'm	We'd	Why'd
Couldn't	Isn't	We'll	Why'll
Didn't	It'd	We're	Why's
Doesn't	It'll	Weren't	Won't
Don't	It's	What'd	Wouldn't
Hadn't	Mightn't	What'll	You'd
Hasn't	Mustn't	What's	You'll
Haven't	Shan't	When'd	You're
He'd	She'd	When'll	
He'll	She'll	When's	
He's	She's	Where'd	
How'd	Shouldn't	Where'll	
How'll	They'd	Where's	
How's	They'll	Who'd	

Can I use different sentence types?

Simple sentences: contains a subject and a verb and can contain an object

- Sarah likes to read in the library.
- Tom enjoys reading at home.

Compound sentences: joins two simple sentences using the connectives: *for, and, nor, but, or, yet, so.*

- Sarah likes to read in the library but Tom prefers to read at home.

Complex sentences: A complex sentence contains a conjunction such as *because, since, after, although, or when.*

- Because Robert felt tired, he only studied for an hour.
- Although the rain had stopped, the pitch was still water-logged.
- Paul enjoys Music, however, he is more proficient in Art.

Homophones

I have checked that I have not mixed up my homophones.

Affect/effect	Meat/meet
Bare/bear	One/won
Brake/break	Passed/past
Buy/by	Peace/piece
For/four	Practice (n)/practise (v)
Flour/flower	Read/red
Grate/great	Sea/see
Hair/hare	Sight/site
Hole/whole	Son/sun
Hour/our	To/too/two
Knight/night	Wait/weight
Know/no	Weak/week
	Wear/where

What traffic light am I?
Is my punctuation accurate?

L iteracy mat

Basics:

- Every sentence must start with a capital letter.
- Every sentence must finish with some form of punctuation: .?!
- Proper nouns need capital letters. These are **unique** people, places or things *e.g. there are many cities so 'city' doesn't take a capital letter. However there is only one London, therefore it takes a capital letter.*
- When writing titles of works such as books, films or plays:
 - Capitalise the first word
 - Capitalise any main/important words
 - Don't capitalise minor words such as 'and', 'of' or 'the' *e.g. The Sound of Music, The Wizard of Oz, Harry Potter and the Goblet of Fire*
- When writing speech:
 - ✓ Go to a new line when a different person speaks *e.g. "Good morning" said the Headteacher.*
 - "It's the afternoon!" replied the student.*
 - ✓ Each person's speech is marked with speech marks *e.g. "Walk on the left" said Mr Mathews.*

Can I spell accurately?

- Sound out the word
- Think about how it looks
- Think about a similar word
- Is there a memory sentence for this word? (e.g. **big** **e**lephants **c**annot **a**lways **u**se **s**mall **e**xits)
- Find the word in a list -
 - Key words list
 - Frequently used words list
 - Your own word bank
- Look it up in a dictionary/spellchecker
- Ask a friend or teacher
- To learn it: look, cover, write, check
- Once you've solved it, add the correct spelling to your own word bank.

Can I use punctuation?

The Apostrophe

I always aim to use apostrophes correctly.

There are two main reasons why we use apostrophes: for **possession** and to replace a letter or letters

Note: Apostrophes are NEVER used to denote plurals

Full stop	.	indicates that a sentence has finished
Comma	,	indicates a slight pause in a sentence, separates clauses in a complex sentence and items in a list
Question mark	?	goes at the end of a question
Exclamation mark	!	goes at the end of a dramatic sentence to show surprise or shock
Apostrophe	'	shows that letter(s) have been left out or indicates possession
Speech marks	" "	indicate direct speech, the exact words spoken or being quoted
Colon	:	introduces a list, a statement or a quote in a sentence
Semicolon	;	separates two sentences that are related and of equal importance
Dash / hyphen	-	separates extra information from the main clause by holding words apart
Brackets	()	can be used like dashes, they separate off extra information from the main clause
Ellipsis	...	to show a passage of time, to hook the reader in and create suspense

Apostrophe for Possession

(To show that something belongs to another)

If a single thing/person owns anything, add an apostrophe + 's'.

- The dog's bone
- The boy's homework
- Jones's bakery
- Yesterday's lesson

However, if it is plural (more than one), an apostrophe comes after the 's'.

- The dogs' bones
- The boys' homework
- Joneses' bakeries (lots of Jones families)
- Many websites' content is educational

There/ their/ they're

Note: special care must be taken over the use of **there**, **their** and **they're** as they sound the same but are used quite differently:

- ❖ **There** shows position *Your seat is over there*
- ❖ **Their** shows that 'they' own something *Their blazers are navy blue*
- ❖ **They're** is short for **they are** as in *They're revising every day*

ITS

Note: **its**, which shows that something owns something (like our, his etc), **does not** take an apostrophe: *the dog ate its bone and we ate our dinner*

Your/ you're

Note: special care must be taken over the use of **your** and **you're** as they sound the same but are used quite differently:

- ❖ **Your** is possessive as in *this is your pen*
- ❖ **You're** is short for **you are** as in *you're coming over to my house*

Fine Art - Portfolio

Proportion – the size of objects/shapes when compared with each other.

Media/medium – the materials and tools used by an artist to create a piece of art.

Technique – the skill with which an artist uses tools and materials to create a piece of art.

Abstract – a piece of art that is not realistic. It uses shapes, colours and textures.

Composition – the arrangement and layout of artwork/objects.

Highlight – the bright or reflective area within a drawing/painting where direct light meets the surface of the object or person.

Shadow, shade, shading – the darker areas within a drawing or painting where there is less light on the object or person.



How to create an artist research page

Introduce the artist.

* Name, Date, Title.

Describe the artwork.

* In this image I can see....

Analyse the formal elements.

* The formal elements in this image are.....

Discuss your opinion about the artwork.

- In my opinion,
- I find this artwork interesting because....
- I am inspired by.....
- I like/dislike.....

Explore the style of the artist through the presentation and visual studies you include in your written work.

Finally, when you have finished all your references, **compare the artworks.**

What are their similarities/differences? Which do you prefer and why?

- **These artworks are similar because**
- **They are different because....**
- **I prefer.....because....**
- **These artists link to my topic of.....because....**
- **The artist was influenced by.....**

Write in full sentences and use key vocab. Check spellings, use of capital letters and punctuation. Proof read your work.

Can you use conjunctive adverbs in your sentences? **However? Furthermore?**



Artist name and art movement

A sentence or two about when and where the artist lived. Does this affect how their work looks?

An example of their work

A few sentences about what their art looks like.

An example of their work

A paragraph about what you think about the work. Do you like it? Do you dislike it? Why?

Your own version of a similar subject (not a direct copy)

ASSESSMENT OBJECTIVES

AO1 – Critical Understanding

Develop ideas through investigations, demonstrating critical understanding of sources.

AO2 – Creative Making

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

AO3 – Reflective Recording

Record ideas, observations and insights relevant to intentions as work progresses.

AO4 – Personal Presentation

Present a personal and meaningful presentation that realises intentions and demonstrates understanding of visual language.

Explore Materials: water colour paint, inks, stencils, acrylic, pencil and pen, fabric, Photoshop, DSLR Camera, pinhole camera, mono printing/collagraph equipment, clay, wax.

Explore Processes: mono printing, collagraph printing, paint techniques, mark making, fabric transfer, mixed media, collage, Photoshop, DSLR, pinhole, paper cut outs, ceramics, sun prints, wax resist.

Artists to look at; Francis Bacon, Sarah Frances, Charley Harper, Julia Cairns, Rochelle Carr, Edward Waite, Vincent Van Gogh, Henri Matisse, Tim Parrish, Phillip Hughes, Paul Catherall, Cristina Jaco, Svenja Jodicke, Melissa Wilcox, Arti Chauhan, David Hockney, Gerhard Richter, Jon Burgerman, Yvonne Coomber.

FORMAL ELEMENTS;

COLOUR, SPACE, LINE, PATTERN, TEXTURE, SHAPE, FORM, TONE

JOB PRODUCTION Production of items one-at-a-time

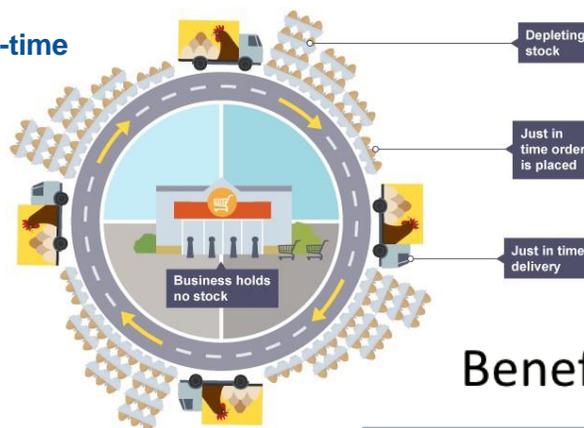
ADVANTAGES

- Can produce unique "one-offs", specification can constantly be modified
- workers more likely to be motivated, tasks require high degree of skill and expertise. Work more demanding and interesting
- organisation is simple, communication, co-ordination, supervision and inspection can be carried out.

JW operations 2008

DISADVANTAGES

- labour costs high
- may be expensive to buy all the tools and equipment necessary
- lead times can be lengthy
- selling costs may be high
- Once demand for a firm's product rises, job production may become costly. Firms may prefer to use a method more suited to producing large quantities.



Procurement means buying goods/services in order to use in production

Lean Production:

is a set of measures that aim to reduce waste during production. Waste reduction methods,

Benefits and drawbacks of JIT

Cell Production – small teams
Kaizen – always improve

Just - in - time

With just in time, a business holds no stock and instead relies upon deliveries of raw materials and components to arrive exactly when they are needed.

Just - in - case

Is a system used by businesses when they keep stock in a warehouse, including a reserve stock level for emergencies.

Advantages	Disadvantages
Lower stock holding means a reduction in storage space which saves rent and insurance costs	There is little room for mistakes as minimal stock is kept for re-working faulty product
As stock is only obtained when it is needed, less working capital is tied up in stock	Production is highly reliant on suppliers and if stock is not delivered on time, the whole production schedule can be delayed
Less likelihood of stock perishing, becoming obsolete or out of date	There is no spare finished product available to meet unexpected orders, because all product is made to meet actual orders
Less time spent on checking and re-working production as the emphasis is on getting the work right first time	A need for complex, specialist stock systems

FLOW PRODUCTION

Batch – make in bundles

ADVANTAGES

- unit costs are reduced
- the process can be highly automated, many operations carried out by robots and other types of machinery
- Quality systems can be built into production

DISADVANTAGES

- Set up costs are high
- product is standardised
- worker motivation can be low
- breakdowns can prove costly
- Supply may exceed demand

Mass production, often using machinery & fewer skilled workers

What impacts a business's choice of suppliers?

- Price
- Quality
- Reliability

Suppliers

- Role;** to provide the business with goods or services that they might need
- Objectives;** they want to charge high prices to make a profit, they want customer loyalty with repeat orders, they also want payment on time, they may also want larger orders



Computing GCSE – NEA Python J276/02 – Programming Techniques

KEY VOCABULARY	
Variable	A piece of stored data, used in a computer program, which can be changed or altered by the program
Constant	A piece of stored data which cannot be changed by the program or user
Operator	An operator is a mathematical symbol, used to work with data in a program
Input	Data, entered into a program, by the user
Output	The returned result of an algorithm
Algorithm	A set of instructions to carry out a process or problem-solving operation, especially by a computer
Program Control	Selection of code to be executed, based on the results of prior operations in a program, or user input
Loop	A piece of repeating code – either condition controlled (WHILE) or count controlled (FOR)
Iteration	A type of LOOP which repeats a series of steps with a finite number of variable changes
Selection	IF statement – selecting to do something depending upon the input. A method of controlling the information flow through branching steps – the code checks if something is True, then carries out one set of instructions if it is and a different set of instructions if it is False.
Sequence	A series of coded instructions for a computer to follow, step by step
String	A character, or characters, stored as a list, within “ ”.
Integer	A whole number, stored as its value
Real	A decimal number, stored as its value
Boolean	True or False. Stored as 1 or 0.

KEY VOCABULARY																					
Declaration	Assigning a value to a variable																				
Casting	Converting variable as integer, Bool, Float or String																				
Data Arrays	<p>‘Lists’ of data, stored in an indexable table format</p> <p><u>1 D ARRAY:</u></p> <table border="1" style="display: inline-table; margin-right: 10px;"> <tr> <td>C</td><td>O</td><td>D</td><td>I</td><td>N</td><td>G</td><td>E</td><td>E</td><td>K</td> </tr> <tr> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td> </tr> </table> <p>← single row of elements</p>	C	O	D	I	N	G	E	E	K	0	1	2	3	4	5	6	7	8		
C	O	D	I	N	G	E	E	K													
0	1	2	3	4	5	6	7	8													
2D Arrays	<p>A data structure which has more than 1 ‘row’ of data. 2D arrays use 2 indexes to identify data</p> <p>IMPORTANT!!! 2D arrays use the Y axis first in the co-ordinates, then the X axis. This is the opposite way around to most other co-ordinates!</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Column 1</th> <th>Column 2</th> <th>Column 3</th> <th>Column 4</th> </tr> </thead> <tbody> <tr> <th>Row 1</th> <td>a[0][0]</td> <td>a[0][1]</td> <td>a[0][2]</td> <td>a[0][3]</td> </tr> <tr> <th>Row 2</th> <td>a[1][0]</td> <td>a[1][1]</td> <td>a[1][2]</td> <td>a[1][3]</td> </tr> <tr> <th>Row 3</th> <td>a[2][0]</td> <td>a[2][1]</td> <td>a[2][2]</td> <td>a[2][3]</td> </tr> </tbody> </table>		Column 1	Column 2	Column 3	Column 4	Row 1	a[0][0]	a[0][1]	a[0][2]	a[0][3]	Row 2	a[1][0]	a[1][1]	a[1][2]	a[1][3]	Row 3	a[2][0]	a[2][1]	a[2][2]	a[2][3]
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Syntax Error: An error in the rules/grammar of the language eg missing colon/spelling error

Logic Error: The program is written to do something other than what the programmer intended. Eg Resetting only the first 9 elements in an array instead of all 10.

Run Time Error: More difficult to spot as it can run a program without reporting an error. E.g. runs but doesn't give an output. Or the program hangs or becomes inactive

Written Evaluations (How, What, Why)

Material for Performance

What research did you do?

What have you learnt about the process of rehearsals?

- **Time keeping:** Were you in all lessons, making good use of time, timing the length of your piece?
- **Co-operation:** Working as part of a team, how successful or unsuccessful were you?
- **Warm-ups:** Which warm-ups have helped you and why?
- **Development of Piece/ Role:** How did you do it? Why did you do it? What does this tell the audience?
- **Shaping and Structuring:** How did you come up with your ideas?

What have you learnt about the importance of:

- Music
- Costumes
- Props

Movement

- **Gesture**
What you do with your hands
- **Facial expressions**
Changing your face to show emotion
- **Body language**
Using your body to show emotion
- **Posture**
How your character stands and sits
- **Proxemics**
The space between the characters and props. What does this say about their relationships? How have you set out the stage?

Vocal Skills

- **Tone of voice/colour**
The feeling or emotion in your voice.
- **Volume**
How loud or quiet your voice is.
- **Pitch**
How high or low your voice is
- **Pace**
How fast you speak
- **Pause**
Taking breaks between lines (e.g. when your character is thinking)
- **Articulation**
Did your character pronounce every letter in their speech? E.g. butter or bu-er?

Performance

1. How well did you communicate your role to the audience?
2. Was your message/ character clear?
3. Were you focussed?
4. Were you engaged in the rehearsal process and performance?
5. What did you think about your audience?
6. What would you improve for your next performance?

English – An Inspector Calls

Year 10 - An Inspector Calls Plot		Themes:	Vocabulary
<p>ACT 1: The Birlings are celebrating the upcoming marriage of Sheila Birling to Gerald Croft.</p>	<p>Mr Arthur Birling: the head of a family, and is arguably the main subject of Priestley's social critique. Dominant, arrogant, self-centred and morally blind, he is insistent throughout about his lack of responsibility for Eva/Daisy's death.</p>	<ul style="list-style-type: none"> • Responsibility • War bringing its own form of socialism • Class • Gender and women • Age • Rights of workers • Poverty and wealth • Individual vs State • Time • Honesty and truth • Poverty and wealth • Hypocrisy and double standards • Prejudice 	altruistic
<p>An Inspector arrives claiming that a young woman called Eva Smith has just committed suicide.</p>	<p>Sheila Birling: accepts responsibility for their part in Eva/Daisy's death and becomes more rebellious toward her parents, supporting her brother against them and assisting Goole in his interrogations. By the end of the play, she represents the younger generation's protests against the morality of the older generation and seems the most responsive to Goole's Socialist views about moral responsibility towards others.</p>		conscience
<p>Eva was employed by Mr Birling and was fired unfairly. She was then taken on by a shop, Millwards, where Sheila used her influence and got Eva fired too.</p>	<p>Edna: Has limited contribution in the play; however she is the only person in the play who can provide an insight into the life of Eva Smith/Daisy Renton, a character to whom Edna has a similar background (working class). It is she who opens the door to allow the Inspector into the Birlings' lives, although she is often taken for granted and treated somewhat despicably at times, as if she is not actually there.</p>		domineer
<p>Sheila feels terrible remorse.</p>	<p>Gerald Croft: The son of Sir George Croft and a member of the aristocracy, a competitor of Birling and Company. He is celebrating his recent engagement to Sheila Birling. Gerald is revealed to have secretly known Eva/Daisy and installed her as his mistress, becoming "the most important person in her life", before ending the relationship. He is shown as cowardly and thoughtless for taking advantage of a vulnerable woman.</p>		gluttonous
<p>ACT 2: Gerald admits that he used Eva as a mistress and leaves upset.</p>	<p>Sybil Birling: Sybil Birling is the wife of Arthur and mother of Sheila and Eric Birling. She is her husband's social superior and is keen to show him the correct etiquette. As the leader of a women's charitable organisation, she assumes a social and moral superiority over Inspector Goole, whose questioning style she frequently refers to as, "impertinent" and "offensive". Like her husband, she refuses to accept responsibility for the death of Eva Smith/Daisy Renton. She is described as a snob who doesn't care about working class people, only respecting the people of her class.</p>		hypocritical
<p>Mrs Birling was also involved by refusing to give Eva (now pregnant), any money when she came to beg for charity. Mrs Birling is adamant that the father of the child take responsibility. This turns out to be her son, Eric, and she is seen as a hypocrite.</p>	<p>Eric Birling: Eric Birling is the son of Arthur Birling and Sybil Birling. Eric is revealed to have made Eva Smith pregnant as well as stolen some money from his father's business to support Eva. When the Inspector is revealed to be a fake, he and Sheila are the only two who still feel guilty over Eva's death. By the end of the story he seems to have learned his lesson and feels as guilty as Sheila does for his part in Eva Smith's death.</p>		impoverish
<p>ACT 3: Eric admits that he is the father of Eva's child. He feels terrible for what he has done. The Inspector leaves and they are all shocked. Gerald returns and informs the Birlings that there is no Inspector Goole working at the local police station.</p>	<p>The Inspector: A mysterious interrogator who introduces himself as, "Inspector Goole" (as in "ghoul"), claiming that he has seen the dead body of Eva/Daisy earlier that day after her slow and painful suicide by swallowing disinfectant, and that he has "a duty" to investigate the Birlings' responsibility for her death.</p>		influential
<p>A phone call confirms this. However, the final lines in the play state that a girl has just died and they are all to be interviewed by an inspector.</p>	<p>Eva Smith/Daisy Renton: the unseen working class woman who Goole claims has committed suicide whilst pregnant with Eric's baby, and has been mistreated by each of the Birling family.</p>	penitent	
		<p>Context</p> <p>AIC is set in 1912, a time of immense inequality and there were no rights for workers, such as Eva Smith</p> <p>The play was first performed in 1945, just after a sweeping Labour election victory.</p> <p>The Labour victory used the Beveridge Report as its core message for a better world post WW2, "everyone regardless of class should be looked after by the state from the cradle to the grave".</p> <p>The Beveridge Report called for a Nationalised Health Service, benefits for those poor who needed it and good housing for all as a basis for a moral society.</p> <p>Priestley's play was a call to his audience to believe in this new society as a better way to protect the poor and vulnerable.</p>	portentous
			prejudice
			scruple
			wrath

Opinion guru

j'adore
j'aime beaucoup
je préfère
j'apprécie
j'admire
je suis fan de
je raffole de
ça me plaît



in my opinion
à mon avis
selon moi
d'après moi
quant à moi
pour ma part

j'ai horreur de
je ne supporte pas
je hais
je déteste
je méprise
j'abhorre
ça m'énerve



What?

ce que j(e n)'aime (pas),
c'est...
ce qui (ne) me plaît (pas),
c'est...
– what I (dis)like is...
ce qui me préoccupe, c'est...
ce qui m'inquiète, c'est...
– what worries me is...
ce qui est important pour moi
c'est...
– what's important to me is...
ce qui me rend heureux,
c'est...
– what makes me happy is...
je pense/crois/estime que
– I think that
je trouve ça, je le/la/les
trouve
– I find it/him/her
en ce qui me concerne
– as far as I'm concerned

Object pronoun ninja

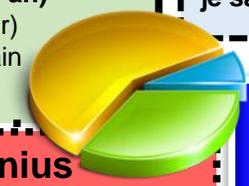
ça me rend + adjective – it makes me
(sad/happy...)
ça me donne envie de + inf – it makes
me feel like
ça me fait + inf – it makes me
(laugh/cry...)
ça m'amuse – I find it fun
ça m'intéresse – it interests me
ça me plaît/ça m'a plu – I like/d it
ça m'ennuie – it bores me
ça m'énerve – it makes me angry
ça me saoule – it annoys me (colloquial)
ça m'est égal – I don't mind



ÇA M'ÉNERVE !

Frequency pro

toujours – always/still
souvent – often
quelquefois –
sometimes
de temps en temps
– from time to time
rarement – rarely
jamais – never
le matin – in the morning
une fois (par an)
– once (a year)
encore – again



Infinitive master

ça me donne envie de – it makes me feel like
je suis en train de – I'm in the process of
je suis sur le point de – I'm about to
je viens de – I have just...
pour, afin de – in order to
il faut – it's necessary to
avant de – before (doing)
je dois – I must
je peux – I can
je sais – I know how to



après + past inf. –
after doing
après avoir mangé,
après être allé...

Linking expert

de plus – furthermore
ensuite – after
puis – then
pourtant – yet
d'autre part
– on the other hand
cependant – however
par contre – on the contrary
alors que – whereas
néanmoins – nonetheless
parce que/car – because
alors/donc/ainsi – so
surtout – mostly
en particulier – especially
cela dit – that being said
soit... soit... – either... or...
d'ailleurs – by the way
par conséquent – as a result
autrement dit – in other words
(tout) d'abord – firstly
deuxièmement – secondly
pour conclure – to conclude
en fin de compte – in the end



Idiomatic genius

revenons à nos moutons – back to the topic
il me casse les pieds – he annoys me
j'ai ri jaune – I had a forced laugh
il fait un temps de chien – the weather's bad
je ne baisserai pas les bras – I won't give up
j'y vais de bon cœur – I'm happy to go there
ça a fait un tabac/carton – it was a big
success
ça me casse les oreilles – it hurts my ears
j'ai le cafard – I feel down
il en a fait tout un fromage – he made a fuss
c'est le pied ! – it's awesome!
chapeau ! – well done!

SLQ link to grammatical
and precise vocab content



Scan me

Conditional hero

je voudrais y aller – I'd like to go
si j'étais riche, j'irais – if I were rich I'd go
si j'avais le choix, je ferais – if I had the choice
I'd do
si j'avais su, je ne serais pas venu
– if I'd known, I wouldn't have come
j'aurais voulu – I would have liked
j'aurais dû faire – I should have done

Subjunctive jedi

il faut que tu saches – you need to know
pour que ça aille mieux – in order to make it better
bien que je sois jeune – although I'm young
je veux que tu prennes ça – I want you to take this
je ne crois pas que ce soit vrai – I don't think it's true
je suis triste qu'il ne puisse pas venir – I'm sad he can't come
que ça te plaise ou non – whether you like it or not
avant que tu ne viennes – before you arrive
le plus cher que j'aie jamais vu – the most expensive I've seen



j'ai...

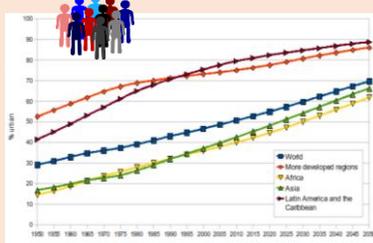
...quinze ans - I'm 15
...froid/chaud - cold/hot
...faim/soif - hungry/thirsty
...raison/tort - right/wrong
...envie de... - I fancy...
...de la chance - I'm lucky
...peur de - I'm afraid of
...honte de - ashamed of
...besoin de - I need

Geography – Unit 2a : Urban Issues and Challenges

What is Urbanisation?

This is an increase in the amount 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.

Causes of Urbanisation

Rural - urban migration (1)

The movement of people from rural to urban areas.

Push

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

Pull

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

Natural Increase (2)

When the birth rate exceeds the death rate.

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.

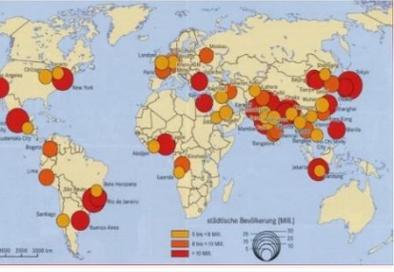
Lower death rate (DR)

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

Types of Cities

Megacity

An urban area with 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.

Sustainable Urban Living

Sustainable urban living means being able to live in cities in ways that do not pollute the environment and using resources in ways that ensure future generations also can use them.



Water Conservation

This is about reducing the amount of water used.

- Collecting rainwater for gardens and flushing toilets.
- Installing water meters and toilets that flush less water.
- Educating people on using less water.

Energy Conservation

Using less fossil fuels can reduce the rate of climate change.

- Promoting renewable energy sources.
- Making homes more energy efficient.
- Encouraging people to use energy.



Creating Green Space

Creating green spaces in urban areas can improve places for people who want to live there.

- Provide natural cooler areas for people to relax in.
- Encourages people to exercise.
- Reduces the risk of flooding from surface runoff.

Waste Recycling

More recycling means fewer resources are used. Less waste eventually goes to landfill.

- Collection of household waste.
- More local recycling facilities.
- Greater awareness of the benefits in recycling.

Sustainable Urban Living Example: Freiburg

Background & Location

Freiburg is in west Germany. The city has a population of about 220,000. In 1970 it set the goal of focusing on social, economic and environmental sustainability.



Sustainable Strategies

- The city's waste water allows for rainwater to be retained.
- The use of sustainable energy such as solar and wind is becoming more important.
- 40% of the city is forested with many open spaces for recreation, clean air and reducing flood risk.

Integrated Transport System

This is the linking of different forms of public and private transport within a city and the surrounding area.

Brownfield Site

Brownfield sites are areas of land or premises that have been previously used, but have subsequently become vacant, derelict or contaminated.

Traffic Management

Urban areas are busy places with many people travelling by different modes of transport. This has caused urban areas to experience different traffic congestion that can lead to various problems.

Environmental problems

- Traffic increases air pollution which releases greenhouse gases that is leading to climate change.

Economic problems

- Congestion can make people late for work and business deliveries take longer. This can cause companies to lose money.



- There is a greater risk of accidents and congestion is a cause of frustration. Traffic can also lead to health issues for pedestrians.

Congestion Solutions

- Widen roads to allow more traffic to flow easily.
- Build ring roads and bypasses to keep through traffic out of city centres.
- Introduce park and ride schemes to reduce car use.
- Encourage car-sharing schemes in work places.
- Have public transport, cycle lanes & cycle hire schemes.
- Having congestion charges discourages drivers from entering the busy city centres.



Traffic Management Example: Bristol

In 2012 Bristol was the most congested city in the UK. Now the city aims to develop its integrated transport system to encourage more people to use the public transport. The city has also invested in cycle routes and hiring schemes.



Greenbelt Area

This is a zone of land surrounding a city where new building is strictly controlled to try to prevent cities growing too much and too fast.

Urban Regeneration

The investment in the revival of old, urban areas by either improving what is there or clearing it away and rebuilding.



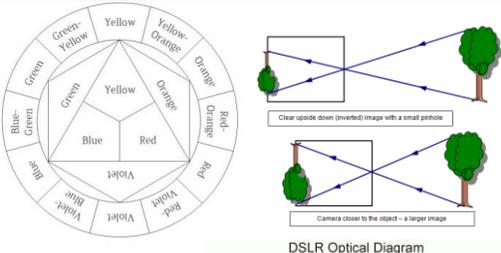
Graphic Communication

Explore Materials: AO2

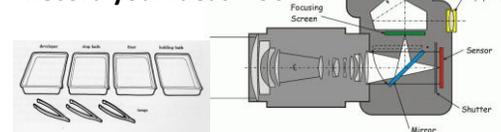
Water colour Paint, Inks,, Stencils, Pencil and pen, Photoshop, DSLR Camera, Pinhole Camera, Mono printing equipment, .

Explore Processes. AO2

Mono Printing, Paint Techniques, Mark making, Observation Photography and studies, Collage, Photo shop, DSLR, Pinhole.



Record your ideas AO3



Assessment Objectives.

AO1

Develop ideas through investigations, demonstrating critical understanding of sources.

AO2

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

AO3

Record ideas, observations and insights relevant to intentions as work progresses.

AO4

Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.

Artist Research Page AO1 – Format A3 Landscape.

Introduce the artist.

* Name, Date, Title.

Describe the artwork.

* In this image I can see....

Analyse the formal elements.

* The formal elements in this image are.....

Discuss your opinion about the artwork.

- In my opinion,
- I find this artwork interesting because....
- I am inspired by.....
- I like/dislike.....

Explore the style of the artist through the presentation and visual studies you include in your written work.

Finally, when you have finished all your references, **compare the artworks**. What are their similarities/differences? Which do you prefer and why?

- **These artworks are similar because**
- **They are different because....**
- **I prefer.....because....**
- **These artists link to my topic of.....because....**
- **The artist was influenced by.....**

Write in full sentences and use key vocab. Check spellings, use of capital letters and punctuation. Proof read your work.

Can you use conjunctive adverbs in your sentences? **However? Furthermore?**



Theme:

Album Cover

Project Outcome: AO4

Produce an album cover for an existing band or invent your own. Including band name, album name, song list with running times, record label and artwork that reflects the bands music. Extension explore and make potential merchandise: suggestions are: T shirt, wrist band, ticket, flyer, water bottle.

The Formal Elements.

Line – Tone – Colour – Form – Texture - Pattern



Components of the Project that need to be evidenced in the Graphic Media Folder.

- Mind Map of music styles and imagery.
- Artist Research Davis Carson, Zoe de la Cases, Dan Mountford, Paula Scher.
- DSLR Photoshoot and Techniques.
- Album cover analysis X3
- Design Ideas – layout, key elements.
- Typography and font styles.
- Press Printing
- Collage
- Paint techniques
- Using Photoshop - layering, colour, filter.
- Plan Outcome
- review and refine Outcome versions x 3
- Apply details to merchandise
- Evaluation

Key Words:

Proportion – the size of objects or shapes when compared to each other.

Media/medium – the materials and tools used by an artist to create a piece of art.

Technique – the skill in which an artist uses tools and materials to create a piece of art.

Abstract – a piece of art that is not realistic. It uses shapes, colours and textures.

Composition – the arrangement and layout of artwork/objects.

Highlight – the bright or reflective area within a drawing/painting where direct light meets the surface of the object or person.

Shadow, shade, shading – the darker areas within a drawing or painting where there is less light on the object or person.

Tone: a range from dark to light

Contrasting - Dramatic change from light to dark.

Perspective – a way of making things look near or far.

Scale – the size of an object next to others.

Health and Social Care – LO1: Assessing Scenes of Danger and Identifying Risks

LO1: Assessing Scenes of Danger and Identifying Risks

In an emergency, acting **calmly** and **quickly** is essential.

There are 4 main steps:

- Assess the situation
- Make the area safe
- Give emergency aid
- Get help

Keywords

First Aid - Urgent treatment given to an individual who has suffered a sudden injury or an unexpected health problem.

Casualty - Someone who has suffered an injury.

Risk - Something that could cause harm to individuals.

Providing key information to the emergency services:

- Location
- Telephone number
- Name of person calling
- Type of emergency
- Condition of casualty/details of injury
- Hazards
- Name of casualty

STEP 1: Assessing the Scene-

Before approaching the casualty, look around the scene of the incident. Quickly checking for danger to the casualty or others.

STEP 2: Make the Area Safe -

Quickly remove any hazards that you can - without injuring yourself. Look for things such as moving sharp objects away.

STEP 3: Give Emergency Aid -

If there is more than one casualty - treat the one with the most severe injuries first. Check whether they are **conscious, breathing** and have a **pulse**.

STEP 4: Get Help!

Calling 999 in a medical emergency is essentially what you do here. Medical emergencies include; heart attacks, strokes or head injuries.

Consent, Communication and Additional Support.

Consent means that permission is given for something to happen.

Informed Consent

is when a person is given information about what they are giving their consent for.

Communicating Effectively is vital when giving first aid as this allows the casualty to understand what is happening and reassures them.

Additional Support is getting extra help in the form of an extra pair of hands if there are helpful passers by or calling for the emergency services.

The purpose of administering first aid is obvious. There are **three** main aims though:

- **Preserve life** - your own, the casualty's and bystanders'
- **Prevent deterioration** - stop the casualty getting worse
- **Promote recovery** - help them to get better

ABC Check

A= Airway

Check for obstructions in the throat or in the mouth that are stopping breathing.

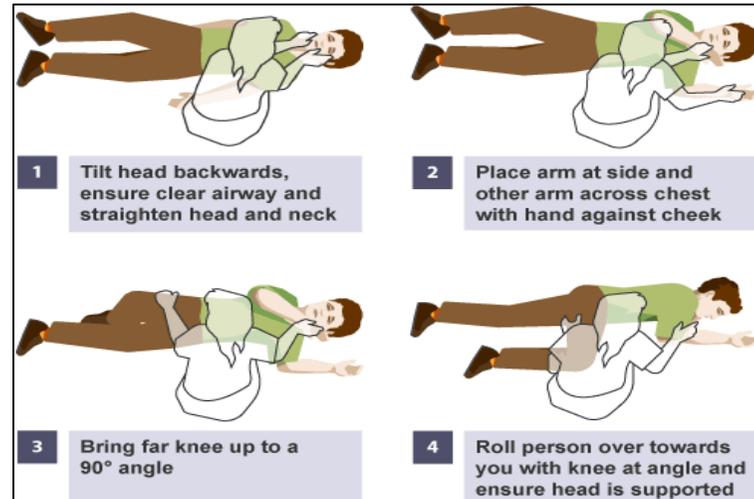
B = Breathing

Look for chest movements and listen for breathing sounds. If the casualty is breathing, place them in the **recovery position**.

C = Circulation

Check for a pulse. You can check for this at the wrist or neck. If no pulse is detected, start **CPR**.

The Recovery Position



LO2: First Aid Procedures

6 injuries to get to know!

- Shock
- Bleeding
- Burns/Scalds
- Choking
- Asthma Attack
- Conscious/Unconscious/Breathing/Not-breathing.

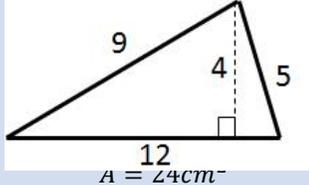
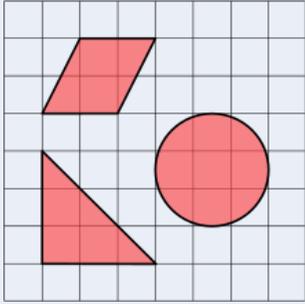
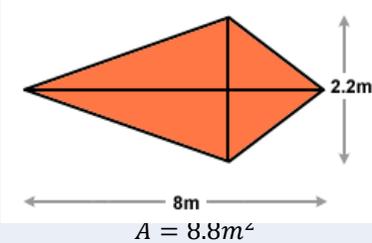
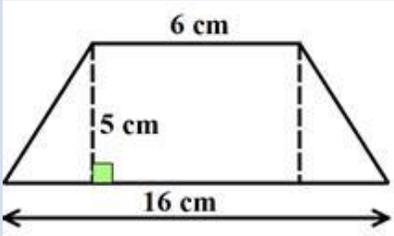
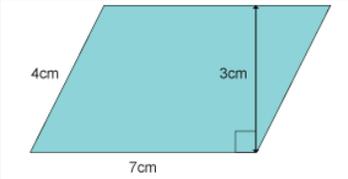
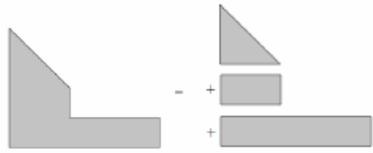
What you need to know...

- Symptoms
- Causes
- Severity
- Sequence of First Aid steps
- Rationale (what's the aim?)

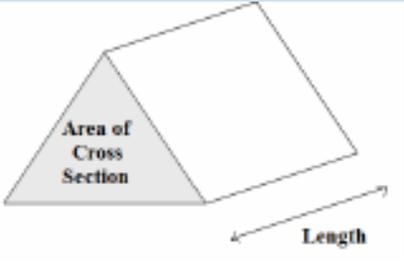
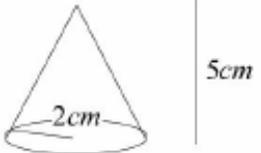
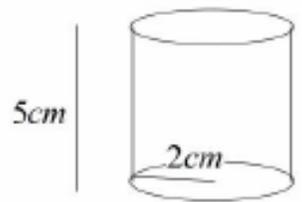
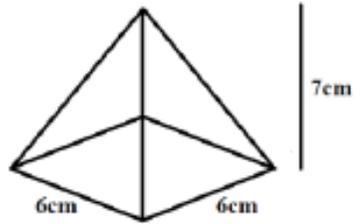
HISTORY GCSE - Germany in Transition, 1919 – 1939: Impact of the First World War

Definition of Era: Inter-war period between WWI (1914-1918) and WWII (1939-1945)		KPI 1 The Weimar Republic: Met for the first time in January 1919, in the town of Weimar. Germany became a republic after the Kaiser abdicated and fled. The provisional government made an agreement. It lasted from 1919-1933, led by two presidents, Ebert then Paul von Hindenburg.	KPI 2 Political Instability: Weimar hated by communists, socialists, nationalists and army leaders. Faced constant threats from the right and left of politics.
Timeline dates 9 th November 1918 11 th November 1918 December 1918 Early 1919 March 1919 28 th June 1919 January 1923 November 1923	Timelines description Kaiser abdicated. Armistice signed. Spartacists demonstrated against the government. Spartacists attempted to overthrow the government. Kapp Putsch. Treaty of Versailles signed. French occupied the Ruhr. German government ordered passive resistance and printed money. Hyperinflation followed. Munich Putsch.	KPI 3 The hyperinflation crisis and events in the Ruhr, 1923: The currency had been going down in value due to inflation since 1914. The government started to print more money than it had, to pay off reparations and workers. The currency started to decrease rapidly. French and Belgian troops invaded the Rhineland twice, in 1921 and 1923 when Germany failed to pay reparations. Germany needed this money to pay off war debts to the USA. The invasion was met by passive resistance (strikes and sabotage). Some workers were shot by French troops, reminding people of the war, strikers were seen as heroes and the government continued to pay them even though less goods were produced. This led to hyperinflation. People with savings, on a fixed income or with pensions had nothing. Some did benefit – <ul style="list-style-type: none"> • Businessmen were able to pay off debts easily • Rise in prices helped farmers • Foreigners could afford things others couldn't. 	KPI 4 The strengths and weaknesses of the Weimar Constitution: Strengths: Men and women had the vote at the age of 20; voting by proportional representation meant that the number of seats each party had in the Reichstag was based on the number of votes they got. For example, if a party won 10% of the votes it was given 10% of the seats. Weaknesses: The system of voting - using proportional representation meant that it was hard for 1 party to gain a majority which resulted in coalition governments. Frequent changes of government - nine elections, weak and unstable governments followed. Power of the President- due to article 48, in any 'state of emergency' the president could pass any laws, without the Reichstag. He could rule by decree which was very undemocratic.
Keywords and concepts Abdicate Armistice Communists	Definition Monarch or Emperor quits the throne. The ending of hostilities in a war. Followers of Karl Marx who believed, for example, that the state should own the means of production and distribution.	KPI 5 The Munich Putsch: November 1923, Hitler and 600 Nazis burst into a meeting. At gunpoint, Chief minister Von Kahr and army chief Von Lossow agreed to take over the Berlin government. The police and army were notified. There was a clash with the National Socialists whereby 16 Nazis and 4 policemen died.	KPI 6 The Kapp Putsch: Weimar government tried to shrink the Freikorps; the Berlin Freikorps refused to comply. Led by Wolfgang Kapp, he tried to form a right-wing government. The Reichswehr backed Kapp. Army refused to fire at Kapp's men. Ebert called for a strike which trade unionists and civil servants supported so it all collapsed.
Hyperinflation Left-wing Right-wing Reparations	Extremely high inflation, where the value of money plummets and becomes almost worthless. Of politicians and parties that favour socialism. People who support conservative or traditional ideas and oppose social democracy. War damages to be paid by Germany.	KPI 7 The Impact of the Treaty of Versailles (28 June 1919) Most Germans were horrified, embarrassed and angered by the terms of the treaty which contained 440 clauses including :- <ul style="list-style-type: none"> • Land : Territorial terms- lost 13% of land, 6 million citizens, Germany was forbidden to unite with Austria. Saarland administered by the League of Nations. • Army: Military terms - army limited to 100,000 men, forbidden to possess any tanks, heavy guns or aircraft. Only allowed ships below 10,000 tons; the Rhineland was demilitarised. • Money: Financial terms - £6,600 million reparations bill to be paid in instalments. • Blame: Political terms- Germany forbidden to join League of Nations, had to accept blame for war. 	KPI 8 The Spartacist Uprising: Communist uprising / led by Karl Liebknecht+ Rosa Luxemburg. December 1918, founded the German Communist Party (KPD). In January 1919, communists began plans to overthrow Ebert's government. Government used Reichswehr and Freikorps to put the rebellion down. The leaders were captured + executed.

Maths - Year 10 Foundation - Area and perimeter

Topic/Skill	Definition/Tips	Example	Topic/Skill	Definition/Tips	Example
1. Perimeter	<p>The total distance around the outside of a shape.</p> <p>Units include: <i>mm, cm, m</i> etc.</p>	<p>8 cm</p>  <p>5 cm</p> $P = 8 + 5 + 8 + 5 = 26cm$	5. Area of a Triangle	Base x Height \div 2	
2. Area	<p>The amount of space inside a shape.</p> <p>Units include: mm^2, cm^2, m^2</p>		6. Area of a Kite	Split into two triangles and use the method above.	
3. Area of a Rectangle	<p>Length x Width</p>	<p>9 cm</p>  <p>4 cm</p> $A = 36cm^2$	7. Area of a Trapezium	$\frac{(a + b)}{2} \times h$ <p>Half the sum of the parallel side, times the height between them. That is how you calculate the area of a trapezium.</p>	 $A = 55cm^2$
4. Area of a Parallelogram	<p>Base x Perpendicular Height</p> <p>Not the slant height.</p>	 <p>4cm</p> <p>7cm</p> <p>3cm</p> $A = 21cm^2$	8. Compound Shape	A shape made up of a combination of other known shapes put together.	

Maths - Year 10 Higher - Volume

Topic/Skill	Definition/Tips	Example	Topic/Skill	Definition/Tips	Example
1. Volume of a Prism	$V = \text{Area of Cross Section} \times \text{Length}$ $V = A \times L$		3. Volume of a Cone	$V = \frac{1}{3} \pi r^2 h$	 $V = \frac{1}{3} \pi (4)(5)$ $= 20.9 \text{ cm}^3$
2. Volume of a Cylinder	$V = \pi r^2 h$	 $V = \pi (4)(5)$ $= 62.8 \text{ cm}^3$	4. Volume of a Pyramid	$\text{Volume} = \frac{1}{3} B h$ <p>where B = area of the base</p>	 $V = \frac{1}{3} \times 6 \times 6 \times 7 = 84 \text{ cm}^3$
			5. Volume of a Sphere	$V = \frac{4}{3} \pi r^3$ <p>Look out for hemispheres – just halve the volume of a sphere.</p>	<p>Find the volume of a sphere with diameter 10cm.</p> $V = \frac{4}{3} \pi (5)^3 = \frac{500\pi}{3} \text{ cm}^3$

The Music Industry
EXTERNAL EXAM
Part 1 Understanding different types of organisations that make up the music industry

Introducing Music Recording

Part 1 Planning a Recording Session
Equipment
Recording Sessions
Health & Safety

Part 2 Use Recording equipment safely to produce multi-track recording

- Recording audio
- Mixing down the multi-track

Part 2 Understand jobs roles in the Music Industry

- Performance and Creative Roles
- Management and Promotion roles
- Recording Roles
- Media and other roles
- How and Why workers are employed in the industry
- Getting a break and starting out
- Importance of individual roles and responsibilities
- How individual roles and responsibilities interrelate
- How the Industry relies on entrepreneurs, the self-employed and small enterprises
- How to get paid

Venues and live performance
Health, Safety and Security at venues
Production and promotion
Service companies and agencies
Unions

How organisations interrelate and why these relationships are important

Link to :- Music Industry facts every musician needs to know :-
<https://www.thebalancecareers.com/music-industry-facts-every-musician-needs-to-know-2460726>

Setting up a recording Session

<https://www.izotope.com/en/blog/music-production/18-tips-for-running-a-great-recording-session.html>



Physical Education - Rugby

Kit Needed:

Boots, black long socks, long sleeved Eggbuckland Rugby top and black Eggbuckland shorts

Equipment:

Rugby ball and a pitch

5 Key Rules:

- You must pass backwards.
- You must release the ball on the ground.
- You must consider other pupil's safety.
- To score a try you place the ball on the ground over the try line.
- You must tackle from the armpit down.

Key terms

- **Tackle**- a way of stopping an attacking player who has the ball, by tackling them to the ground. The attacking player must release the ball on the ground.
- **Ruck**- the competition for the ball that has been released between at least one player from each side.
- **Offside line**- an imaginary line that goes right across the pitch which is in line with the back of the ruck.
- **Knock on**- when the ball falls forwards out of a player's hands.
- **Forward pass**- when the ball is passed forward (the ball is allowed to go sideways and backwards).
- **Side step**- a way of evading a tackle from your opponent.



TEAMWORK RESPECT ENJOYMENT DISCIPLINE SPORTSMANSHIP

Rugby Football Union. The RFU Rose and the words 'England Rugby' are official registered trade marks of the Rugby Football Union.

Tackle



Ruck



Offside line



Side step



Knock on



Try



Physical Education - Netball

Kit Needed:

- White trainers, white socks, short or long-sleeved PE top and black Egguckland shorts, skort or leggings.

Equipment:

- Netballs, posts and bases and position bibs.

5 Key Rules:

- Do not move with the ball.
- 3 seconds holding the ball.
- No contact.
- No closer than 1 metre from the person with the ball.
- Only allowed in your position's areas.

Positions

- Goal Keeper- Marks the goal shooter to stop them shooting.
- Goal Defence- Marks the goal attack to stop them shooting.
- Wing Defence- Marks the wing attack to stop them feeding the ball into the shooting 'D'.
- Centre- Marks the other centre. Controls the game from mid court.
- Wing Attack- Aims to feed the ball into the shooting 'D' to provide shooting opportunities.
- Goal Attack- To score goals and be a link between mid-court and the shooting 'D'.
- Goal Shooter- To score goals within the 'D'.

Passing

- Basic body position
- High arms
- Extend elbows to straight to release

Defending

- Basic body position
- Use both arms over the ball and follow where attack holds it.
- When moving, remain close to attacker and ensure you can see player and the ball.

Basic body position



Footwork

- Catch the ball and land one foot before the other
- The first foot can not be moved
- The second foot can be moved to pivot
- If landing with both feet at same time, you can choose which one to use to pivot

Shooting

- Basic body position or feet shoulder width apart
- High arms
- Ball above head in both hands
- Extend elbows to straight to release towards the net aiming for the back of the ring

P4L – Work related learning

Living Independently

Key concepts/questions:

What are the monthly fixed costs that would have to be paid every month?
What are the variable costs that would have to be paid for every month?
How much money would I need to earn, to live independently in Plymouth?

KEY TERMS:

Budget - allow or provide a particular amount of money.

Income - money received, normally for work done.

Expenditure – an amount of money spent.

Fixed costs – money spent that is a constant amount, usually paid out every month.

Variable costs – money that is spent, but varies in the amount from month to month.

Council Tax - a tax on households determined by a local council, based on the estimated value of the property and the number of people living in it.

Utility bills – the amount a household or office is expected to pay for electricity, water and/or gas each month.

P.C.M. – per calendar month

A.P.R. – annual percentage rate

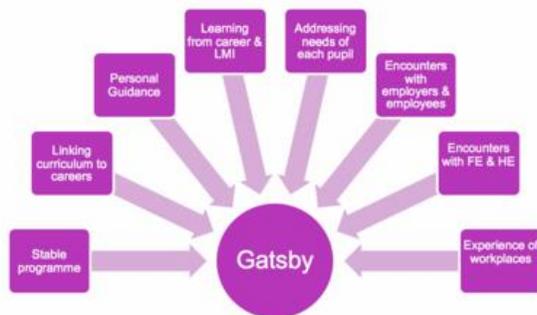
Debit card - a card allowing the holder to transfer money electronically from their bank account when making a purchase

Credit card – a card that is issued by a bank that allows you to buy goods on credit (a type of loan)

Direct debit – an agreement made with a bank that allows a company to transfer money from a person's bank account on agreed dates, usually to pay bills.

Standing order - an instruction to a bank by an account holder to make regular fixed payments to a particular person or organisation

Credit score – a score based on how much debt you have and how you are managing that debt.



NOTES:

Applying for Work

Key concepts/questions:

What is a CV for?
What is included in a CV?
When would I need a CV?
What is a personal statement?
Why do I need a personal statement?
What is a covering letter?
How would I apply for part-time work?
What are the health and safety laws I should know about when working for someone else?

KEY TERMS:

C.V. – Curriculum Vitae. A brief account of a person's education, qualifications, and previous occupations, typically sent with a job application.

Personal Statement - a written description of someone's skills, personal qualities, achievements, interests, included as part of an application for a job or a place at university or college.

Achievement – what you can show you have improved on.

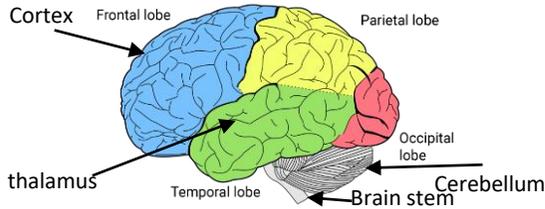
Skill – something you can learn to do, such as work in a team.

Personal Quality – How you come across or behave, such as being friendly.

Health and Safety – regulations (rules) and procedures intended to prevent accident or injury in workplaces or public environments.

Psychology - Development

Early brain development



Brain development in the womb

Week 3 – neural plate becomes tube
 Week 4 – neural tubes begin to divide
 Week 15 – cerebellum has formed
 6 months – brain is fully formed

Brain stem: connects brain to spinal cord controls autonomic functions eg. breathing
Cerebellum: co-ordinates sensory and motor one of the last parts of brain to reach maturity.
Thalamus: located deep inside brain. Acts as information hub, receives and sends signals around brain.
Cortex: outer layer of brain divided into 4 lobes; thinking and processing happens here.

Piaget Theory

Changes in thinking over time. Children think differently to adults. Different kinds of logical thinking occur at over time.

Sensorimotor stage: 0-2 years. Learn to co-ordinate sensory and motor skills. Object permanence develops

Pre-operational stage: 2-7 years. Can't think in a consistently logical way. Egocentric and lack conservation.

Concrete operational: 7-11 years. Most children can conserve at 7 and show less ego centrism.

Formal operational: 11+ years. Children can draw conclusions about abstract concepts and form arguments.

Key Terms

Schema	Mental structures containing knowledge, schemas develop further through accommodation and assimilation.
Assimilation	Add new information to an existing schema.
Accommodation	Receiving new information that changes our understanding so a new schema is formed.
Conservation	The ability to understand that although appearance of material changes the quantity stays the same.
Egocentrism	Seeing the world from one's own point of view and not being able to see it from others.

Key studies testing Piaget

Hughes – Policeman Doll study

Aim: To see if children are egocentric earlier than Piaget suggested.
Method: 3½ - 5 year old children asked to hide a boy doll from two policeman dolls using partition walls. Practiced with one doll first.
Results: 90% were able to hide the doll away.
Conclusion: Children can conserve earlier than the age of 7. Piaget underestimated the abilities of children.

+ three mountains task research supports their findings

+
 -Task involved hiding from policeman lacks ecological validity
 -Children in unfamiliar setting and with unfamiliar adults

Growth mindset: belief that ability comes from hard work and can increase.

Fixed mindset: belief that ability is genetic and unchanging.

Dweck's mindset theory

Our assumptions affect our success. Success it is due to effort not talent. When faced with a challenge fixed mindset give up quickly, growth mindset keep trying. Fixed mindset see failure as lack of talent, growth mindset see failure as an opportunity to learn.

Role of praise: Person focuses on the ability. **Process** focuses on effort. Students who get person praise feel that success is beyond their control.

Role of self-efficacy: understanding your own abilities. Higher self efficacy results in greater effort, performance and resilience. Self efficacy increases or decreases future success.

Evaluation: + Research support for her theory
 + Real world application e.g. in sports seeing failure as a lack of effort rather than talent motivates future effort
 - Praising effort can still lead to completing task for approval, and discourages independent behaviour.

McGarrigle and Donaldson – Naughty teddy

Aim: To see if children can conserve at an earlier stage than Piaget found if change is accidental.
Method: Children aged 4- 6 years shown two rows of counters. Teddy messes up one row of them. Child asked if the rows were the same.
Results: 62% of children stated the rows were same. Only 16% did in Piaget's experiment
Conclusion: if the change to materials seems accidental children under the age of 7 can conserve.

+ other researchers findings also supports
 + shows that children can conserve earlier than Piaget said
 -- sample only used children from one primary school
 - Results in other research not as high as they found

Role of nature vs nurture

Nature characteristics and behaviour are inherited.

Nurture our characteristics and behaviour are influenced by environment.

Brain forms due to nature but environment has big influence on its development.

Smoking during pregnancy can decrease size of babies' brains.
 Infections in the womb can lead to hearing loss.
 Babies in womb learn to recognise mother's voice.

Twin studies used to provide evidence for both sides of debate – identical twins share same DNA, similarities will be down to nature, differences nurture. E.g IQ study.

Nature evidence
 – babies can recognise faces and cry from birth implies nature.

Nurture evidence
 – baby rats kept alone and with no toys developed slower and had smaller brains than rats kept with toys and in a group.

Application to education

Individual learning: children go through stages at different rates, allow child to discover the answers themselves

Readiness: Can only teach something when child biologically ready.

Real world objects:

Children must be given actual objects to allow discovery.

Learning styles

Verbaliser: focus on words. Processing by hearing or reading words and talking 

Visualiser: focus on pictures. Processing by seeing, use of diagrams, maps and think using pictures. 

- Too many learning styles
 - No supporting evidence

+ Allowed teaching methods to develop

Willingham's learning theory

Criticises learning styles theories as they aren't evidence based. Teaching and learning can be improved through the following ways

Praise: praising effort should be unexpected. Praise before a task led to less motivation.

Memory and forgetting: forgetting happens because of lack of cues, practicing retrieving information from memory

Self-regulation: self control (delay gratification)

Neuroscience: brainwaves in dyslexia are different. Earlier intervention would increase progress.

Religious Studies - Religion, crime and punishment

Good & evil actions and intentions

Some people suggest that those who commit the worst crimes are evil.

But where does evil come from?

Christianity: Evil is seen as the abuse of the **free will** God gave to humans. In order to be able to appreciate good, then evil has to exist. Most Christians believe in a figure called **the devil** or Satan. So, evil is a combination of internal and external factors.

Islam: The **Qur'an** says there is a devil who was an angel. Iblis was expelled from paradise because he refused to bow to Adam. Iblis continually tempts and punishes humans to be wicked. Evil is a mix of powerful evil being and the weakness of humans.

3 aims of punishment

Retribution: is the least positive of the 3 aims of punishment. It means that society, on behalf of the victim, is getting its own back on the offender. In the Old Testament it is referred to as **lex talionis** (the law of retaliation). **"An eye for an eye, a tooth for a tooth"**

Deterrence: This is the belief that if offenders are seen to be punished for wrongdoing, then this may 'put off' others from committing that offence. The offender themselves might also be put off from reoffending.

Reformation: This is the aim of punishment most Christians prefer because it seeks to help offenders by working with them to help them understand that their behaviour is harming society. It is hoped that offenders will change their attitudes and become responsible, law-abiding members of the community.

Reasons for crime & types of crime

Causes of crime include: *upbringing, mental illness, poverty, opposition to existing laws, greed/hate, or addiction.*

There are 3 key **types** of crimes: *Crimes against the **person** (e.g. murder); Crimes against **property** (e.g. burglary); Crimes against the **state** (e.g. terrorism).*

St Paul tells Christians to **"obey the laws of the land"**

Suffering

For many people, suffering is an unfortunate part of living. It may be caused by something natural, such as an illness, or it may be due to how people have behaved. Whatever the cause, Christians believe they should try to help others who are suffering. Christians feel that they should follow the example of Jesus, who helped many whom he saw were suffering, and who taught that those who believe in God should help those who suffer.

Heller Keller was a Christian writer and activist who became deaf and blind when she was only 19 months old. She said **"We are never really happy until we try to brighten the lives of others"**.

Treatment of criminals

Christians do not disagree with discipline. They see a positive need for it: **"He who spares the rod hates their children, but the one who loves their children is careful to discipline them"**. However, they may question the method used since Jesus' teachings on love and caring for people rule out any physical punishment. Instead, Christians focus on positive sanctions that help offenders to realise the error of their ways and reform. Jesus always treated people with respect, and Christians believe they should follow his example.

Corporal punishment: to punish the offender by causing physical pain. It is illegal in the UK but allowed in some other parts of the world. For example some Muslim countries such as Iran and Saudi Arabia allow caning as punishment for offences such as gambling and sexual promiscuity.

Community service: offers offenders a chance to make up for what they have done and receive help in reforming their behaviour. Christians are in general agreement that it is a suitable punishment for fairly minor offences.

"Mutual respect for and tolerance of those with different faiths and beliefs, and for those without faith"

The death penalty

Abolished in the UK in 1965 and is now illegal in many EU countries.

The Principle of Utility = an action is right if it promotes the maximum happiness for the maximum number of people.

The sanctity of life = God gave life, so only He has the right to take it away.

For	Against
<ul style="list-style-type: none"> It is a justifiable retribution for serious crimes It is a deterrent It gives the victim's family a sense of justice 	<ul style="list-style-type: none"> Only God has the right to take life Jesus taught a message of love and forgiveness It is hypocritical

Forgiveness

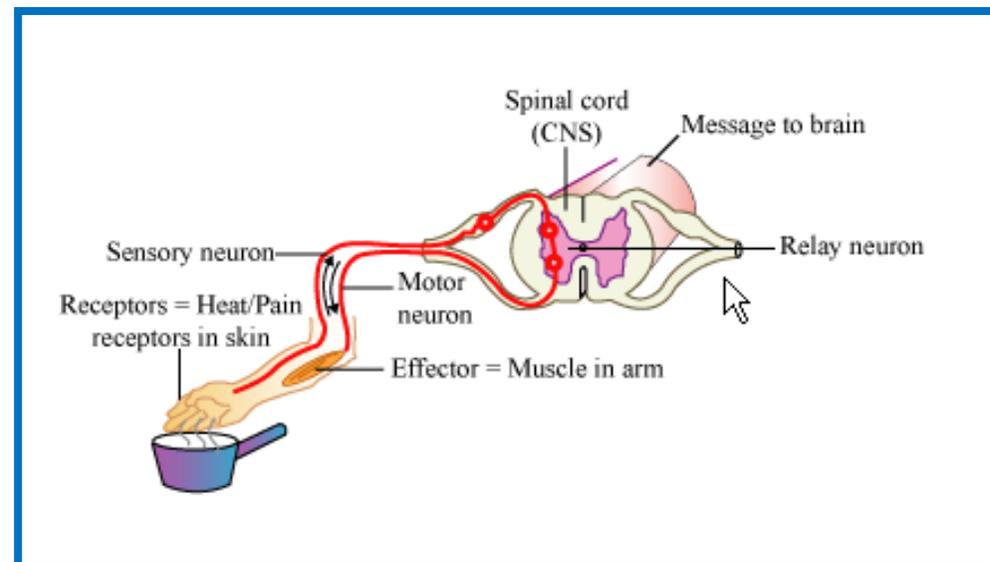
Forgiveness is a core Christian belief and one Jesus emphasised in his teachings.

Christians are expected to be forgiving towards those who wrong them, if they expect to be forgiven themselves: **"Forgive us our sins, as we forgive those who sin against us."** Many Christians would argue that forgiveness is not a replacement for punishment.

During his ministry Jesus was asked how many times you should forgive someone who wrongs you and he replied **"I tell you not seven times, but seventy-seven times"**

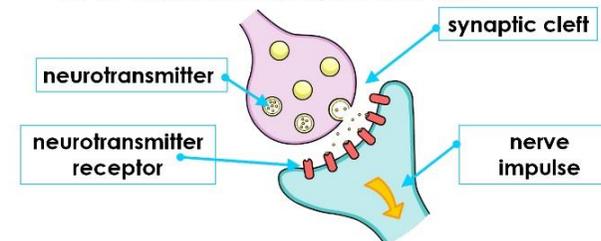
Science - Homeostasis and Response (1 of 3)

Key Terms	
Homeostasis	The maintenance of a constant internal environment.
Central nervous system (CNS)	The brain and spinal cord. Sometimes referred to as the coordinator.
Neurones	Nerve cells – they link receptors and effectors to the CNS. Sensory neurons carry impulses from receptors to the CNS, relay neurons carry an impulse within the CNS and motor neurons carry the impulse from the CNS to an effector.
Receptor	A cell or group of cells that detect a change and generate a nervous impulse.
Effector	A muscle or gland that brings about a response.
Synapse	A gap between neurons.
Neurotransmitters	Chemicals which diffuse across the synapse and initiate a nervous impulse in the next neurone.
Reflex response	An automatic response that you do not think about.
Reflex Arc	The pathway of neurons in a reflex arc.



3. DIFFUSION AND NERVES IMPULSES

A **synapse** is a junction between two neurones across which electrical signals must pass.



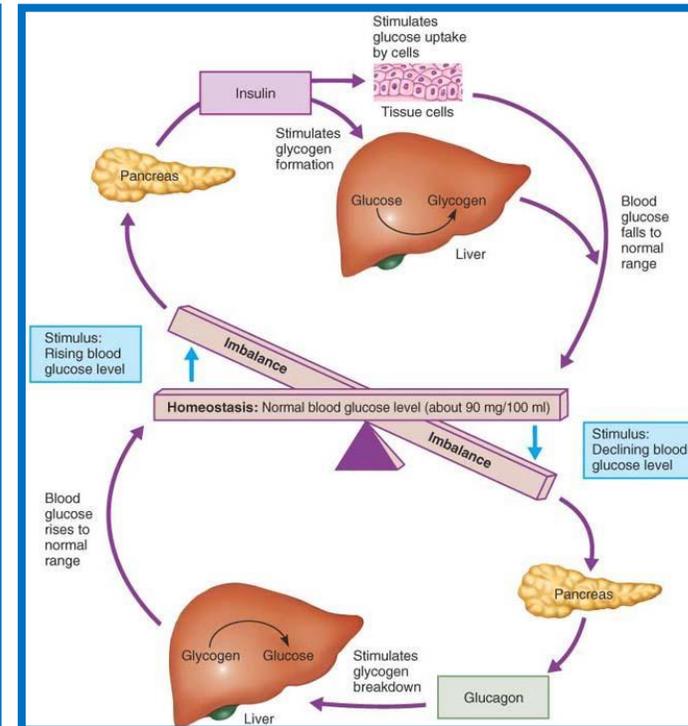
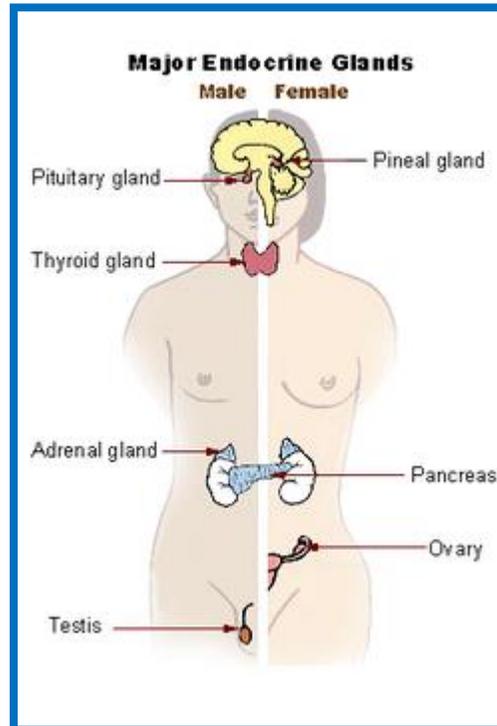
Neurotransmitter molecules diffuse from vesicles towards the neurotransmitter receptors, moving from an area of high concentration to low concentration.



Science - Homeostasis and Response (2 of 3)

Key Terms

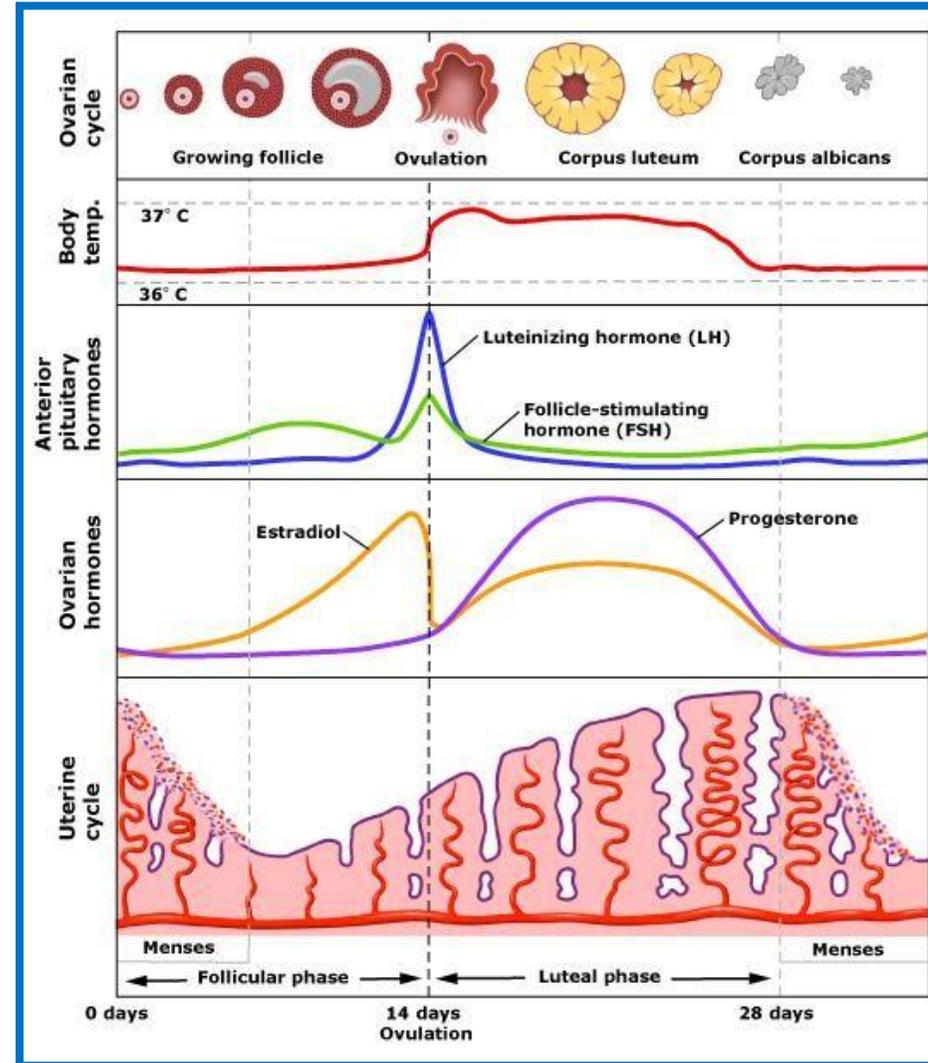
Gland	A structure in the body that produces hormones
Pituitary Gland	The master gland in your brain that produces a number of hormones, including TSH, FSH and LH
Insulin	A hormone produced in your pancreas that lowers blood glucose by converting it into glycogen and storing it in the liver
Glycogen	An insoluble molecule made from many glucose molecules
Glucagon	A hormone produced in the pancreas that raises blood glucose by breaking down glycogen stored in the liver
Negative feedback	A homeostatic mechanism by which the body detects a change and makes an adjustment to return itself to normal
Type I Diabetes	A medical condition that usually develops in younger people, preventing the production of insulin
Type II Diabetes	A medical condition that usually develops in later life, preventing the person producing enough insulin or preventing cells from responding to insulin



Science - Homeostasis and Response (3 of 3)

Key Terms

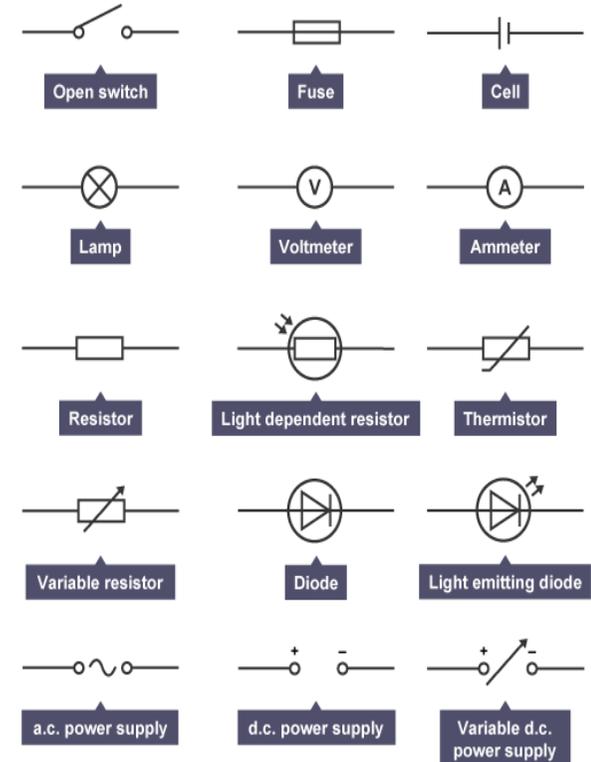
Oestrogen	A female sex hormone produced in the ovaries that controls puberty and prepares the uterus for pregnancy.
Progesterone	A female sex hormone produced in the ovaries that prepares the uterus for pregnancy.
Testosterone	A male sex hormone produced in the testes that controls puberty.
Menopause	The point in a woman's life, usually between 45 and 55, when she stops menstruating and therefore cannot become pregnant.
Follicle stimulating hormone (FSH)	A hormone produced by the pituitary gland that causes an ovum to mature in an ovary and the production of oestrogen.
Follicle	A structure in an ovary in which an ovum (egg) matures.
Lutenising hormone (LH)	A hormone produced by the pituitary gland that stimulates ovulation.
Corpus luteum	After ovulation the empty follicle turns into this and releases progesterone.
Vasectomy	A contraceptive medical procedure during which a man's sperm ducts are blocked or cut.
Tubal ligation	A contraceptive medical procedure during which a woman's fallopian tubes are blocked or cut.



Science - Electricity

Key Terms

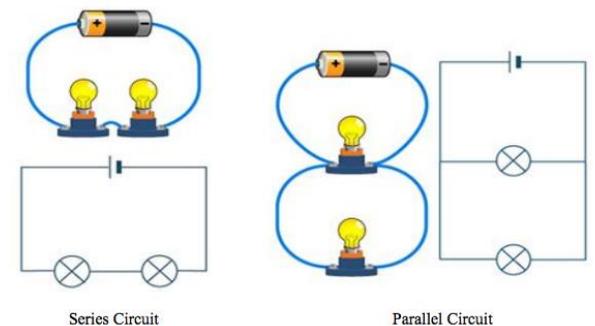
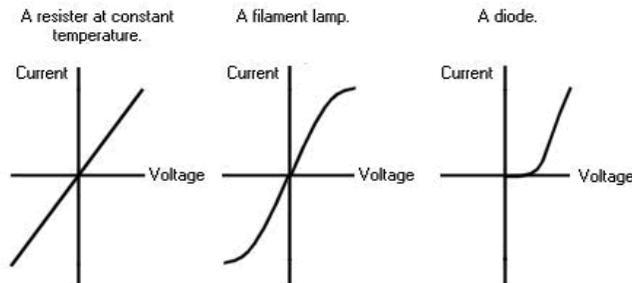
Potential difference (p.d.)	A measure of the electrical work done by a cell (or other power supply) as charge flows round the circuit. Potential difference is measured in volts (V).
Electric current	A flow of electrical charge. The size of the electric current is the rate at which electrical charge flows round the circuit.
Resistor	A component that acts to limit the current in a circuit. When a resistor has a high resistance, the current is low.
Directly proportional	When two quantities are directly proportional, doubling one quantity will cause the other quantity will cause the other quantity to double. When a graph is plotted, the graph line will be straight and pass through the origin.
Inversely proportional	When two quantities are inversely proportional, doubling one quantity will cause the other quantity to halve
Ohmic	The current flowing through an ohmic conductor is proportional to the potential difference across it. If the p.d. doubles, the current doubles. The resistance stays the same.
Non-ohmic	The current flowing through a non-ohmic resistor is not proportional to the potential difference across it. The resistance changes as the current flowing through it changes.



$P = V \times I$ power = voltage x current.
 $V = I \times R$ voltage = current x resistance.
 $Q = I \times t$ charge = current x time.
 $E = V \times Q$ energy = voltage x charge.
 $E = V \times I \times t$ energy = voltage x current x time.

$$\frac{V_p}{V_s} = \frac{N_p}{N_s} \quad \text{transformer equation}$$

Total cost = number of units x cost per unit.



Science - Atomic Structure and the Periodic Table

Key Terms

Atom	A particle with no electric charge made up of a nucleus containing protons and neutrons and surrounded by electrons.
Proton	A positively charged particle found in the nucleus of an atom.
Neutron	A neutral particle found in the nucleus of an atom.
Electron	Negatively charged particles found on energy levels (shells) surrounding the nucleus inside atoms.
Nucleus	Central part of an atom containing protons and neutrons.
Energy level (shell)	The region an electron occupies surrounding the nucleus inside an atom.
Atomic number	Number of protons in an atom.
Mass number	Number of protons plus neutrons in an atom.
Isotope	Atoms with the same number of protons but a different number of neutrons.
Relative atomic mass	The average mass of atoms of an element taking into account the mass and amount of each isotope it contains. RAM = Total mass of atoms / total number of atoms
Electronic structure	The arrangement of electrons in the energy levels of an atom.
Ion	An electrically charged particle containing different numbers of protons and electrons.
Group	The name given to each column in the periodic table.
Element	A substance containing only one type of atom.
Compound	A substance made from different elements chemically bonded together.
Period	The name given to a row in the periodic table.
Alkali metals	The elements in Group 1 of the periodic table.
Noble gases	The elements in Group 0 of the periodic table.

Halogens	The elements in Group 7 of the periodic table.
Diatomic molecule	A molecule containing 2 atoms.
Halides	Compounds made from Group 7 elements.
Mixture	More than one substance that are not chemically bonded.
Solvent	The liquid that a solute dissolves in.
Solution	A solute dissolved in a solvent.
Soluble	A substance that will dissolve.
Insoluble	A substance that will not dissolve.
Solute	The solid that dissolves in a solvent.

Plum Pudding Model

+ve potential sphere

electron

~10⁻¹⁰m = 1 Angstrom

Nuclear Model

+ve nucleus

Orbiting electrons

~10⁻¹⁰m = 1 Angstrom

Nucleus

Protons

Neutrons

Electron

Atomic Mass = # of Protons + # of Neutrons

4

2He

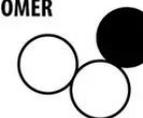
Atomic Number = # of Protons

Science - Bonding, structures and the properties of matter

Giant Lattice	Ionic substances are made up of a giant lattice of positive and negative ions in a regular structure.
Ionic bonding	The electrostatic attraction between positive and negative ions
Molecule	Particle made from atoms joined together by covalent bonds
Covalent bond	Two shared electrons joining atoms together
Intermolecular forces	Weak forces between molecules
Polymer	Long chain molecule made from joining lots of small molecules together by covalent bonds
Monomer	The building block (molecule) of a polymer
Delocalised	Free to move around
Metallic bonding	The attraction between the nucleus of metal atoms and delocalized electrons
Malleable	Can be hammered into shape
Alloy	A mixture of a metal with small amounts of other elements, usually other metals
States of matter	These are solid, liquid and gas
Fullerenes	Family of carbon molecules each with carbon atoms linked in rings to form a hollow sphere or tube
Catalyst	Substance that speeds up a chemical reaction but is not used up in it

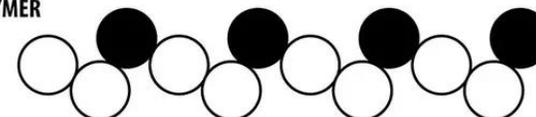
Structure of Monomers and Polymers

MONOMER



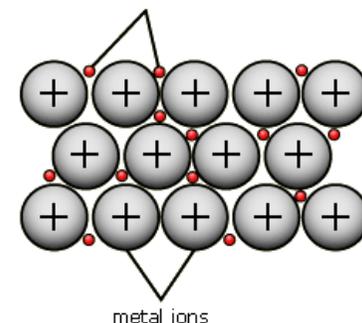
A monomer is a small molecule.

POLYMER



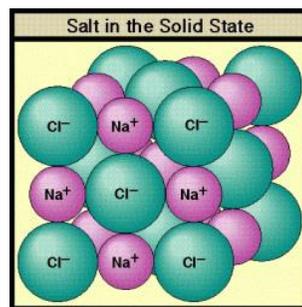
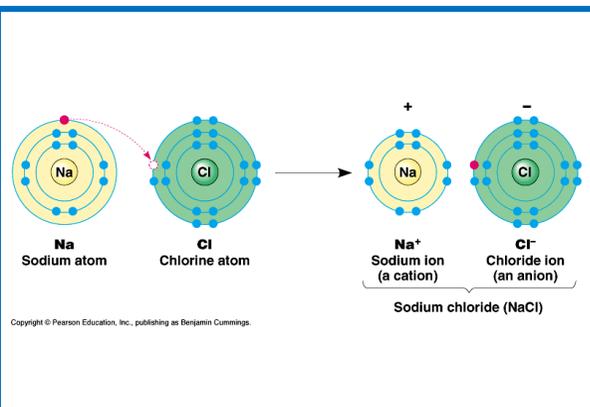
A polymer is a long-chain molecule made up of a repeated pattern of monomers.

free electrons from outer shells of metal atoms

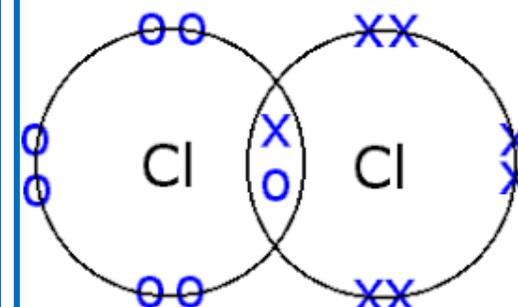


Metallic structure

metal ions



Ionic bonding and structure



Covalent bonding

Crime and Deviance knowledge Organiser



Social Order: For people to live and work together a certain amount of order and predictability is needed.

Functionalists argue this is based on value consensus.
Marxists: Social order is maintained because of class conflict. The bourgeoisie have power and control to enforce order and influence the law.

Social Control: Much of our behaviour is socially controlled.

Formal Social Control: Based on written rules and laws.

- Agencies of formal social control:**
- Houses of Parliament
 - The police force
 - Judiciary
 - The prison service.

Informal Social Control: Based on unwritten rules and processes such as approval & disapproval

- Agencies of informal social control:**
- Family members
 - Peers
 - Teachers
 - Work colleagues

Functionalist
 Crime is vital and necessary of all societies. It helps to remind people about boundaries of acceptable & unacceptable behaviour. When the public come together over a reaction to a major crime, it creates social cohesion. (Durkheim)

- Sources of data into crime:**
- Victim Surveys
 - Self-report studies
 - Crime Survey
 - National Statistics

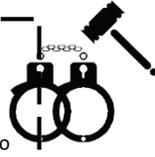
How useful are statistics recorded by the police?

- If a crime isn't witnessed it won't be reported.
- Many crimes are witnessed and not reported.
- **The dark figure of crime**

Marxist
 Because society is based on values such as materialism, consumerism and competition- an unequal society. Some people cannot earn enough to fit these norms & values, therefore they commit illegal activities to get them.

Mass Media & Deviancy Amplification (Stan Cohen 1972):

- The media creates **moral panics**- exaggerating the extent and significance of a social problem.
- A particular group is set as **folk devil**- a threat to society's values.
- The media distorts the events and incidents and create a false image of young people and their activities.
- This can encourage other young people to behave in the way the media portrays.
- Recent moral panics: school violence, bullying & shootouts, benefit cheats and single mothers, refugees & asylum seekers.



The class deal & the gender deal.

- Most people conform to the rules because of the 'deals' that offer them rewards.
- **Class Deal:** Material rewards if you work for your wage
- **Gender deal:** Material & emotional rewards if you live with a male breadwinner within the family.

Crime: An illegal act punishable by law.

Feminist
 Women are treated and punished as double deviants- they have firstly broken the law and second the norms that govern their gender behaviour. Arguments around the 'chivalry thesis'

Refusing the class deal: Not found legitimate ways of earning a decent living. More to gain than to lose by offending.

Refusing the gender deal: Supposed to be rewarded with happiness & fulfilment from family life. Many women may be abused, no bonds with family & friends. Nothing to lose and everything to gain.

Deviance: Behaviour that does not conform to society's rules and norms.

Interactionists
 Labelling produces a self-fulfilling prophecy. Social groups create deviance by making rules and applying them to particular people and labelling them as 'outsiders'. Groups whose social position gives them power are able to label people. These people see this as a self-fulfilling prophecy.



Those at high risk from crime:

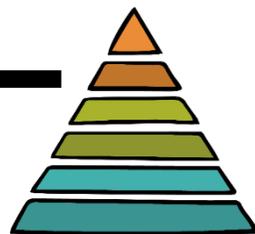
Class: The poor, living in private rented housing
Gender: Males
Age: The Young
Ethnicity: Minority ethnic groups.

White Collar Crime: Crimes committed by people in relatively high-status positions. E.g. tax evasion, fraud, misuse of expense account

Keythinkers

Albert Cohen (1955) (Functionalist)	Robert Merton (1938) (Functionalist)	Pat Carlen (1988) (Feminist)	Frances Heidensohn (1985, 1996) (Feminist)	Howard Becker (1997) (Interactionist)
Cultural deprivation accounts for working class boys' lack of educational success. They turn to criminality as an alternative route to success. 	Deviance results from the culture and structure of society. All members of society hold the same values. However, because members of society have different positions in the social structure, for example in terms of social class, Merton identified five possible ways that individuals will respond to the goals of success in society.	Control theory is the basis for her approach, this starts from the assumption that human beings are neither naturally good nor bad but will make a rational decision to crime when the advantages outweigh the disadvantages. It supports the view that criminal behaviour becomes more likely when social control breaks down.	Control theory is the basis why women commit fewer crimes than men. She argues that male-dominated patriarchal societies control women more effectively than men, making it difficult for women to break the law.	Becker argued that an act only becomes deviant when others define it as such. Whether the 'label' of deviancy is applied depends on who commits the act, when and where it is committed, who observes the act, and the negotiations that take place between the various actors involved in the interaction.

Social Stratification Knowledge Organiser



Ascribed status: social position is fixed at birth and unchanged over time.

Achieved status: social position is earned on merit e.g. education, promotion.

Social class is seen as the main source of stratification in Britain. Based on economic factors such as occupations and income. **Social mobility** is deemed to be possible.

Other forms of social stratification:

- **Feudalism:** ascribed, little to no chance of moving to the next strata.
- **The caste system in India:** ascribed, closed and little movement
- **Apartheid:** ascribed, little social mobility

Distribution of wealth and income
Wealth refers to assets such as houses, land, art, jewellery. Income refers to wages, benefits etc. Wealth is usually distributed more unevenly than income.

Life chances:
Peoples chances of achieving positive or negative outcomes as they progress through life. These are not distributed equally between groups. Affected by factors such as: *religion, social class, gender, ethnicity, sexuality, age, disability*

The culture of poverty:
People from the poorest section of society are socialised within the subculture of poverty. As a result they are unable to break free from poverty.

The cycle of deprivation:
The policy to remove poverty involves employing social workers and using local authority provision to help break children out of the cycle of deprivation.

Material deprivation:
Having insufficient money to be able to afford goods and services. As a result people may not have a balance diet. Poverty may lead to ill health during childhood and inadequate housing.

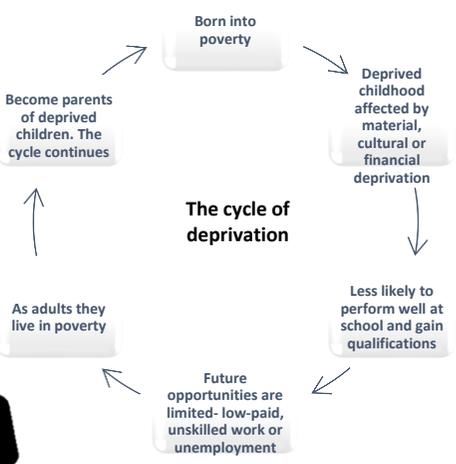
Social mobility: moving between social classes.
Intra-generational social mobility- movement of their lifetime e.g. promotion.
Inter-generational social mobility- movement between generations of a family e.g. when a child enters a different social from their parents.

Social Stratification: Describes the way society is structured in a hierarchy, shaped like a pyramid. Each layer is smaller but more powerful than the one below it.

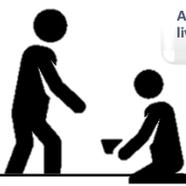
Social inequality: Refers to the uneven distribution of resources such as money & power, life chances or opportunities related to education, employment and health.

Karl Marx and social class (1818-1883)

- The bourgeoisie (the ruling class)- owned the means of production.
- The proletariat (working class) forced to sell their labour. Experience **alienation** and lack of control.
- The bourgeoisie exploit the proletariat.
- **Ruling-class ideology and false class consciousness.**



Embourgeoisement thesis
Working-class families are becoming middle-class. Their norms and values are changing as their standards of living and income improves. Affluence has led to privatised lifestyles centred on the home and family- based on consumerism.



keythinkers

Davis & Moore (1945) (Functionalist)	Max Weber (1864-1920) (Marxist)	Fiona Devine (1992)	Charles Murray (1996)	Peter Townsend (1979)
Social stratification was a 'universal necessity' for every society. The system must match the most able people with the functionally most important positions in society. These high rewards would encourage ambitious people to compete for them, with the most talented achieving success.	Classes are formed in market places, such as the labour market. One class hire, the other sells their labour. A class is a group of people with similar life chances- being successful. Weber stressed the importance of status (prestige) and power in determining life chances and shaping patterns of stratification e.g. members of aristocracy may have no savings, but have a title that gives them status.	Devine tested Lockwood's idea that 'privatized instrumentalism' would become typical amongst the working class. This term refers to social relationships centred on the home with work only to an end, when affluent workers joined with their workmates. Paid work is a means to a comfortable lifestyle rather than having job satisfaction.	Society had a growing underclass. Government policies have encouraged the members of this underclass to become dependent on benefits. Traditional values such as honesty, family life and hard work were being undermined by the members of the underclass, to be replaced by an alternative value system that tolerated crime and various forms of anti-social behaviour.	Identified three ways of defining poverty: The state's standard of poverty on which official statistics are based. The relative income standard of poverty based on identifying those households whose income falls below the average for similar households. Relative deprivation, when families are unable to participate in activities and have the living conditions that are widely available in society

Spanish

Vivo en – *I live in*
 Una casa en hilera/individual/adosada – *a terraced/detached/semi-detached house*
 Una casa de un sólo piso – *a bungalow*
 Un piso – *a flat*
 Una granja – *a farm*
 (no) tiene – *It has/(doesn't have)*
 (un) salón - *lounge*
 (una) cocina - *kitchen*
 (un) cuarto de baño - *bathroom*
 (____) dormitorios – *(number) bedrooms*
 (un) jardín - *garden*
 (unos) balcones – *balconies*
 (un) garaje - *garage*
 Es grande/pequeño/moderno/viejo – *It is big/small/modern/old*

La casa



Vivo allí desde hace 1988 – *I have been living here since 1988*
 Vivo allí desde hace cuatro años – *I have been living here for four years*

Cuando era pequeño/a – *When I was little*
 Vivía en – *I used to live in*
 (no) había... – *There was(n't)*
 Vivía con – *I lived with*
 Mis padres/mi familia/mis abuelos – *my parents/family/grandparents*
 Vivía allí durante tres años – *I lived there for three years*
 Era – *it was (+ adjective)*
 Estaba en - *it was in (position)*
 el norte/este/sur/oeste/centro- *north/east/south/west/centre*
 Me mudé en 1994 – *I moved in 1994*

En el futuro – *In the future*
 Voy a vivir en – *I am going to live in*
 En mi casa ideal – *in my ideal house*
 Me gustaría tener – *I would like to have*
 (no) habría – *there would (not) be*
 (no) tendría – *it would (not) have*
 (una) piscina climatizada – *a heated pool*
 (una) sala de juegos – *a games room*
 (una) pista de tenis – *a tennis court*
 Estaría – *it would be (position)*
 En el campo – *it the countryside*
 En pleno centro- *dead in the centre*
 En la ciudad capital – *in the capital*
 Sería - *It would be (+ adjective)*
 lujos@/guay/modern@ - *luxurious/cool/modern*



Vivo en – *I live in*
 Una ciudad/un pueblo – *a city/town (or village)* **El barrio**
 Que se llama _____ - *which is called*
 Está en el norte/este/sur/oeste/centro de Inglaterra – *it is in the north/east/south/west/centre of England*
 Está en la frontera con Cornualles – *it's on the border with Cornwall*
 Está en el campo/en la costa/en las montañas – *it is in the countryside/coast/mountains*
 Está cerca de... - *it is near to _____*
 Está lejos de... - *it is far from _____*
 Es una ciudad industrial/turística/histórica/moderna/rural/de la costa – *it is an industrial/touristy/historical/modern/rural/coastal city*

El centro – *the centre* Las afueras – *the suburbs*
 Un barrio que se llama '.....' – *an area which is called '....'*
 En mi barrio hay... - *In my area there is/are...*
 Pero no hay (un/una...)... *But there is no...*
 (Unos) parques - *parks*
 (Una) playa - *beach*
 (unos) museos - *museums*
 (unos) grandes almacenes – *department stores*
 (unas) tiendas locales – *local shops*
 (un) cine - *cinema*
 (un) polideportivo – *sports centre*
 (un) estadio de rugby/de fútbol – *rugby/football stadium*
 (una) pista de patinaje – *skating rink*
 (un) ayuntamiento – *town hall*
 (unos) institutos - *schools*
 (unas) iglesias históricas – *historic churches*
 (una) catedral moderna – *modern cathedral*
 (unos) buenos bares y restaurantes – *good bars and restaurants*
 (una) discoteca – *disco/nightclub*

Lo mejor de mi barrio es... *The best thing about my area is...*
 Lo peor de donde vivo es... *The worst thing about where I live is...*
Que hay mucho bullicio*that there's lots of hustle and bustle*
Que hay tantas diversiones*that there are so many fun things*
 Que (no) hay mucho que hacer – *that there is (not) a lot to do*
 Que está cerca del centro/mis amigos/el colegio – *that it is near to the centre/my friends/the school*
 Que (no) hay much@ ruido/contaminación/circulación /gente/espacio verde/naturaleza– *that there is (not) a lot of noise/pollution/traffic/people/green space/nature*
 Que (no) tiene un equipo de fútbol famoso – *that is has (no) famous football team*



Me gustaría vivir en... - *I would like to live in...*
 Prefiero vivir en el campo porque... - *I prefer to live in the country because...*
 Hay más naturaleza/espacios verdes/paisaje bonito – *there is more nature/green spaces/pretty countryside*
 Hay menos ruido/tráfico/gente/basura/contaminación – *there is less noise/traffic/people/rubbish/pollution*
 Me gusta(n) la naturaleza/los animales – *I like nature/animals*
 Prefiero vivir en la ciudad porque... - *I prefer to live in the city because*
 Hay más cosas que hacer/gente/transporte público – *there are more things to do/people/public transport*
 Es más viva y animada/conveniente – *it is more lively and animated*
 Una ventaja es... - *an advantage is...* **CIUDAD/CAMPO**
 Una desventaja es... - *a disadvantage is...*
 Poder viajar fácilmente – *being able to travel easily*
 Estar cerca de mis amigos – *being close to my friends*
 Poder ir de paseo – *being able to go for a walk*
 Poder jugar en el aire libre – *being able to play in fresh air*



(no) – * before each expression for negative
 Me encanta(n) – *I love*
 Me gusta(n) – *I like*
 Me interesa(n) – *I am interested in*
 Me chifla(n) – *I find cool*
 Me mola(n) - *I find cool*
 Me entusiasma(n) – *I find exciting*
 Me da(n) igual – *I don't mind*
 Prefiero - *I prefer*
 Odio – *I hate*
 No soporto – *I can't stand*
 No aguanto – *I can't stand*

Opinión

Porque/dado que (no) es... - *Because it is(n't)*
 Demasiado - *too*
 Muy – *very* Sumamente - *really*
 Bastante - *quite*
 Un poco – *a little*
 Nada – *not at all*

También - *also*
 Además – *as well*
 O - *or*
 Pero - *but*
 Sin embargo - *however*
 Por lo tanto - *therefore*

CONNECTIVES

REMEMBER:
6ws – who, what, when, where, why, what was it like...

- ✓ Detail
- ✓ Present
- ✓ Past
- ✓ Future
- ✓ Opinions
- ✓ Reasons

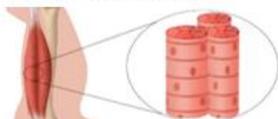
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Component 1 The Muscular System

Classification of muscles:

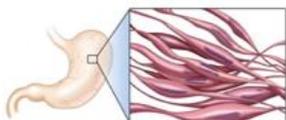
Voluntary muscles

- Found on the skeleton e.g. biceps triceps & quadriceps
- Conscious control
- Attach to the skeleton to create movement



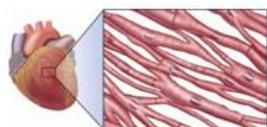
Involuntary muscles

- Found in the stomach, intestines & blood vessels
- Unconscious control
- Contract slowly and rhythmically

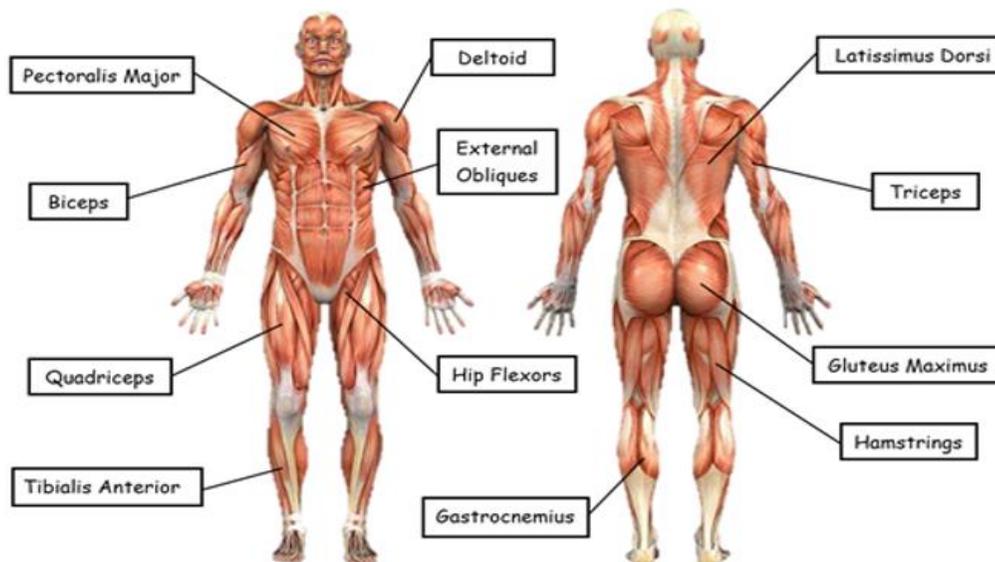


Cardiac muscle

- Found in the wall of the heart
- Unconscious control
- Do not tire



Voluntary muscles of the body:



Muscle fibres:

Type I (Slow Twitch)

- Aerobic events
- Marathon running

Type IIa (Fast Twitch)

- 400m race

Type IIx (Fast Twitch)

- Anaerobic events
- 100m sprint

Characteristic	Slow Twitch Type I	Fast Twitch Type IIa	Fast Twitch Type IIx
Force of Contraction	Low	High	Very high
Speed of Contraction	Slow	Medium	Fast
Resistance to Fatigue	High	Moderate	Low
Aerobic or Anaerobic	Aerobic	Aerobic & Anaerobic	Anaerobic
Myoglobin	High	Medium	Low
Mitochondria	High	Medium	Low
Capillary Network	Good	Moderate	Low

Muscles and their function:

Muscle	Location	Function	Sporting Example
Deltoid	Shoulder	Move the upper arm in all directions from the shoulder	Serve in tennis Front Crawl
Pectoralis Major	Chest	Adducts the arm at the shoulder	Forehand drive in tennis Hand off in rugby
Latissimus Dorsi	Back muscle	Adducts and extends the arm at the shoulder	Butterfly stroke Rowing stroke
Biceps	Front of Upper Arm	Elbow flexion (bending)	Boxing Uppercut Preparing to Throw a javelin
Triceps	Back of Upper Arm	Elbow extension (straightening)	Press-up Hand off in rugby
External Obliques	Side of the abdomen	Pulls the chest downwards Flexion and rotation at spinal column	Crunches
Gluteus Maximus	Form the buttocks	Adducts and extends the hips pulling the leg backwards	Pull leg back before kicking a ball
Hip Flexors	Front of the hip	Flexes the hip, moves the hip upwards	Lifting knees when sprinting
Quadriceps	Front of Upper Leg	Knee extension (straightening)	Kicking a ball Jumping upwards
Hamstrings	Back of Upper Leg	Knee flexion (bending)	Bending knee before kicking a ball
Gastrocnemius	Calf muscle	Plantar flexion, points the toes	Running gymnastics
Tibialis Anterior	shin	Dorsi flexion, pulls toes upwards	Ski jumping Hurdling

Antagonistic muscle pairs:

When we bend the elbow (flexion) the biceps contract and the triceps relax
Agonist = Biceps
Antagonist = Triceps



When we straighten the elbow (extension) the triceps contract and the biceps relax
Agonist = Triceps
Antagonist = Biceps

Other antagonistic pairs include:

- Quadriceps & Hamstrings
- Hip flexors & Gluteus Maximus
- Gastrocnemius & Tibialis Anterior

The skeletal system and muscular system work together. Bones provide anchors for muscles to attach. Muscles attach to bone through tendons, when muscles contract, they pull on bones to create movement.

Component 1 The Skeletal System

The functions of the skeleton:

1. Protection of vital organs

Cranium protects the brain when heading a ball



2. Muscle attachment

Bones provide anchors for muscles to attach.



3. Joints for movement

Bones act as levers to create movement.



4. Platelets

Platelets clot blood when we are cut to stop the bleeding.



5. Blood cell production

Red blood cells carry oxygen
White blood cells fight infection.



6. Store calcium & phosphorus

Calcium and Phosphorus is stored in the bones to keep them strong.



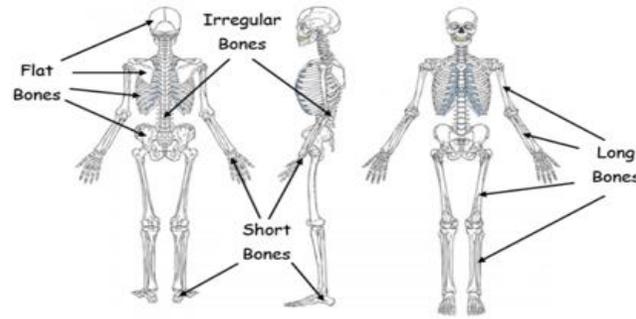
Classification of bones:

Long bones act as levers so we can move. Examples are the humerus, ulna and femur.

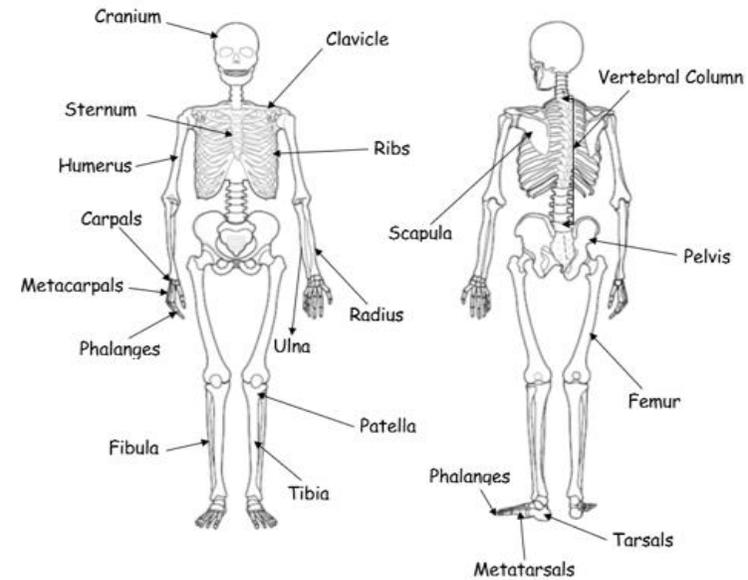
Short bones are important for weight bearing and to absorb shock. Examples are the carpals and tarsals.

Flat bones usually protect organs. Examples are the ribs, pelvis and scapula.

Irregular bones have odd shapes and perform a range of functions. Examples are the bones of the vertebrae.



Structure of the skeleton:



Movement possibilities at joints:

Flexion: bending movement (decreases angle)

Extension: Straightening movement (increase angle)

Abduction: Moving away from midline

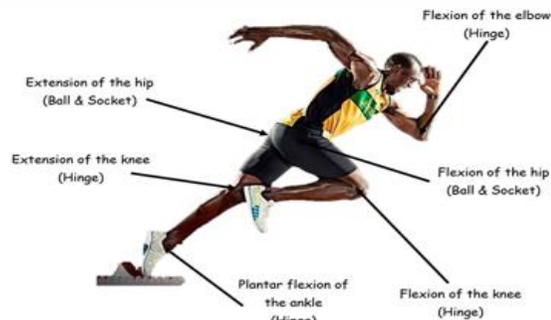
Adduction: Moving towards the midline

Plantar flexion: Pointing the toes downwards

Dorsi flexion: Pointing the toes upwards

Rotation: Rotation around a joint or axis

Circumduction: flexion/extension Abduction/adduction



The role of ligaments and tendons:

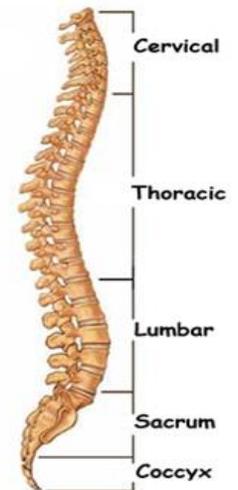


A ligaments main function is to join bone to bone. Ligaments help stabilise joints and prevent dislocation.



Tendons attach muscle to bone. Tendons help provide powerful movements such as kicking, jumping and

Vertebral column:



Classification of joints:

Hinge

E.g. Elbow & Knee



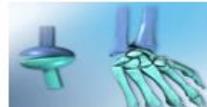
Ball & Socket

E.g. Hip & Shoulder



Condyloid

E.g. Wrist



Pivot

E.g. Neck (axis & Atlas)



Sport - Unit 3 Applying the Principles of Personal Training

Personal Goals

- S – Specific
- M – Measurable
- A – Achievable
- R – Realistic
- T – Time-related
- E – Exciting
- R - Recorded

Lifestyle and Physical Activity
History
Medical History Questionnaires

Learning Aim A - Design a personal fitness training programme

Maximum HR = $220 - \text{age (years)}$
Training zones to CV health and fitness 60-85%
Borg Rating of Perceived Exertion (RPE)

Aims and Objectives of what you want to achieve in your selected activity.

Goals
Short-term
Medium-term
Long-term

Personal information	Aiding your training programme design
Selection	Appropriate training method, activity for improvement, maintaining the selected component of fitness
Safe Design	Appropriate method, selection of appropriate combination of activities - meeting personal training needs, goals, aims and objectives
Basic principles of training	F – Frequency I – Intensity T – time T – Type This will include application of the Principles of training
WARM UP	Warm up (light, continuous PA to prepare the body from a state of rest to a state of exercise!)
COOL DOWN	Cool down (light, continuous PA to return the body to a state of rest – reducing the HR, removal of Lactic Acid and prevent blood pooling)
Creative Design	Prevent and avoid barriers to training occurring, programme enjoyable, must include – interesting, different exercise activities to maintain motivation and commitment and to prevent BOREDOM!
Intensity	Target zones and training thresholds

Technology - Engineering

Keywords

Tolerance —The upper and lower limit of a dimension eg. +/- 0.5mm
Countersink—to apply a bevel to a pre drilled hole and allow a bolt to sit flush
Assembly —And drawing used to show fit and function, and verify how a product is put together

Extrusion—in manufacturing, this is a process where metal is forced through a die to create a particular profile
Scale—A drawing that shows a real object with accurate sizes reduced or enlarged by a certain amount
Anodise— enhances the natural corrosion resistance as well as giving a much more consistent, aesthetic finish.

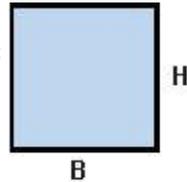
Engineering processes

- **Marking out** layout means the process of transferring a design or pattern to a workpiece, as the first step in the manufacturing process.
- **Cutting** is the process in which **acutting** is used to remove small chips of material from the workpiece finishing
- **Preparing** is to clean and remove oil and grease from the surface of metal to aid finishing
- **Shaping** of metal or other materials by removing material to **form** final shape.
- **Drilling** is a cutting process that uses a drill bit to cut a hole of circular cross-section in solid materials

Mathematical knowledge

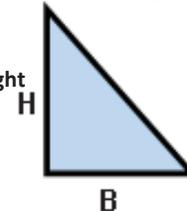
The area of a rectangle can be calculated using the following formula.

Area of rectangle = Base x Height



The area of a triangle can be calculated using the following formula.

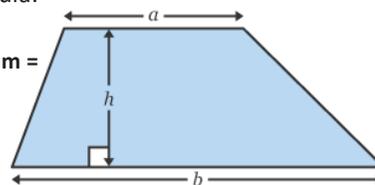
Area of triangle = 1/2 Base x Height



The area of a **trapezium** can be calculated using the formula:

Area of trapezium =

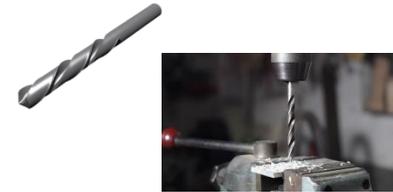
$1/2 (a+b) \times h$



Manufacturing processes

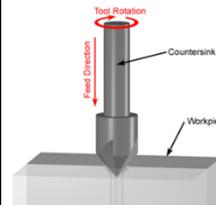
Twist drills

Sometimes known as **jobber drills**. These drills can be used with plastics and metals.



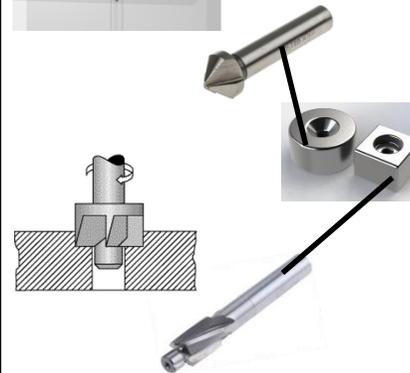
Countersink

This produces a chamfer on the edge of an existing hole. It allows countersunk screw heads to sit flush with the surface.



Counterbore

This opens out the top of an existing hole to a larger size. It allows screw heads to sit level or below with the surface.



A drill bit is rotated and moved into the material until the hole is created.

Bench drills

Bench drills are secured to a surface of a work bench

Pillar drills

Pillar drills are floor standing. They have a lot more adjustment so can drill bigger work. They are more powerful and as a result are more expensive.



Hand held power drills

Only good for small work. Often inaccurate.



Hazards

Flying debris _____ Goggles
 Fingers caught in chuck _____ Guards
 Work spinning off the table _____ Clamp work
 Snatching _____ Drill slow at breakthrough point
 Loose clothing / hair caught by drill _____ Apron / hair band
 Cuts from swarf _____ Gloves

Control measures

Technology – Food preparation and nutrition

Key Vocabulary

Drying	A useful preservation method for fruits and herbs. For example raisins, apricots, dried basil.
Canning	Canned fruits include pineapple, peaches and mandarins. They are usually in a liquid such as natural juice or sugar syrup. Canned vegetables have a much softer texture than fresh vegetables due to the high temperature used in the canning process.
Bottling	Bottling is when fruit and vegetables are prepared and placed in special glass jars with sugar syrup brine. The jars are sealed and heated to a high temperature to sterilise the contents. This will destroy any microorganisms and will preserve the fruits and vegetables for several months.
Pickling	A preservation method that uses acetic acid naturally found in vinegar.
Freezing	By freezing food the water inside turns into ice and this stops the growth of microorganisms. Some fruits and vegetables need to be blanched first to stop enzymic activity.
Jam making	A method of preserving fruit using high temperature and sugar. The combination of heat, sugar and pectin in the fruit enables the jam to form a gel and set on cooling.
Gelatine	A natural protein substance present in the tendon, ligaments and tissue of animals. It is translucent and colourless. It is used to set desserts such as cheesecakes.
Staple Foods	Food that forms a large part of the diet, usually starchy foods
Hypothesis	A statement of what you think is likely to happen

Key Temperatures

5C – 63C—Temperature danger zone
63C and above — Hot held food
75C—Cooked food
-18C — Temperature of a freezer
5C — Temperature of a fridge

A balanced diet will contain at least 5 portions of fruits and vegetables per day.
Some nutrients such as vitamin C and dietary fibre are only found in fruits and vegetables.

Vegetables are categorised as:

Root	Beetroot, parsnips, Swede	Seeds and Pods	Beans, Peas, Lentils
Stems	Asparagus, Celery	Flower Heads	Broccoli, Cauliflower
Tubers	Potato, Jerusalem Artichokes	Leaves	Cabbage, Spinach
Fungi	Mushrooms,	Sea Vegetables	Samphire, Nori, Kelp
Bulbs	Leeks, Onions	Vegetable Fruits	Aubergines, Tomatoes

Fruits are classified as:

Hard - Apples, Pears, Quince

Dried - Raisins, Figs, Apricots

Soft - Blackberries, Strawberries

Stoned - Cherries, Peaches, Plums

Citrus - Oranges, Lime, Grapefruit

Tropical - Water melon, Mango, Coconut

Shortcrust pastry

Recommended fat to use:

1/2 lard 1/2 margarine or butter.

Proportion of fat to flour:

1/2 fat to flour

Type of flour: Plain flour

Technique used to make: Fat

cut into cubes and rubbed in to flour, liquid added

For a richer pastry: Egg yolk and sugar are added

Whisking Cake Making Method

Proportion of fat to flour: No fat used

Proportion of sugar to flour: Equal

Technique used to make: Eggs and sugar are whisked, flour folded in

Examples: Swiss Roll, Genoese sponge cake

Potatoes are considered to be one of the most important staple foods in the UK.

There is a wide range of potato varieties available. Different varieties suit different cooking methods.

Eatwell Guide

The Eatwell Guide shows how eating different foods can make a healthy and balanced diet. It divides food into groups and shows how much of each food group is needed for a healthy diet.

A traffic light colour coded food label which helps you choose healthy food



Foods high in fat and/or sugar have been removed from the main segments as these should be eaten less often and in small amounts.

8 Tips for Healthy Eating

1. Base your meals on starchy foods
2. Eat lots of fruits and vegetables
3. Eat more fish—including a portion of oily fish each week
4. Cut down on saturated fat
5. Eat less salt
6. Get active
7. Drink plenty of water
8. Don't skip breakfast

Macro Nutrients

- Protein** is needed for growth, repair, maintenance and energy.
examples
- Carbohydrate** provides the body with energy.
examples
- Fat** keeps the body warm, provides energy, protects vital organs and provides fat soluble vitamins
examples

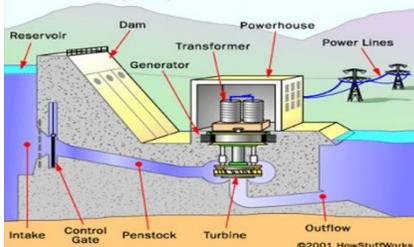
Micro Nutrients & Minerals

- Vitamin A** Keeps the eyes and skin healthy
Liver, milk, carrots, red peppers
- Vitamin B** Releases energy from food
Bread, fish, broccoli, liver, milk, peas, rice
- Vitamin C** Keeps connective tissue healthy. Helps the body to absorb iron
Oranges, blackcurrants, broccoli, red and green peppers
- Vitamin D** Helps the body to absorb calcium for strong bones and teeth
Butter, eggs, milk and oily fish

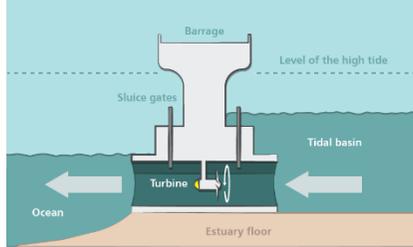
- Calcium** Builds strong bones and teeth
Yoghurt, cheese, milk, tofu
- Iron** Keeps red blood cells healthy
Green vegetables, beans, fish, egg yolk, red, meat
- Sodium (Salt)** Keeps the correct water balance
Cheese, bacon, salted nuts, ready meals

Key Vocabulary

Tool path	Line the cutter will take when cutting work on the router
Contour	A line around the out/inside of another
CNC lathe	Lathe controlled by a computer
Jig	Something of a given size used to save measuring
Batch Production	Making a defined number of the same items. Eg 12 cakes
Component	A part <i>example, screw, LED, resistor, bolt</i>
Quality Assurance	The process put in place to ensure all parts will be the same
Series circuit	Where electricity passes from 1 component into another
Parallel circuit	Where each component draws power for positive / negative
LED	Light emitting diode. Often used as a warning light
Polarity	The way the + and — on a DC circuit are connected
Resistor	An electronic component used to slow the current down
Test	Checking fitness for purpose
CNC	Term used to classify machines controlled buy a computer
CAD	Computer aided design
CAM	Computer aided making (manufacture)
Router	Machine used to cut out maze
2D Design	CAD program used in schools
Insulate	To stop something heat / electricity being conducted
Heat Shrink	Tubing put around wire and shrunk to hold in place
Soldering Iron	Tool used to melt solder
Solder	Metal with a low melting point used to join electronics
Resistor	Component used to slow the current of electricity
Solvent	Liquid used to dissolve something
Tensol Cement	Solvent cement used to join acrylic to acrylic
Dissolve	To melt or soften into a liquid



A Hydroelectric Power Plant



A Tidal Power Plant

Electricity Generation

Fossil Fuels

Fuels such as coal gas and oil are fuels formed over millions of years from dead organisms. These are burnt to create heat and convert water to steam which driver turbines connected to generators

Advantages:
Can be built anywhere

Disadvantages:
Burning fossil fuels releases carbon dioxide which adds to the greenhouse effect and possible global warming
Fossil fuels are non finite resources

Nuclear

In a nuclear reactor, uranium atoms are split using a process called fission. This process causes heat which is used to create steam which can turn turbines.

Advantages:
High output, reliable, minimal output of greenhouse gasses.

Disadvantages:
Potentially hazardous. Many old power stations need replacing. Dealing with spent fuel leaves longstanding complications. There have been several high profile accidents.

Renewable

Renewable energy is gathered from sources such as wind, solar, tidal, water or hydroelectricity, wave power, biomass

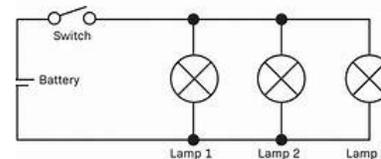
Advantages:
Renewables tend not to produce much, if any waste. They also do not add significantly to global warming,

Disadvantages:
Sources are unreliable. Solar cells only work when the sun is shining, hydroelectricity requires damming river and flooding valleys etc. Infrastructure can be expensive.

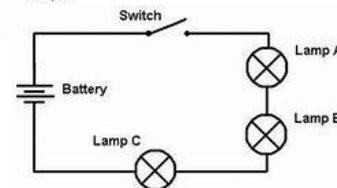
Series and Parallel Circuits

In this series circuit, electricity flows through 1 component, on to another and into a 3rd light before completing it's circuit. This causes all bulbs to light but not brightly

In a parallel circuit, each bulb draws an independent power supply from the battery or power supply. This draws more current and the bulbs light fully however the battery will not last as long



Battery = 1.5 volts, Lamps = 1.5 volts ea.



Electronic Symbols

Switch	Battery	LED	Resistor	Bulb	Buzzer	Speaker	Motor

Keywords

Tolerance

in textiles is the amount of acceptable variation from the specified measurement from which you can cut out pattern pieces, add components or sew seams.

Seam allowance

is the amount of material between the edge of the fabric and the seam, and it is tested to check it meets the tolerance stated in the manufacturing specification.

Manufacturing specification

Document containing clear and detailed instructions for the manufacture of a product.

Quality Control

Quality control (QC) is the system of checks throughout the manufacturing process to make sure each step is completed to a high standard.

Lay plan

How the pattern pieces on fabric should be laid out.

Stock form

Standard sizes for a material, component or product.

Flow chart

A diagram of the sequence of movements or actions of people or things involved in a complex system or activity.

Key Concepts

Job production: Bespoke, made-to-measure garments can be made for a client, such as wedding dresses or couture outfits. These will be original garments and can be produced to a very high quality; however, they can be very expensive to make and highly skilled workers will be needed.



Batch production: is where many items of the same product are produced, such as swimwear and fashionwear. A range of specific and identical products can be produced, including fashion and seasonal items which are regularly changed, but time is lost when retooling and skilled workers are needed. When a product is made in a batch, it is often far cheaper per product than making just one.



Mass Production: Mass-produced products are manufactured in large volumes, and are often made by automated machinery with assembly line workers used to fit parts together or to add standard components, such as buttons or zips. Examples of mass production for textiles are plain T-shirts, school shirts and socks, with products kept low cost as large amounts are made and bulk materials are cheaper to buy. There is, however, a large cost in setting up such an assembly line.

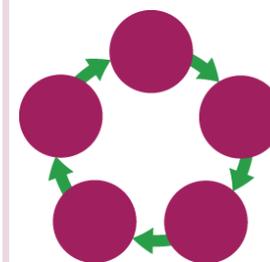


Key Concepts

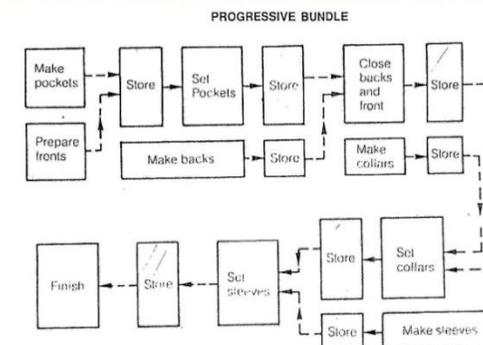
Line production: Each machinist performs exactly the same task over and over again, which can lead to mistakes being made.



Cell production: A manufacturing system whereby teams of machinists work together to produce either a significant part of, or a completed product. Each team is responsible for the quality control of each product or process.



Progressive bundle system: Bundles of garment parts are passed from one machinist to another via a central location. Each completes a specific operation and in one single process. Once checked for quality, the completed bundle will go to another machinist to complete another process until the garment is finished.



My Diary : AUTUMN 2019 - I

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	02/09	03/09	04/09	05/09	06/09	07/09	08/09
2	09/09	10/09	11/09	12/09	13/09	14/09	15/09
3	16/09	17/09	18/09	19/09	20/09	21/09	22/09
4	23/09	24/09	25/09	26/09	27/09	28/09	29/09
5	30/09	01/10	02/10	03/10	04/10	05/10	06/10
6	07/10	08/10	09/10	10/10	11/10	12/10	13/10
7	14/10	15/10	16/10	17/10	18/10	19/10	20/10

My Homework

Week						
02/09						
09/09						
16/09						
23/09						
30/09						
07/10						
14/10						

Home Contact

