



My
**Knowledge
Organiser**
and Planner

Autumn 2 - 2020

Year 9

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 + Post 16
10.50am – 11.15am	Break time for years 9, 11 + Post 16
	Tutor time for years 7, 8 + 10
11.15am – 12.10pm	Period 3
12.10pm – 1.05pm	Period 4 for years 9, 11 + Post 16
	Lunch for years 7, 8 + 10
1.05pm – 2.00pm	Period 4 for years 7, 8 + 10
	Lunch for years 9, 11 + Post 16
2.00pm – 3.05pm	Period 5 + DEAR / homework time
3.05pm – 4.00pm	Period 6 for year 11 (some year 12)

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?

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.*
 - ✓ 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.

L iteracy mat

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:

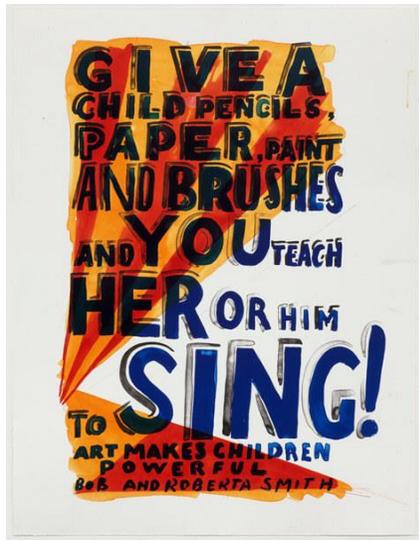
- ❖ **Your** is possessive as in *this is your pen*
- ❖ **You're** is short for **you are** as in *you're coming over to my house*

Record

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

Materials:

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



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

Explore Materials and processes: Observational drawing, mark making, paint techniques, collage, typography



A4 or A3 outcome
Solid background colour
Text layout
Hierarchy of elements
Font
Use of Colour
Use of Pattern

Time line of lessons

- ✓ Observation and progress
- ✓ Use of Line
- ✓ Artist Research
- ✓ Mark Making
- ✓ Oil Pastels
- ✓ Typography
- ✓ Pen
- Composition
- Design ideas
- Experiments
- Collage
- Outcomes
- Evaluations

FORMAL ELEMENTS;

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

The Environment
Politics
Headlines
Education
Quotes

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.

Proportion is the size of the different elements in an outcome

Composition the layout of the outcome

Harmonious are colours next to each other on the Colour Wheel

Complementary are colours opposite on the Colour Wheel

Leading is the distance between each line of text

Hierarchy is how the text is shown to create an order of importance to the elements of a design so as to direct attention

In bold/italic - Formal Elements

Develop ideas

Artist research -

Bob and Roberta Smith

www.bobandrobertasmith.co.uk

Business Studies : Unit 1, 2, 3 and 4



Unit 4: Human Resources

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.

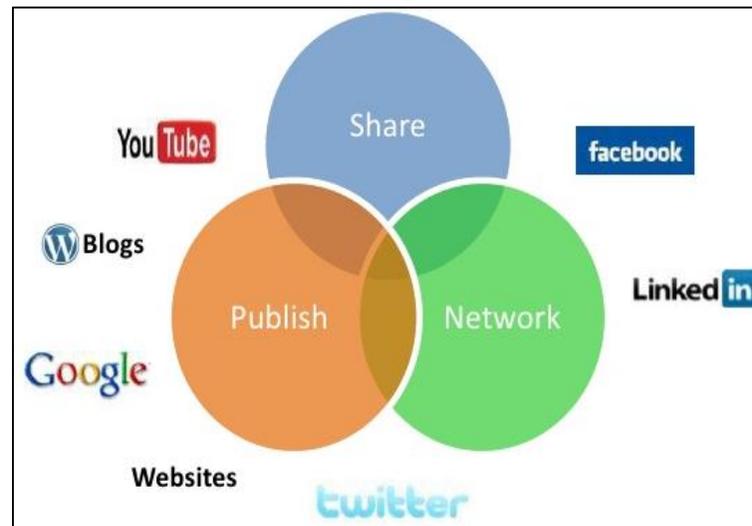


Unit 1: Purpose of Business

Unit 3: Recruitment



Unit 2: Digital Communication



Design principles			
Colours:	<ul style="list-style-type: none"> • use of range of colours • use of organisational house style • ensuring that colours do not clash • use of textures 	Font style/size:	<ul style="list-style-type: none"> • ensuring text style/style is readable • use of sans serif fonts for screen reading • avoiding decorative fonts
Language:	<ul style="list-style-type: none"> • using appropriate language for user needs and skill level 	Amount of information:	<ul style="list-style-type: none"> • appropriate amount of information • making appropriate use of white space
Layout:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • colour • sound • symbols • visuals
Retaining user attention:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • visual • hearing • speech • motor • cognitive
Skill level:	<ul style="list-style-type: none"> • expert • regular • occasional • novice
Demographics:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • text based • speech/natural language • Graphical User Interface/Windows, Icons, Menus, Pointers • sensors • menu/forms 	Factors:	<ul style="list-style-type: none"> • performance/ response time • ease of use • user requirements • user experience • accessibility • storage space
Range of uses:	<ul style="list-style-type: none"> • computers • handheld devices • entertainment systems • domestic appliances • controlling devices • embedded systems 	Influences:	<ul style="list-style-type: none"> • operating systems/platforms • types/size of screen • types of user input • hardware resources available • emerging technologies



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

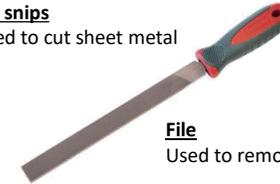


Tin snips

Used to cut sheet metal

Ball peen hammer

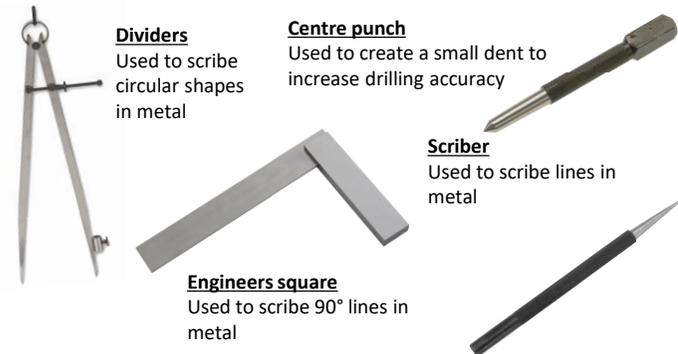
Used to shape and bend metal and with a centre punch



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

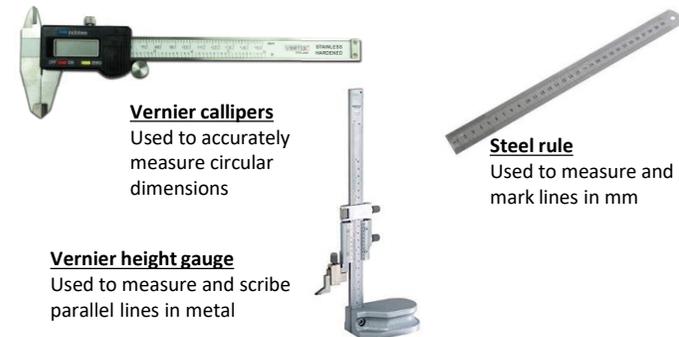
Scriber

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

Steel rule

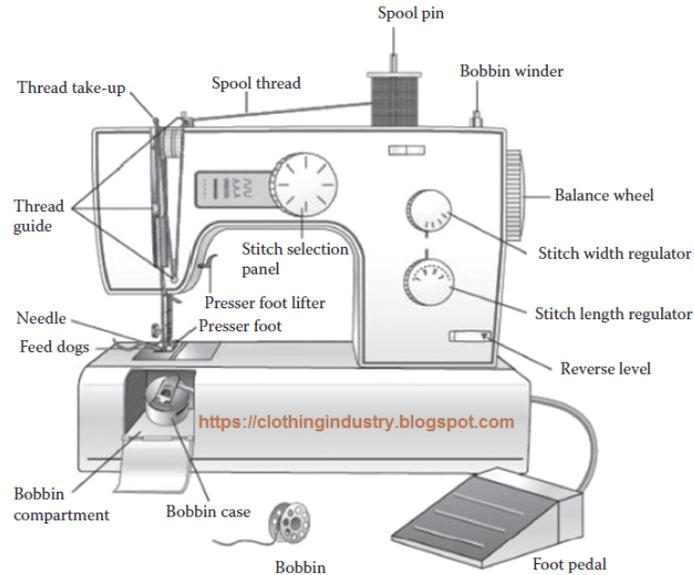
Used to measure and mark lines in mm

Vernier height gauge

Used to measure and scribe parallel lines in metal

Key knowledge

Sewing Machines



A sewing machine is used to stitch fabric together with thread. It is much faster and more accurate than sewing by hand. Some sewing machines are also used for embroidery.

Plain seam - two pieces of fabric are joined together with a running stitch allowing for a seam allowance, which must be measured correctly to the desired width otherwise the garment being sewn will be the wrong size or shape, and needs neatening to prevent fraying (achieved by overlocking).

Vocabulary

Tolerance: 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. In home sewing, seam allowance is generally 1.5 cm, whereas in industry, to save on fabrics, the seam allowance is often 1.0 cm.

Blended fibres are mixtures of fibres that combine properties of two or more fibres.

Computer numerical controlled (CNC) sewing machines - controlled by the use of computer technology, the machine will follow a CAD template created by programming the stitching of the machine

Key knowledge

Materials Knowledge

Cotton: Natural, from a cotton plant. Highly absorbent so is comfortable to wear, strong and durable, easy to care for but can shrink and has poor elasticity so creases. Uses: most clothing, bed linen, upholstery fabric and in the medical industry (because it can be boiled).

Polyester: Synthetic, from oil. Hardwearing with good tensile strength, good elasticity but poor absorbency, a highly versatile fibre. Uses: clothing and sportswear.

Polycotton: A blend of cotton (60%) and polyester (40%) fibres to improve the properties of each. Cotton has poor elasticity and creases but polyester has good elasticity so doesn't crease. Cotton is absorbent so comfortable to wear but polyester isn't absorbent so doesn't let the skin breathe as well. Uses: easy care shirts, bed linen and duvet covers.

Corrugated card: Strong but lightweight, made from two layers with at least two or more fluted (crimped) sheets between, available in different thicknesses, not water resistant, can be recycled. Uses: corrugations make it strong, protective and insulating; used in packaging.

QR codes



Design and Technology – Food Preparation and Nutrition

Keywords

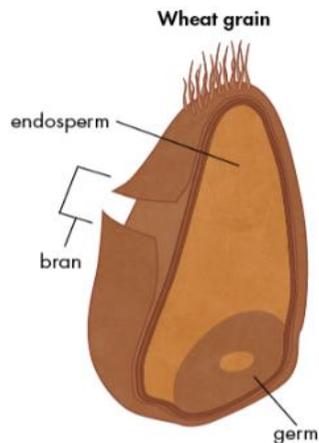
Cereals:	Cultivated grasses. The grains of these grasses are used as the food source. One of the most important cereals is wheat.
Primary Processing:	Changing the raw food material into food that can be either eaten immediately or processed into other types of food products.
Fortified:	Vitamins and minerals have been added to foods (for example calcium is added to flour).
Fibre:	The nutrient found in the cell walls of cereal grains. It is needed for the digestive system to remain healthy and function properly.
Gluten:	Formed when water is added to flour and mixed.
Carbohydrate:	One of the five nutrients. A macronutrient.
Dietary fibre:	A complex sugar found in the cell walls of plants.
Digestive system:	Parts of the body where food is broken down to provide nutrients.
Wholegrain:	The whole grain is crushed and often made into flour, e.g. wheat flour.
Yeast:	A single celled plant fungus and a biological raising agent that needs food, warmth, time and liquid to grow and ferment.
Fermentation:	The process in which yeast produces the gas carbon dioxide.
Dough:	A mixture of dry ingredients and liquid that is mixed, kneaded and shaped and then baked.
Prove:	Leaving dough to rise.
Knock back:	Knocking out the air and kneading the dough again

Food intolerance:

Certain ingredients in certain foods cannot be digested properly. This is often because of an enzyme deficiency.

Food allergy:

This has nothing to do with enzyme deficiency. It is when the body's immune system reacts against specific foods.



Cereals

Examples of cereals include Wheat, Rice, Oats, Maize and Barley.

Cereals are often referred to as staple foods. Staple foods form a large part of the diet and are usually starchy foods that grow well and can be stored for consumption throughout the year.

Wheat is the main staple crop in the UK. Wheat is used in food production, primarily flour, bread, biscuits, cake, pastry, pizza and breakfast cereals.

Cereals are a good source of starchy carbohydrate and protein. Fat is also found in whole grain as is a range of B vitamins and vitamin E. Fibre is also present in the bran.

Grains are an essential element in a healthy diet and eating high-fibre whole grains may help to reduce the risk of heart disease and type 2 diabetes and control blood cholesterol.

Special Diets

In addition to dietary needs based on age, gender and growth, there are also special diets which are specific to individuals or groups of individuals.

Some health conditions may be also diet related and may be specifically associated with a poor diet. Other health conditions can be hereditary but controlled by special diets. These health conditions include

- coeliac disease,
- type 2 diabetes,
- iron deficiency anaemia,
- cardiovascular disease,
- obesity and bone related health conditions,
- obesity
- nut allergy
- lactose intolerance.

Coeliac – a person who suffers from a chronic intestinal disorder caused by sensitivity to the protein gliadin contained in the gluten of cereals.

Diabetics – people who suffer from diabetes, a condition that occurs when the body can't use glucose normally.

Anaemia – a condition where the body lacks enough healthy red blood cells or haemoglobin.

Coronary Heart Disease – a preventable disease caused by the coronary arteries, which supply blood to the heart, becoming blocked. This can be caused by eating too much saturated fat.

Nut Allergies – can cause a reaction when the food is eaten or touched. A reaction can happen in minutes or develop over a number of hours. Reactions to nuts can result in anaphylactic shock.

Intolerances – when individual elements of certain foods cannot be properly processed and absorbed by the digestive system.

Design and Technology – Food Preparation and Nutrition

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.

Carbohydrate provides the body with energy.

Fat keeps the body warm, provides energy, protects vital organs and provides fat soluble vitamins

Micro Nutrients Vitamins & 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

Design Technology - Workshop

Design Brief: Identify the Need & Constraints

Designers and Engineers ask critical questions about what they want to create, whether it be a skyscraper, amusement park ride, bicycle or smartphone. These questions include: What is the problem to solve? What do we want to design? Who is it for? What do we want to accomplish? What are the project requirements? What are the limitations? What is our goal?

Specification: A specification would usually be written as a list of key points that would be written up as a sentence.

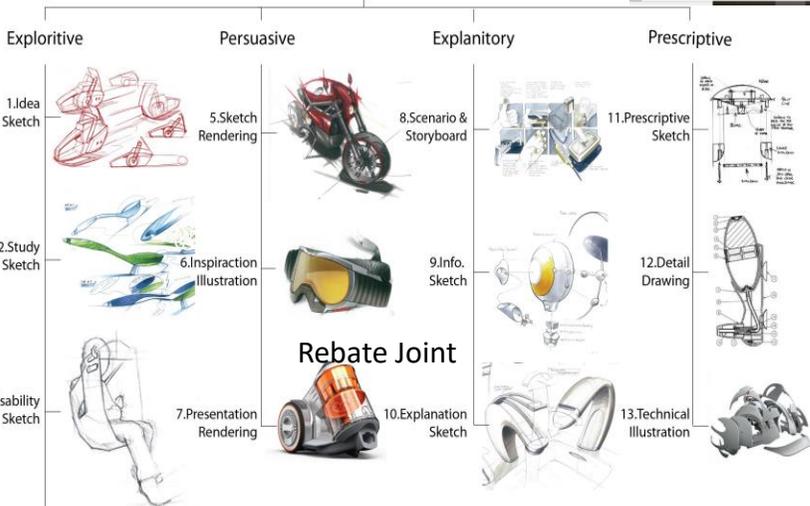
A good specification will have clearly defined points to help lead the designing.

You need to set the specification yourself

Design Sketches: 4 types of design sketch

Designers and Engineers use design sketches in many ways: To explore ideas, sell a concept, explain how and idea works and as means of technical drawing.

Sketches & Illustrations



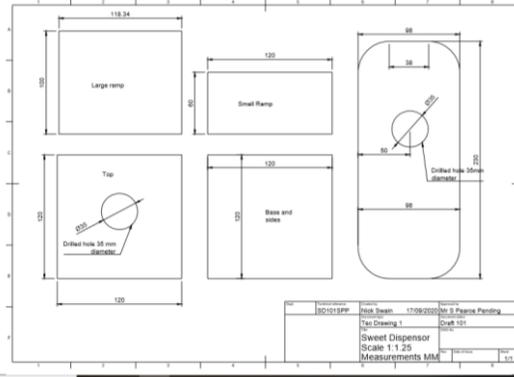
Orthographic Projections

A projection of a single view of an object (such as a view of the front) onto a drawing surface

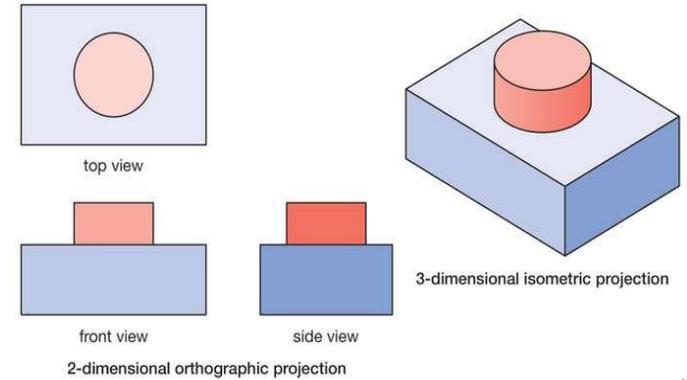
The representation of related views of an object as if they were all in the same plane and projected by orthographic projection

2D CAD: Develop 2D shapes to be cut out by the CNC Mill

Designers and Engineers use 2D CAD to accurately machine out parts to build a product. This lowers the tolerance of an object



Orthographic and isometric projections of an object



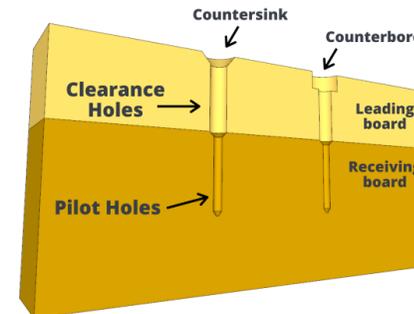
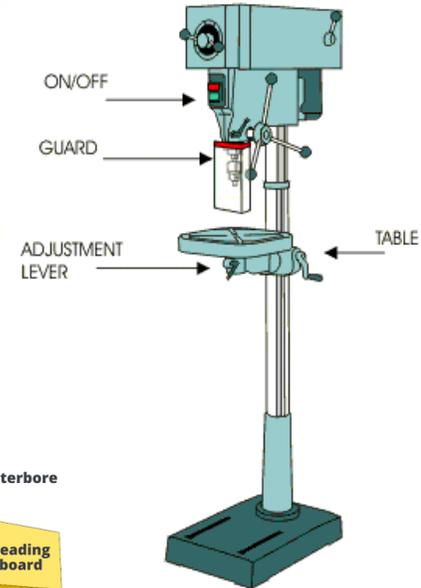
Forstner Bit

Used for drilling holes. A normal drill set will include sizes from 1mm to 14mm



Twist Drill

Used for drilling holes. A normal drill set will include sizes from 1mm to 14mm.



Techniques: Pilot Hole

A **pilot hole** is a small hole drilled into a piece of construction material. Its purpose is a) to guide a larger drill to the appropriate location and ease the job of the larger drill, b) to allow for the insertion of another hole-making tool.

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.

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.

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.

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
Demonstration	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 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

Week 1 & 4 Volcanic eruptions	Week 2 & 5 Tsunamis	Week 3 & 6 Monitoring, Planning, Preparation
<p>Volcano : An opening in the Earth's crust from which lava, ash and gases erupt.</p> <p>Management : Methods of monitoring, planning, prediction and responding to natural hazards</p> <p>Primary effects - The initial impact of a natural event on people and property, caused directly by it, for instance the ground buildings collapsing following an earthquake.</p>	<p>Tsunami : A series of waves in a water body caused by the displacement of a large volume of water.</p> <p>Displacement : when an object enters water, it pushes out water to make room for itself.</p> <p>Epi centre – The place directly above the focus of an earthquake, where the energy from seismic waves is greatest.</p>	<p>Monitoring :Recording changes, e.g. earthquake tremors around a volcano.</p> <p>Planning :Actions taken to enable communities to respond to, and recover from, natural disasters.</p> <p>Prediction :Attempts to forecast when and where a natural hazard will strike.</p>
<p>Eyjafjallajökull (E15) Eruption, located in northern Europe, Iceland 2010</p> <p>Causes: The North-American and Eurasian plates move apart on a constructive plates.</p> <p>Effects : The thick ice cap melted which caused major flooding.</p> <p>No reported deaths. Airspace closed across Europe, with at least 17,000 flights cancelled. Cost insurers £65m in Cancelled flights</p> <p>Management: Iceland had a good warning system with texts being sent to residents within 30 minutes. Large sections of European airspace were closed down due ash spread over the continent. Airlines developed ash monitoring equipment.</p>	<p>Causes : Earthquakes at destructive plate boundaries. Here, an oceanic plate is subducted into the mantle beneath a continental plate. This movement causes friction, which in turn causes the plates to stick. Energy accumulates, like that of a compressed spring. When the energy exceeds the friction, the plates snaps back into position. This movement displaces the water above causing a wave to form. The waves can travel large distances. When the waves reach shallower water the following happens:</p> <p>the shallow water slows the waves, the height of the waves can increase by several metres, the waves get closer together</p> <p>Water retreating is a sign that a tsunami is approaching a coast. Shortly after this happens, the waves reach the shore. This is actually the trough of the wave following behind.</p>	<p>Managing Volcanic eruptions, monitoring. Seismometers are used to detect earthquakes. Thermal imaging and satellite cameras can be used to detect heat around a volcano. Gas samples may be taken and chemical sensors used to measure sulphur levels.</p> <p>In March 2010 on Mt. Merapi the first signs that the volcano would erupt were Tiltmeters showed that the volcanic dome had begun to bulge. In September there was increased earthquake activity, white plumes of smoke were seen rising above the volcano's crater.</p> <p>Protection</p> <p>Creating an exclusion zone around the volcano. Being ready and able to evacuate residents. Having an emergency supply of basic provisions, such as food. Trained emergency services and a good communication system.</p>
<p>Mt Merapi (meaning Mountain of Fire) located in South East Asia, on the island of Java, Indonesia. 2010. Merapi is located in one of the most densely populated parts of Java with over 11,000 people living on the slopes of the mountain. Most of these people are poor farmers who depend on the richness of the soil for their living.</p> <p>The volcanic eruptions are caused by the Indo-Australian Plate being subducted beneath the Eurasian Plate. The volcano is located on a destructive plate margin, at a subduction zone, part of the Pacific Ring of Fire.</p> <p>Primary effects Volcanic bombs and heat clouds, with temperatures up to 800°C, spread over a distance of 10 km. Pyroclastic flows travelled 3 km down the heavily populated mountain sides. Volcanic ash fell up to 30 km away. Bronggang a village 15 km away was buried under 30 cm of ash.</p> <p>Secondary Ash clouds caused major disruption to aviation across the region. Vegetable prices increased because of the damage to crops.</p> <p>Heavy rain on 4th November caused lahars, washing ash and rock down into towns and destroying bridges.</p>	<p>The 2011 earthquake off the Pacific coast of Tōhoku</p> <p>On Friday, March 11, 2011 at 2.46 PM, an earthquake of magnitude 9.0 on the Richter scale occurred. It was at the point where the Pacific tectonic plate slides beneath the North American plate. The epicentre was 30 kilometres below the Pacific Ocean sea bed and 129 kilometres off the east coast of Honshu, Japan. This triggered a tsunami. Waves were generated and travelled across the Pacific Ocean.</p> <p>Effects</p> <p>The wave travelled as far as 10 km inland in Sendai. The massive surge destroyed three storey buildings where people had gathered for safety. A state of emergency was declared at the Fukushima nuclear power plant, where a cooling system failed and released radioactive materials into the environment.</p>	<p>Managing Earthquakes and Tsunamis</p> <p>A system of buoys which can monitor wave height has been established in Tsunami prone areas. However these are expensive and difficult to maintain, meaning those around Indonesia are no longer operational. NASA use satellite imagery which can measure waves over 1 metre. These systems can provide an early warning system. This is dependent on having a good communication network.</p> <p>Protection</p> <p>Japan recently unveiled a newly-installed, upgraded tsunami warning system. Earthquake engineers examined the damage, looking for ways to construct buildings which are more resistant to quakes and tsunamis. Studies are ongoing.</p>



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. Its about belonging.

Case study:

Verity is 10 years old and suffers with profound Downs 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.

Key words:

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.

Health care settings

Hospital, GP, pharmacy, dentistry, physiotherapy, occupational therapy, speech and language therapy, specialist centres e.g. Great Ormond Street

Social Care settings

Social services, adoption, fostering, nursing homes, residential homes, home care, lunch clubs for the elderly.

Early years settings

Special schools, nursery, childminders, any form of childcare for the under 5's, health visitors, teachers, nursery workers

History – Health and Medicine 2 : Attempts to prevent illness & disease

Health & Medicine 2	Week 1 & 4	Week 2 & 5	Week 3 & 6
<p>Definition of Topic Investigation of how people from Medieval to modern day attempted (tried) to prevent illness and disease.</p>	<p>Early methods of prevention of illness & disease Travellers had to spend up to 1 month outside the town walls in the quarantine. Infected families were boarded inside their homes.</p>	<p>Application of Science in the prevention of disease in the late 18th and 19th centuries Helped by the development of the microscope in 1590, modern science began to develop. The ideas of the ancient writers, like the Four Humours Theory were proved wrong.</p>	<p>The discovery of antibodies and developments in the field of bacteriology In 1861, Pasteur published his germ theory which proved that bacteria caused diseases.</p>
<p>Key dates 1721: Inoculation introduced to England by Lady Mary Montagu 1753 : James Lind identified cause of ‘Scurvy’ in sailors 1802 : Edwin Jenner awarded £10,000 by the government to develop his work on vaccinations 1854 : London Cholera Epidemic 1955 : Polio vaccine 1963 : Measles vaccine 1998 : MMR vaccine</p>	<p>Some held scented flowers to avoid bad air or miasma. Some took potions like theriac (an ointment) in an attempt to kill off the plague. Flagellants whipped themselves so that God would not punish them.</p>	<p>New discoveries like the foxglove plant as a utensil to treat heart disease by William Withering were made. During the eighteenth century, there was a focus on the thesis ‘prevention is better than cure’, fresh air and exercise were all the range for those that could afford it. It was a time of fads, vegetarianism became popular as did teetotalism. John Snow discovered the cause of cholera in 1854 and James Lind discovered the cause of scurvy in 1853.</p>	<p>This idea was taken up by Robert Koch in Germany, who began to isolate the specific bacteria that caused particular diseases, such as TB and cholera. It was Koch who realised that antibodies could help destroy bacteria and build up immunity against disease. However, back in France it was Pasteur who developed the first vaccines since Jenner, with vaccines for chicken cholera, anthrax and rabies.</p>
<p>Keywords Apothecaries: People who prepare or sell medicines. Alchemy: An ancient branch of philosophy of how to change basic substances. Barber surgeons: Medieval doctors who performed surgery and hair cuts. Astrology: Study of planets & stars to decide what action to take. Supernatural: Paranormal, magic, spirits Child-bed Fever: An infection after childbirth. Cholera: Infectious disease caused by drinking/eating contaminated water. Vaccination: Injection of a mild form of a disease to stop you getting a more dangerous version of the disease. Inoculation: Early form of vaccination where the skin is scratched rather than injected. Royal Society: A National organisation for science & learning designed to promote changes in scientific knowledge. WHO: Advise & support international public health & medicines.</p>	<p>Alchemy, Physicians, Soothsayers Alchemy came to Europe in the late middle ages with ancient writings translated into Latin. It was a mixture of science, philosophy and mysticism (the belief there is a hidden meaning). Alchemists attempted to find the ‘elixir of life’ to make a person immortal for life. In doing so, they produced hydrochloric acid and nitric acids whilst discovering the elements: arsenic, antimony and bismuth. These discoveries laid the foundation for the development of chemistry. Physicians trained at medical school in Italy or Paris and used a variety of methods including urine charts, ‘zodiac man’ charts and other odd methods. Apothecaries experimented with herbs to find medicines. As there were very few trained doctors in England, most people depended on the ‘wise woman’ or soothsayer. They would collect plants and herbs, special stones and carry them in a willow basket. They would make special charms to protect against evil. Mother Shipton was a famous fifteenth century soothsayer.</p>	<p>Vaccination Smallpox was spread by coughing, sneezing or contact with an infected person. In the eighteenth century, two methods of preventing this disease were discovered: inoculation and vaccination. Inoculation involved spreading a small dose of the disease from an infected wound. This was popular yet not completely safe, some patients died as they contracted a fatal form of the disease. In 1796, Edward Jenner developed a safer method to prevent smallpox. He experimented with milkmaids (who had cowpox) and first tested the vaccine on a small boy, James Phipps. He called it vaccination after the Latin word ‘vacca’ (cow). Since 1977, there has been no cases of smallpox and in 1979, the WHO declared smallpox extinct. In the twentieth century other diseases have been eliminated such as polio and measles.</p>	<p>The Germ Theory of disease is a theory in biology. It says that small organisms (called germs), also known as microbes, cause diseases. Most, but not all diseases are infectious. The germ theory states that small organisms cause a reaction in the body of those who are infected. The body's reaction to infection is called a disease. In World War One, 10 million vaccine doses were produced for troops being sent to the Western Front. As a result, deaths from typhus fell to 0.14 per 1,000, compared to 14 per 1,000 for the Boer War 15 years earlier.</p>

Languages - French

LES OPINIONS	OPINIONS
Je suis fan de 	I am a fan of
Je raffole de	I am crazy about
J' admire	I admire
J' apprécie	I appreciate
J' aime beaucoup	I like a lot
Ça me plaît	It pleases me
Je ne supporte pas 	I cannot stand
Je méprise	I despise
A mon avis	In my opinion
Selon moi	According to me
D'après- moi	In my view
Je pense que	I think that

Quizlet link :
<https://quizlet.com/gb/529902432/verbes-dopinion-yr8-french-flash-cards/>



LES MOTS TEMPORELS		TIME WORDS
Past	Present	Future
Hier yesterday	aujourd'hui today	Demain tomorrow
le week-end dernier Last w end	tous les jours everyday	
	Souvent often	le week-end prochain Next w end
	Rarement rarely	
la semaine dernière Last week	Quelquefois sometimes	la semaine prochaine Next week
	Normalement normally	
l'année dernière Last year	de temps en temps From time to time	l'année prochaine Next year
avant-hier The day before yesterday	ne ... jamais never	ce week-end This w end
	Toujours always	
il y a dix ans 10 years ago	en général In general	dans dix ans In 10 years
	Maintenant now	
l'hiver dernier Last winter	en été In summer	l'été prochain Next Summer
	en hiver In winter	
l'été dernier Last summer	au printemps In Spring	cet hiver This Winter

LE PASSÉ COMPOSÉ	THE PAST TENSE
avoir <u>j'ai eu</u>	lire <u>j'ai lu</u>
boire <u>j'ai bu</u>	mettre <u>j'ai mis</u>
croire <u>j'ai cru</u>	pouvoir <u>j'ai pu</u>
devoir <u>j'ai dû</u>	prendre <u>j'ai pris</u>
dire <u>j'ai dit</u>	recevoir <u>j'ai reçu</u>
écrire <u>j'ai écrit</u>	
être <u>j'ai été</u>	voir <u>j'ai vu</u>
faire <u>j'ai fait</u>	vouloir <u>j'ai voulu</u>

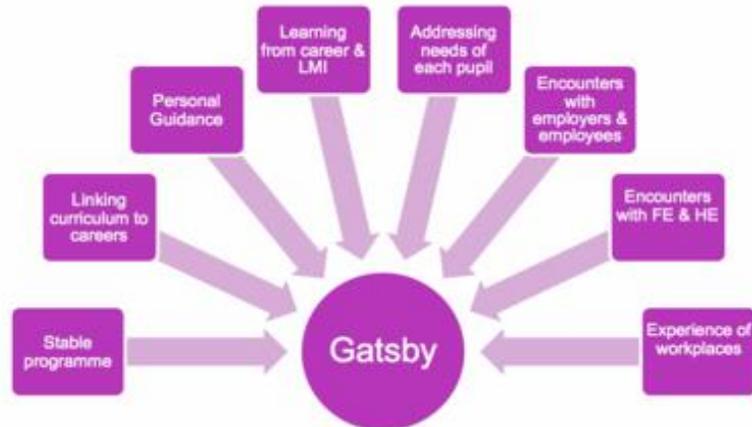


<https://quizlet.com/gb/529980677/les-mots-temporels-flash-cards/>

Maths – Foundation and Higher: Algebra

Topic/Skill	Definition/Tips	Example
1. Expression	A mathematical statement written using symbols, numbers or letters ,	$3x + 2$ or $5y^2$
2. Equation	A statement showing that two expressions are equal	$2y - 17 = 15$
3. Identity	An equation that is true for all values of the variables An identity uses the symbol: \equiv	$2x \equiv x+x$
4. Formula	Shows the relationship between two or more variables	Area of a rectangle = length x width or $A = L \times W$
5. Simplifying Expressions	Collect 'like terms' . Be careful with negatives. x^2 and x are not like terms.	$2x + 3y + 4x - 5y + 3 = 6x - 2y + 3$ $3x + 4 - x^2 + 2x - 1 = 5x - x^2 + 3$
6. x times x	The answer is x^2 not $2x$.	Squaring is multiplying by itself, not by 2.
7. $p \times p \times p$	The answer is p^3 not $3p$	If $p=2$, then $p^3=2 \times 2 \times 2=8$, not $2 \times 3=6$
8. $p + p + p$	The answer is $3p$ not p^3	If $p=2$, then $2+2+2=6$, not $2^3 = 8$
9. Expand	To expand a bracket, multiply each term in the bracket by the expression outside the bracket.	$3(m + 7) = 3x + 21$
10. Factorise	The reverse of expanding . Factorising is writing an expression as a product of terms by ' taking out ' a common factor .	$6x - 15 = 3(2x - 5)$, where 3 is the common factor.

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 - Dance

Kit Needed:

- Short or long sleeved PE top and black Egguckland shorts, skort or leggings – Bare Feet
- No socks or shoes to be worn whilst taking part in Daance activities.

Equipment:

- Telephone numbers work sheets, music speaker.

Key Rules:

- Follow all instructions

Listen to teacher and others

Key words

- Sequence
- Linking
- Staging
- Pulse raiser / warm up
- Stretch
- Development
- Awareness of others
- Body control/ tension/ extension
- Skill development
- Contact
- Sequence ideas/ lists
- Counter balance/ top and base
- Confidence
- Agility, speed and quickness
- Unison
- Canon
- RADS

R – Relationships

A – Actions

D – Dynamics

S - Space

**Relationships –
Who we move with
around, canon, drag,
follow, hold, in front of,
match, mirror, near,
next to, opposite, pass,
questioning, side by
side, together, through,
under upside down**

Actions – What we do

bend, bounce, clap, contract,
dangle, entre, exit, explore,
gallop, fall, freeze, kick, knock,
nod, open, over, reach return,
shrink, slide, spin stamp, stand,
suspend, surround, tangle,
travel, under, walk, wave, whip,
wrap and zoom

Poem – My Name is Cocaine

Key ideas from poem

Gestures with hands and body, repetition, mirroring, gesture (wipe nose), gesture rocking arms then drop e.g. baby has gone, repetition of an action that you perform in the dance, one controlling another A – drug & B – addict, big actions to small actions, temptation – moving away being pulled back.

Dynamics – How we move

bold, bouncy, careful, calm, delicate, determined, easy energetic, fast, firm, flowing, gentle, happy, heavy, hesitant, immediate, jerky, lazy, loud, mild, noisy, overt, quick, quiet, tender, untidy, urgent, vibrant, weighty,

Space – Where we move

above, across, angled, around, backwards, behind, below, circle, cross, curve, diagonal, drop, encircle, extend, far, flow, high, jagged, large, left, level, line, narrow, over, shape, side, sideways, snake, straight, triangular, under, up, upside, vertical, wall, weave, wide, zigzag

Physical Education - Table Tennis

Kit Needed

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

Equipment

- Table Tennis Tables, Bats, Balls and Nets

5 Key Rules

- The ball must hit your opponents' half of the table to win a point
- When serving you must hit the ball and the ball must bounce on your side of the table before going over the net and then bouncing on your opponents side
- Play on if it hits or clips the net. If it happens on serve and then goes in you play a 'Let'. If it happens on serve and goes out you lose the point
- Games go to 11 points
- The ball must be thrown up 15cm before contact is made with the ball for a service to be legal

Key Terms

- Service – The way you start a rally
- Topspin – Attacking shot which creates forward spinning motion on the ball
- Backspin – Defending shot which creates backward spinning motion on the ball
- Let – A term which means the point is replayed
- Forehand – For a right hander the racket starts on the right side of the body, makes contact and follows through to the left side

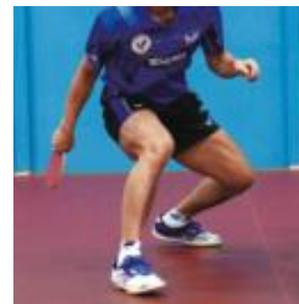
Forehand

- Opposite foot slightly in front of the other
- Side on
- Knees bent
- Strong base position
- Rotate at the hip

Backhand

- Feet shoulder width apart and almost level
- Parallel to the table
- Knees bent
- Strong base position
- Flex and extend in the shot

Basic body position



Spin

- A shot where you can put different types and amount of rotation on the ball to enable different tactics eg
Topspin – attacking shot as ball dips on to table
Backspin – defensive as makes opponent hit the ball down in to net

Serve

- Starts the game and each point
- Ball leaves hand, is hit into your side of the table first then bounces over the net and onto opponents side
- Various spin can be used

Physical Education - Keywords

Table Tennis		Dance		Fitness and Multi-Skills	
Key Word	Definition	Key Word	Definition	Key Word	Definition
Backhand	Any shot done with the back of the band towards the ball.	Dynamics	when used as a dance term it expresses the way in which shape of movement is executed (effort, speed and force)	Speed	The ability to move the whole body or body parts quickly. Uses 'fast twitch muscle fibres.
Backspin	Backward spin placed on the ball. Also called Underspin.	Relationships	refers to the relationship the dancers' body parts have to everything else (spatial relationships, time relationships, relationship to music, and to each other).	Strength	The ability to apply force against an object or resistance. Use 'fast twitch' muscle fibres.
Block	A quick, off the bounce return of an aggressive drive done by just holding the racket in the ball's path.	Sequence	a particular order in which related things follow each other	Power	The ability to apply strength/force quickly. Uses 'fast twitch' muscle fibres. Calculate by measuring 'force x speed'.
Chop	A chop is a heavy underspin shot. It is usually executed away from the table and below the table-top. A chop forces the ball to drop downwards when it hits an opponent's paddle.	Canon	a choreographic device or structure in which movements introduced by one dancer are repeated exactly by subsequent dancers in turn	Endurance	The ability to maintain high levels of exercise for a sustained period of time.
Footwork	How a person moves to make a shot.	Hesitate	to be reluctant or wait to act because of fear, indecision, or disinclination	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.
Forehand	Any shot done with the palm of the hand towards the ball.	Repetition	a choreographic device in which movements or motifs are repeated.	Skill	The ability to preform movements and techniques with control and precision.
Let	A service hitting the net as it goes over or a distraction that causes the point played over.	Determination	the quality of being determined; firmness of purpose	Agility	The ability to change direction of the whole body or body parts with speed.
Rally	The period in which the ball is in play.	Confidence	the feeling or belief that one can have faith in or rely on someone or something	Balance	The ability to maintain the 'centre of gravity' within the base of support without falling over or stumbling.
Spin	The rotation of a ball. Topspin: Spin placed on a ball to allow it to curve down onto the table.	Agility	ability to move quickly, easily and change direction	Co-ordination	The ability to control one or more body parts at the same time.
Topspin	Spin placed by hitting the ball with a closed bat angle to allow it to curve down onto the table. The ball will kick forwards.	Unison	Performing at the same time as your partner	Reaction Time	The speed with which a person can react to a stimulus or situation.

Physical Education – BTEC Sports : Unit 1

Aerobic Endurance

The ability of the cardiorespiratory system to work efficiently, supplying nutrients to the working muscles.

This is needed for long distance events.

What is the cardiorespiratory system?

- ✓ Uptakes oxygen from air breathed in
- ✓ Transports oxygen around body to working muscles
- ✓ Removes waste products such as carbon dioxide

AEROBIC- in the presence of oxygen
(long distance events)
ANAEROBIC- without oxygen
(short distance or power events)

Coordination

The ability to use body parts together accurately.

This is needed in most sports.

HAND-EYE coordination

FOOT-EYE coordination

HAND-HAND coordination

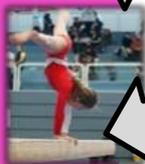


Balance

The ability to maintain the centre of mass over a base of support.

STATIC BALANCE- maintaining a balance whilst stationary. Eg- handstand

DYNAMIC BALANCE- maintaining a balance whilst in motion. Eg- cartwheel



Muscular Endurance

The ability of muscles to work repeatedly against a light to moderate load without getting tired.



Speed

Accelerative speed: This is the speed generated in order for a performer to be at their top speed. Eg- long jump run up

Pure speed: This is needed for events that are won by achieving the quickest time. Eg- 100m sprint

Speed endurance: This is an athlete's ability to sustain speed over a long period of time with short recovery periods. Eg- a footballer



$$\text{SPEED (m/s)} = \frac{\text{DISTANCE TRAVELLED}}{\text{TIME TAKEN}}$$

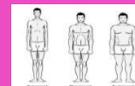
Physical Fitness

Muscular Strength

The maximum force that can be generated by a muscle or group of muscles. Weights will be heavy and therefore repetitions are low.

Body Composition

This is the combination of muscle, fat and bone.



Ectomorph- Tall and Thin

Endomorph- Short and Dumpy

Mesomorph- Muscular

Flexibility

The ability to move a joint fluidly through a complete range of movement.

Some sports require all round flexibility whereas some sports require flexibility at specific joints.

$$\text{POWER} = \text{STRENGTH} \times \text{SPEED}$$



Power

The ability to use strength at speed. Therefore the faster or stronger a motion, the more powerful it will be.



Agility

The ability to change direction quickly.

Eg- rugby players

Unit 1 @LWarnerPE
Learning Aim A-
Components of Fitness

Components of physical fitness	Components of skill related fitness
Aerobic endurance	Agility
Muscular endurance	Balance
Flexibility	Coordination
Speed	Power
Muscular strength	Reaction time
Body composition	

Skill-Related Fitness

Reaction time

The time taken for a performer to respond to a stimulus. Eg- sprinter



Psychology Knowledge Organiser-Year 9

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)

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 e.g. a firebell



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.

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.

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.

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



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

Key words:

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
<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.

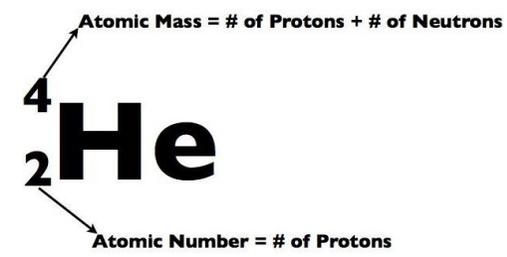
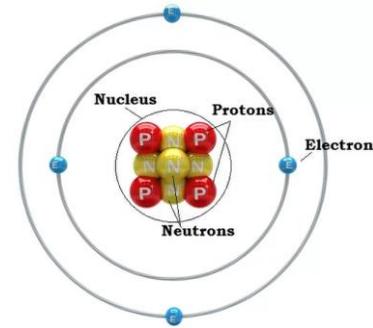
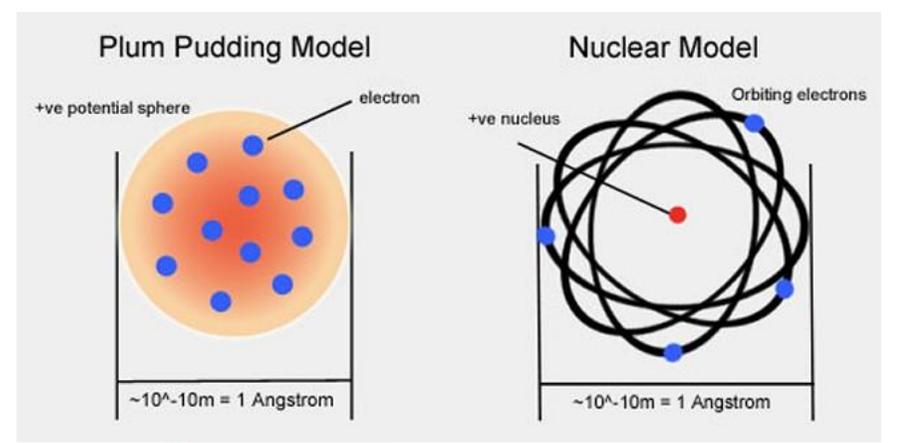
Christians are expected to be forgiving towards those who wrong them, if they expect to be forgiven themselves: **"Forgive us our sins, as we forgive those who sin against us."** Many Christians would argue that forgiveness is not a replacement for punishment.

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 - Atomic Structure and the Periodic Table

Keywords	
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.



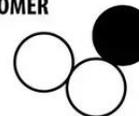
Science - Bonding, structures and the properties of matter

Keywords

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

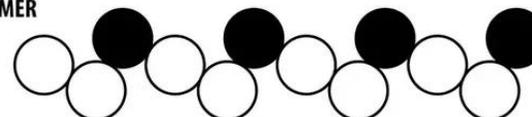
Structure of Monomers and Polymers

MONOMER



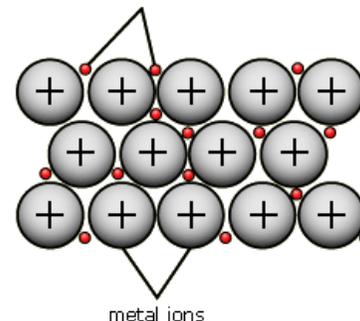
A monomer is a small molecule.

POLYMER



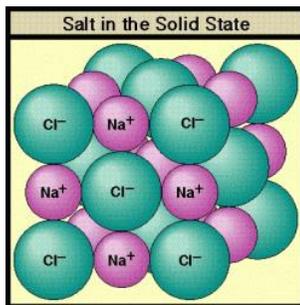
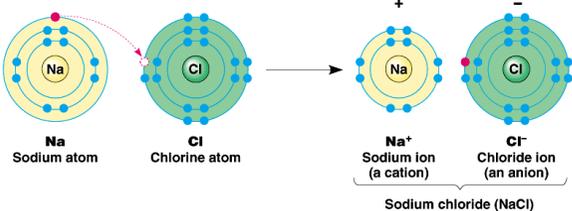
A polymer is a long-chain molecule made up of a repeated pattern of monomers.

free electrons from outer shells of metal atoms

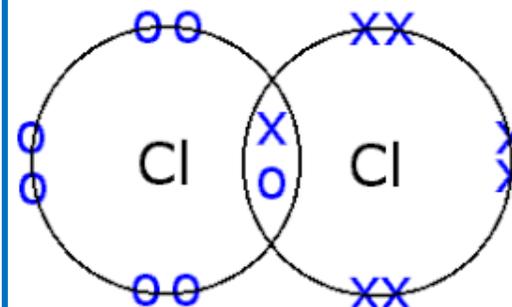


Metallic structure

metal ions



Ionic bonding and structure



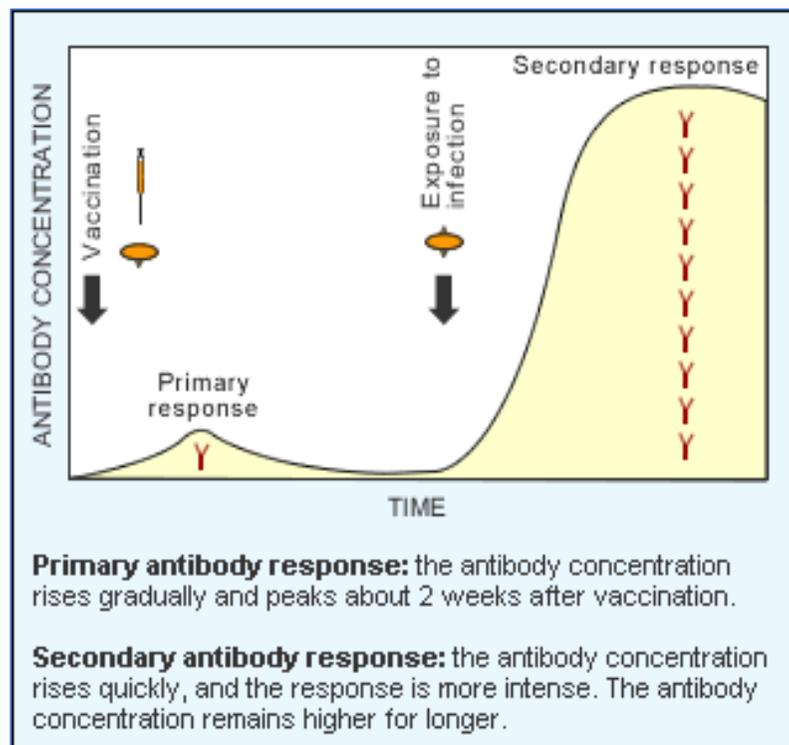
Covalent bonding

Science - Infection and Response

Keywords

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.



My Diary :

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

My Homework

Week						
02/11						
09/11						
16/11						
23/11						
30/11						
07/12						
14/12						

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

Date	Book Title	Pages	Main Events
02/11 MONDAY			
03/11 TUESDAY			
04/11 WEDNESDAY			
05/11 THURSDAY			
06/11 FRIDAY			
09/11 MONDAY			
10/11 TUESDAY			
11/11 WEDNESDAY			
12/11 THURSDAY			
13/11 FRIDAY			
16/11 MONDAY			
17/11 TUESDAY			
18/11 WEDNESDAY			
19/11 THURSDAY			
20/11 FRIDAY			

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

Date	Book Title	Pages	Main Events
23/11 MONDAY			
24/11 TUESDAY			
25/11 WEDNESDAY			
26/11 THURSDAY			
27/11 FRIDAY			
30/11 MONDAY			
01/12 TUESDAY			
02/12 WEDNESDAY			
03/12 THURSDAY			
04/12 FRIDAY			
07/12 MONDAY			
08/12 TUESDAY			
09/12 WEDNESDAY			
10/12 THURSDAY			
11/12 FRIDAY			

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

Date	Book Title	Pages	Main Events
14/12 MONDAY			
15/12 TUESDAY			
16/12 WEDNESDAY			
17/12 THURSDAY			
18/12 FRIDAY			

Home Contact

