



My
**Knowledge
Organiser**
and Planner

Autumn 2 - 2019

Year 8

Basic *Expectations* *Every Day*

Right Uniform
Right Equipment
On time
No Disruption
Best Effort

College Day

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

Can I write in paragraphs?

The TIPTOP rule

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

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

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

Have I used the correct grammar?

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

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



literacy mat

My work

I am proud of my work because...

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

Can I spell familiar words accurately?

Common contractions

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

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

Can I use different sentence types?

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

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

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

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

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

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

Homophones

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

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

What traffic light am I?
Is my punctuation accurate?

L iteracy mat

Basics:

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

Can I spell accurately?

- Sound out the word
- Think about how it looks
- Think about a similar word
- Is there a memory sentence for this word? (e.g. big elephants cannot always use small exits)
- Find the word in a list -
 - Key words list
 - Frequently used words list
 - Your own word bank
- Look it up in a dictionary/spellchecker
- Ask a friend or teacher
- To learn it: look, cover, write, check
- Once you've solved it, add the correct spelling to your own word bank.

Can I use punctuation?

The Apostrophe

I always aim to use apostrophes correctly.

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

Note: Apostrophes are NEVER used to denote plurals

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

Apostrophe for Possession

(To show that something belongs to another)

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

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

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

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

There/ their/ they're

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

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

ITS

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

Your/ you're

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

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

Art and Design – Landscape (Seascape)

Record

Use poetry to generate ideas for an atmospheric semi abstract Seascape, inspired by Poetry about the sea.

The sea is a hungry dog,
Giant and grey.
He rolls on the beach all day.
With his clashing teeth and shaggy jaws,
Hour upon hour he gnaws
The rumbling, tumbling stones,
And 'Bones, bones, bones, bones!'
The giant sea-dog moans,
Licking his greasy paws.

And when the night wind roars
And the moon rocks in the stormy cloud,
He bounds to his feet and snuffs and sniffs,
Shaking his wet sides over the cliffs,
And howls and hollos long and loud.

But on quiet days in May or June,
When even the grasses on the dune
Play no more their reedy tune,
With his head between his paws
He lies on the sandy shores,
So quiet, so quiet, he scarcely snores.

James Reeves.

Rock **Crash**
Blue **Swirl** **Wave**
Ripple



Develop

Artist Research on:

Kurt Jackson

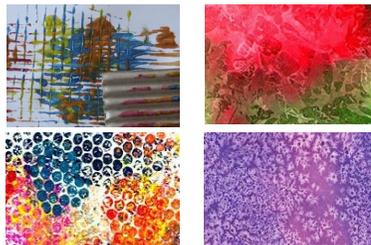
Include:

- Title in a relevant style.
- Introduce the artist.
- Describe the artwork.
- Analyse the formal elements.
- Discuss your opinion.
- Use this to influence your outcome.



Textures;

Corrugated card, tissue paper, wall paper, watercolour and salt, sand, bubble wrap.



Explore – Materials and processes.

Mark making
Collage
Texture



Materials: Water colour Paint, Inks, Newspaper, Glue, Stencils, Stamps, pastel, crayon, Pencil and pen.

Present

Outcome:

Atmospheric seascape with Semi-abstract details made by using mixed media, which includes layered collage, paint washes and techniques, press printed detail, ink and pencil markings.



Composition

The **Foreground**, **Midground** and **Background** in a composition are generally divided into 3 sections. The foreground is at the front of the composition, the midground being in the middle, and the background being furthest away from the viewer.

Time line of lessons

- ✓ Progression Test
- ✓ Artist Research x2
- ✓ Poetry /Word Collage
- ✓ Mark Making
- ✓ Typography
- Plan Outcome
- Produce Wash
- Background - textures
- Add Collage
- Pencil/Pen mark making layer detail

Key Words:

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

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

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

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

Composition – the arrangement and layout of artwork/objects.

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

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

Tone – refers to the lightness and darkness of an object to show it is solid subject, and to create depth.

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

Computer Science

KEY VOCABULARY

Denary	Base 10 number system. Uses digits 0,1,2,3,4,5,6,7,8,9
Binary	Base 2 number system. Uses digits 0 and 1 only.
Hexadecimal (Hex)	Base 16 number system. Uses characters 0-9 and A,B,C,D,E and F
BIT	Contraction of BINARY DIGIT – a single value of 0 or 1
Binary Code	Representation of values using multiple bits
Character Set	A list of unique values, stored in binary, which represent the letters, numbers and symbols a computer can show/use.
ASCII	American Standard Code for Information Interchange. A character set which uses 7 bits to store 128 (2 ⁷) characters
Extended ASCII	A character set which uses 8 bits to store 256 (2 ⁸) characters
UNICODE	A characters set which uses 16 bits to store 65,535 characters (2 ¹⁶)
Overflow Error	Where the denary value cannot be represented with the given number of bits.
Lossy Compression	Data is removed from the file to make it smaller. This data is lost and cannot be regained. Suitable where the loss of data is likely not to be noticed. Eg images
Lossless Compression	No data is lost, but rather rearranged to ensure a perfect version of the data can be returned. Used where exact reproduction is vital. Eg text documents
Pixel	Smallest element of an image – the dots that make up an image on a screen.

BINARY ADDITION

$$\begin{array}{r}
 0 \quad 1 \quad 0 \quad 1 \\
 +0 \quad +0 \quad +1 \quad +1 \\
 \hline
 00 \quad 01 \quad 01 \quad 10 \\
 \text{carried bit} \nearrow
 \end{array}$$

When adding 2 large binary numbers, if there is not enough bits to take the *carried bit* then this results in an **OVERFLOW ERROR**

$$\begin{array}{r}
 1 \quad 1 \quad 0 \quad 0 \quad 1 \quad 1 \quad 0 \quad 1 \\
 + 0 \quad 1 \quad 0 \quad 1 \quad 1 \quad 1 \quad 1 \quad 0 \\
 \hline
 1 \quad 0 \quad 0 \quad 1 \quad 0 \quad 1 \quad 0 \quad 1 \quad 1
 \end{array}$$

This value is not counted, it is *overflow*.

In 8 bits, this sum reads : 203 + 94 = 43!

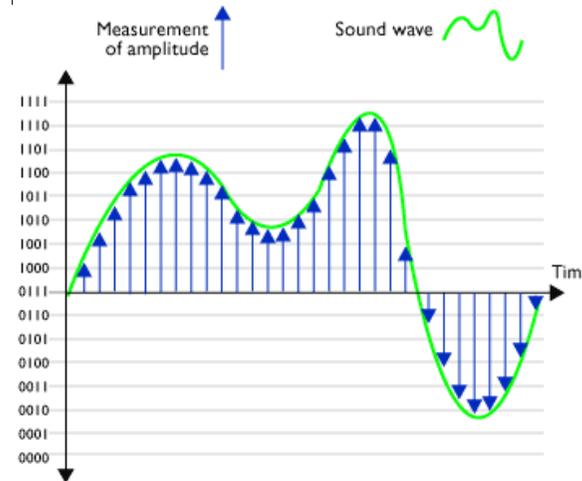
KEY VOCABULARY

Bitmap	An image where every pixel is 'mapped' in binary to show it's colour, transparency (Alpha) and brightness (Gamma) Increasing size will lower the quality
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Images

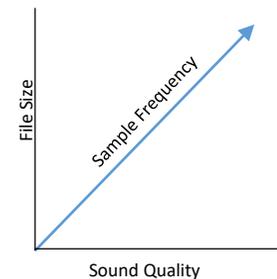
- Stored as Bitmap file as pixel
- **Each Pixel** of Image is made up of a 1 or 0.
- Following information about image **is stored in file:**
 - Width of the picture in pixels.
 - Number of bits used for each pixel
 - Colour of each pixel.
- **Image Resolution** = The concentration of pixels in an image
- **Higher Resolution** = More Pixels = Larger File Size
- **Lower Resolution** = Less Pixels = Smaller File Size.

SOUND SAMPLING



Each measurement is assigned a number (byte) according to its amplitude. The end result is a file comprising a string of bytes, eg ... 1001 1110 0001 1010 0111 0100 1111 1101 etc

As the sample rate increases, the quality of the sound goes up – the sound is closer to the analogue original, but the file size also increases. Reduce the sample rate, you reduce quality but also file size.



Vector

An image where the lines are stored as mathematical shapes, so the size can be increased without impacting quality

Keywords

Market Pull When a product is made due to consumer demand.

Technology Push When advances in technology drive the design of new products and the redesign of old ones.

Product Analysis Examining a current product to get ideas for a new product.

CAD Computer Aided Design. Using computers to design a product.

Fibres A thin, hair like structure from a natural or man made source that can be spun in to a yarn.

Non-woven A fabric made from layers of fibres, held together by bonding or felting.

CAM Computer Aided Manufacture. Making a product using a computer.

Design brief The instructions that a client gives to a designer about what they want a product to be like.

Market Research Asking the target market questions to find out their likes/dislikes to help the designer understand what they want from a product.

Equipment & Processes

Tailor's chalk is used to transfer markings on to your fabric that you can remove later.

Fabric shears are used to cut out fabric. They have long, very sharp blades that cut through fabric more easily and neatly.

Paper scissors are used to cut out patterns.

Pinking shears to cut fabric with a zig-zag edge—this helps prevent fabric from fraying.

Measuring tapes are used to accurately, measure curved surfaces e.g. a person's waist.

Stencilling: Cut out design from card by hand or using a laser cutter. Position on fabric and apply colour using sponge/brush. The colour will appear in cut areas.



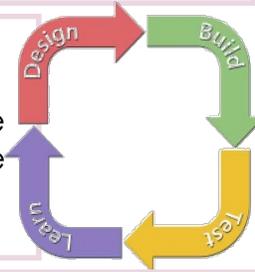
Key Concepts

Modelling:

Modelling is a good way to spot and solve problems with your designs. You can try out different aspects of your design to check it works before producing the final product.

Iterative design:

is when you continually test and improve a single prototype, until you have created a design that you're happy with.



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.

Design and Technology – Food

Key Vocabulary

Nutrients	The components that make up food.
Balanced diet	A diet that contains all the nutrients in the correct amount.
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.
Sensory descriptors:	Words to describe the appearance, taste, and texture of the food.
Aroma:	Smell
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.
Bacteria:	Microscopic living organisms, which are single-celled and can be found everywhere.
Temperature danger zone:	Bacteria grow most rapidly between 5C—63C
Salmonella:	A food poisoning bacteria
Binary fission:	How each bacterium reproduces by splitting in two.
Food poisoning :	An illness caused by eating contaminated food.
High Risk:	Ready-to-eat moist foods, usually high in protein, for example cooked rice.

Food Safety

Food can become contaminated with bacteria from:

- Raw foods
 - Work surfaces and equipment
 - Food handlers
 - Pests
 - Waste food and rubbish
- Food poisoning often causes symptoms such as: nausea, vomiting, diarrhoea and stomach pain.



Raising Agents: are added to mixtures to make them rise. Many baked items such as bread, pastries, cakes and biscuits depend on raising agents for their soft, light, springy texture. The three types of raising agents are **chemical, mechanical** and **biological**.

Baking powder: is a chemical raising agent used in cakes such as a Victoria Sandwich cake. Baking powder reacts with moisture and heat to produce the gas carbon dioxide. The carbon dioxide forms small bubbles in the mixture, which makes it rise. This results in a well risen, light cake.

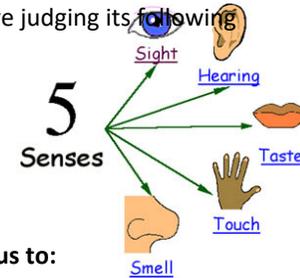
Key Temperatures

5C — 63C—Temperature danger zone
63C and above — Hot held food
75C—Cooked Food

Sensory Evaluation

When you eat food, you are judging its following characteristics:

- Appearance
- Taste
- Smell— aroma
- Texture—mouthfeel



Sensory evaluation helps us to:

- Make sure that a food product meets expectations. For example a strawberry yoghurt has the appearance, texture and aroma that is expected.
- Make sure that a food product compares with other similar products.
- Check on the quality and shelf-life of food products over time.

Why is fibre important?

Fibre is important as it keeps our digestive system healthy by helping the food waste travel through the body more easily. If you don't eat enough fibre, this can cause constipation, which can eventually lead to cancer of the bowel.

Yeast is a biological raising agent. It is a single-celled plant fungus. Yeast is used to raise bread and doughnuts. Yeast uses the flour, sugar and water or milk to ferment and produce carbon dioxide and alcohol. The carbon dioxide gas expands and collects as small bubbles throughout the dough. This will make the dough rise. When the dough is baked in the oven, the yeast is killed and the alcohol escapes and the dough sets.

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

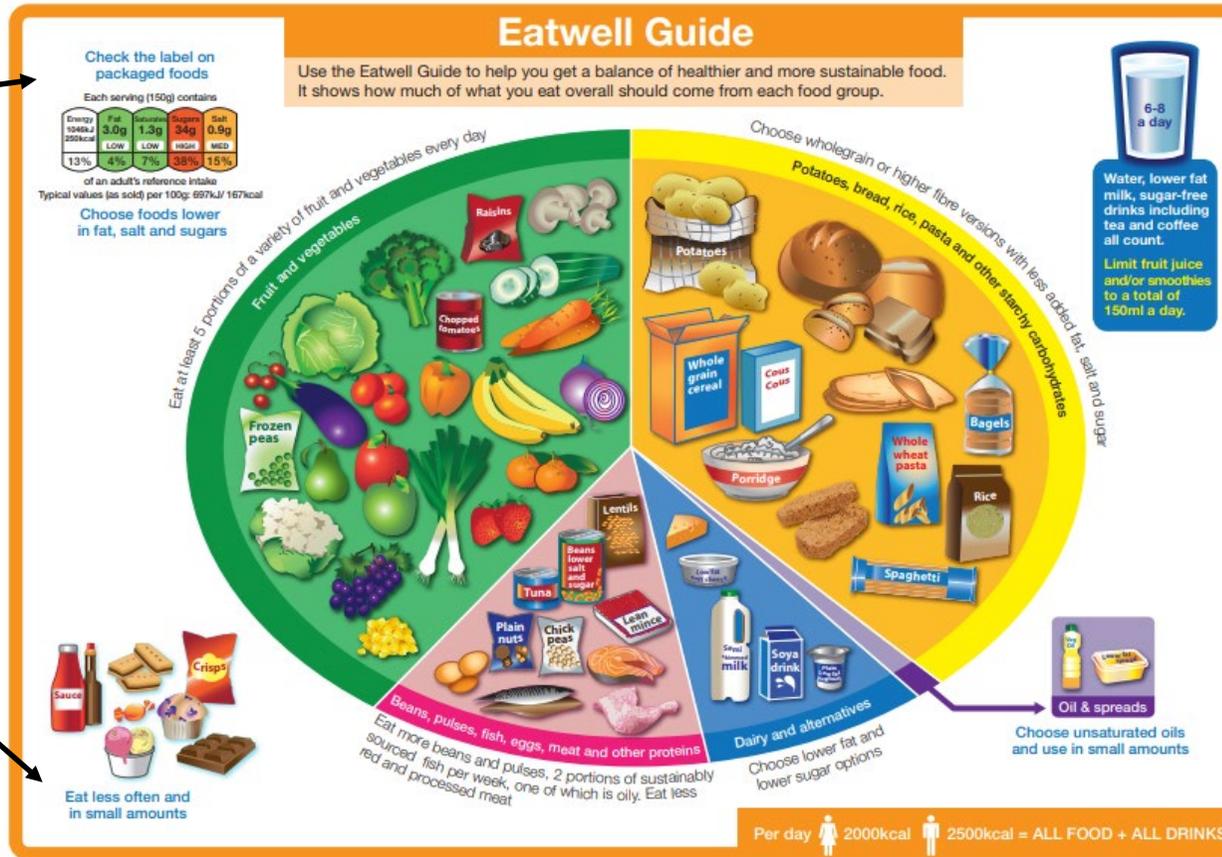
Design and Technology – Food

Eatwell Guide

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

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

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



8 Tips for Healthy Eating

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

Macro Nutrients

Protein is needed for growth, repair, maintenance and energy.

examples

Carbohydrate provides the body with energy.

examples

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

examples

Micro Nutrients 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 and Technology – Workshop

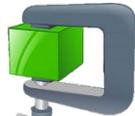
Key Vocabulary

Research:	How to gather information that helps form a design idea.
Designing:	The process of drawing and thinking about a problem and coming up with a solution.
Planning:	Organizing your time and materials so that you can complete task as efficiently as possible.
Making:	The process of cutting and manufacturing the project.
Evaluation:	Reflection of what has been done and recording how you could improve next time.
Pine:	A softwood used to manufacture indoor products and furniture.
Timber:	The word to describe wood in general terms.
MDF:	Medium density fiber board
Softwood:	A wood type such as pine
Hardwood:	A wood type such as ash
Plywood:	A man-made laminated wood with glued layers
Computer Aided	
Design (CAD):	Use of computers to design and manufacture a product.
Industrial	
Production:	Large scale manufacture of products
Template:	Instructional drawing measurements included
Coping Saw:	A type of saw to cut wood
Glass Paper:	Sand paper
Tenon Saw:	A type of saw for cutting tight corners
Chisel:	A sharp bladelike tool for carving wood.
Try Square:	A tool for marking at 90°
Marking Gauge:	A tool for marking out continuous lines in wood
Mallet:	A type of hammer
Pillar Drill:	Vertical drilling machine
Bench Hook:	A device to secure work to the bench and cut safely.
Materials:	The wood used to manufacture the product
Equipment:	The tools used in the project

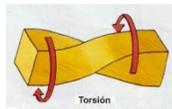
What is a force? A physical influence that tries to change the position of an object.



What is compression? When an object is being pushed or squashed.



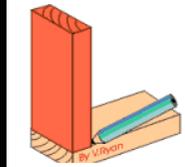
What is torsion? When an object is being twisted.



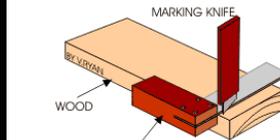
What is tension? When an object is being pulled.



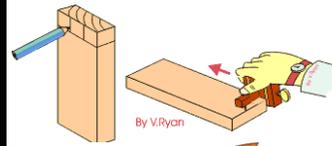
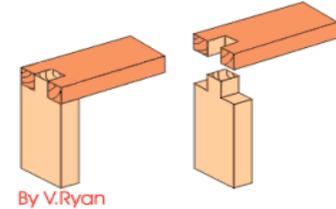
Tools, Equipment and Processes



- Two sides to be jointed are arranged as shown in the diagram. A pencil is used to mark the thickness of the material.



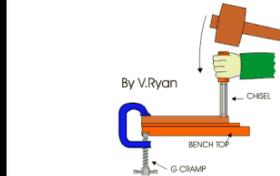
- Marking knife and a try square are used to mark all the way round the material. It is possible to use only a pencil but a marking knife is more precise and it has the advantage of cutting the wood fibres. This means when a saw is used to cut the joint the surface of the wood is less likely to split.



- Fingers of the first joint are marked out using a pencil and a try square/steel ruler. The traditional way of marking the fingers involves the use of a marking gauge. When using a marking gauge, marking the fingers is difficult especially if you have not used this type of tool before. The waste wood should be shaded with a pencil. This will help you avoid cutting away the wrong part of the joint.



- The wood is placed in a vice. It must be vertical so that the tenon saw is always cutting down in a straight line. Avoid putting the wood in the vice at an angle as it will be virtually impossible to use the saw accurately. When cutting it is important to cut on the waste wood side of the line. It should be possible to see the marking out lines after the saw has been used.



- If the joint is slightly inaccurate a firmer or bevel-edged chisel can be used to correct it. A G clamp is used to hold the wood firmly. Scrap wood is placed underneath to protect the surface of the bench from the chisel. The first side of the joint should now be complete.

Material Properties Keywords

STRENGTH:	The ability of a material to stand up to forces being applied without it bending, breaking, shattering or deforming in any way.
ELASTICITY:	The ability of a material to absorb force and flex in different directions, returning to its original position.
PLASTICITY:	The ability of a material to be changed in shape permanently. E.G. casting molten metal.
DUCTILITY:	The ability of a material to change shape (deform) usually by stretching along its length.
TENSILE STRENGTH:	The ability of a material to stretch without breaking or snapping.
MALLEABILITY:	The ability of a material to be reshaped in all directions without cracking.
TOUGHNESS:	A characteristic of a material that does not break or shatter when receiving a blow or under a sudden shock.
HARDNESS:	The ability of a material to resist scratching, wear and tear and indentation.
CONDUCTIVITY:	The ability of a material to conduct electricity.

Drama - Shakespeare

Tragedy - a play dealing with tragic events and having an unhappy ending, especially one concerning the downfall of the main character.

Protagonist - the leading character or one of the major characters in the play.

Antagonist - a person who actively opposes or is hostile to someone or something.

Prologue - a separate introductory section of a play.

Monologue - long speech by one actor in a play or film

Soliloquy - an act of speaking one's thoughts aloud when by oneself or regardless of any hearers, especially by a character in a play.

Dramatic Irony - a literary technique, originally used in Greek tragedy, by which the full significance of a character's words or actions is clear to the audience or reader although unknown to the character.

Foreshadowing - a warning or indication of (a future Event)

Juxtaposition - two things being seen or placed close together with contrasting effect.

Oxymoron - a figure of speech in which apparently contradictory terms appear in conjunction (e.g. faith unfaithful kept him falsely true).

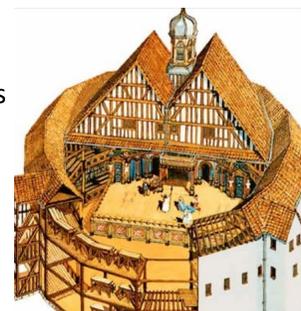
Iambic Pentameter - a line of verse with five metrical feet, each consisting of one short (or unstressed) syllable followed by one long (or stressed) syllable, for example Two households, both alike in dignity.

Prose - written or spoken language in its ordinary form, without metrical structure.

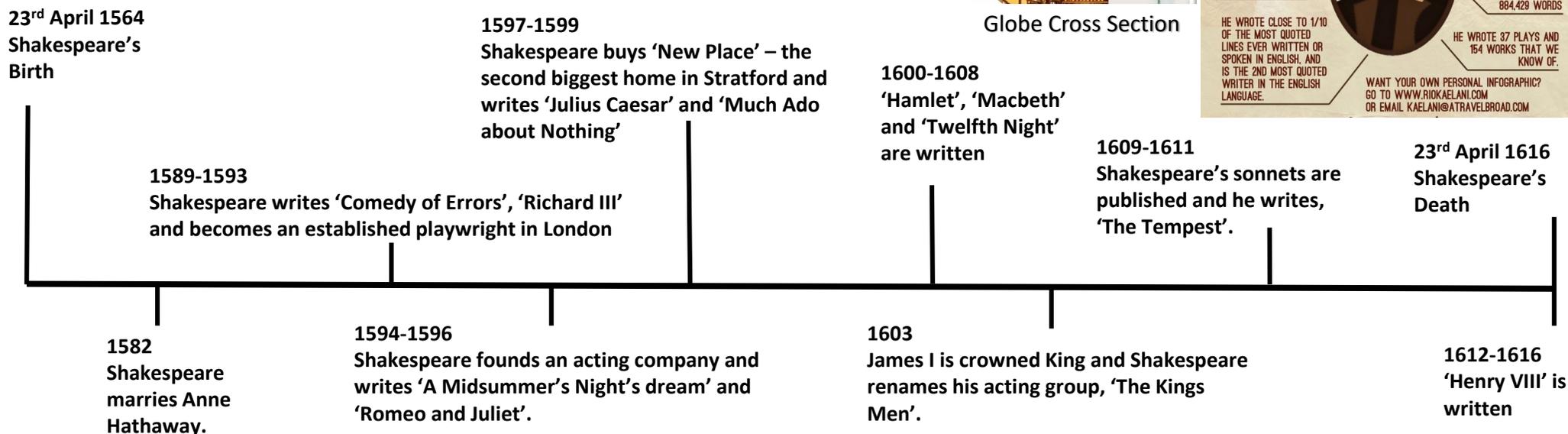
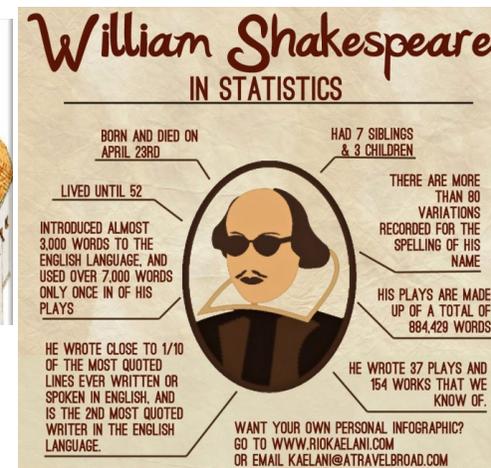
Metaphor - a figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable.

Simile - a figure of speech involving the comparison of one thing with another thing of a different kind, used to make 3 description more emphatic or vivid (e.g. as brave as a lion)

- The Globe theatre was where many of Shakespeare's plays were performed
- It was constructed in 1599, by the Burbage brothers
- It was octagon shaped, roofless with a stage and three galleries surrounding it
- It was 80x80ft and held around 3000 people
- We do not know what the original Globe Theatre looked like
- Shakespeare's Globe had to have special permission to have a thatched roof, there has been a law against thatched buildings in London since the Great Fire in 1666.



Globe Cross Section



English – Ruby in the smoke

Vocabulary	Characters	Description	Context																		
afflicted	<p>Sally Lockhart The female protagonist who has recently lost her father.</p> <p>Frederick Garland A handsome photographer who meets Sally by chance.</p> <p>Rosa Garland Fred’s outspoken sister.</p> <p>Jim Taylor A young man who works at Lockhart and Selby shipping firm. He is a great amateur detective.</p> <p>Adelaide She works for the terrifying Mrs Holland who apparently killed her last maid. She finds friends and safety in Sally and Fred.</p> <p>Matthew Bedwell He worked for Sally’s father and was on board the ship that sank which drowned Mr Lockhart. He has become an opium addict which sends him into a downwards spiral.</p> <p>Nicholas Bedwell Brother to Matthew. He is a religious man. He is an expert boxer.</p> <p>Mrs Holland The novels’ wicked antagonist. She runs a lodging house and has the young Adelaide working for her. She is obsessed with getting hold of the Ruby of Agrapur.</p> <p>Captain Lockheart Sally’s father.</p>	<p>The story is set in 1872, at the height of the Industrial Revolution, when Britain's Empire spread far across the globe. Bringing in wealth, jewels, spices and drugs. With it came new ideas : feminism, socialism, new technologies, new forms of social relations.</p> <p>Women had fewer rights than men during the Victorian Era, despite Queen Victoria being a woman. Mostly a woman’s place as was ‘in the home’ or revolved around motherhood.</p> <p>With the dawn of the Industrial Revolution women and men were encouraged to keep separate - men focusing on business.</p> <p>This meant that women who didn’t have a male or senior chaperone were vulnerable and were at risk of damaging their reputation.</p> <p>Genre: : Mystery</p> <p>Mystery - there is a problem that needs to be solved, usually a crime or serious conundrum.</p> <p>We should have an intelligent detective or investigator.</p> <p>The audience should be given clues throughout so they can solve the mystery with the characters.</p> <p>We may be given a “red herring”. This is a clue that leads us down the wrong investigation path or has no influence on the outcome of the case.</p>																			
amiable																					
ballast																					
blight																					
condescending																					
contempt																					
dismal																					
evade																					
facetious																					
formidable																					
furtive																					
genially																					
haughty																					
insinuate																					
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omnibus																					
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solicitous																					
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			<table border="1"> <thead> <tr> <th>Typical Features</th> <th>Archetypal characters</th> <th>Typical Settings</th> </tr> </thead> <tbody> <tr> <td>Disguise/mistaken identity</td> <td>Amateur sleuth/detective</td> <td>Unpleasant places</td> </tr> <tr> <td>Plot twists</td> <td>A murder victim</td> <td>An exotic island/country</td> </tr> <tr> <td>Red herrings</td> <td>An adolescent protagonist</td> <td>Abandoned warehouses</td> </tr> <tr> <td>Death/Murder</td> <td>A villain</td> <td>Stormy weather</td> </tr> <tr> <td>Villain punished</td> <td>Suspects</td> <td>Isolated places</td> </tr> </tbody> </table>	Typical Features	Archetypal characters	Typical Settings	Disguise/mistaken identity	Amateur sleuth/detective	Unpleasant places	Plot twists	A murder victim	An exotic island/country	Red herrings	An adolescent protagonist	Abandoned warehouses	Death/Murder	A villain	Stormy weather	Villain punished	Suspects	Isolated places
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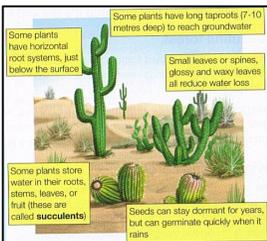
Geography - Fragile Ecosystems

Hot Deserts: Deserts are dry (arid) areas. They are both hot and cold, but all receive less than 250mm of rainfall per year.

Location: Hot deserts are mostly found in a belt between 30°N and 30°S of the Equator. Most occupy dry continental interiors, but coastal deserts also exist.

Characteristics:

- Very low rainfall (less than 250mm/yr)
- Extreme diurnal temperature range – lack of cloud cover allows high daytime temperatures, but very cold nights
- Soils tend to be sandy or stony. Limited leafy vegetation means little soil fertility
- Soils are saline (salty) because evaporation of moisture draws salts to the surface
- Nocturnal rodents live in burrows underground. Snakes and lizards have waterproof skins which retain moisture and camels can go days without water.
- People who live in the desert are often nomadic (travel around)



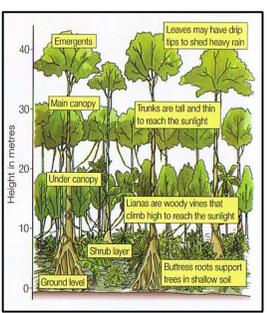
At risk from deserts: Desertification is where land is gradually turned into desert. It occurs mostly on the fragile borders of existing deserts. Desertification is a results of both natural and human causes, affects both poor and rich countries and threatens one billion people in areas at risk. Causes include; Climate change, Overgrazing, Over cultivation and Increased requirements for fuelwood

Tropical rainforests: Tropical rainforests cover 6% of the Earth's surface, yet they support more than 50% of all living organisms.

Location: Tropical rainforests are located mostly a few degrees wither side of the Equator between the Tropics of Cancer and Capricorn in the equatorial climate.

Characteristics:

- Rainforests are hot and humid all year, with high, but variable rainfall. There are no distinct seasons.
- The biodiversity is remarkable, supporting more plants and animals than any other biome.
- Tropical rainforests are adapted to their environment, with distinctive layers in the vegetation.
- Soils are iron-rich and surprisingly infertile because the nutrients are 'cycled' quickly by the vegetation.
- Trees and plants have adaptations which enable them to shed water quickly, compete for sunlight & stabilise their tall trunks.



Tropical rainforests at risk: Tropical rainforests can provide us with resources, medicines, and water. They are home to Indigenous people and more than half the world's species of plants and animals, however they are at risk of deforestation for many reasons: Logging, Road building, Energy development, Mineral extraction, Population pressure, Commercial farming, and Subsistence farming.

Coral Reefs – Rainforests of the sea

A coral reef is a hard, rocky ridge formed on the seabed from the external skeletons of many tiny, coral animals. Although they cover less than 0.1% of the world's ocean surface, they provide a home for at least 25% of all marine species.

Location: Coral reefs are mainly found between 30°North and South of the Equator.

Conditions required for survival:

- Temperature:** Seawater with a temperature of 18°C or above.
- Depth:** Corals feed on algae, which requires sunlight so corals are found in shallow water.
- Salinity:** Corals require salty water so they do not live near estuaries.
- Clear water:** Corals need water without a lot of sediment (sand/stone) in them.

Importance of coral reefs:

- Food and fishing:** Reefs provide over 1 billion people with fish and shellfish.
- Medicine:** Chemicals from coral-reef organisms are used in scientific research to help treat diseases.
- Coastal protection:** Corals form a natural barrier to storm waves and tsunamis.
- Tourism:** Millions of people are attracted to coral reefs.
- Ecology:** Reefs are home to 250 000 known species of marine life.

Coral reefs at risk: Local threats to coral reefs include damage caused by tourists, fishermen and agricultural runoff. The effects of climate change on coral ecosystems are more serious. Warmer ocean temperatures cause corals to push out the algae that provide them with food. This leads to coral bleaching. Eventually the corals will die and the reef becomes lifeless.

Antarctica: The last great wilderness

Location: Antarctica is the southernmost continent and site of the South Pole

Climate:

Antarctica can be called a desert because of the low levels of precipitation. Antarctica has the coldest land temperature recorded on the Earth of -89.2°C. The average annual temperature is around -50°C. The precipitation in Antarctica is mainly snow. There are also strong winds, with recordings of up to 200 mph being made.

The ice in Antarctica:

The ice in Antarctica is on average 2.5 km thick. Nearly 99 per cent of Antarctica is covered by an ice sheet. Glaciers are formed within the ice sheet. When the glacier flows into the sea, an ice shelf is formed. The ice shelf floats on the water. The largest ice shelf in Antarctica is the Ross Ice Shelf. If the blocks of ice break free from the glacier, a process called 'calving' forms icebergs.

Antarctica at risk: A resource is something that exists within the environment. It has the potential to have value. There are many resources in Antarctica, which include:

- Mineral and energy resources** - most is currently covered by snow, including the world's largest known coalfield
- Fresh water extraction from icebergs** (70 per cent of the world's fresh water is in Antarctica)
- Resources from the sealife** - eg farming of fish and **krill**
- Scientific resources** - scientists can study weather patterns, ecosystem adoptions and the past climatic and geological changes
- Tourism** also offers potential because of the attraction of this unique wilderness.

History - (WWI) KS3: 20th Century - The First World War

Definition of Era:

World War also known as the **First World War** or the **Great War**. It is described as "the war to end all wars", it led to the mobilisation of more than 70 million military personnel, including 60 million Europeans, making it one of the largest wars in history.

Timeline:

- 1914 : June 28** - Archduke Franz Ferdinand is assassinated.
- July 28** - Austria-Hungary declares war on Serbia.
- August 1** - Germany declares war on Russia.
- August 3** - Germany declares war on France as part of the Schlieffen Plan.
- August 4** - Germany invades Belgium. Britain declares war on Germany.
- 1916 : July 1** - The Battle of the Somme begins.
- 1917** : The Russian Revolution, Russia leave the war.
- 1918 : November 11** - Germany agrees to an armistice, fighting ends at 11am on the 11th day of the 11th month.
- 1919 : June 28** - The Treaty of Versailles is signed by Germany and WW1 comes to an end.

Keywords and concepts

- Arms race:** A race between countries to build the biggest army.
- Triple Alliance:** Germany, Austria-Hungary, Italy
- Triple Entente:** Britain, France, Russia
- Patriotism:** **Pride for your country**
- Propaganda:** Information of a misleading nature, used to promote a political cause of point of view.
- Conscription:** Being forced to join the army by the government.
- Conscientious Objector:** Men who refused to join the army because they believed that war was wrong.
- Trench foot:** A medical condition caused by prolonged exposure of the feet to damp, unsanitary & cold conditions.
- Attrition:** Slow destruction, to wear the opposition down over time.

KPI 1 What were the MAIN causes of the First World War?

Militarism – Alliances – Imperialism - Nationalism
The terms above MAIN were **LONG TERM** causes of WW1, they are a combination of reasons that have built up over several years.

Militarism: People took pride in their armies & navies. To make sure that theirs were the best, countries spent more & more money on bigger & bigger armies. Nobody wanted the smallest army, so countries got caught up in an arms race.

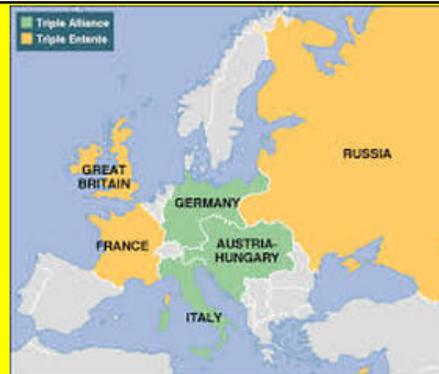
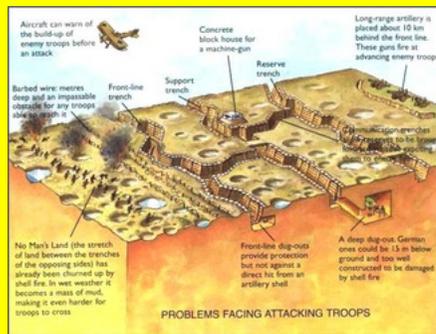
Alliances: Different sides, partnerships between countries.

Imperialism: Many countries had their own empires, the race to gain control of other nations, particularly Africa led to tensions & fierce rivalries among European countries.

Nationalism: People were proud of their countries, people of different nations, especially Europe were convinced that their people, country & the way of doing things were best. Sadly, one way to prove this was to have a war with your rivals.

KPI 4 Trench Warfare

The deadly fire of the machine guns forced entire armies to live almost underground for months on end. Artillery attacks from the air, poison gas attacks causing severe damage to eyes & lungs, plus tanks!



KPI 2 Short term cause of the First World War.

On 28th June 1914, the heir to the Austrian throne **Archduke Franz Ferdinand** was assassinated in the Bosnian city of Sarajevo. Bosnia was part of the Austro-Hungarian Empire, conquered by Austrians in 1908. Many Bosnians were unhappy about this because they wanted to join their neighbours Serbia, Serbians felt the same to. A gang of Serbians called the **'Black Hand'** planned the assassination of the Archduke.

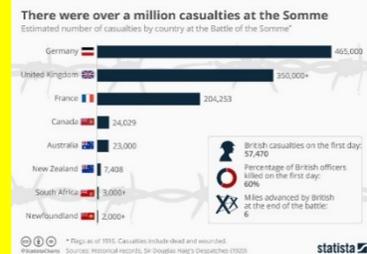
The European Alliances stepped in:

The **Triple Entente** versus the **Triple Alliance**.

By 12th August 1914 the First World War began.

KPI 5 Battle of the Somme

The Battle of the Somme, fought in **northern France**, was one of the **bloodiest** of WW1. For **five months** the British and French armies fought the Germans in a brutal battle of attrition on a **15-mile front**. The aims of the battle were to relieve the French Army fighting at Verdun and to weaken the German Army. However, the Allies were unable to break through German lines. In total, there were over one million dead and wounded on all sides.



KPI 3 Why did men join up?

When the British government asked for **volunteers** aged between 19-30 there was a great rush to 'join up'.

A wave of **Patriotism** swept the country & by Christmas 1914, over a million men enlisted.

Propaganda posters were used to encourage men to join up, these posters had powerful messages designed to play on people's feelings.

Newspapers also supported the propaganda campaign by only writing about victorious battles, with defeats hardly getting a mention.

By January 1916, a total of 2.5 million men had agreed to fight. Some felt 'pushed' while others felt the 'pull' of the excitement of war.



KPI 6: Trench Conditions

Historians can learn a lot from the **letters, diary's & poems** written by soldiers about their experiences of trench life. Soldiers suffered with **lice** infested clothing, the constant threat of **'trench foot'** as well as living alongside **rats** who fed off dead bodies of soldiers. Rations were insufficient & many men suffered from malnutrition.



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

SLQ link to
grammatical
and precise
vocab
content
below:



Scan me

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

Past

hier

le week-end
dernier

la semaine
dernière

l'année dernière

avant-hier

il y a dix ans

l'hiver dernier

l'été dernier

Present

aujourd'hui

tous les jours

souvent

rarement

quelquefois

normalement

de temps en
temps

ne ... jamais

toujours

en général

maintenant

en ce moment

en été

en hiver

au printemps

Future

demain

le week-end

prochain

la semaine

prochaine

l'année prochaine

ce week-end

dans dix ans

l'été prochain

cet hiver

Vary your vocab

moche – ugly
grand – tall
pénible – annoying
méchant – mean
égoïste – selfish
démodé – old-fashioned
lunatique – moody
impressionnant – 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'appelles, il/elle s'appelle
j'ai quatorze ans
c'est/c'était/ce sera + masculine adjective
ennuyeux intéressant
mon copain, ma copine, mes
copains/copines
de temps en temps
le collègue
je suis allé

Go compare!

Plus ... que
Moins ... que
Aussi ... que
Meilleur/mieu
Plus
mauvais/pire



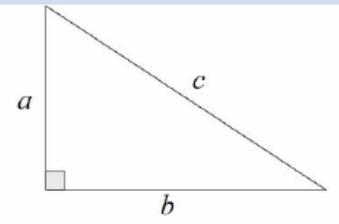
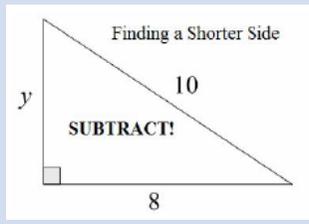
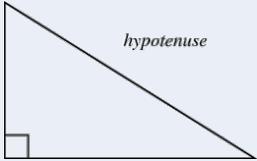
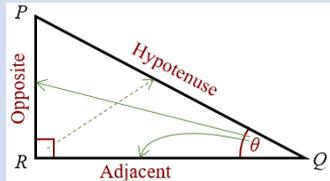
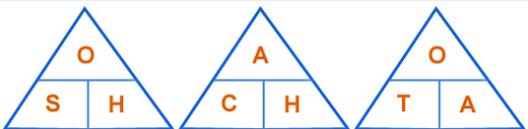
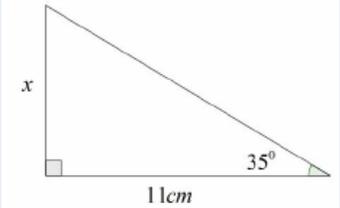
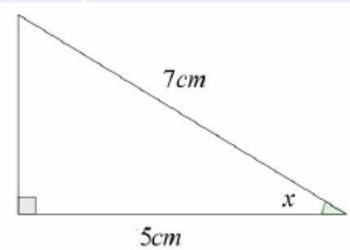
Avoid repetitions!

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

Topic/Skill	Definition/Tips	Example																				
1. Types of Data	<p>Qualitative Data – non-numerical data</p> <p>Quantitative Data – numerical data</p> <p>Continuous Data – data that can take any numerical value within a given range.</p> <p>Discrete Data – data that can take only specific values within a given range.</p>	<p>Qualitative Data – eye colour, gender etc.</p> <p>Continuous Data – weight, voltage etc.</p> <p>Discrete Data – number of children, shoe size etc.</p>																				
2. Grouped Data	<p>Data that has been bundled in to categories.</p> <p>Seen in grouped frequency tables, histograms, cumulative frequency etc.</p>	<table border="1"> <thead> <tr> <th>Foot length, l, (cm)</th> <th>Number of children</th> </tr> </thead> <tbody> <tr> <td>$10 \leq l < 12$</td> <td>5</td> </tr> <tr> <td>$12 \leq l < 17$</td> <td>53</td> </tr> </tbody> </table>	Foot length, l , (cm)	Number of children	$10 \leq l < 12$	5	$12 \leq l < 17$	53														
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3. Primary /Secondary Data	<p>Primary Data – collected yourself for a specific purpose.</p> <p>Secondary Data – collected by someone else for another purpose.</p>	<p>Primary Data – data collected by a student for their own research project.</p> <p>Secondary Data – Census data used to analyse link between education and earnings.</p>																				
4. Mean	<p>Add up the values and divide by how many values there are.</p>	<p>The mean of 3, 4, 7, 6, 0, 4, 6 is</p> $\frac{3 + 4 + 7 + 6 + 0 + 4 + 6}{7} = 5$																				
5. Mean from a Table	<ol style="list-style-type: none"> Find the midpoints (if necessary) Multiply Frequency by values or midpoints Add up these values Divide this total by the Total Frequency <p>If grouped data is used, the answer will be an estimate.</p>	<table border="1"> <thead> <tr> <th>Height in cm</th> <th>Frequency</th> <th>Midpoint</th> <th>F × M</th> </tr> </thead> <tbody> <tr> <td>$0 < h \leq 10$</td> <td>8</td> <td>5</td> <td>$8 \times 5 = 40$</td> </tr> <tr> <td>$10 < h \leq 30$</td> <td>10</td> <td>20</td> <td>$10 \times 20 = 200$</td> </tr> <tr> <td>$30 < h \leq 40$</td> <td>6</td> <td>35</td> <td>$6 \times 35 = 210$</td> </tr> <tr> <td>Total</td> <td>24</td> <td>Ignore!</td> <td>450</td> </tr> </tbody> </table> <p>Estimated Mean height: $450 \div 24 = 18.75\text{cm}$</p>	Height in cm	Frequency	Midpoint	F × M	$0 < h \leq 10$	8	5	$8 \times 5 = 40$	$10 < h \leq 30$	10	20	$10 \times 20 = 200$	$30 < h \leq 40$	6	35	$6 \times 35 = 210$	Total	24	Ignore!	450
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Total	24	Ignore!	450																			
6. Median Value	<p>The middle value.</p> <p>Put the data in order and find the middle one.</p> <p>If there are two middle values, find the number half way between them by adding them together and dividing by 2.</p>	<p>Find the median of: 4, 5, 2, 3, 6, 7, 6</p> <p>Ordered: 2, 3, 4, 5, 6, 6, 7</p> <p>Median = 5</p>																				
7. Median from a Table	<p>Use the formula $\frac{(n+1)}{2}$ to find the position of the median.</p> <p>n is the total frequency.</p>	<p>If the total frequency is 15, the median will be the $\left(\frac{15+1}{2}\right) = 8\text{th}$ position</p>																				
8. Mode /Modal Value	<p>Most frequent/common.</p> <p>Can have more than one mode (called bi-modal or multi-modal) or no mode (if all values appear once)</p>	<p>Find the mode: 4, 5, 2, 3, 6, 4, 7, 8, 4</p> <p>Mode = 4</p>																				

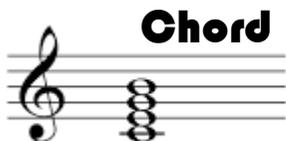
Maths – Higher: Pythagoras and Trigonometry

Topic/Skill	Definition/Tips	Example
1. Pythagoras' Theorem	<p>For any right angled triangle:</p> $a^2 + b^2 = c^2$ <p>Used to find missing lengths. a and b are the shorter sides, c is the hypotenuse (longest side).</p> 	<div style="display: flex; justify-content: space-between;"> <div data-bbox="1265 168 1574 392"> <p>Finding a Shorter Side</p>  </div> <div data-bbox="1597 154 1881 411" style="border: 1px solid black; padding: 5px;"> $a = y, b = 8, c = 10$ $a^2 = c^2 - b^2$ $y^2 = 100 - 64$ $y^2 = 36$ $y = 6$ </div> </div>
2. Hypotenuse	<p>The longest side of a right-angled triangle.</p> <p>Is always opposite the right angle.</p>	
3. Adjacent	<p>Next to</p>	
4. Trigonometric Formulae	<p>Use SOHCAHTOA</p> $\sin \theta = \frac{O}{H}$ $\cos \theta = \frac{A}{H}$ $\tan \theta = \frac{O}{A}$ <div style="text-align: center;">  </div> <p>When finding a missing angle, use the 'inverse' trigonometric function by pressing the 'shift' button on the calculator.</p>	<p>Use 'Opposite' and 'Adjacent', so use 'tan'</p>  $\tan 35 = \frac{x}{11}$ $x = 11 \tan 35 = 7.70\text{cm}$ <p>Use 'Adjacent' and 'Hypotenuse', so use 'cos'</p>  $\cos x = \frac{5}{7}$ $x = \cos^{-1}\left(\frac{5}{7}\right) = 44.4^\circ$

Music - Understanding the Conventions of the Blues Music



- **Links through the slave trade to Blues Music**
- **The Development of spirituals and church music**
- **The Development of Blues into Country Music**



Slide Guitar



12 Bar Blues

Key of C

□ ●	● ● ● ●	● ● ● ●
X32010	XX3211	210003
<p>C Major</p>	<p>F Major</p>	<p>G Major</p>
Strimming Strokes →		
Beat Count → 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4		



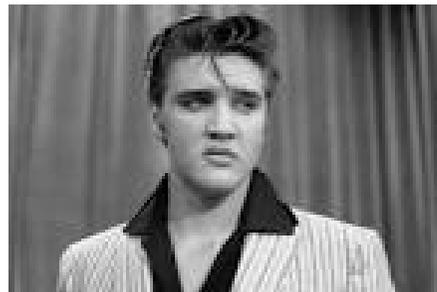
The movement of Blues Music into Rock'n Roll



Louis Armstrong



Bessie Smith

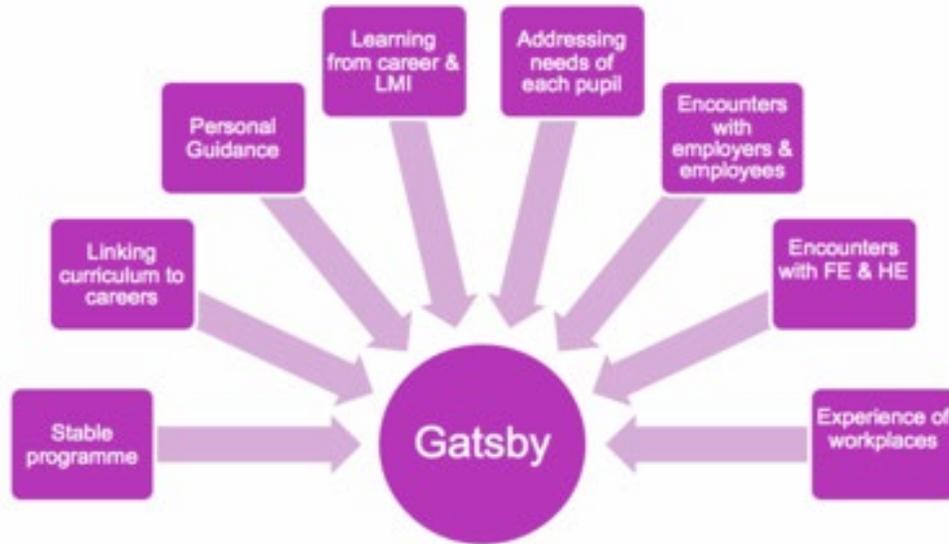


Elvis Presley



Jerry Lee Lewis

P4L – Enterprise Skills and Funding a Business



KEY CONCEPTS/QUESTIONS:

What are the Enterprise Skills?

How to solve complicated business problems

What makes a good leader?

How does a team work?

Financing a small business.

Understanding how to develop and market a product

Jobs and their skills.

KEY TERMS:

Organisation - Having a system for something that allows things to happen efficiently

Planning - Identifying what to do, in what order and when to do it

Time management - Knowing how much time is available and how much time is needed to do something

Literacy - Having accurate spelling and using punctuation and grammar correctly

Numeracy - Understanding numbers or applying calculations correctly

Money management - Making good decisions with money

Presentation skills - Putting your message across clearly

Negotiation skills - Persuading someone without threats

Team working - Working in a group towards a common goal

Leadership - Inspiring other people to be successful

Problem solving - Identifying the issue or barrier that prevents you from achieving your goal and then solving this

Innovation - Coming up with a unique idea or product

Creativity - Solving a problem and representing it in a novel way

Physical Education - Badminton

Kit Needed

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

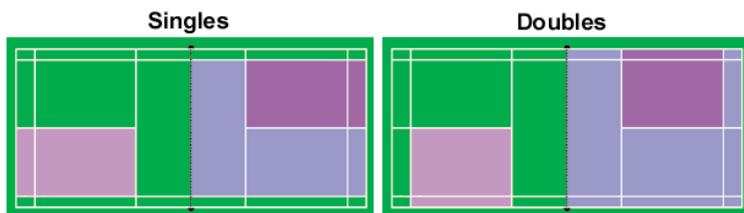
Equipment

- Badminton rackets, shuttle cocks, nets, posts and bases

5 Key Rules

- Point is scored if opponent hits shuttle cock into net
- Point is scored if opponent hits shuttle cock out of playing area
- Serve must be underarm and served to the diagonal box
- Playing area for singles is long and thin. Playing area for doubles is short and fat
- Serve from the left on an odd score and right for an even score

Playing area



Server stands in area

Shuttle must land in area

Area of play after service

Serve

- Starts the games
- Underarm
- Opposite foot forward to racket hand
- Hold shuttle in front and above racket head
- Flick wrist in direction and over the net

Smash

- To win points through attacking play
- Basic body position
- Non Racket hand high
- Bend racket hand
- Hit shuttle at highest point whilst extending arm
- Aim to hit hard downward to opponents back court

Basic body position



Overhead clear

- To create space, force opponent to back court
- Basic body position
- Non Racket hand high
- Bend racket hand
- Hit shuttle at highest point whilst extending arm
- Aim to hit shuttle to the back of court over opponents head

Drop shot

- To create space at back of court and force opponent to front court
- Basic body position
- Weight on back foot
- Raise your non-racket hand and point at the shuttle
- Contact the shuttle as high as possible and out in front of your body. Straighten your elbow as you hit the shuttle. Tap the shuttle as you hit it
- Aim to hit it to the front court

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 Dance 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

Telephone Numbers

0 = Jump
1 = Turn
2 = Roll
3 = Arm Swing

4 = Lunge
5 = Slide
6 = Kick (No Contact)
7 = Hop

8 = Balance
9 = Punch (No Contact)

Make up a dance using your Phone number

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

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

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

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 - Football

Kit Needed

- Moulded studs, Long/ Short sleeved top, Black Egguckland shorts, Shin pads, Long black socks

Equipment

- Footballs, posts, bibs

5 Key Rules

- A player can control the ball with any part of their body except their arms.
- A player must get the ball and not the player when making a tackle. If the tackling player makes contact with the attacking player then a free-kick is awarded.
- If a player is the last person to touch the ball before the side of the pitch then a throw in is awarded to the opposition.
- If the ball crosses the goal line (either side of the goal) and was last touched by a defensive player then a corner is awarded.
- If the ball crosses the goal line (either side of the goal) and was last touched by an attacking player then a goal kick is awarded.

Key Terms

- Pass- how you transfer the ball from one team member to another
- Shot- when a player attempts to score a goal with their feet
- Header- when a player controls or strikes the ball with their head

Skill/Tactic	Technique Points
Short Pass	Non kicking foot next to the ball/ use the side of the kicking foot to contact the ball following a short back swing/ keep head over the ball to improve accuracy and ensure ball stays on the ground/ follow foot through to generate more power.
Long Pass	Non kicking foot next to the ball/ use the front (laces) of the kicking foot to contact the ball following a bigger back swing (flexion of the knee)/ keep head over the ball to improve accuracy of the pass/ lean back slightly to help generate height if required on the pass/ follow foot/leg through to generate more power.
Heading	Keep eyes focused on the ball when preparing to header/ use the forehead to contact the ball/ move feet to ensure body is slightly behind the ball before heading/ use neck to generate more power on the header/ defensive headers are normally headed high with increased distance whereas attacking headers on goal are normally headed down to make it more difficult for the goal keeper to save/ perform a jump before the header to increase power and give yourself more chance of beating the opponent to the header.
Shooting	Non kicking foot next to the ball/ keep body balanced/ head slightly over the top of the ball/ use side foot for placement or top of the foot for increased power/ flex leg back further when preparing to strike to the football for increased power/ aim for the area of the goal that the goalkeeper is least likely to save the ball.
Attacking	Attack defender with pace/ keep ball in close control away from the defender/ move the ball to make it more difficult for the defender to tackle you/ use tricks to outwit the opponent.
Defending	Man to man marking – sideways on/ close to player/ try to slow attacking player down/ on toes/ show attacker to their weaker foot/ time tackle effectively to increase chances of winning the ball back.
Crossing	Non kicking foot placed next to the ball/ contact ball with the instep of the foot/ lean body slightly back to add height on to the cross to avoid the first defender/ follow leg through to increase the power on the cross/ the body needs to remain balanced to increase accuracy and success of the cross.

Physical Education - Gymnastics

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 Gymnastic activities.

Equipment

- Mats, Low level apparatus, Vaults, Spring boards, Trampettes and large apparatus – Year 9 with training.

Key Rules

- Follow all instructions
- Handling of equipment – lifting and carrying always in pairs or fours.
- Setting up and dismantling large apparatus

Key words

- Sequence
- Linking
- Apparatus
- Pulse raiser / warm up
- Stretch
- Development
- Awareness of others
- Body control/ tension/ extension
- Skill development
- Acrobatic gymnastics
- Sequence ideas/ lists
- Counter balance/ top and base
- Confidence
- Agility, speed and quickness

Low level Apparatus

- Basic body positions and shapes
- Over, under, around and jump off
- Lead and follow
- Matching and mirror
- Non-contact and contact
- Counter balances
- Acrobatic balancing – Base and Top
- Support weight in balances



Floor Work

- Basic body position
- Tension and extension
- Matching and mirroring
- Lead and Follow
- Point and Patch balances
- Jumps – Full and half term (add a shape)
- Sequence – start, jumps, balances, locomotion, over, under and around, rolls, travel and finish position



Basic Body Shapes

Tuck, Pike, Star, Straddle, Straight, Dish and Arch



Vaulting

- Run up, take off, flight and landing – 4 key elements
- Shape on vault – Squat on – shape off
- Development on a roll along box top
- Development of cartwheel ¼ turn off the box top
- Development of head/hand sprints along the vault and over the vault

Key pointers / ideas

- Tension and extension
- Body control
- Observation and analysis
- Demonstrations / handling
- Lifting and handling
- Supporting others
- Use of Ipads and video analysis
- Feedback and visual aids

Physical Education - Handball

Kit Needed

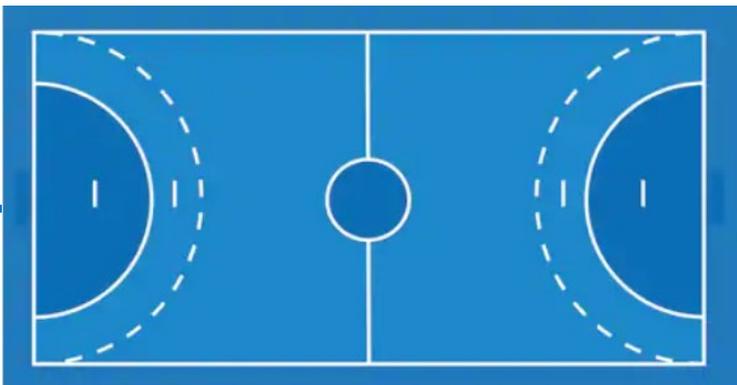
- White trainers, White socks, short or long sleeved PE top and black Egguckland shorts, skort or leggings

Equipment

- Handballs, mini goals (or netball posts or football goals) and Bibs

Handball basic rules

- A match consists of two periods of 30 minutes each.
- Each team consists of 7 players; a goalkeeper and 6 outfield players.
- Outfield players can touch the ball with any part of their body that is above the knee.
- Once a player receives possession, they can pass, hold possession or shoot.
- If a player holds possession, they can dribble or take three steps for up to three seconds without dribbling.
- Only the goalkeeper is allowed to come into contact with the floor of the goal area.
- Goalkeepers are allowed out of the goal area but must not retain possession if they are outside the goal area



- 2 handed high catch
- 2 handed low catch

Defending

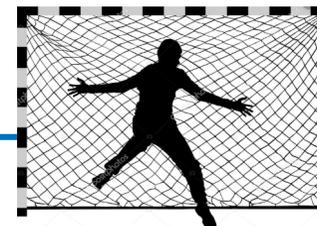
- Basic body position
- Use both arm over the ball and follow where attacker holds it.
- When moving, remain close to attacker and ensure you can see player and the ball

Basic body position



Goal keeping

Goal keeper has to keep a Wide body position and Can use any part of their body to defend the ball from the attacking player



Upper passes (overhead/ one handed
Vertical jump shot
Blocking and defending

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 game where you can put different types and amount of spin on the ball
- Tactically game

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 - Volleyball

Kit Needed

- White trainers, White socks, short sleeved PE top and black Egguckland shorts, skort or leggings
- **Equipment:**
- Volleyballs, posts and bases and nets

5 Key Rules

- Maximum 3 touches per team each time the ball is on your side of the court
- The same player cannot touch the ball twice in a row
- Do not touch the net
- You rotate clockwise as a team
- You only rotate when you win the point to get the service back. If your team have served and won the point again you do not rotate.

Positions & Terms

- Setter – This player normally takes the 2nd touch in the team to create the attack
- Receiver – A player who digs or volleys the first ball on your side of the court
- Service – The way you start a rally
- Volley / Set / Overhead Pass – The shot with the most control and accuracy played above head height in the fingers of both hands
- Dig – A two handed underarm pass played with the forearms
- Spike – A one handed attacking shot
- Block – The first part of the defence

Volley / Set / Overhead Pass

- Shot with the most control
- Bend your leg and push when contacting the ball to get more power
- Height = Time
- Strong base position

Dig

- Played when the ball is below waist height
- Flat rebounding platform
- Height = Time
- Strong base position

Basic body position



Spike

- Attacking shot with power
- Timing on the ball is important
- Firm contact with hand spread across the ball on contact

Serve

- Starts the game and each point
- Underarm / Overarm or Jump serve action can be used
- Strong base position

Science – 8B Energy and forces

Heat Vs. Temperature

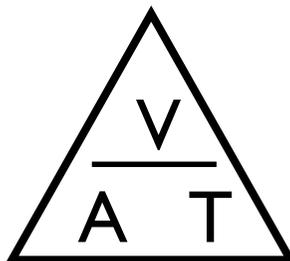
The temperature of something tells us how hot it is in degrees Celsius (°C). It does not tell us how much heat energy is in it.

The water in both beakers is at the same temperature but the water in the large beaker has 5 times as much heat energy in it. Heat energy is measured in Joules (J).

Efficiency = $\frac{\text{useful energy output}}{\text{Total energy input}}$

Efficiency is usually measured in %
 $\times 100 (\%)$

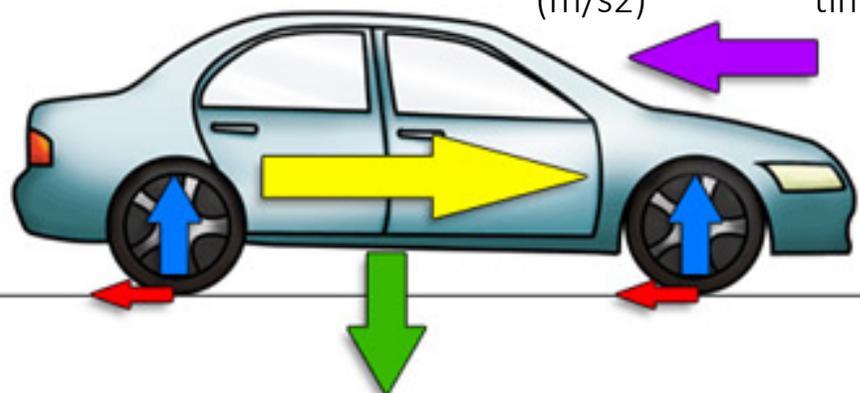
Speed = $\frac{\text{distance (in metres)}}{\text{time (in seconds)}}$



Acceleration = $\frac{\text{change in velocity (m/s)}}{\text{time taken (seconds)}}$
 (m/s²)

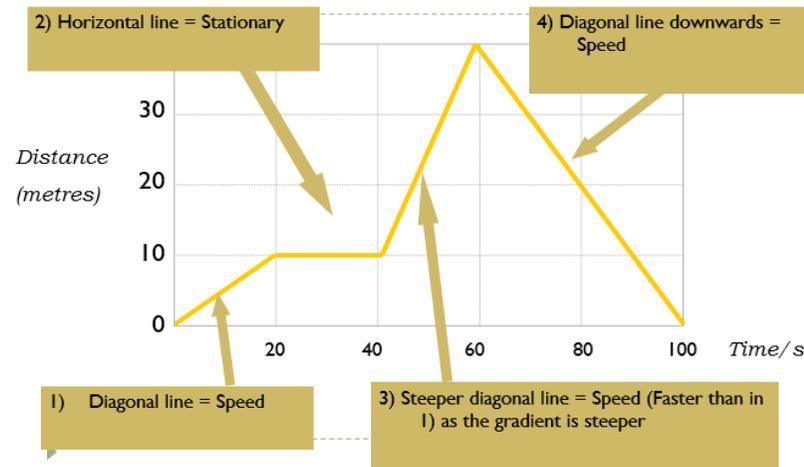
Forms of Energy:

- Magnetic
- Kinetic
- Heat (Thermal)
- Light
- Gravitational*
- Chemical*
- Sound
- Elastic*
- Electrical
- Nuclear

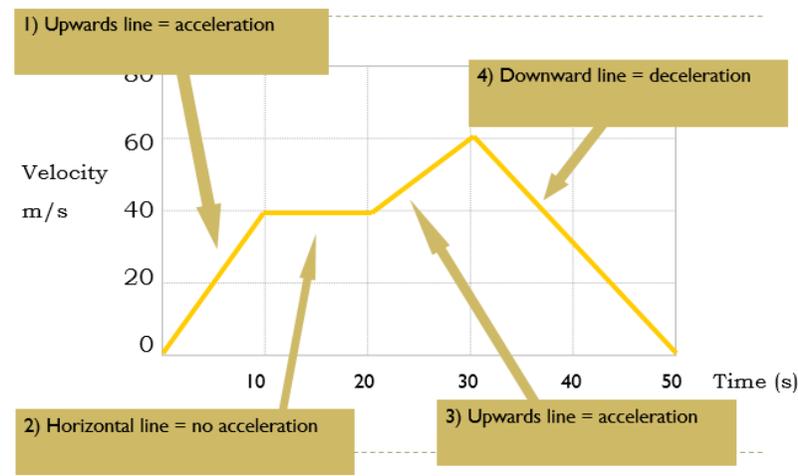


- █ weight
- █ driving force
- █ reaction force
- █ friction
- █ air resistance

Distance-time graphs



Velocity-time graphs



Science – 8B Respiration and the lungs

Physical digestion – chewing or stomach muscles breakdown food. **Chemical** digestion – enzymes further break down food.

Peristalsis is the movement of food through the digestive system.

Food tests

Starch – iodine solution – orange to blue-black

Protein – Biurets Solution – blue to lilac

Fat – use ethanol – clear to cloudy white

Sugar – Benedict's solution – blue to orange/red

The **alveoli** of the lungs are dead-end sacs surrounded by lots of blood **capillaries**. Here the oxygen diffuses into the blood and the carbon dioxide out of the blood. They have a large surface area and are thin so **gases** can **diffuse** easily.

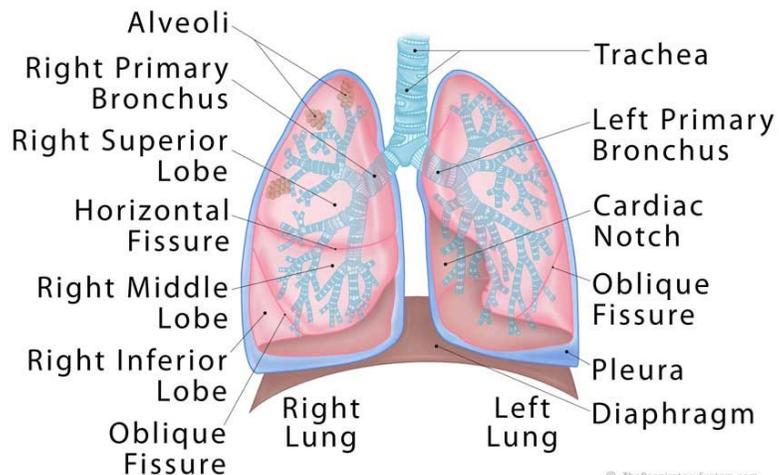
Gaseous exchange

Gaseous exchange in humans is when we **take in oxygen** and **release carbon dioxide**. This happens in the **alveoli** in the lungs and in the **capillaries** in the circulatory system.

These surfaces are **specially adapted** to ensure they can conduct efficient gaseous exchange, such as, **very thin surfaces, a large surface area, moist surfaces**.

Fish also use gaseous exchange. They have **gills** instead of alveoli.

Lungs



Organisation

Cells can form tissues (e.g. muscle tissue), tissues can form organs (e.g. heart), organs form organ systems, and organ systems form organisms.

Organ systems include: circulatory system, respiratory system, digestive system, nervous system, reproductive system, leaf canopy. E.g. Digestive system is needed to supply nutrients to the cells and breakdown food into these nutrients. Organs include the oesophagus, stomach, liver, small intestine, large intestine.



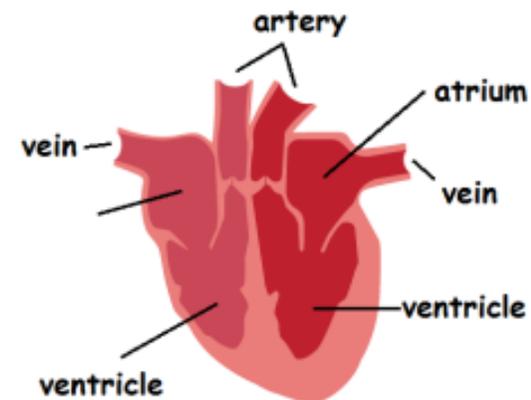
Respiration

Respiration is a **chemical reaction** that happens in all living cells: it releases **energy** from food, needed for all cell functions (e.g. muscle movement, chemical reactions to make substances).

Aerobic respiration uses oxygen and is:



Anaerobic respiration happens when the body cannot get enough oxygen to the cells.



Heart

The heart is a **muscle** that **pumps** blood around the body. It is divided into 4 **chambers** – 2 on the left and 2 on the right. Mammals have a **double circulatory** system (the blood goes twice through the heart – to the lungs then the body – before returning to where it started).

Red blood cells carry oxygen around the body – they have a large surface area and contain **haemoglobin** (this binds with oxygen and carries it around the body).

My Diary : Autumn 2019 - 2

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	28/10/2019	29/10/2019	30/10/2019	31/10/2019	01/11/2019	02/11/2019	03/11/2019
2	04/11/2019	05/11/2019	06/11/2019	07/11/2019	08/11/2019	09/11/2019	10/11/2019
3	11/11/2019	12/11/2019	13/11/2019	14/11/2019	15/11/2019	16/11/2019	17/11/2019
4	18/11/2019	19/11/2019	20/11/2019	21/11/2019	22/11/2019	23/11/2019	24/11/2019
5	25/11/2019	26/11/2019	27/11/2019	28/11/2019	29/11/2019	30/11/2019	01/12/2019
6	02/12/2019	03/12/2019	04/12/2019	05/12/2019	06/12/2019	07/12/2019	08/12/2019
7	09/12/2019	10/12/2019	11/12/2019	12/12/2019	13/12/2019	14/12/2019	15/12/2019

My Homework

Week						
28/10						
04/11						
11/11						
18/11						
25/11						
02/12						
09/12						
16/12						

Home Contact

