



My
Knowledge
Organiser
and Planner

Autumn 1

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.

- | | | |
|-----------------|-------------|---------------|
| o Furthermore | o But | o Meanwhile |
| o Whereas | o Since | o Nonetheless |
| o Nevertheless | o Yet | o However |
| o Alternatively | o Therefore | o Although |
| o Consequently | o Besides | o 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.*
 - "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 -
 - o Key words list
 - o Frequently used words list
 - o 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.



literacy 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

Use poetry to generate ideas for an atmospheric semi-abstract Seascape, inspired 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.

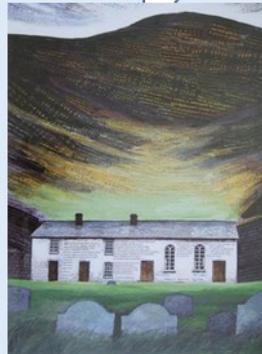
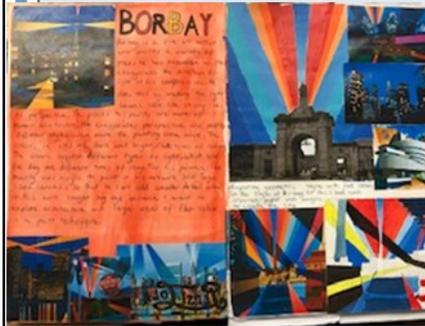
Rock CRASH
Blue Swirl Ripple **Wave**



Develop

Artist Research on:
Kurt Jackson, Ogwin Davis and Vincent Van Gogh

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.

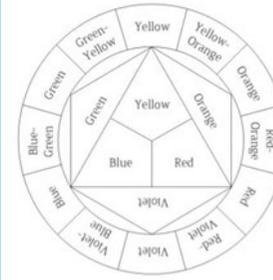


The Formal Elements.

Line – Tone – Colour – Form
Texture - Pattern

Explore - Materials and processes

Press Printing
Paint techniques
Mark making
Observation drawing
Collage.



Materials:

Water colour paint, inks, newspaper, glue, stencils, stamps, 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 mark making.



Time line of lessons

- Progression Test
- Artist Research x2
- Poetry /Word Collage
- Press Printing
- Mark Making
- Typography *
- Plan Outcome
- Produce Wash
- Background
- Add Collage
- Marking Making Layer
- Press Print Layer
- Pencil/Pen mark making layer detail.

Key Words:

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

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

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

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

Composition – the arrangement and layout of artwork/objects.

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

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

Computing - Python

KEY VOCABULARY

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

KEY VOCABULARY

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

Comparison Operators

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

Skills

Split Focus: When action is taking place on stage at the same time but set in two different locations.

Freeze Frames: Using your body to create a frozen image which tells the audience what is happening.

Narration: Telling the audience what is happening.

Breaking the 4th Wall: Looking out and talking to the audience to let them into your play.

Enticing the Audience: Getting the audience's attention and getting them interested.

Informing the Audience: Telling the audience important information.

Interview: A meeting of people face-to-face = discussion, conference, evaluation, decisions.

Presentation: The giving of information as part of a formal ceremony.

Role Play: Using play techniques to improvise and explore characters.

Vocal Skills

Tone of Voice: *The feeling or emotion in your voice.*

Volume: *How loud or quiet your voice is.*

Pitch: *How high or low your voice is.*

Pace: *How fast you speak.*

Pause: *Taking breaks between lines (eg when your character is thinking, or to create tension).*

Movement

Gesture: *What you do with your hands.*

Facial Expressions: *Changing your face to show emotion.*

Body Language: *Using your body to show emotion.*

Posture: *How your character stands and sits.*

What do we watch on TV?

- Dramas
- Sit com
- Television
- News reports
- Reality TV
- Adverts



English - The Ruby in the Smoke

Vocabulary	Characters	Description	Context
afflicted	Sally Lockhart	The female protagonist who has recently lost her father.	<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. We should have an intelligent detective or investigator. The audience should be given clues throughout so they can solve the mystery with the characters. 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	Frederick Garland	A handsome photographer who meets Sally by chance.	
ballast	Rosa Garland	Fred's outspoken sister.	
blight	Jim Taylor	A young man who works at Lockhart and Selby shipping firm. He is a great amateur detective.	
condescending	Adelaide	She works for the terrifying Mrs Holland who apparently killed her last maid. She finds friends and safety in Sally and Fred.	
contempt	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.	
dismal	Nicholas Bedwell	Brother to Matthew. He is a religious man. He is an expert boxer.	
evade	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.	
facetious	Captain Lockheart	Sally's father.	
formidable			
furtive			
genially			
haughty			
insinuate			
laudanum			
omnibus			
pompous			
pugnacious			
solicitous			
thwart			
unequivocal			
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	

I want your opinion!

j'adore
j'aime beaucoup
je préfère
j'apprécie
j'admire
je suis fan de
je raffole de
ça me plaît
j'ai horreur de
je ne supporte pas
je hais
je déteste
je méprise
j'abhorre
ça m'énerve



in my opinion

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

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

Adverbs

with an adjective or a verb
-c'est vraiment intéressant
-elle joue bien
-effectivement, c'est beau
beaucoup – much
très – very
bien – well
mal – badly
assez – quite/enough
trop – too/too much
tellement – so
effectivement – indeed
carrément – really
extrêmement – extremely
vachement – extremely
plutôt – rather
un peu – a bit

Quantifiers

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

Conjunctions

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



SLG link to grammatical and precise vocab content below:



Scan me

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

Vary your vocab

beau/belle – good-looking	moche – ugly	charmant - charming
petit – small	grand – tall	énorme – huge
sympa – nice	pénible – annoying	casse-pieds – annoying
gentil – kind	méchant – mean	agréable – pleasant
généreux (euse) – generous	égoïste – selfish	timide – shy
branché – fashionable	démodé – old-fashioned	célèbre – famous
tête en l'air – forgetful	lunatique – moody	fou/folle – crazy
favori(te)/préféré – favourite	impressionnant – impressive	magnifique – wonderful
Sain – healthy	malsain – unhealthy	dangereux/se – dangerous
facile – easy	difficile – difficult	fatigué/gant – tired/ing
cher – expensive	bon marché – cheap	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 collège
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

Geography - Think Global, Act Local

<p>Continents and Oceans</p>	<p>The world is divided into Continents. Continents are large masses of land and the islands closest to them. Most countries are entirely part of one continent, but some countries span two continents. There are seven continents in the world.</p>	
<p>Latitude and longitude</p>	<p>Lines of latitude and longitude are used to locate places accurately on the Earth's surface. Lines of latitude circle the Earth in an east-west direction. They are parallel. Lines of longitude run from the top of the Earth to the bottom. They meet at a point at the north and south poles and are called meridians.</p>	

<p>Climate change</p>	
<p>Key terms</p>	<p>Climate change – changes in climate (temperature and rainfall) as a result of natural causes or human activity. Global warming – the recent increase in global temperatures</p>
<p>Greenhouse effect</p>	<p>Some heat energy from the Earth's surface escapes into space. If too much heat energy escaped, the planet would be very cold. However some gases in the atmosphere, called greenhouse gases, trap escaping thermal energy. This causes some of the thermal energy to pass back to the surface. This is called the greenhouse effect, and it keeps our planet warm. Carbon dioxide is an important greenhouse gas.</p>
<p>Global warming</p>	<p>Extra carbon dioxide in the atmosphere increases the greenhouse effect, causing the planet to become warmer than it would be naturally. This increase in the Earth's temperature is called global warming. The majority of climate scientists agree that there is a link between the increasing levels of carbon dioxide and the increasing temperatures.</p>
<p>Managing the impacts of climate change</p>	<p>Mitigation means to reduce or prevent the effects of something from happening. These include alternative energy, carbon capture, planting trees and international agreements. Adaptation strategies do not aim to reduce or stop global warming. Instead they aim to respond to climate change by limiting its negative effects. These include changes to Agriculture, conserving and transferring water supply, and reducing the risk from sea level rise.</p>

<p>Plastic</p>	
<p>Key terms</p>	<p>Microplastics – tiny pieces of non-biodegradable plastic which are toxic and harm organisms. Biodegradable – capable of being decomposed by bacteria.</p>
<p>The problem with plastic</p>	<p>Plastic is made from crude oil extracted from the ground. Making things from plastic is popular because there are many different types and it can be made in to all sorts of shapes, colours and sizes. The problem with plastic is that most of it isn't biodegradable. It doesn't rot, like paper or food, so instead it can hang around in the environment for hundreds of years. Each year, 400 million tons of plastic is produced and 40% of that is single-use - plastic we'll only use once before it's binned. More than eight million tonnes of plastic enters the world's oceans each year and most of that escapes from land. Experts think that by 2050, the amount of plastic in the ocean will weigh more than the amount of fish in the ocean.</p>
<p>Reducing the plastic problem</p>	
<p>Many plastics (but not all) can be recycled. Recycling means that we use less crude oil, the raw material needed for making plastics. Different types of plastics have to be sorted out and this can be difficult, but recycling plastic does stop much of it ending up in landfill sites.</p> <ul style="list-style-type: none"> • We now pay 5p for plastic carrier bags and the number we use has dropped by over 80% • Plastic microbeads have been banned from products like face scrubs and toothpaste. The Government's promising to cut all avoidable plastic waste over the next 25 years. 	

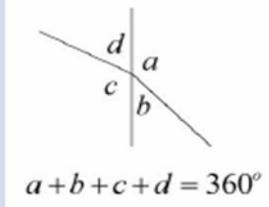
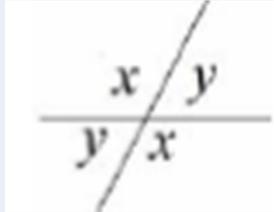
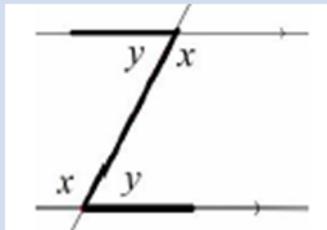
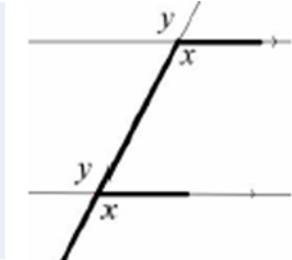
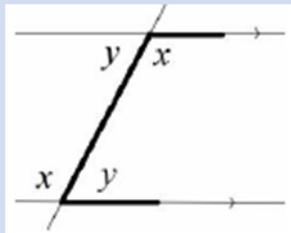
History - Industrial Revolution 1750-1900 - Changing relationships through time of the peoples of the UK

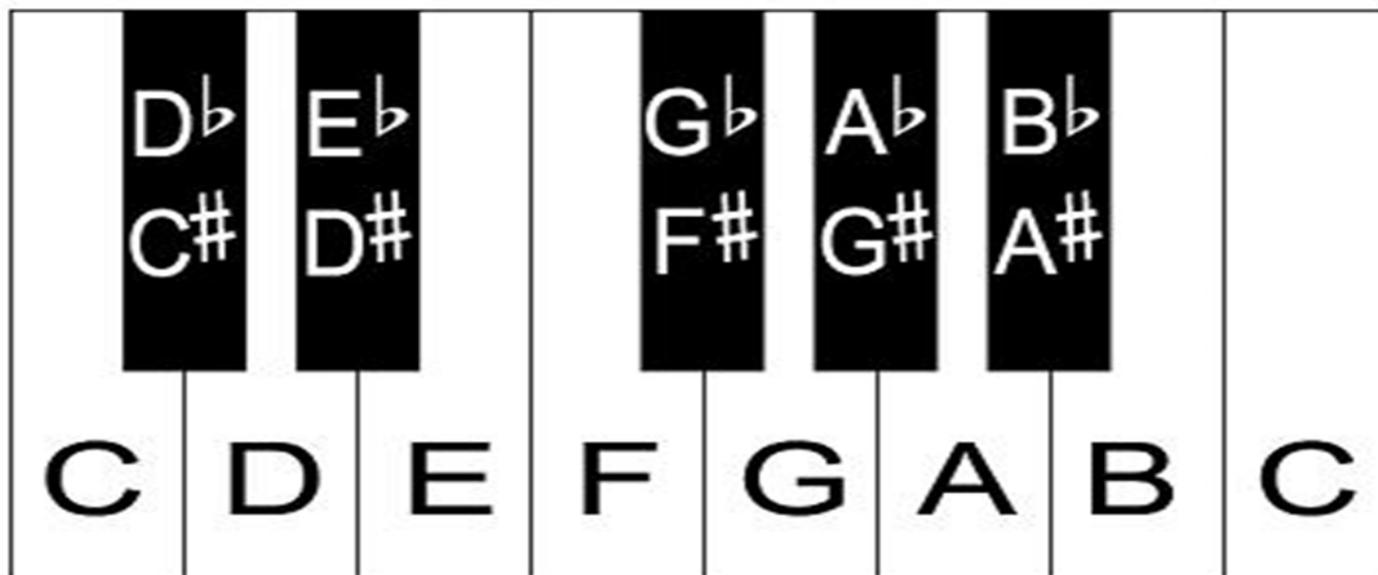
<p>Definition of Era: The Industrial Revolution lasted from the late 1700s to the mid-1800s. It industrialized the manufacture of textiles and began the move of production from homes to factories. Steam power and the cotton gin played an important role in this period.</p>	<p>KPI 1 How did the industrial revolution change Britain? Population: In 1700s approx. 80% of the population lived in the countryside. An explosion of people: 7 million people in Britain in 1750 by 1900 it was 40 million. Transport: 1750, roads were very bad, it could take 2 weeks to get from London to Edinburgh. By 1900 it took 9 hours by train. By 1840 4,000 miles of <u>canals</u> had been built. By 1880 approx. 300,000 people worked in jobs that depended on the <u>railways</u>, by 1900 there were over 20,000 miles of train tracks. Medicine: Improvements in midwifery by 1760 some hospitals provided maternity beds. In 1796 Edward Jenner discovered how to vaccinate against smallpox, Britain's worst disease. After 1870 anaesthetics & antiseptics were introduced to improve surgery. Law & Order: Many criminals were not caught as there were no police officers to track them down. In 1829 the Metropolitan Police Force were set-up. By 1856 every town in the country had its own police officers.</p>	<p>KPI 2 Living conditions: Overcrowding: Due to large numbers of people moving to the cities, there were not enough houses for all these people to live in. Disease: Typhus, typhoid, tuberculosis and cholera all existed in the cities of England. Overcrowding, low standard housing and poor quality water supplies all helped spread disease. Waste disposal: Gutters were filled with litter. Human waste was discharged directly into the sewers, which flowed straight into rivers. Poor quality housing: Houses were built very close together so there was little light or fresh air inside them. They did not have running water and people found it difficult to keep clean. Lack of fresh water: People could get water from a variety of places, such as streams, wells and stand pipes, but this water was often polluted by human waste.</p>	<p>KPI 3 The Factory Systems Domestic system: Where people worked in their homes or small workshops rather than factories Spinning Jenny: Invented in 1764; increased spinning of cotton/wool from 1 spool to 80 spools. Manufacturing: To make goods in a factory. Factory System: People worked in factories to produce goods in large quantities, replacing the domestic system. Steam engines: Uses steam as a means to power machines. Mechanised: Machines are used to create goods, i.e. steam engines.</p>
<p>Timeline: 1712 - Thomas Newcomen invents the first steam engine. 1769 - James Watt improves the steam engine – Powers the first trains, steamboats and factories. 1790 Arkwright changes his huge factories over from water power to steam engines. 1812 Parliament passes law making it illegal by penalty of death to destroy industrial machines. 1833 The first Factory Act provides first small regulation of child labour in textile factories. 1834 Poor Law created “poorhouses” for the destitute. 1844 - Samuel Morse invents the telegraph – Allows messages to be sent quickly over a wire. 1870 - Louis Pasteur develops vaccines for diseases – This helps people live longer. 1880 Education Act made school compulsory for children up to age 10 1901 This Factory Act raised the minimum work age to 12 years old.</p>	<p>KPI 4 Working conditions of the Factory Systems: Long working hours: Normal shifts were usually 12 -14 hours a day, with extra time required during busy periods. Low wages: A typical wage for male workers was about 15 shillings (75p) a week, but women and children were paid much less, with children three shillings (15p). For this reason, employers preferred to employ women and children. Cruel discipline: There was frequent "strapping" (hitting with a leather strap). Other punishments included nailing children's ears to the table, and dowsing them in water butts to keep them awake. Accidents: Forcing children to crawl into dangerous, unguarded machinery led to many accidents and deaths. Health: The air was full of dust, which led to chest and lung diseases and loud noise made by machines damaged workers' hearing.</p>	<p>KPI 5 Reflection: Improving use of sources. Contemporary: Documents or, in recent times, films or audio recordings produced at roughly the same time as the event that you are studying. Secondary: After the event/date. Inference: An idea or conclusion that is drawn from evidence and reasoning. An inference is an educated guess. Interpretation: Interpreting a source requires you to think a bit more about what a source says or shows about a topic. This requires you to identify implicit ('hidden' or less obvious) meanings in historical sources. You will need to do this most often with visual sources that take time to interpret. C: Content What the info is O: Origin When (date) & who created the source P: Purpose Why was the source created? Audience – Who is the source for? Authorship – Who the source came from</p>	<p>KPI 6: Who was Jack the Ripper: Jack: The ripper was known by many names, 'the butcher' & 'the doctor'. Modus Operandi: Latin for the 'mode of operation', used to describe a criminals methods/style of committing crimes. Prostitute: Someone who engages in sexual activity for payment. Evidence: Sources of information Suspects, M.J Druitt, Aaron Kosminski, Michael Ostrog Witness: Someone who saw the crime Victims: The person affected by the crime Police: Over 2,000 people were interviewed. Handed out 80,000 leaflets appealing for information.</p>
<p>Keywords and concepts 1750 Britain went through a process of change in a number of key areas: Agriculture – New tools, fertilizers and harvesting techniques were introduced, resulting in increased productivity and agricultural prosperity. Industry – factories sprung up all over the country creating more efficient ways to produce goods such as wool, cotton and coal. The increase in factories brought thousands of new jobs. Transport and communications - Thomas Telford built roads and canals in the 1700s, George Stephenson and Isambard Kingdom Brunel oversaw the 'Railway Mania' of the 1800s. There had previously been no very fast way of transporting goods and people around the country. Technology - There were also many scientific discoveries and technological inventions that changed society and industry. Changes to sanitation and medical treatment such as the work of John Snow and Edward Jenner improved people's quality of life. Urbanisation - The growth of cities due to movement of people from rural areas to cities.</p>			

Maths - Foundation - Fractions, decimals and percentages

Topic/Skill	Definition/Tips	MATHS Year 8 Foundation Autumn 1 Fractions, decimals and percentages Example
1. Adding or Subtracting Fractions	Find the LCM of the denominators to find a common denominator. Use equivalent fractions to change each fraction to the common denominator. Then just add or subtract the numerators and keep the denominator the same.	Multiples of 3: 3, 6, 9, 12, 15 .. Multiples of 5: 5, 10, 15 .. LCM of 3 and 5 = 15 $\frac{2}{3} + \frac{4}{5}$ $\frac{2}{3} = \frac{10}{15}$ $\frac{4}{5} = \frac{12}{15}$ $\frac{10}{15} + \frac{12}{15} = \frac{22}{15} = 1\frac{7}{15}$
2. Multiplying Fractions	Multiply the numerators together and multiply the denominators together.	$\frac{3}{8} \times \frac{2}{9} = \frac{6}{72} = \frac{1}{12}$
3. Dividing Fractions	'Keep it, Flip it, Change it – KFC' Keep the first fraction the same Flip the second fraction upside down Change the divide to a multiply Multiply by the reciprocal of the second fraction.	$\frac{3}{4} \div \frac{5}{6} = \frac{3}{4} \times \frac{6}{5} = \frac{18}{20} = \frac{9}{10}$
4. Fractions to Percentages	Percentage is just a fraction out of 100. Make the denominator 100 using equivalent fractions. When the denominator doesn't go in to 100, use a calculator and multiply the fraction by 100.	$\frac{3}{25} = \frac{12}{100} = 12\%$ $\frac{9}{17} \times 100 = 52.9\%$
5. Percentages to Fractions	Percentage is just a fraction out of 100. Write the percentage over 100 and simplify.	$14\% = \frac{14}{100} = \frac{7}{50}$

Maths - Higher - Angles

Topic/Skill	Definition/Tips	MATHS Year 8 Higher Autumn 1 Angles Example	
1. Angles at a Point	Angles around a point add up to 360° .		
2. Opposite Angles	Vertically opposite angles are equal.		
3. Alternate Angles	Alternate angles are equal. They look like Z angles, but never say this in the exam.		
4. Corresponding Angles	Corresponding angles are equal. They look like F angles, but never say this in the exam.		
5. Co-Interior Angles	Co-Interior angles add up to 180° . They look like C angles, but never say this in the exam.		



Bronze Keyboard Book

C Hand Position,
Finding Notes

Using the correct fingers

Reading the notes without the letters
underneath

Note Values Revision from Year 7

Silver Keyboard Book

G Hand position
Finding Notes

Using the correct fingers

Reading the notes without the letters underneath

Note Values Revision from Year 7

Simple Key signatures sharps and flats

Stretching between notes

Local Government Budgets

KEY CONCEPTS:

The structure of Local Government
Where does local government get its budget from?
What does Plymouth City Council spend its budget on?
Local employment

KEY TERMS:

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

Unitary Authority - A type of local council that is responsible for all local government functions within its area.

Ward - A local council area, typically used for electoral purposes. Wards are usually named after neighbourhoods.

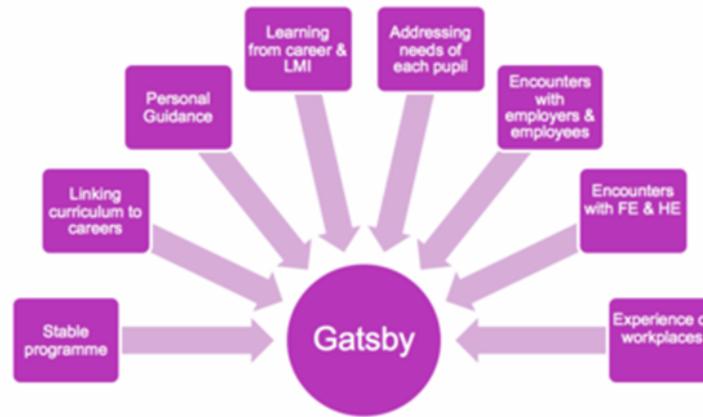
Parish Council - Is a civil (not religious) local authority found in England and is the first tier or level of local government.

Spending priorities – Spending money on the most important and statutory obligations first.

Statutory – Something that legally has to be covered or paid for by the Local Council.

Workforce - The people engaged in or available for work; either in a country or area or in a particular firm or industry.

Labour market - Is the place where workers and employees interact with each other, as well as the availability of employment versus the labour available.



Notes:

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 is 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 - Rugby

Kit Needed

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

Equipment

- Rugby ball and a pitch

5 Key Rules

- You must pass backwards
- You must release the ball on the ground
- You must consider other pupils safety
- To score a try you place the ball on the ground over the try line
- You must tackle from the arm pit down

Key terms

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



TEAMWORK RESPECT ENJOYMENT DISCIPLINE SPORTSMANSHIP

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

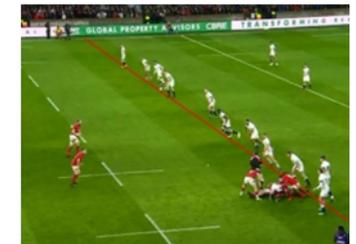
Tackle



Ruck



Offside line



Side step



Knock on



Try



Rugby

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

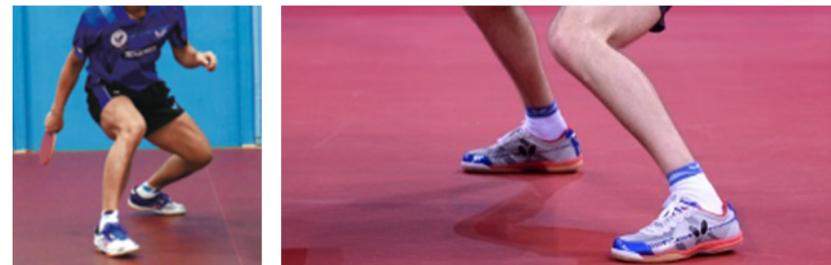
Forehand

- 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 - Netball

Kit Needed

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

Equipment

- Netballs, posts and bases and position bibs

5 Key Rules

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

Positions

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

Passing

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

Defending

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

Basic body position



Footwork

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

Shooting

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

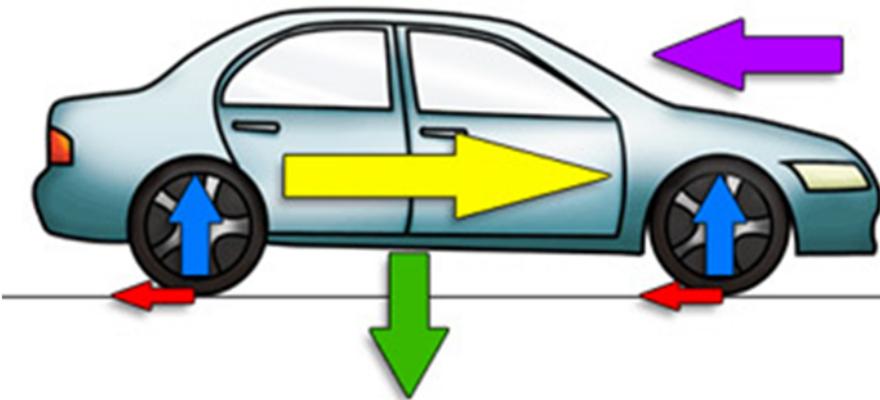
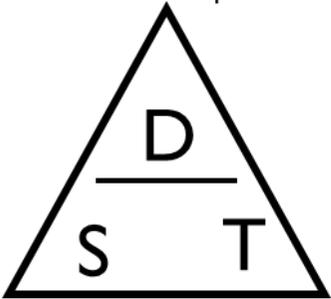
Netball

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).

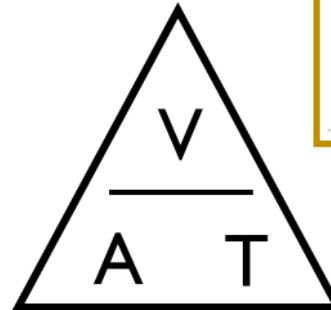
$$\text{Speed} = \frac{\text{distance (in metres)}}{\text{time (in seconds)}}$$



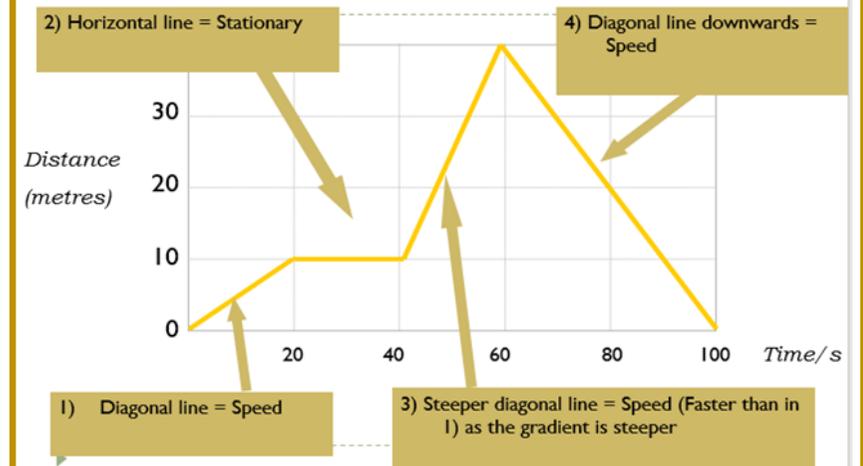
- █ weight
- █ reaction force
- █ driving force
- █ friction
- █ air resistance

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

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

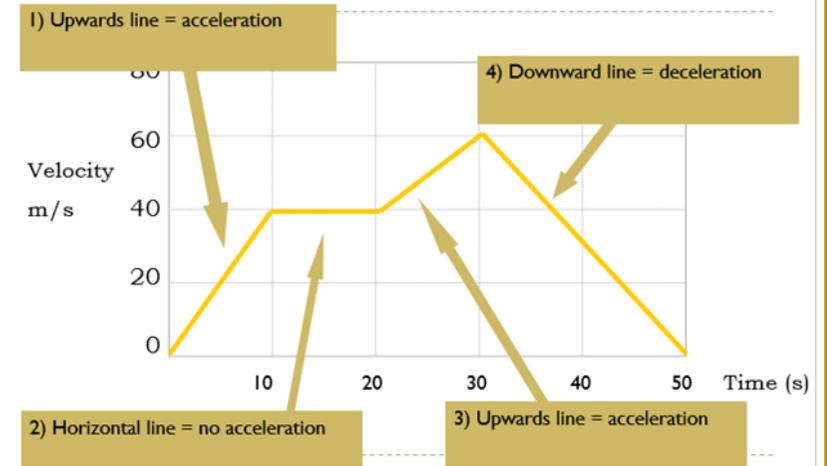


Distance-time graphs



$$\text{Acceleration} = \frac{\text{change in velocity (m/s)}}{\text{time taken (seconds)}} \quad (\text{m/s}^2)$$

Velocity-time graphs



Forms of Energy:

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

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

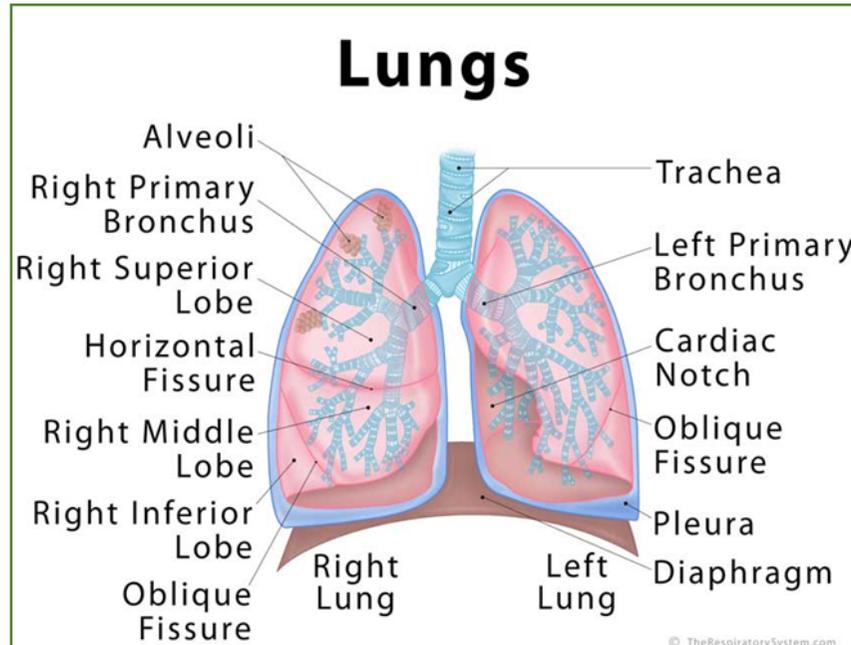
The **alveoli** of the lungs are dead-end sacs surrounded by lots of blood **capillaries**. Here the oxygen diffuses into the blood and the carbon dioxide out of the blood. They have a large surface area and are thin so **gases** can **diffuse** easily.

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.



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.



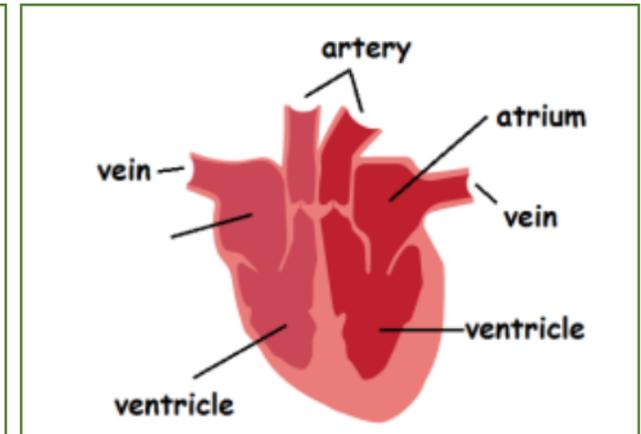
Respiration

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).

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:

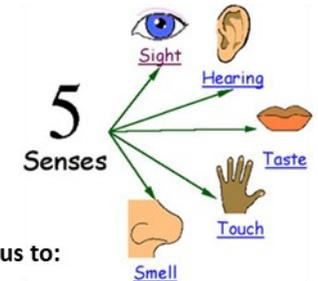
- Raw foods
 - Work surfaces and equipment
 - Food handlers
 - Pests
 - Waste food and rubbish
- Food poisoning often causes symptoms such as: nausea, vomiting, diarrhoea and stomach pain.



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.

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.

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.

Key Temperatures

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

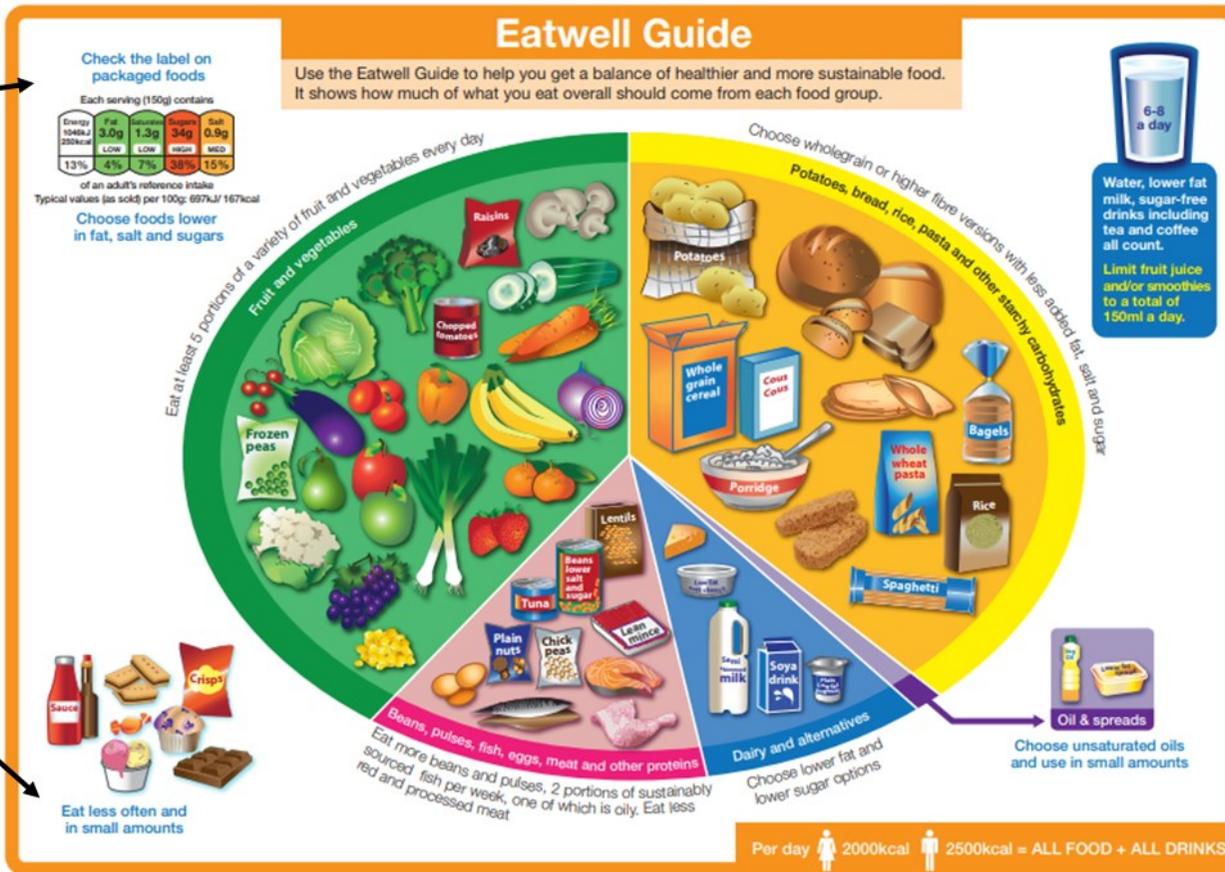
-18C — Temperature of a freezer
5C — Temperature of a fridge

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

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 persons 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.



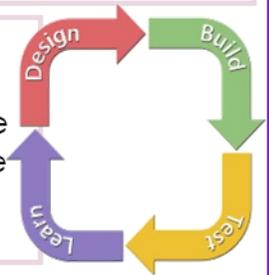
Key Concepts

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.

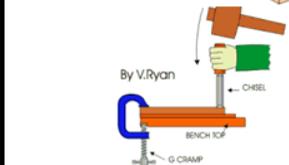
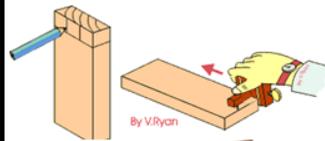
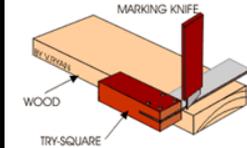
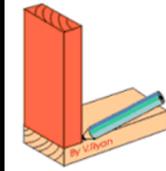
Felted - the most common is made from wool fibres matted together using moisture, heat and pressure; it has little strength, drape or elasticity and is expensive but is warm and does not fray; used for hats, slippers and in handcrafts

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.

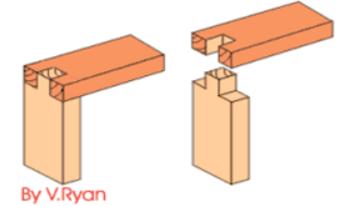
Key Vocabulary

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

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.

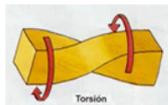
What is a force? A physical influence that tries to change the position of an object.



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



My Diary : AUTUMN 2019 - I

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

My Homework

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

Home Contact

Knowledge, Notes and Quizzes