My Knowledge Organiser and Planner

Year 9

Autumn 1 - 2020

Basic *Expectations Every Day*

Right Uniform

Right Equipment

On time

No Disruption

Best Effort

College *Day*

8.40am – 9.35am	Period 1
9.35am – 10.30am	Period 2
10.30am – 10.50am	Break time for years 7, 8 + 10
	Tutor time for years 9, 11 + Post16
10.50am – 11.15am	Break time for years 9, 11 + Post16
	Tutor time for years 7, 8 + 10
11.15am – 12.10pm	Period 3
12.10pm – 1.05pm	Period 4 for years 9, 11 + Post16
	Lunch for years 7, 8 + 10
1.05pm – 2.00pm	Period 4 for years 7, 8 + 10
	Lunch for years 9, 11 + Post16
2.00pm – 3.05pm	Period 5 + DEAR / homework time
3.05pm – 4.00pm	Period 6 for year 11 (some year 12)

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 write in paragraphs?

The **TIPTOP** rule
You move onto a new paragraph when you change **t**ime, **p**lace, **t**opic or **p**erson.

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

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	

Homophones

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

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

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.

What traffic light am I?
Is my punctuation accurate?

Literacy mat

Can I use punctuation?

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.*

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)

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

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

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

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

There/ their/ they're

<u>Note:</u> 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

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

Your/ you're

<u>Note:</u> 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*

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. <u>b</u>ig <u>e</u>lephants <u>c</u>annot <u>a</u>lways <u>u</u>se <u>s</u>mall <u>e</u>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.

Art and Design

Record:
Using a statement, text and your own observations to create a powerful statement

Explore: Materials and processes: Observational
Drawing, Mark making, Paint Techniques, Collage, Typography

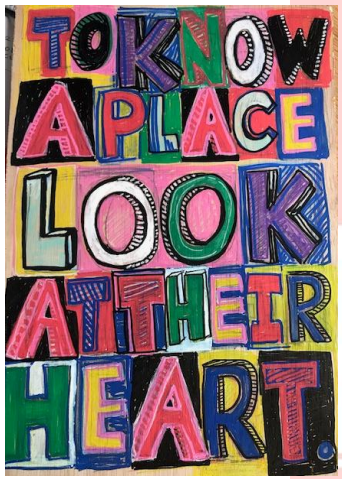
WHAT IS YOUR POWERFUL STATEMENT?

Time line of lessons.
- ❑Observation and progress
- ❑Artist Research
- ❑Mark Making
- ❑Typography
- ❑Pen
- ❑Pastels
- ❑Size
- ❑Collage
- ❑Outcomes
- ❑Evaluations

Materials:
Paint, inks, collage, glue, pencil and black biro, fineliner, marker pen – what else could you use?

SCAN ME

Don't forget to show your work from home – sketchbooks/ photos/ use of apps and tablets



Develop ideas:
Artist research -
Bob and Roberta Smith
www.bobandrobertasmith.co.uk
Include:
Title in a relevant style.
Introduce the artist - how and what?
Describe the artwork
Analyse the formal elements
Add your opinion
Use this to influence your outcome.

SCAN ME

FORMAL ELEMENTS;
COLOUR, SPACE, LINE, PATTERN, TEXTURE, SHAPE, FORM, TONE

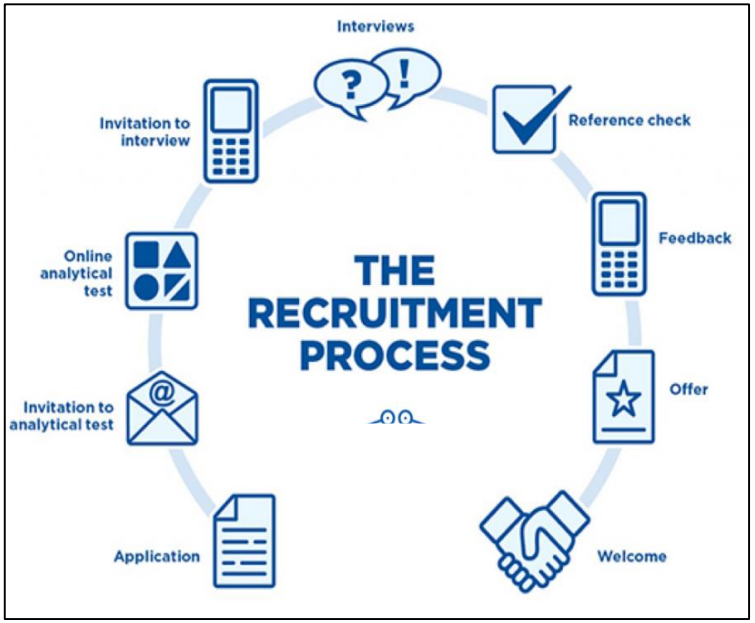
Line - a single long mark made by an implement.
Shape - when shapes, colours or lines are repeated or gathered together.
Tone - Tone refers to the lightness and darkness of a subject to show it is a solid object.
Colour - there are 3 primary colours; Red, Yellow and Blue. By mixing any 2 primary colours together we get a secondary colour e.g. Yellow + Blue = Green.
Observation – a drawing of what you see in front of you as realistically and as true to life as possible
Proportion - the size of objects or shapes when compared to each other.
Typography - is the art and technique of arranging type to make written language legible, readable, and appealing when displayed.
Font is a type in a particular size and weight.
Typeface is a particular design of type.
Serif is a small decorative flourish on the end of the strokes that make up letters or symbols.
In bold/italic - Formal Elements

www.studentartguide.com/articles/realistic-observational-drawings

Business Studies : Unit 1, 2, 3 and 4

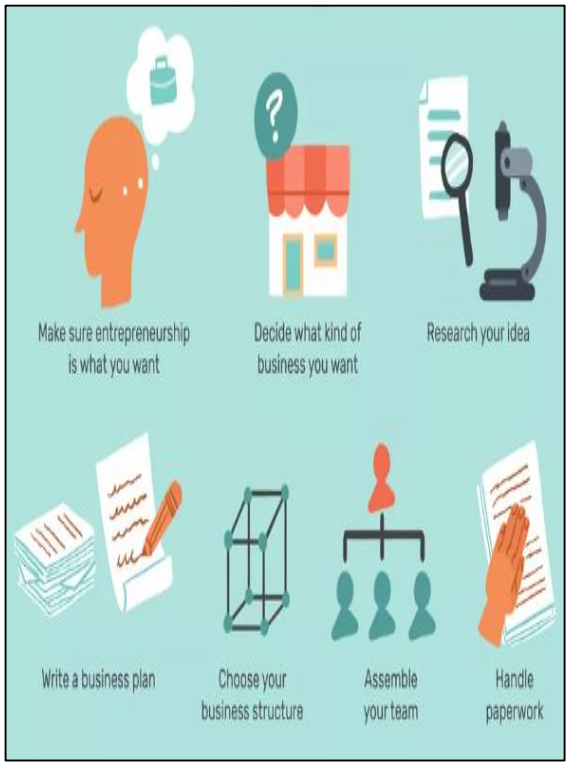
Unit 4: Human Resources

Unit 3: Recruitment



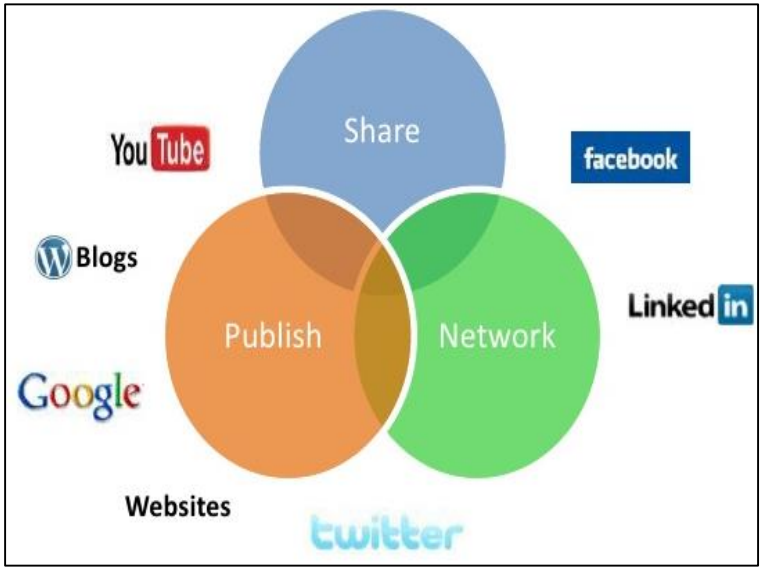
Keywords

Enterprise: A business or company.
Recruitment: The action of finding new people to join an organisation or support a cause.
Engagement: The action of keeping customers interested.
Goods: A tangible *(physical)* item.
Services: An intangible *(cannot touch)* item.
Stakeholders: A person (or group) who have a common interest in a business.
Retention: A proportion of a workforce who remain with a business over a lengthy period.
Social Enterprise: A business this is set-up to help society rather than to make a profit.
Customer Loyalty: A customer who returns to a business repeatedly because they prefer their products or services.
Social Media: Methods of online communication such as websites.



Unit 1: Purpose of Business

Unit 2: Digital Communication



Design principles

Colours:	• use of range of colours • use of organisational house style • ensuring that colours do not clash • use of textures	**Font style/ size:**	• ensuring text style/style is readable • use of sans serif fonts for screen reading • avoiding decorative fonts
Language:	• using appropriate language for user needs and skill level	**Amount of information:**	• appropriate amount of • information • making appropriate use of white space
Layout:	• consistency • keeping the layout as close as possible to user expectations • placing important items in prominent positions • grouping related tasks together • use of navigational components	**User perception:**	• colour • sound • symbols • visuals
Retaining user attention:	• grabbing attention • screen is uncluttered • clearly labelled items/features • use of predetermined/default values for common user inputs • use of auto-fill • use of tip text	**Intuitive design:**	• use graphics to denote what buttons do • helpful pop-up messages • easy-to-use help feature • ensuring consistency • easy reversal of actions

Audience needs of a user interface

Accessibility needs:	• visual • hearing • speech • motor • cognitive
Skill level:	• expert • regular • occasional • novice
Demographics:	• age • beliefs/values • culture • past experiences

User Interface - the means by which the user and a computer system interact, in particular the use of input devices and software.

Types of interface:	• text based • speech/natural language • Graphical User Interface/Windows, Icons, Menus, Pointers • sensors • menu/forms	**Factors:**	• performance/ response time • ease of use • user requirements • user experience • accessibility • storage space
Range of uses:	• computers • handheld devices • entertainment systems • domestic appliances • controlling devices • embedded systems	**Influences:**	• operating systems/platforms • types/size of screen • types of user input • hardware resources available • emerging technologies

Computer Science

KEY VOCABULARY	
Algorithm	An abstracted program which completes a given task, whatever the data provided
Abstraction	Abstraction is moving a problem out of the specific in order to create a general solution that would work in similar scenarios. Ignoring the gritty details to focus on the problem
Decomposition	Breaking a problem down into smaller, computational solvable chunks
Pseudo Code	A structured way of planning code, which is 'computational' in style (uses Boolean logic, variables, comparisons and arithmetic for example) but is not tied to a strict high-level language's syntax
Flow Diagram	A diagram, made using specific shaped boxes, that mocks up the flow of a program through various stages, processes and decisions.

ERROR TYPES	
Syntax Error	An error in the code – incorrectly typed, missing punctuation etc
Logical Error	An error which, although allows the code to run, produces incorrect outcomes
EOF Error	The *End of File* has been reached, whilst the computer is waiting for a snippet to be completed.
Type Error	Attempting to use data incorrectly – adding 1 to a string etc
Name Error	Using a variable before its declaration
Indentation Error	Loops or functions are incorrectly indented

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
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 numbers, stored as its value
Real	A decimal number, stored as its value
Boolean	True or False. Stored as 1 or 0.

Arithmetic operators

+	Addition e.g. `x=6+5` gives 11
-	Subtraction e.g. `x=6-5` gives 1
*	Multiplication e.g. `x=12*2` gives 24
/	Division e.g. `x=12/2` gives 6
MOD	Modulus e.g. `12MOD5` gives 2
DIV	Quotient e.g. `17DIV5` gives 3
^	Exponentiation e.g. `3^4` gives 81

Comparison operators

==	Equal to
!=	Not equal to
<	Less than
<=	Less than or equal to
>	Greater than
>=	Greater than or equal to

What is Computational thinking The thought processes involved in formulating a problem and its solution(s), so that a computer, human or machine can effectively carry out.

Flow Diagram Shapes

START/STOP

Always start and end with this

PROCESS

To do something in the program e.g a calculation

INPUT/OUTPUT

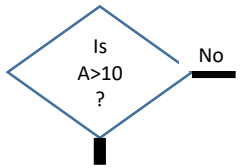
Use when there is an input or output required e.g. user inputs their name, program displays their name

SUB ROUTINE

Sequence that performs a specific task. You can use this within your flowchart to show more detail in a specific section

Flow lines – show the flow of information in the algorithm

Decision



When a **choice** has to be made in the program

Design Technology - Engineering

Key knowledge

Ferrous

- Mostly contain iron
- Good conductors of electricity
- Good magnetic properties
- Lower resistance to rust
- Weigh more

Cast iron

Melts at 1200°C and is relatively brittle

Mild steel

Very common metal that is quite tough

High carbon steel

Very hard metal used to make cutting tools

Non ferrous

- Do not contain iron
- Higher resistance to rust and corrosion
- Malleable
- Non-magnetic
- Weigh less

Aluminium

Malleable metal that conducts heat and electricity well

Copper

Malleable metal and used for electrical wire

Zinc

Used to coat ferrous metals and prevent rust

Brass

Machines well and is able to be bent and shaped whilst maintaining its strength

Alloys

Stainless steel

Steel which contains 18% chromium, 8% nickel, 8% magnesium and is resistant to corrosion

Vocabulary

Ferrous – Contains iron and rusts. Also, magnetic: Low carbon steel

Non Ferrous – A metal without iron that is usually conductive

Alloy – A mixture of two or more metals

Malleable – A physical property of metals that defines the ability to be hammered, pressed or rolled into thin sheets without breaking.

Hardness – Hardness is the ability of a material to withstand indentation.

Toughness – The ability to absorb impact without fracture

Tolerance – Variation of a dimension i.e. +/- 0.5mm that will still enable a component to function correctly

Dimension - Measurements of length, width, and thickness. Standard unit we use is millimetres (mm)

Orthographic - Orthographic projection uses a 2D drawing of each side of an object. Orthographic drawings usually consist of a front view, a side view and a plan view.

Thermoforming - A plastic that can only be set once: Epoxy resin

Thermosetting - A plastic that can only be set once: Epoxy resin

QR codes

Metals – BBC Bitesize

Marking out - Youtube

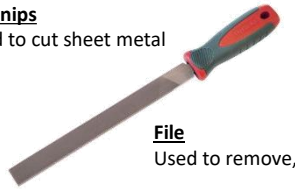
Bending – BBC Bitesize

Key knowledge

Cutting/shaping tools

Tin snips
Used to cut sheet metal

Ball pein hammer
Used to shape and bend metal and with a centre punch



File
Used to remove, shape and smooth metal

Marking out tools

Dividers
Used to scribe circular shapes in metal

Centre punch
Used to create a small dent to increase drilling accuracy

Scriber
Used to scribe lines in metal

Engineers square
Used to scribe 90° lines in metal

Measuring tools

Vernier callipers
Used to accurately measure circular dimensions

Vernier height gauge
Used to measure and scribe parallel lines in metal

Steel rule
Used to measure and mark lines in mm

Design Technology - Fashion

Keywords

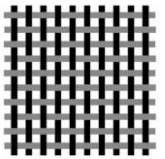
Fibre
A thin, hair-like strand. Fibres can be spun into a yarn, or used as they are, to make fabrics.
Filament
A long continuous length of fibre.
Knitted fabric
A fabric made from yarns held together by interlocking loops.
Non-woven fabric
A fabric made from layers of fibres (not yarns) held together by bonding or felting.
Staple fibre
A short fibre e.g. cotton fibres are staple fibres
Synthetic fibre
A man made fibre that is produced using polymers.
Tolerance
The margin or error allowed for a measurement of part of a product. Tolerances are usually given as an upper and lower limit e.g. 23mm +- 2
Woven fabric
A fabric made by interlacing two sets of yarns
Yarn
A thread made by twisting fibres together. Yarns are woven or knitted to make fabrics.

Equipment & Processes

Over locker: A multi-threaded machine that is often used to enclose a seam when making clothes. It is used as a neatening technique to prevent fabric fraying.
Sewing machine a machine with a mechanically driven needle for sewing or stitching fabric.
Pinking shears to cut fabric with a zig-zag edge—this helps prevent fabric from fraying.
Fabric shears are used to cut out fabric. They have long, very sharp blades that cut through fabric more easily and neatly.
Measuring tapes are used to accurately measure curved surfaces e.g. a person's waist.

Key Concepts

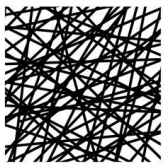
Woven Fabrics are created on a loom; warp threads are held under tension and the weft thread is woven between them, creating the patterns and design in the weave. A woven fabric will often fray and seams will need to be finished, eg by overlocking, to prevent this.


woven


knit

Knitted Fabric: Knitted fabrics are created by interlocking loops of yarn over each other to create a fabric that is more stretchy than a woven fabric- they are not always made from wool. There are two ways to knit a fabric; weft and warp.

Non Woven Fabrics:: *Non-woven fabrics turn fibres into fabrics without first spinning them but, instead, by felting or bonding them.*
Felted - the most common is made from wool fibres matted together using moisture, heat and pressure; it has little strength, drape or elasticity and is expensive but is warm and does not fray; used for hats, slippers and in handcrafts
Bonded - made from webs of synthetic fibres bonded together with heat or adhesives; they are cheap to produce, easy to sew, crease-resistant, do not fray and are stable to washing and dry-cleaning - but are not as strong as woven or knitted fabrics; mainly used for interlining


non-woven

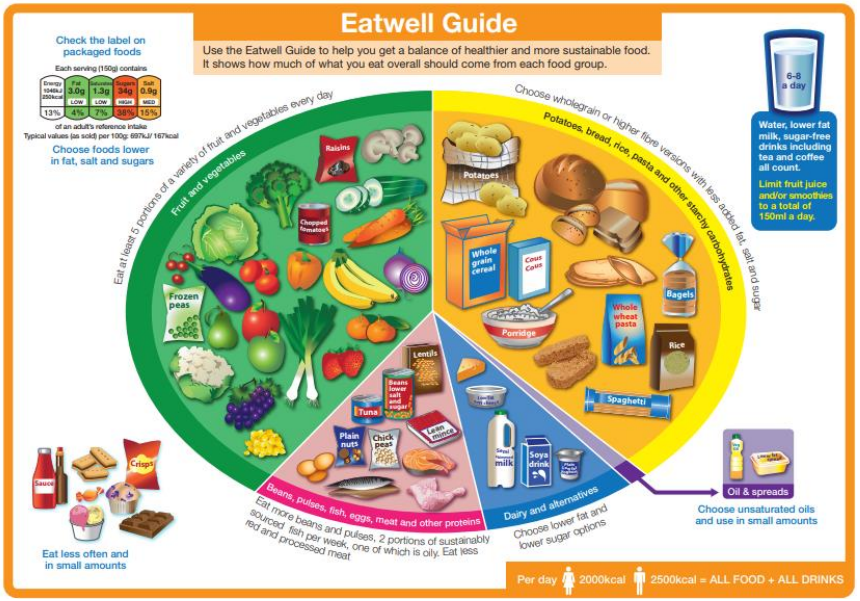
Design and Technology – Food Preparation and Nutrition

Key Words	
Dry heat	Heating without fat or water e.g. dry frying, grilling, using a blow torch, baking
Shallow frying	Cooking food in a small amount of fat in a frying pan
Poaching	Cooking very gently in hot water
Grilling	Food cooked under a direct heat
Steaming	Cooking in the steam coming from boiling water
Standard component	A standard component is a pre-prepared ingredient that is used in the production of a food product. Examples of standard components are pizza bases, ready made sauces and frozen pastry.
Macronutrients	Nutrients needed by the body in large amounts
Micronutrients	Nutrients needed by the body in smaller amounts
Radiates	Gives off heat
Julienne	Small matchstick sized pieces
Brunoise	Small dice/cube

5C — 63C—Temperature Danger Zone
63C and above — Hot held food
75C—Cooked Food

-18C — Temperature of a freezer
5C — Temperature of a fridge

Vegetable Cuts—Vegetables can be cut according to the dish they are being used for



Cooking Methods

Dry Heat Methods:
Baking, Roasting, Toasting, Grilling

Frying Methods
Shallow frying, Deep frying, Stir frying

Moist Heat Methods
Boiling, Simmering, Poaching, Stewing, Braising, Pressure cooking, Steaming, Blanching, Sous Vide

Eggs

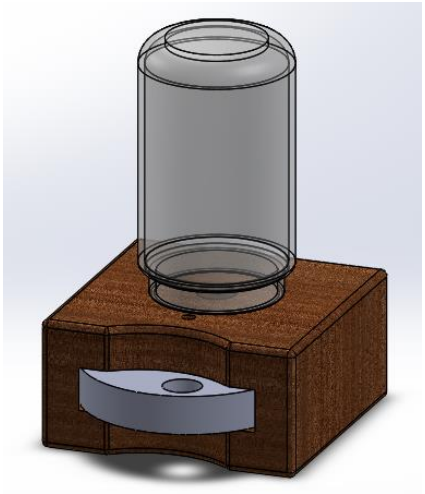
Nutrition—Eggs contain digestible protein needed for growth, vitamins A, D, E, and B, Iron, Phosphorus and Zinc. Eggs contain small amounts of saturated fat and only 80-90kcal each.

Functions of Eggs

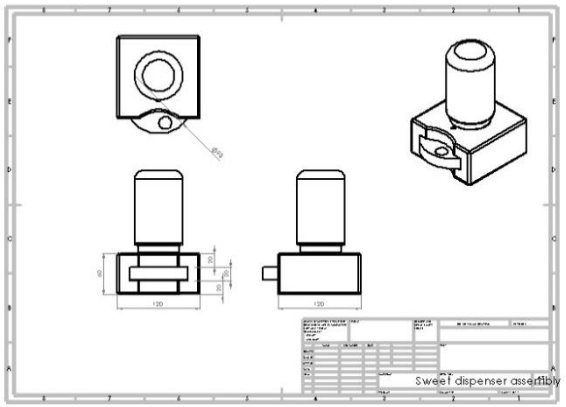
Binding	Eggs coagulate when heated	Burgers, fish cakes
Coating	Coated in raw egg then dipped in breadcrumbs	Fish cakes, Scotch eggs
Glazing	Brushed over food to give a golden colour	Pastry, scones
Thickening	Egg proteins coagulate on heating	Custard, sauce
Trapping air	Egg whites trap air	Mousse, meringue
Enriching	Richer in nutrients	Mashed potato, custard
Emulsifying	Lecithin in egg yolk holds oil and water together and stops them separating	Mayonnaise, aioli, creaming mixture for cakes

Design and Technology – Workshop

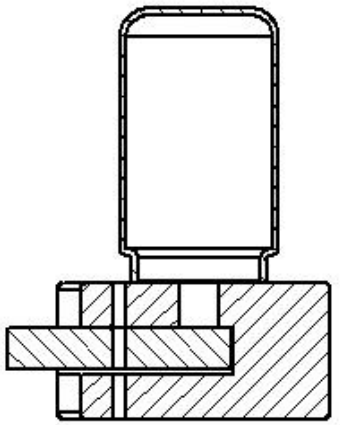
CAD Modelled View



Orthographic Views showing Front, Side and Plan Elevations (Views)



During this term, you will be working on a design and make assignment using a range of materials. You will be expected to work from a brief, develop a specification, and produce a range of ideas. Your chosen idea needs to be developed taking into account materials available and their working properties. You will need to produce accurate working drawings and work to a high level of tolerance to manufacture your product.



Sectional View through the Sweet Dispenser

Project		Name		Date		Teacher	
Part No	Part	Length	Width	Thickness	Qty	Material	Checked

Cutting List

Key Word	Explanation
Acrylic	A synthetic plastic worked in school. Available in sheet or rod format
Brief	Short statement of intent
CAD	Computer Aided Design
Clearance hole	Hole big enough for the body of a screw (not head) to drop into
Cutting List	List of parts required to make the project
Developed Design	Design with sizes, materials, construction notes etc
Dimension	Size
Isometric	A method for visually representing three-dimensional objects in two dimensions in technical and engineering drawings.
Laser cutter	CAM machine used to cut acrylic and laser ply etc.
Orthographic Drawing	Related set of drawings often including a Front, Side and Plan View set out in a grid format
Pilot hole	Small hole used to start a screw
Sectional View	Cut away view through the product
Softwood	Cone bearing tree such as pine
Specification	Set of criteria the project must fulfil
Strip heater	Heater used to bend acrylic
Sustainable	Material that will not run out
Thermoforming (thermo) plastic	Plastic re-softenable with heat
Tolerance	Maximum / minimum amount permitted either side of the shown measurement

Drama

Still Image

A still image is when the action in a play or scene is frozen, as in a photograph or video frame.
Elements to make it look interesting are: Levels Gesture Space and Facial Expressions.
You can use a still image at the start and end of a play.
You can also use it during a performance to highlight a key moment.

Role-Play

Role-play is the acting out of a scene or performance in a particular role.
Being a CHARACTER and being someone else/ acting as someone else.

Thought Tracking

Thought tracking is when a character says their thoughts and feelings out loud to the audience when everyone else is frozen.
Sometimes the character's thoughts/emotions are different to what they are showing or saying on the outside.

Dramatic Irony

Dramatic irony is when the audience knows what is happening but the actors on the stage do not know what is happening.

Split Stage

Split stage is when two or more scenes are performed on stage at the same time. Remember to freeze. It helps to show different locations.

General Drama Terminology/Vocabulary

Devising – Creating a piece of drama from a starting point/stimulus.
Improvisation – Working as a team or individually to explore ideas practically and create a performance.
Characterisation – Creating a character; changing your voice and movement to play a particular role.
Blocking – working out where actors will stand and move to and from.
Props – Objects that are held and used by an actor on stage to make a performance more realistic.

Vocal Skills

Tone of voice – The emotion of a character shown through their voice. For example: angry, happy, sad.
Pitch – How high or how low your voice is.
Pace – The speed in which you say the dialogue. For example; fast or slow.
Pause – Leaving a gap between words to add tension.
Volume – How loud or how quiet you are. This can help show your character's emotions.

Hot-seating

Hot-seating is when you are asked questions in character and you have to answer them in character.
We use hot-seating in Drama as it helps to understand your character and their background and get you to think about who they are.
Open ended questions are better to ask as it draws out more information.

Movement Techniques

Gesture – the actions used by an actor to show what the character is feeling or what they are doing
Facial expressions – changes made to the face to show how the character is feeling.
Body language – the emotion shown by an actor's movement or position of their body.
Posture – the position that a character is sitting or standing in. It helps to show their emotions.

English – Blood Brothers

Russell's Techniques	
A didactic play	A drama which intends to teach, especially with regard to morals.
Tragedy	An event causing great suffering, destruction and distress.
Parallels and contrasts	Parallels – similarities. Contrasts – differences.
Narrator	A person who gives the spoken account of something. Omniscient to remind the audience about the ending of the play.
Stage directions	An instruction in the text of the play indicating the movement, the position or tone of an actor, or the sound effects and lighting.
Song	Characters reveal their true thoughts and feelings through songs.
Foreshadowing	A warning or indication of a future event.
Symbols and motifs	A thing that represents or stands for something else. A motif is a dominant or recurring image of idea.

Vocabulary for exploring the play	
Affluent	Adj- wealthy/rich (usually describes a group or area)
Bias	Noun- prejudice for/against a person or a group that is unfair.
Conform	Verb- to comply with rules/standards/laws
Conservative	Adj- holding traditional values
Demonsation	Noun- the portrayal of something as evil or threatening
Disparity	Noun- a great difference. Imbalance/inequality
Inclination	Noun- a person's natural urge to act/feel/think in a way
Irrepressible	Adj- not able to be controlled or restrained.
Objectification	Noun- degrading someone to the status of a mere object
Prejudice	Noun- having a preconceived idea about someone
Social mobility	The movement of people through the social classes
Susceptibility	Noun- the state of being easily influenced or harmed
Volatile	Adj- liable to change rapidly and unpredictably, for the worse

Context	
Willy Russell	Born into a working class family. He grew up near Liverpool. Father had various jobs including mining and factory work. Annoyed at treatment of intelligent working class and associated stereotypes. Left school at 15 with just one O'level: a D in English Language. Went to evening classes and university to become a teacher.
Liverpool	A major port and the centre for trade providing lots of jobs at the docks. During the Industrial decline, Liverpool became very vulnerable as the docks were shut and unemployment rates soared. Some men turned to crime and gangs in order to support themselves and their families. There were also riots in the 1980s.
Margaret Thatcher	Prime Minister from 1979 – 1990. Reduced the power of the trade unions and closed down many factories etc leading to widespread unemployment.
Skelmersdale	In the 1960s the government began building New Towns. These were small, existing towns which were extended and redeveloped to provide more housing for nearby cities. Working class families were rehoused here in the 1960s.
Class	Working class vs Middle class divide More opportunities for middle classes reflected in education, job prospects and wealth.
Education	The Education Act of 1944 led to 'secondary modern schools' and 'grammar schools.' Top 20% went to a grammar school with an academic curriculum. Secondary modern taught more practical subjects. 7% of students were educated in private, fee-paying schools. The average boarding school fees in the 1960s would have been approximately 25%.
Youth culture	Properly recognised group. Television – Westerns (The Lone Ranger and Rawhide). Police drama - Z Cars fictional town called Newtown.
Family	Nuclear structure the norm. Divorce was easier in 1960s but single parents were frowned upon. Family was patriarchal.

Geography -

Year 9 Natural Hazards Week 1 and 4

Natural Hazard - A natural event (for example an earthquake, volcanic eruption, tropical storm, flood) that threatens people or has the potential to cause damage, destruction and death.
Tectonic hazard A natural hazard caused by movement of tectonic plates (including volcanoes and earthquakes).
Hazard risk The probability or chance that a natural hazard may take place.

What are Natural Hazards?

Natural hazards events like earthquakes and volcanoes that have the potential to do damage humans and property. Hazards include tectonic hazards, tropical storms.

What affects hazard risk?

World Population growth, More people live close to hazards. **Wealth** LICs are particularly at risk as they do not have the money to protect themselves. **Distance from location** People living away from plate boundaries have less risk. **Climate change** A warmer climate changes weather patterns leading to more intense tropical storms

Structure of the Earth there are 4 layers

The crust is split into major fragments called **tectonic plates**. There are 2 types: **Oceanic** (thin, young, dense).
Continental (old, thicker, less dense).
The plates move and where they meet you get tectonic activity (volcanoes and earthquakes).

2 theories of why plates move: **convection currents** and **ridge push, slab pull**. Plates either move against each other (**destructive** margin) away from each other (**constructive**) or next to each other (**conservative**)

Tectonic hazards Week 2 and 5

Tectonic plate A rigid segment of the Earth's crust which can 'float' across the heavier, semi-molten rock below. Continental plates are less dense, but thicker than oceanic plates.
Plate margin The margin or boundary between two tectonic plates.
Subducted A geological process in which one edge of a plate is forced downwards underneath another plate into the mantle.

Types of plates and hazard

Constructive margins – small **earthquakes** as plates pull apart. As magma rises **Shield volcanoes** form e.g. Iceland
Destructive margins **violent earthquakes**, pressure builds and then released as plates are subducted, pressure forces magma up to **form composite volcanoes** eg the Pacific Rim
Conservative margins plates slide past each other. They catch and pressure builds and is then released creating **earthquakes** eg San Andreas fault.

Effects of Tectonic Hazards

Primary effects are immediate. Secondary effects are a result of the primary effects and are therefore often slightly later.

Earthquakes - Primary	Secondary
Property and buildings destroyed **People injured or killed** Ports, roads, railways damaged	**Business reduced as money spent repairing property,** Blocked roads hinders emergency services,
Volcanoes- Primary	**Secondary**
Property and farm land destroyed Air travel halted due to volcanic ash	Tourism can increase as people come to watch **Ash breaks down leading to fertile farm land**

Measuring tectonic hazards Week 3 and 6

Tectonic plate A rigid segment of the Earth's crust which can 'float' across the heavier, semi-molten rock below. Continental plates are less dense, but thicker than oceanic plates.
Plate margin The margin or boundary between two tectonic plates.
Subducted A geological process in which one edge of a plate is forced downwards underneath another plate into the mantle.

Richter Scale: Uses scientific seismographs to record earth movements using a logarithmic scale. Same equipment world wide mean that Earthquakes can be compared.

Richter Magnitude	Earthquake effects
0-2	Not felt by people
2-3	Felt little by people
3-4	Ceiling lights swing
4-5	Walls crack
5-6	Furniture moves
6-7	Some buildings collapse
7-8	Many buildings destroyed
8-Up	Total destruction of buildings, bridges and roads

Mercalli Scale: Measures the amount of destruction an earthquake causes. Means appropriate aid can be given. Not accurate as peoples opinion.

Why do people live in areas at risk?

Areas of tectonic activity are often found at the coast, these areas are good for trade links, import and export jobs opportunities such as along the west coast of the USA.
In Iceland the tectonic activity means that there is a source of cheap geothermal power.
On Mount Etna on Sicily in Italy the volcanic soil is rich in nutrients meaning that there is great farmland.

Health and Social Care – An Introduction

Health and Social Care-Year 9

Health is not just absence of disease but a state of overall wellbeing. It has an impact on 4 areas of life and development.
These 4 areas are **Physical, Intellectual, Emotional and Social…PIES**

Physical
this is everything related to the body and how it works.

This could be the disease, the signs/symptoms, the biology, growth and milestones

Intellectual
this is everything related to cognition and learning.

This could be how to cope with a disease or learn about medication. It could be about how a child develops into an adult.

Emotional
this is everything related to the mind and feelings.

How do people react to their life and the issues in it? What emotions do they experience when health is a problem?

Social
this is everything related to interactions with others.

This is relationships, socialising, working, playing, taking part in religion, sport, art. It's about belonging.

Case study:

Verity is 10 years old and suffers with profound Down's Syndrome. She has limited verbal communication and a slight speech impediment which makes her very shy and nervous around people she does not know. She has learnt Makaton which she uses well and is generally a happy and positive individual. She goes to a special school and has made lots of friends and gets on well with her teachers but especially her TA Michelle. She has 2 siblings, Boris who is 11 and Miranda who is 13. Miranda is really supportive of Verity but Boris and Verity fight all the time. They live with their mum because their Dad is in the Navy and often away….mum is a nursery school worker and works part time on Mondays and Thursdays during school hours.

Verity has diabetes as a side effect from her syndrome which is insulin controlled and she sees the GP as needed and the diabetic nurse once every 3 months. She is also allergic to bee stings so has to carry an Epipen with her all the time. When she was tiny she had an operation to reduce the size of her tongue, also a side effect of her condition. Due to a mild scoliosis she also walks with crutches and occasionally needs the use of a wheelchair.

Health care settings	Social Care settings	Early years settings
Hospital, GP, pharmacy, dentistry, physiotherapy, occupational therapy, speech and language therapy, specialist centres eg Great Ormond Street.	Social services, adoption, fostering, nursing homes, residential homes, home care, lunch clubs for the elderly.	Special schools, nursery, childminders, any form of childcare for the under 5s, health visitors, teachers, nursery workers.

Keywords:
Signs: things that can be seen when you are ill e.g. spots
Symptoms: things you describe to say you are ill
Health Care: care given to people who are ill e.g. hospitals, dentists, pharmacies, GP's
Early Years Care: care given to young children e.g. nurseries, special schools, pre-schools
Social Care: care given in the community such as nursing homes, residential care, respite care, family centres and through social services
Respite care: care given to carers so they can take a break (their loved one is cared for by someone else temporarily)
Service User: the person using the care service
Service Provider: the organisation or person giving the care.
Care Values: used by care workers to give high quality care…different for adults and children.

History - Health and Medicine : Ancient Civilisations

Definition of topic:

Ancient civilisations did not understand the causes of most disease. Famine and war were probably the main killers of this period. Bad harvests meant malnutrition which enabled people to catch diseases more easily.

5000 - 3000BC	**Prehistoric period**
c.3000BC – 1500BC	Ancient Egypt
c.1500BC – 400BC	Ancient Greece
c.400BC	Ancient Rome
43AD	Roman conquest of Britain
400AD	Fall of the Roman Empire
400AD – 1000AD	Early Medieval period or 'Dark Ages'

Keywords Definition and concepts:

Remedy : Something that cures sickness

Medicine Man : Believed to possess supernatural powers and the ability to heal through rituals and ceremonies

Charms : An object believed to have magical powers to cure or treat sickness

Trepanning : Cutting a hole in the skull

Supernatural : Paranormal, magic, spirits

Asclepius : God of Healing

The Four Humours : Four liquids (Blood, phlegm, black and yellow bile) that, in balance, kept the body healthy

Rational : Based on reason or logic

Preserved : Looked after

Arabia : The area in Southwest Asia made up of many countries like Jordan, Iraq, Yemen and Saudi Arabia

KPI 1: Prehistoric Health and Medicine

Who treated the sick?

Most common illnesses were treated by mothers and other women with natural **remedies** which were passed down through each generation. Sometimes it was necessary to call on the expertise of a **medicine man**. He would call on the gods to treat people and use **charms**.

How did they treat the sick?

Herbs and other remedies were used for some illnesses whilst magic charms and spells were used for others.

What did they think caused disease?

People thought that the gods and evil spirits sometimes caused diseases. There is evidence that simple surgical techniques were used e.g. **trephining/trepanning** but this may have been bound up with their supernatural ideas.

KPI 2: Ancient Egyptians

Who treated the sick?

The Egyptians had specialist doctors who were also priests.

How did they treat the sick?

Priest physicians used common sense and herbal remedies. Priest magicians used **supernatural** remedies, such as prayers, **charms** and spells. Some treatments have been proven by scientists to work e.g. the use of honey stops bacteria from growing so it would help to heal an infected wound.

What did the Egyptians think caused diseases?

Egyptians, like people before them, thought that disease and illness was caused by the gods. However, they developed a theory that people became ill when the channels (veins and arteries) in their bodies became blocked.

KPI 3: Ancient Greeks

Who treated the sick?

The Greeks traded with the Egyptians and therefore had similar ideas. The Greeks had doctors who looked for natural explanations for illness and believed in Asclepius, the God of healing and his daughters Panacea and Hygeia.

How did they treat the sick?

Greek doctors were influenced by the work of Hippocrates and his theory of the four humours. He put forward the idea that the body was made up of four main components or 'Four Humours'. These Four Humours needed to remain balanced in order for people to remain healthy. Doctors advised patients that to restore the balance of the Four Humours they should rest or change their diet. They were advised to take regular exercise and to keep clean.

Some Greeks would visit a temple called an Asclepion. The gods would visit to heal them. They would be able to rest, exercise properly and eat healthily too.

What did they think caused disease?

Some people still believed that the gods were the cause of disease and illness. Greek doctors, following the work of Hippocrates, started to think more rationally and were treating their patients on the basis of the theory of the Four Humours.

KPI 4: Ancient Romans

Who treated the sick?

The Romans had doctors and surgeons.

How did they treat the sick?

Roman doctors believed in Hippocrates' methods. Claudius Galen, the Emperor's doctor, developed new ideas that built on Hippocrates' theory. Herbs, magic charms and spells were still used by many.

What did they think caused disease?

Some people thought the gods caused disease. Romans adopted the theory of the Four Humours and developed it.

KPI 5: The Early Medieval Period

The Roman empire collapsed c.400AD. While the Saxons and Vikings were destroying what the Romans had made the Arab world **preserved** and copied Greek and Roman books containing medical ideas. Many Arab doctors were very skilful. Medical skills and understanding were often better in **Arabia** than Europe.

Languages - French

I want your opinion!

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

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

in my opinion

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

je pense que… – I think that
je crois que – I think that
ça me rend +adj – it makes me
ça me donne envie de +inf – feel like
ce qui est important pour moi c'est – what's important to me is
ce qui me préoccupe c'est – what worries me is
si j'étais riche, je voudrais – if I were rich, I'd like to
si j'avais le choix, j'irais – if I had the choice I'd go

Adverbs

with an adjective or a verb
-c'est **vraiment** intéressant
-elle joue **bien**
-**effectivement**, c'est beau

beaucoup – much
très – very
bien – well
mal – badly
assez – quite/enough
trop – too/too much
tellement – so
effectivement – indeed
carrément – really
extrêmement – extremely
vachement – extremely
plutôt – rather
un peu – a bit

Quantifiers

beaucoup **de** – many
peu **de** – few
plein **de** – lots of

Conjunctions

et – and
mais – but
parce que – because
car – because / as
ou – or
donc – therefore
pour – in order to + inf
surtout – above all
peu – little
de plus - furthermore
néanmoins – nevertheless
cependant – however
puisque – seeing as.....
tandis que – whereas.....
ni… ni – neither… nor
soudain – suddenly
ensuite – next
avec – with
sans – without
puis – then
si – if

SLG link to grammatical and precise vocab content below:

Scan me

Past	Present	Future
hier	aujourd'hui	demain
	tous les jours	
le week-end dernier	souvent	le week-end prochain
	rarement	
la semaine dernière	quelquefois	la semaine prochaine
	normalement	
l'année dernière	de temps en temps	l'année prochaine
avant-hier	ne … jamais	ce week-end
	toujours	
il y a dix ans	en général	dans dix ans
	maintenant	
l'hiver dernier	en ce moment	l'été prochain
	en été	
l'été dernier	en hiver	cet hiver
	au printemps	

Vary your vocab

beau/belle – good-looking
petit – small
sympa – nice
gentil – kind
généreux (euse) – generous
branché – fashionable
tête en l'air – forgetful
favori(te)/préféré – favourite
Sain – healthy
facile – easy
cher – expensive

moche – ugly
grand – tall
pénible – annoying
méchant – mean
égoïste – selfish
démodé – old-fashioned
lunatique – moody
impressionant – impressive
malsain – unhealthy
difficile – difficult
bon marché – cheap

charmant - charming
énorme – huge
casse-pieds – annoying
agréable – pleasant
timide – shy
célèbre – famous
fou/folle – crazy
magnifique – wonderful
dangereux/se – dangerous
fatigué/gant – tired/ing
juste – fair

Watch out for common mistakes!

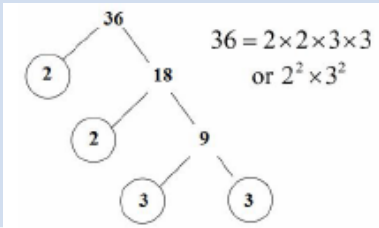
je **m'**appelle, tu **t'**appelle**s**, il/elle **s'**appelle
j'ai quatorze ans
c'**e**st/c'était/**ce** sera **+ masculine adjective**
enn**u**yeux intér**e**ss**a**nt
mon cop**ain**, ma cop**ine**, mes cop**ains**/cop**ines**
de temps **en** temps
le coll**è**ge
je **suis** allé

Go compare!
Plus … que
Moins … que
Aussi … que
Meilleur/mieu
Plus mauvais/pire

Avoid repetitions!

boring: ennuyeux, assommant, fatigant, lassant, fade, monotone, barbant
exciting: intéressant, passionnant, palpitant, captivant, réjouissant, fascinant
fun: amusant, drôle, marrant, tordant, comique, rigolo(te), hilarant
great: génial, super, impeccable, chouette, extra, épatant, superbe, fantastique
rubbish: nul, pénible, odieux, insupportable, atroce, affreux, abominable

Maths - Foundation: Number, powers, decimals, HCF, LCM, roots, rounding

Topic/Skill	Definition/Tips	Example
1. Powers	A number can be raised to a specific power by repeatedly multiplying by itself.	2 cubed = $2^3 = 2 \times 2 \times 2 = 8$
2. Roots	Square roots are the opposite to squaring.	$8^2 = 64$, so the square root of 64 = 8 $\sqrt{64} = 8$
3. Lowest Common Multiple (LCM)	The **smallest** number that is in the **times tables** of each of the numbers given.	The LCM of 3, 4 and 5 is 60 because it is the smallest number in the 3, 4 and 5 times tables.
4. Highest Common Factor (HCF)	The **biggest** number that **divides exactly** into two or more numbers.	The HCF of 6 and 9 is 3 because it is the biggest number that divides into 6 and 9 exactly.
5. Product of Prime Factors	Finding out which **prime numbers multiply** together to make the **original** number. Use a **prime factor tree.** Also known as 'prime factorisation'.	
6. Decimal Place	The **position** of a digit to the **right of a decimal point**.	In the number 0.372, the 7 is in the second decimal place. 0.372 rounded to two decimal places is 0.37, because the 2 tells us to round down. Careful with money - don't write £27.4, instead write £27.40

KEY VOCABULARY
integer, digit, positive, negative, decimal, operation, estimate, power, roots, factor, multiple, primes, square, cube, even, odd

Maths - Higher: Powers, decimals, rounding, indices, standard form, surds

Topic/Skill	Definition/Tips	Example
1. Significant Figure	The significant figures of a number are the digits which **carry meaning** (ie. are significant) to the size of the number. The **first significant figure** of a number **cannot be zero**. In a number with a decimal, trailing zeros are not significant.	In the number 0.00821, the first significant figure is the 8. In the number 2.740, the 0 is not a significant figure. 0.00821 rounded to 2 significant figures is 0.0082. 19357 rounded to 3 significant figures is 19400.
2. Rules of Surds	$\sqrt{ab} = \sqrt{a} \times \sqrt{b}$ $\sqrt{\frac{a}{b}} = \frac{\sqrt{a}}{\sqrt{b}}$ $a\sqrt{c} \pm b\sqrt{c} = (a \pm b)\sqrt{c}$ $\sqrt{a} \times \sqrt{a} = a$	$\sqrt{48} = \sqrt{16} \times \sqrt{3} = 4\sqrt{3}$ $\sqrt{\frac{25}{36}} = \frac{\sqrt{25}}{\sqrt{36}} = \frac{5}{6}$ $2\sqrt{5} + 7\sqrt{5} = 9\sqrt{5}$ $\sqrt{7} \times \sqrt{7} = 7$
3. Rationalise a Denominator	The process of rewriting a fraction so that the **denominator contains only rational numbers**.	$\frac{\sqrt{3}}{\sqrt{2}} = \frac{\sqrt{3} \times \sqrt{2}}{\sqrt{2} \times \sqrt{2}} = \frac{\sqrt{6}}{2}$ $\frac{6}{3+\sqrt{7}} = \frac{6(3-\sqrt{7})}{(3+\sqrt{7})(3-\sqrt{7})} = \frac{18-6\sqrt{7}}{9-7} = \frac{18-6\sqrt{7}}{2}$ $= 9 - 3\sqrt{7}$

KEY VOCABULARY
integer, digit, positive, negative, decimal, operation, estimate, power, roots, factor, multiple, primes, square, cube, even, odd, surd, rational, irrational, standard form, simplify

Music - Organising a Music Concert

Part 1: Plan, develop and work towards organising a music concert within a group

- Target Audience
- Artistic intention
- Type of audience
- Health and Safety
- Time constraints
- Copyright

Part 2: Promote a Music Concert

- Production Meeting
- Developing advertising ideas
- Monitoring progress of advertising
- Products
- Adjusting plans, where necessary, in order
- to meet deadlines.

Introducing Live Sound

Part 1: Planning for your live music event

- Roles and responsibilities
- Stage planning
- Legal considerations
- Equipment requirements
- Understanding health & safety precautions
- Manual handling
- Personal protection requirements
- Electrical safety

Part 2: Demonstrate understanding of Health & Safety

- Risk assessment
- Understanding health & safety precautions
- Manual handling
- Personal protection requirements
- Electrical safety

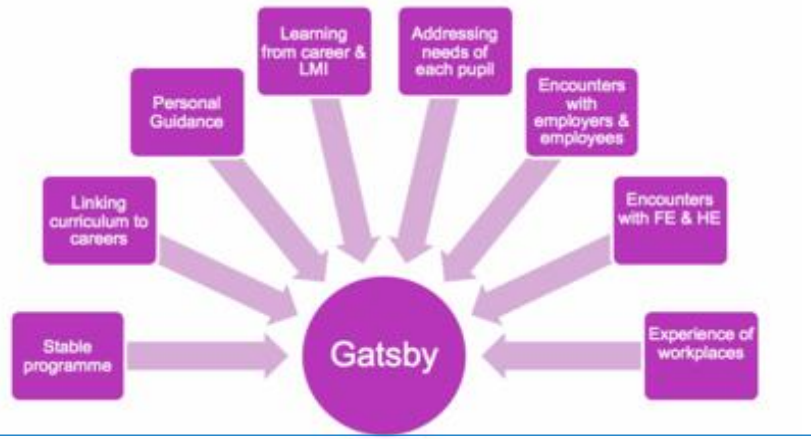
Part 3: Review the management process of organising a music concert

- Strengths and weaknesses of your organising
- Management of relationships
- Use of resources
- Artistic merits
- Audience response
- Suggest how you could make improvements

Part 3: Set up and use live systems

- Setting the PA system up safely
- Sound check
- Operating live sound safely
- De-rigging

Options



KEY CONCEPTS

Understanding qualifications
Understanding career skills
Careers in society
The differences and similarities between careers
Myself and my career ideas: using the online Spartan Test
Researching my career ideas online
How to make a good decision

KEY TERMS:

GCSE – General Certificate in Secondary Education
BTEC – British Technology Education Council
Continuous assessment – every major piece of work you do for the subject goes towards your final grade.
Qualification – a subject that requires you to complete a specific amount of learning and be assessed on your knowledge and understanding of it.
Level 1 – in BTECs they are the lower pass grades equivalent to the lower GCSE grades
Level 2 – in BTECs they are the higher pass grades equivalent to the higher GCSE pass grades
A Levels – a qualification that is the next level up from GCSEs, sometimes referred to as GCEs
Degree – a qualification that is the next level up from A Levels and are usually studied at a university.
Apprenticeship – is a programme that trains a worker to become skilled in a particular trade. Learning occurs by attending a college part time and working is also part time.
Career Action plan – detailed written plan of action related to decisions about careers.

Physical Education - Athletics

Kit Needed:

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

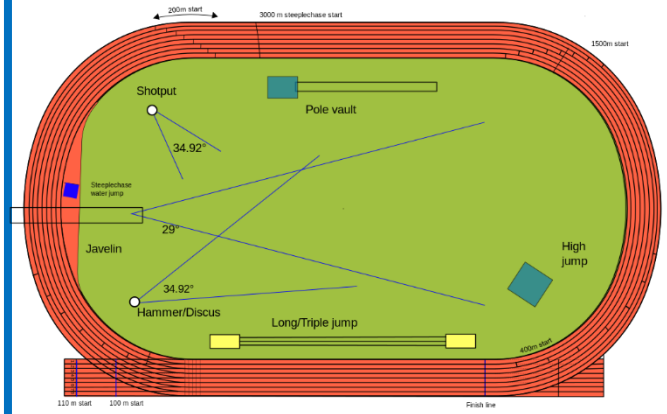
Equipment:

- Stopwatch, Whistle, Tape Measure, Cones, Various event specific equipment

5 Key Rules:

- Running events respond to a starting 'pistol' or a whistle in college
- Stay in lanes for Sprint events
- For Jumping and Throwing events you must not step in front of a designated line
- You have to wait until the official allows you to complete the field event
- Relay teams are made up of 4 runners

Playing area:



Running

- Sprints, Middle Distance, Long Distance
- Pump arms and legs together
- Stride length will vary
- Pacing can be important
- Dip on a sprint finish

Throwing

- Speed and Power activities which use Muscular Strength
- Opposite foot forward
- Rotate at the hips
- Extend and follow through your arm
- Push a Shot Putt. Throw a Javelin
- Whole body actions

Basic body position

Jumping

- Long Jump, Triple Jump and High Jump
- Jump as far or as high as possible
- Take off on one leg
- High knee drive on all three jumps
- Run with speed to take off
- Measured from the point closest to take off for LJ & TJ

Relays

- 4x100m and 4x400m
- Changeover zones when the relay baton has to transfer from one runner to the other
- Start running before the baton gets to you
- Opposite hand transfer
- Down Sweep or Up Sweep
- Sprint events

Physical Education - Cricket

Kit Needed:

- White trainers, white socks, short sleeved PE top and black Eggbuckland shorts.

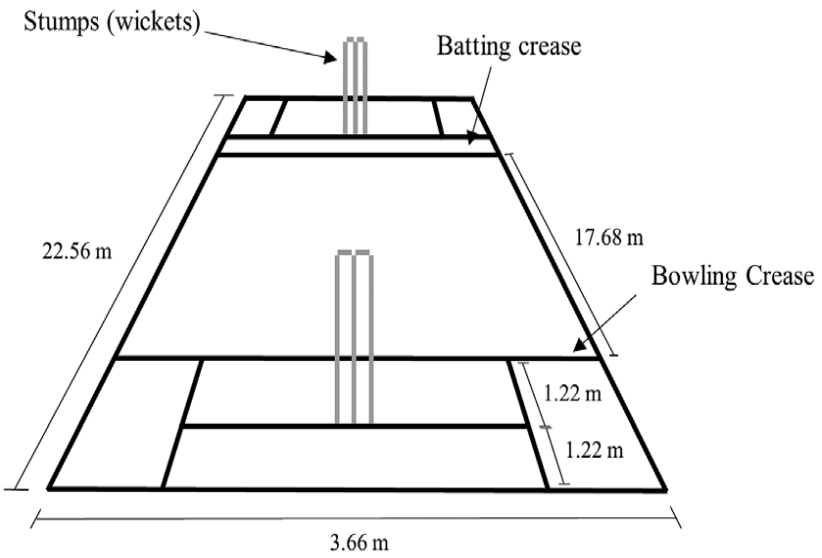
Equipment:

Cricket bats, stumps, cricket balls.

5 Key Rules:

- If you catch the ball after someone hits it they are out
- If you bowl and hit the stumps the batter is out
- When bowling you must keep your arm straight
- When bowling the ball must bounce once
- You must be on or behind your crease to be “safe”

Playing area:

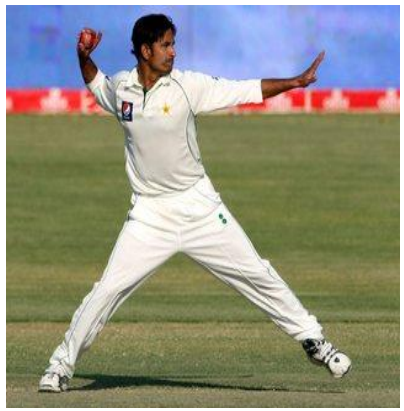


Bowl

- Stand side-on to the target, feet apart.
- Stretch the bowling arm straight behind you and raise the non-bowling arm up, pointing towards the target.
- Keeping the bowling arm straight, swing it over your shoulder and finish across your body.

Grip & Stance (batting)

- Grip the bat with two hands together in the middle of the handle.
- Stand side-on to the bowler, feet a comfortable distance apart, knees bent.
- Your head should be still, eyes level, looking at the bowler



Pull shot

- Swing the bat back while moving your back foot to get your head in line with the ball.
- Step with the front foot so your chest is facing the bowler.
- Swing the bat across your body, aiming to hit the ball along the ground

Overarm throw

- Stand side-on to the target with your feet a big step apart.
- Raise your throwing arm behind you with the elbow above your shoulder and point the non-throwing arm at the target.
- Throw the ball, finishing with your chest facing the target.

Physical Education - Rounders

Kit Needed:

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

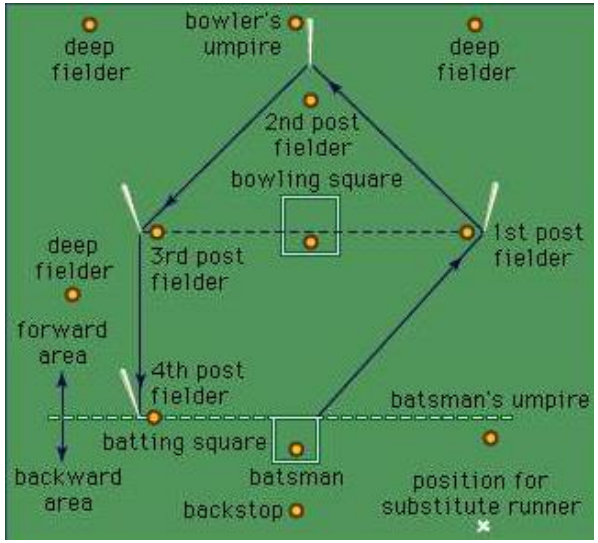
Equipment:

- Rounders bats, balls, posts and bases

5 Key Rules:

- Half a rounder is scored at 2nd or 3rd base in one go. 1 rounder at 4th base.
- Ball should be bowled between head and knee of the batter
- Run around the outside of the posts
- Out if your ball is caught, you overtake another runner or you are stumped out.
- You must stay in contact with the post when waiting and touch 4th base post when finishing your run

Playing area:

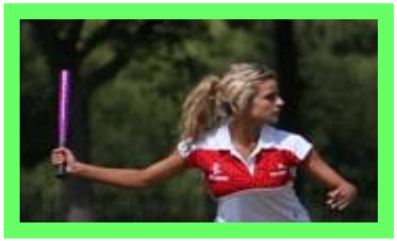


Catching

- Eyes focussed on ball
- Move feet to place the body directly in the path of object with wide base of support
- Hands reach the ball
- Cupped slightly relaxed hands
- Catch and control with hands and bend elbows to absorb the impact

Batting

- Sideways on, feet shoulder width apart, knees bent
- Batting arm straight back, bat up at 90 degrees to arm
- Transfer weight from back to front foot
- Follow through in direction you want the ball to go.



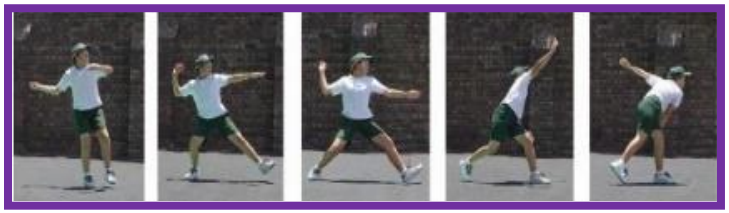
Basic body position

Overarm throw

- Use front arm as a pointer, pointing at the target.
- Let go of the ball over the fingers of the pointed arm. Look for the elbow to come through first.
- Hold ball between fingers and thumb on top for control, with your palm facing upwards.

Bowling

- Grip ball with index/middle finger and thumb
- 2 steps in to bowl (opposite arm to leg)
- Hand pointing where you want the ball to go
- Bent knees



Physical Education - Keywords

Cricket

Key words	Definition
Run	It is the basic unit of scoring in cricket. It is scored when a striking batsman hits the ball bowled and runs between the stumps.
Four	The ball hit by the batsman crosses the boundary rope by rolling or bouncing on the ground.
Six	The shot that ensures the ball lands directly outside the boundary scores six runs.
No-ball	If a bowler's foot is too close while delivering the ball then, it is called a no-ball.
Wide	A ball that is bowled away from the batsman and moves too side to be hit fairly.
Out	Bowled, Caught, Run-out, LBW, and Stumped are the most common ways of getting out.
Bowled	It is a way of getting out where the batsman misses the ball bowled and the stumps are hit by the ball.
Caught	A batsman is declared out when the fielder catches the ball before it bounces.
Run-out	If a fielder touches the stumps or base with ball in hand while the batsman is not in crease after playing a shot, then the batsman is declared run-out.

Athletics

Key words	Definition
Baton	A short stick or tube passed from runner to runner in a relay race.
High Jump	A sport in which competitors jump over a bar that is raised until only one competitor can jump over it.
Hurdles	Are upright frames, normally placed in a series and equal distance apart, that athletes jump over in a race.
Javelin	A lightweight, spear-like object which is thrown and must land point first.
Lane	A track is split into a number of parallel strips marked on a running track for athletes to run along. Some races like sprints you have to stay in the same lane.
Long Jump	An athletic event in which competitors jump as far as possible along the ground in one leap normally with a running start take off.
Relay	A race between teams of runners in which each team member in turn covers part of the total distance. 4x100m or 4x400m.
Shot Put	An athletic contest in which a very heavy metal ball is thrown as far as possible.
Sprint	A short, fast race run over a distance of 400 metres or less. 100m, 200m 400m or hurdles.
Triple Jump	An event in which competitors leap as far as possible by performing a hop, a step and a jump.

Rounders

Keyword	Definition
Pitch	The playing area.
Box	Bowling box where the bowler is not allowed out of this box during the bowl. Batting box is the area the batter is allowed to stand during the batting turn. The batter must run out the side of the box.
Stump/ base	Equipment that outline the pitch that you run around. Stopping at one of these allows you to be 'safe'. You score points getting to the 2nd or 4th base safely. Fielders aim to stump the bases to get the batter out.
Fielders	The team currently fielding. Specific positions are within this.
Batters	The team that is currently batting.
Obstruction	If the fielder gets in the way of the running batsman the batting team is awarded half a rounder.
No ball	A ball that is bowled incorrectly. You do not have to run if this is called.
Bowler	Player in the fielding team whose job is to bowl.
Backstop	A player in the fielding team that collects the ball from behind the batter, they may even catch a clipped hit. They should be tactically aware.
Long barrier	A skill within fielding that aids stopping a rolling ball and allows for quick turn and throwing action

Fitness and Multi-Skills

Keyword	Definition
Speed	The ability to move the whole body or body parts quickly. Uses 'fast twitch muscle fibres
Strength	The ability to apply force against an object or resistance. Use 'fast twitch' muscle fibres
Power	The ability to apply strength/force quickly. Uses 'fast twitch' muscle fibres. Calculate by measuring 'force x speed'
Endurance	The ability to maintain high levels of exercise for a sustained period of time
Cardio-vascular	A combination of heart and lungs. Cardio-vascular fitness is the ability to sustain low/moderate exercise intensity by supplying oxygen to the muscles
Skill	The ability to preform movements and techniques with control and precision
Agility	The ability to change direction of the whole body or body parts with speed
Balance	The ability to maintain the 'centre of gravity' within the base of support without falling over or stumbling.
Co-ordination	The ability to control one or more body parts at the same time
Reaction Time	The speed with which a person can react to a stimulus or situation

Psychology – An Introduction

Psychology **Knowledge Organiser-Year 9**

What is psychology?

It is the scientific study of the mind, the brain and the behaviours of humans.
People are studied in labs, in the real world, through experiments and through observations.

Social

Everything can be learnt from others.
We copy and imitate.
We learn by watching.
We expect rewards.
We learn from **role models** (especially the same gender).

Cognitive

Our understanding of the world is linked to language and ideas.
We build a map of the world **(a schema)** which helps us make sense of it..

Behavioural

Everything can be learnt
This is **conditioning**
It was tested by Pavlov and Skinner.
It is reinforced with rewards and punishment
People learn to react a specific way to a stimulus eg a firebell.

Piaget was the person who looked at child development and their cognitive abilities...his early work told us that children think and act differently and that they learn in stages from play and experimentation.

Pavlov was the person who looked at dogs and noticed their response to eating....salivation. He then experimented with ringing a bell every time they were fed. Later he rang the bell but didn't feed them. He found that the response of salivation remained.

In the modern world we use bells on humans in a similar way e.g. alarms such as fire or emergency

Bandura was the person who looked at aggression and copying. He thought that we copied behaviour and if we saw aggression we could copy it. He did an experiment with a Bobo doll and children aged 3-6.

They witnessed the doll being abused and when left with the same doll showed the same behaviour. Another group saw kindness and when left they copied this behaviour with the doll.

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.

Evaluation

+ 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

Keywords:

Aim: idea for a study or a reason
Hypothesis: a testable statement set by the researcher
Confederate: a person who takes part in a study. They seem to be a participant but are working for the researcher.
Participant: a person recruited to be part of a study
Variables: factors that the researcher manipulates to see the result
Dependent variable (DV): the variable being tested by the hypothesis
Extraneous variable: unexpected factors the researcher didn't choose to manipulate but might have an effect
Independent variable (IV): the variable being changed to test the DV
Method: the way that a study is conducted including the type of test, the location and the sample.
Lab experiment: a carefully designed test in controlled laboratory conditions which will test the hypothesis
Observation: a different way to test the hypothesis by watching what people do
Sample: a small selection of people/things to be tested

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
• It is a justifiable retribution for serious crimes • It is a deterrent • It gives the victim's family a sense of justice	• 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.

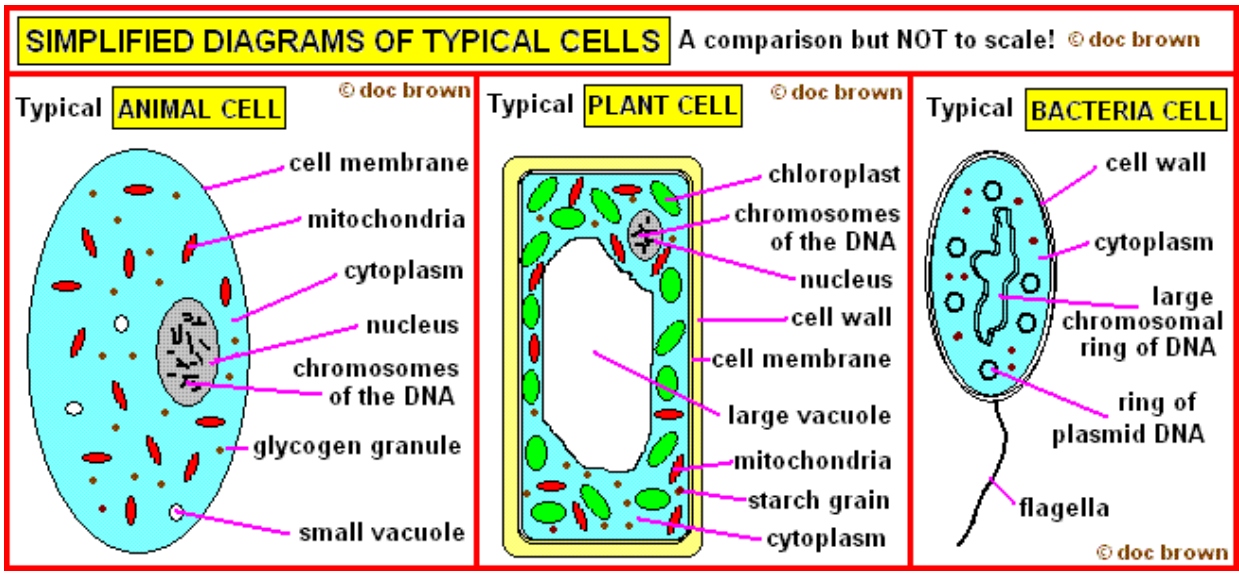
Christians are expected to be forgiving towards those who wrong them, if they expect to be forgiven themselves: ***"Forgive us our sins, as we forgive those who sin against us."***

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 - Cell Biology

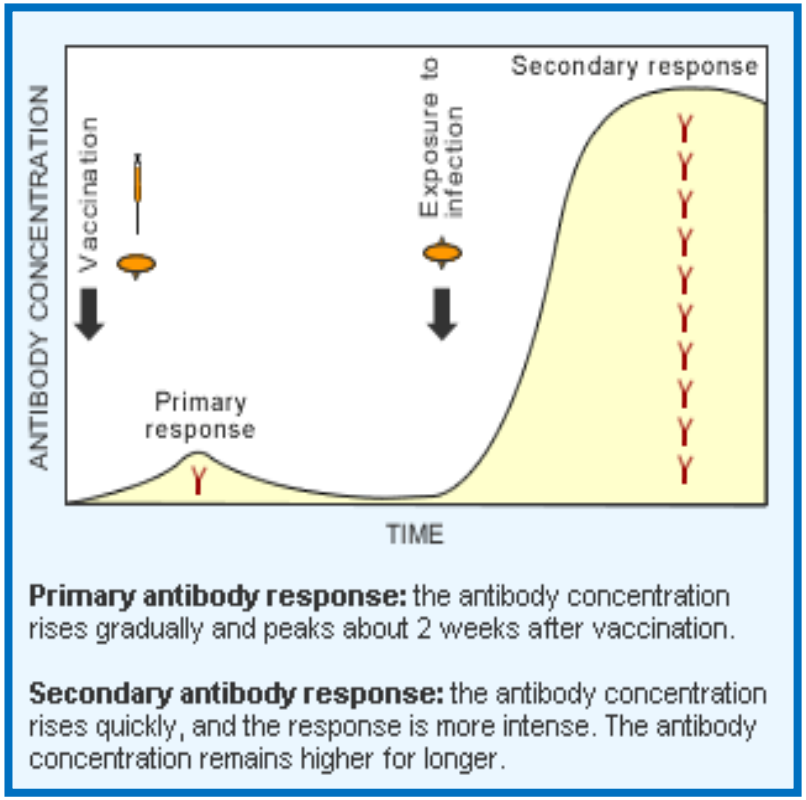
Key Terms	Definition
Eurakryotic cells	Cells that contain a nucleus
Eukaryote	An organism that is made of eukaryotic cells
Prokaryotic cells	Single-celled organisms that do not contain a nucleus
DNA	Deoxyribonucleic acid – the genetic information found in all living orgnanisms
Ribosome	A cell organelle that makes proteins
Respiration	The release of energy from glucose
Diffusion	The net movement of particles form an area of high concentration to an area of lower concentration
Organelle	A part of a cell with a specific function
Mitochondrion	A cell organelle in which respiration occurs
Chloroplast	A cell organelle in which photosynthesis occurs
Cytoplasm	Jelly like substance in cells where chemical reactions occur
Nucleus	A cell organelle found in eukaryotes containing their genetic material
Cell membrane	Structure surrounding the cell that controls what moves in and out of the cell
Vacuole	Found in plant cells, filled with cell sap, keeps the cell turgid
Cell wall	Made from cellulose and provides structural strength the some cells (not animal cells)
Photosynthesis	Chemical reaction that happens in chloroplasts that stores energy in glucose
Turgid	Describes a swollen cell
Biconcave	Describes a shape with a dip that curves inwards on both sides
Ova	Eggs
Axon	The extension of a nerve cell along which the electrical impulses travel
Phloem	Tubes of living cells that carry sugars to all cells in plants
Xylem	Tubes of dead plant cells through which water flows
Electron microscope	A microscope that uses electrons in place of light to give higher magnification
Resolution	The smallest distance between two separate points



Science - Infection and Response

Key Terms	Definition
Infectious	Describes a pathogen that can easily be transmitted, or an infected person who can pass on the disease.
Vector	An animal that spreads a communicable disease.
Antibiotic	A group of medicines, first discovered by Alexander Fleming, that kill bacteria and fungi but not viruses.
Chitin	A polymer made from sugars that forms the cell walls of fungi and the exoskeleton of insects.
Hyphae	Branching filaments of a fungus that spread out.
Malaria	A communicable disease, caused by a protest transmitted in mosquitos, which attacks red blood cells.
Insecticide	A chemical that kills insects.
Lysozymes	Antibacterial enzymes found in your tears to prevent eye infections.
Cilia	Tiny hair-like projections from ciliated cells that waft mucus out of the gas exchange system.
Antigen	A protein on the surface of a pathogen that your antibodies can recognize as foreign.
Antitoxin	A protein produced by your body to neutralize harmful toxins produced by pathogens.
Vaccine	A medicine containing an antigen from a pathogen that triggers a low level immune response so that if you become infected later your body can respond more quickly to the pathogen.
Antiseptic	A substance applied to the skin or another surface to destroy pathogens.
Anaesthetic	A drug that stops all pain sensation and can be local or general.
Efficacy	How effective a drug is.

Double blind trials	A medical experiment in which the patient and doctors do not know who has been given the drug and who has been given the placebo.
Placebo	A medicine that has only psychological effects.
Phagocytes	A type of white blood cell that engulf pathogens.
Lymphocytes	A type of white blood cell that produce antibodies.
Antibodies	Highly specific Y-shaped proteins that are produced by the immune system to help stop intruders from harming the body.



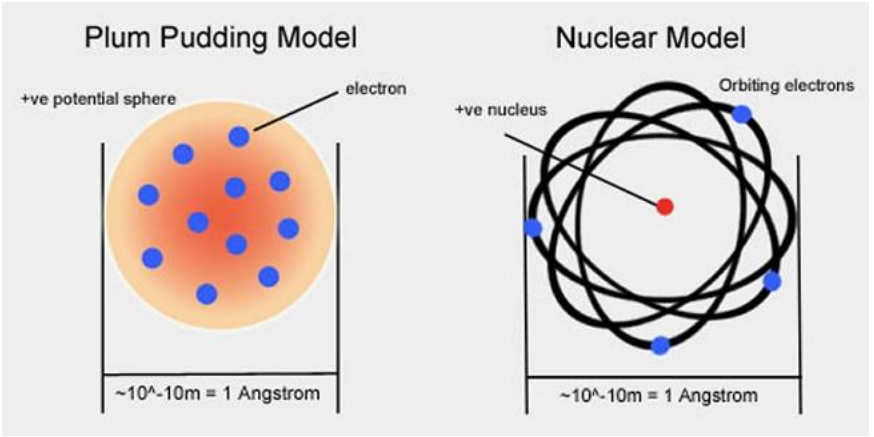
Primary antibody response: the antibody concentration rises gradually and peaks about 2 weeks after vaccination.

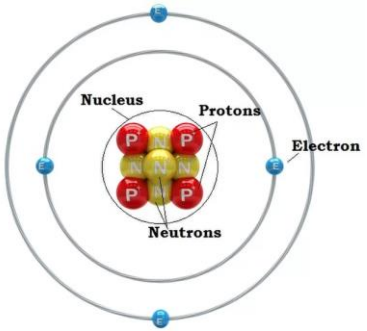
Secondary antibody response: the antibody concentration rises quickly, and the response is more intense. The antibody concentration remains higher for longer.

Science - Atomic Structure and the Periodic Table

Key Terms	Definition
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.





Atomic Mass = # of Protons + # of Neutrons

$^{4}_{2}He$

Atomic Number = # of Protons

My Diary :

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	07/09/2020	08/09/2020	09/09/2020	10/09/2020	11/09/2020	12/09/2020	13/09/2020
2	14/09/2020	15/09/2020	16/09/2020	17/09/2020	18/09/2020	19/09/2020	20/09/2020
3	21/09/2020	22/09/2020	23/09/2020	24/09/2020	25/09/2020	26/09/2020	27/09/2020
4	28/09/2020	29/09/2020	30/09/2020	01/10/2020	02/10/2020	03/10/2020	04/10/2020
5	04/10/2020	05/10/2020	06/10/2020	07/10/2020	08/10/2020	09/10/2020	10/10/2020
6	11/10/2020	12/10/2020	13/10/2020	14/10/2020	15/10/2020	16/10/2020	17/10/2020
7	18/10/2020	19/10/2020	20/10/2020	21/10/2020	22/10/2020	23/10/2020	24/10/2020

My Homework

Week						
07/09						
14/09						
21/09						
28/09						
04/10						
11/10						
18/10						

My Reading Record - To be completed at the end of each DEAR session

Date	Book Title	Pages	Main Events
07/09 MONDAY			
08/09 TUESDAY			
09/09 WEDNESDAY			
10/09 THURSDAY			
11/09 FRIDAY			
14/09 MONDAY			
15/09 TUESDAY			
16/09 WEDNESDAY			
17/09 THURSDAY			
18/09 FRIDAY			
21/09 MONDAY			
22/09 TUESDAY			
23/09 WEDNESDAY			
24/09 THURSDAY			
25/09 FRIDAY			

My Reading Record - To be completed at the end of each DEAR session

Date	Book Title	Pages	Main Events
28/09 MONDAY			
29/09 TUESDAY			
30/09 WEDNESDAY			
01/10 THURSDAY			
02/10 FRIDAY			
04/10 MONDAY			
05/10 TUESDAY			
06/10 WEDNESDAY			
07/10 THURSDAY			
08/10 FRIDAY			
11/10 MONDAY			
12/10 TUESDAY			
13/10 WEDNESDAY			
14/10 THURSDAY			
15/10 FRIDAY			

My Reading Record - To be completed at the end of each DEAR session

Date	Book Title	Pages	Main Events
18/10 MONDAY			
19/10 TUESDAY			
20/10 WEDNESDAY			
21/10 THURSDAY			
22/10 FRIDAY			

Home Contact

Knowledge, Notes and Quizzes