

Knowledge Organiser

YEAR
8



Year 8 Science Work by Sonny and Angelito

THE ENGAGED MIND STAYS SHARP.
BE ENGAGED IN THE HERE AND NOW.

Knowledge Organisers at Redmoor Academy

WHY?

Why do we have knowledge organisers?

Your knowledge organisers help you to be successful in many ways. Firstly, they make clear the key elements needed in a topic to have an excellent understanding of it. If you know these elements, your teacher will help you to understand them.

WHAT?

What are my teachers' expectations of me?

In year 7 and 8 your teachers will give you homework. That means you will be spending 20 minutes a week learning information from your knowledge organiser for each subject. In year 9 this will increase to 30-40 minutes. Teachers will test you once a week to make sure that you are completing the homework and remembering your knowledge. Teachers and form tutors will be regularly checking that you are revising.

HOW?

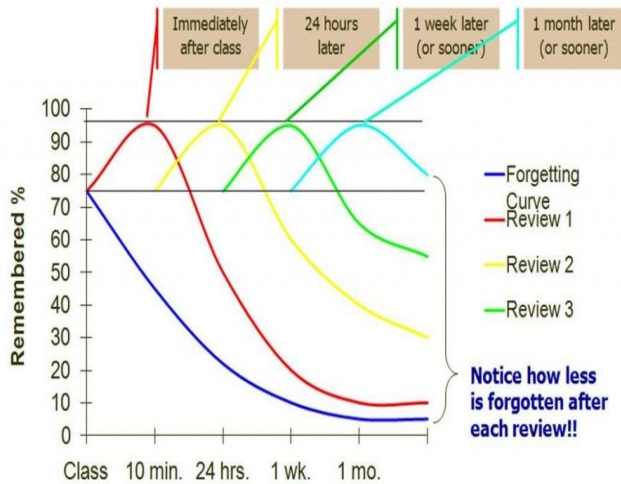
How will my teachers use them?

Each subject will set homework that will help you to learn your knowledge organiser. They will also test you once a week on certain parts to see how well you have remembered it. Research tells us that this practising is a really good way of helping you make sure that the knowledge stays in your memory. Over time you will build on this knowledge to make sure that you know everything you need to for your subject. Sometimes you may have high stakes quizzes, where teachers will set a certain score that you have to reach to be successful.

How will they help me revise?

When it comes to GCSEs, you have lots of information to remember. Your knowledge organisers will gradually build up this knowledge over 5 years to help support you in year 11 so that when you revise, you are just recalling knowledge that you have already stored. Also, you will have practised lots of revision techniques whilst revising your knowledge organisers over the past 5 years, which will help prepare you for the final exams.

How we learn at Redmoor



Why reviewing your learning is so important

As soon as we are told a new piece of information, most of that information is 'lost' and forgotten. Hermann Ebbinghaus found that repeating information helps us remember more of it. So we need to be reviewing and going over what we learn in order for us to remember and be able to use the information after a period of time has passed.

This resource summarises some proven strategies that you can use to review your knowledge.

Common methods of revision that are the least effective:

- Highlighting key points
- Re-reading
- Summarising texts



Retrieval practice

Testing what you know is a powerful tool in revision; the effort to remember something really strengthens your memory. Apps such as Memrise and Quizlet allow you to use or create your own quizzes based on topics. Create them, test yourself or get someone to test you. It works!

Learn more about retrieval practice here: [Link to the Learning Scientists](#)

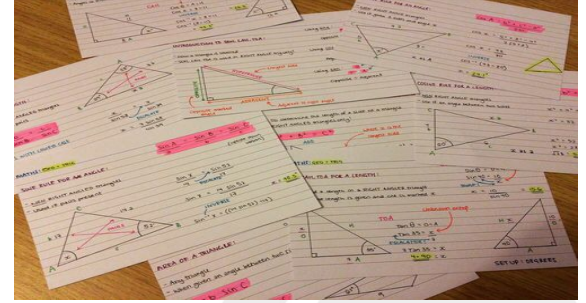
How we learn at Redmoor

Flash cards

Simply create questions on one side, answers on the other. Colour code the cards for specific topics. Post it notes can be useful for keywords and timelines.

Once you have created your flash cards, you need to think about how you will use them effectively. There is a link below to Leitner system of using flashcards:

[YouTube: The Leitner Method](#)



Dual Coding



Dual coding is the process of combining verbal materials with visual materials.

Simply take information that they are trying to learn, and draw visuals to go with it.

Learn more about dual coding here:

[Link To The Learning Scientists](#)

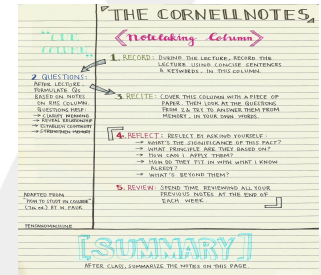
Try to come up with different ways to represent the information. For example: a timeline, a cartoon strip or a diagram of parts that work together.

Cornell Notes

This method can be used in your revision books as a great method to get you to 'think' about your revision.

Simply split your page into 3 sections as shown on the diagram below:

- Note Taking
- Key words / concepts
- Summary



THINK HARD, WORK HARD, GO FAR

How we learn at Redmoor

Spacing and Interleaving

Don't revise your all topics in one go (cramming). Instead, you should revise 'chunks' of a topic for small amounts of time (15-30 minutes) and then move onto another 'chunk' from a different Topic.

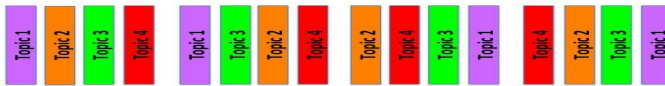
Eg. topic 1 cells, topic 2 digestive system

This will improve your memory!

Massed presentation



Spaced and interleaved presentation



Mind Maps

Mind mapping is simply a diagram used to visually represent or outline information.

It is a powerful graphic technique you can use to translate what's in your **mind** into a visual picture.

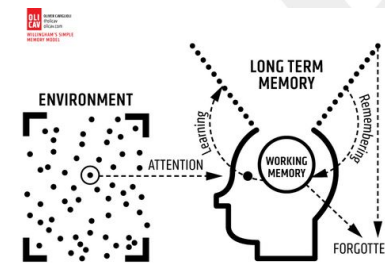
Mind maps help with memorisation of key knowledge as it helps to organise information and begin to make links and connections to different pieces of information.

The use of visual images helps your brain to memorise the information with simple words next to them - links to dual coding!



Useful links:

- The learning scientists: <https://www.learningscientists.org/>
- Memrise: <https://www.memrise.com/>
- Quizlet: <https://quizlet.com/en-gb>
- Seneca: <https://www.senecalearning.com/>



Literacy

Proofreading Guidance

When we write, we know what we're trying to say, so our brains might skip out words or punctuation. It is important that we proofread to avoid making silly mistakes.

Full Stops & Commas

- A full stop gives a strong pause. It goes at the end of a whole sentence.

*e.g. Jake had four brothers.
He got on best with Dan who shared his sense of humour.*

- A comma gives a short pause and is used to separate items in a list *e.g. Bring some milk, eggs, butter and flour.*

After introductory words *e.g. However,*

Between the different parts of a sentence: *Gran, who had been a champion boxer in the sixties, stepped forward.*

Paragraphs

- Change in time, *e.g. Later that day, an important letter arrived.* - Change in place, *e.g. Back at home things were just as bad. / Chile, however, has a population of...*

- Change of subject, *e.g. As well as mountain biking, I also enjoy swimming...*

- Each time a different person speaks:

"Hey, that's my phone!"

"No it isn't - I had it for my birthday."

Spelling Homophones

Words that sound the same but are spelt differently.

there , their , they're

They're silly to have left their coats over there where there is wet grass.

your , you're

You're such a good friend to lend me your phone.

to , two , too

Two of my friends are coming to Alton Towers too.

Grammar Errors

I have played tennis. ✓ *I of played tennis.* ✗

I should have / should've played tennis. ✓

I of / should of played tennis. ✗

I/she/he were late. ✗ *I/she/he was late.* ✓

They were late. ✓ *They was late.* ✗

You were late. ✓ *You was late.* ✗

I ran quick, passing the ball brilliant. I played amazing. ✗

I ran quickly, passing the ball brilliantly. I played amazingly. ✓

Apostrophes

- Use an apostrophe to show possession *e.g. John's football is flat.*

- Also use an apostrophe for omissions (the apostrophe shows where a letter or letters are missing) *e.g. I didn't do it. It wasn't me!*

Capital Letters

- At the start of every sentence

- For days, months and celebrations, *e.g. Wednesday, April, Easter*

- For proper nouns (names of people and places) *e.g. James, London, Rutland Water*

- For Titles (except the small words) *e.g. The Hunger Games, Match of the Day*

- For abbreviations *e.g. BBC, RSPCA*

Correct Tense

Are you using the correct tense? Do not switch from one to another. - For days, months and celebrations,

- **Past:** *e.g. I ran to the shops.*

- **Present:** *e.g. I am running to the shops*

- **Future:** *e.g. I am going to run to the shops.*

Literacy Marking Code:

sp	Spelling mistake
^	Missing word/letter
O	Capital letter/Punctuation
~~~~~	Unclear/poorly worded
//	New paragraph
th	Use a thesaurus
w	Wrong word

# Contents Page

English	1-2
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Music	19
PE	20-23



## Equipment

all students must have...



Mobile phones are not to be used in lessons without staff permission  
No photos or videos to be taken without permission  
No school related images or videos to be uploaded on to social media

Black or blue pen  
Pencils  
Ruler - 30cm  
Protractor  
Compass  
Rubber  
Pencil Sharpener  
Purple pen  
Scientific calculator  
Coloured crayons  
Student Organiser  
Knowledge Organiser  
Locker Key

# Redmoor English Department: Conflict Poetry

Redmoor English Department: Conflict Poetry		<b>BIG QUESTION:</b> Why do form and structure matter?	
<b>VOCABULARY BOOST</b>		Caesura	A break within a line of poetry where there is punctuation to create a pause.
<b>Word</b>	<b>Definition</b>	Enjambment	The continuation (spilling over) of a line of poetry onto the next line without punctuation at the end.
Condemn	To criticise something or someone strongly.	Rhyme scheme	The pattern of rhyme within a poem.
Coerce	To persuade someone forcefully to do something that they may not want to do.	Rhythm	The beat of the poem, made up of stressed and unstressed syllables.
Enlist	To join the armed forces, or to ask for and get help or support from someone.	Sonnet	A poem with 14 lines which is traditionally about love. It usually ends in a rhyming couplet.
Expose	To remove what is covering something so it can be seen, or to bring to public notice.	Volta	A turn in the thought or argument on the poem. It can be a dramatic shift in emotion.
Patriotic	Showing love for your country and being proud of it.	<b>CONTEXT: WORLD WAR I</b>	
Propaganda	Ideas, information, opinions or images that give one half of the argument.	1914 - 1918	When the war happened.
Psychological	Relating to the human mind and feelings.	Trenches	Long, narrow ditches dug into the ground. Soldiers lived in them.
Reality	The state of things as they are, rather than as they are imagined to be.	No man's land	Disputed ground between the trenches of two opposing armies.
<b>BIG QUESTION:</b> How are words powerful?		Gas	A toxic chemical used as a weapon for the first time during this war.
Direct address	Is when a speaker talks directly to the reader or audience.	Shells	An order or command. Also, something that is very important or urgent.
Imagery	Descriptive language which creates clear images - this could be religious imagery, natural imagery etc.	Shell Shock	The post traumatic stress disorder many soldiers suffered from.
Imperative	An order or command. Also, something that is very important or urgent.		
Irony	The use of words that actually say the opposite of what they really mean.		
Metaphor	A phrase which describes one thing as if it is something else.		
Personification	When you give an animal, thing or object qualities that only a human can have.		
Symbolism	Where an image or object represents something else.		
Tone	An attitude of a writer toward a subject or an audience.		



# Redmoor English Department: Of Mice and Men

<b>BIG QUESTION:</b> Why do you think Steinbeck wrote this novel?		<b>BIG QUESTION:</b> Why do form and structure matter?	
John Steinbeck	Grew up as middle class and spent his summers working on ranches near his home in California. He often wrote stories with moral messages (allegories).	Allegory	A story, poem, or picture that can be interpreted to reveal a hidden meaning, typically a moral or political one.
Gender	In the 1930s married women were expected to stay at home, look after the children and give up their jobs if their husband wanted them to.	Cyclical structure	A story's ending which links back to the beginning by repeating words, ideas, settings or actions.
Darwinism	'Survival of the fittest': the weak will be placed aside as the powerful take the opportunities.	Foreshadowing	When the writers gives a hint about what's to come later in the story.
Racism	The Jim Crow Laws made racial segregation legal in America. They lasted until 1968 and denied African Americans the right to vote, hold jobs and get an education or other opportunities.	Microcosm	This is where the world is represented on a smaller scale.
		Tragedy	A genre of drama or literature where the hero is brought down by his/her own flaws, a defect in their character.
Disability	The mentally disabled were often seen as a burden on society. In some states, having a low IQ score meant that people were sterilised (stopped from having children).	<b>VOCABULARY BOOST</b>	
		<b>Word</b>	<b>Definition</b>
Dreams	Wants or desires - it doesn't always seem possible	Idealism	Believing that very good things can be achieved, particularly when they don't seem likely to other people.
Discrimination	Treating someone badly because they are different. Often due to race, gender or disability.	Isolation	The state of being alone or away from others.
		Microcosm	This is where the world is represented on a smaller scale.
<b>BIG QUESTION:</b> How are Steinbeck's words powerful?		Migrant	A person who moves from one place to another to find work or better living conditions.
Animal Imagery / zoomorphism	When the writer gives animal characteristics (features) to a human or non-animal.	Predatory	A person or organisation that is eager to gain something out of someone else's weakness or suffering.
Colloquialism	Language we use in ordinary and informal conversations.	Prejudice	An unreasonable dislike of a particular group of people, person or thing.
Connotation	An idea or feeling which a word makes you think of or suggests.		
Semantic field	A group of words that can be connected to the same topic or theme.	Status	A position or rank in relation to others.
Symbolism	The use of a symbol or image to represent something else.		

# MATHS - Assessment 1

Sparx Code	TOPIC	Covered in lessons	Pre-test reflection	Post test reflection
M957	Constructing and solving equations			
M387	Solving equations with the unknown in the denominator			
M554	Solving equations with the unknown on both sides			
M902	Solving linear equations involving brackets *			
M401	Solving equations of the form $(x+a)/b=c$ *			
M568	Simplifying algebraic fractions by cancelling common factors			
M120	Simplifying expressions using index laws			
M150	Index rules with negative indices			
M608	Index rules with positive indices			
M681	Value for money			
M533	Percentage change with a calculator			
M476	Percentage change without a calculator			

$$\text{Percentage Change} = \frac{\text{amount of change}}{\text{original amount}} \times 100$$

Balancing method

$$\begin{aligned} \frac{x}{12} - 5 &= 4 \\ +5 \quad +5 & \\ \hline \frac{x}{12} &= 9 \end{aligned} \quad \times 12$$

$$x = 108$$

Function machine method

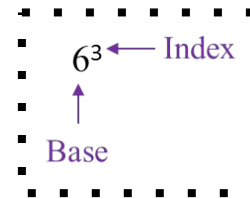
$$\begin{aligned} \frac{x}{12} - 5 &= 4 \\ x \rightarrow \div 12 \rightarrow -5 \rightarrow 4 & \\ 108 \leftarrow \times 12 \leftarrow +5 \leftarrow 4 & \\ x &= 108 \end{aligned}$$

Expanding Brackets  
Grid Method

$$5(x + 4)$$

x	x	+4
5	5x	+20

$$\begin{aligned} \frac{x-5}{12} &= 4 \\ \times 12 \quad \times 12 & \\ x-5 &= 48 \\ +5 \quad +5 & \\ x &= 53 \end{aligned}$$



Calculate the percent increase:

$$\begin{aligned} 60 &\leftarrow \text{Initial Value} \\ 90 &\leftarrow \text{Final Value} \end{aligned}$$

STEP 1: Find the difference

$$90 - 60 = 30$$

STEP 2: Divide by the initial value.

$$30 \div 60 = 0.50$$

STEP 3: Multiply by 100

$$0.50 \times 100 = 50\% \text{ increase}$$


Rule	Example
$a^m \times a^n = a^{m+n}$	$2^5 \times 2^3 = 2^8$
$a^m \div a^n = a^{m-n}$	$5^7 \div 5^3 = 5^4$
$(a^m)^n = a^{m \times n}$	$(10^3)^7 = 10^{21}$
$a^1 = a$	$17^1 = 17$
$a^0 = 1$	$34^0 = 1$
$\left(\frac{a}{b}\right)^m = \frac{a^m}{b^m}$	$\left(\frac{5}{6}\right)^2 = \frac{25}{36}$
$a^{-m} = \frac{1}{a^m}$	$9^{-2} = \frac{1}{81}$
$a^{\frac{x}{y}} = \sqrt[y]{a^x}$	$49^{\frac{1}{2}} = \sqrt{49} = 7$

# MATHS - Assessment 2

Sparx Code	TOPIC	Covered in lessons	Pre-test reflection	Post test reflection
M866	Position-to-term rules for sequences of patterns			
M991	Position-to-term rules for arithmetic sequences			
M166	Substituting into position-to-term rules			
M241	Term-to-term rules for sequences of patterns			
M381	Term-to-term rules for numerical sequences			
M230	Solving shape properties involving coordinates			
M622	Calculating midpoints			
M618	Reading and plotting coordinates			
M112	Drawing and interpreting scale diagrams			
M525	Sharing amounts in a given ratio			
M801	Using equivalent ratios to find unknown amounts			

**Ratio**


A comparison of **two** amounts that can be expressed **three** ways.



$2 : 4$    **2 to 4**    $\frac{2}{6}$


**Equivalent ratios**

Ratios that have the **same** value.



**1 to 2**

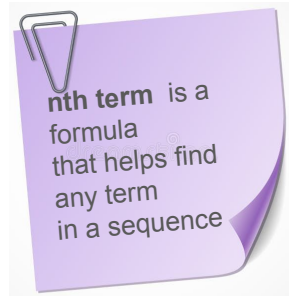
→



**2 to 4**

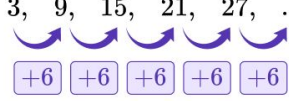
**Sequence:**

**3      6      9      12**  
 1st term 2nd term 3rd term 4th term



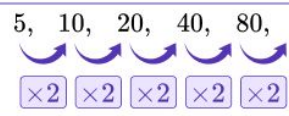
**n**th term is a formula that helps find any term in a sequence

Arithmetic    3, 9, 15, 21, 27, ...

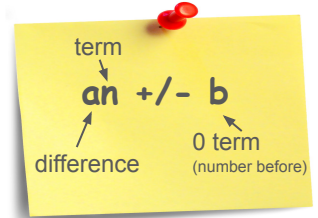


add or subtract by same number

Geometric    5, 10, 20, 40, 80, ...



multiply or divide by same number



term  
 $an \ +/- \ b$   
 difference      0 term (number before)

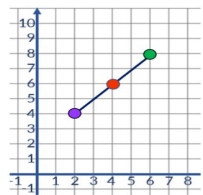
**Finding the Midpoint of Two Points**

1. Add the coordinates together

$$\begin{array}{r} (2, 4) \\ + (6, 8) \\ \hline (8, 12) \end{array}$$

2. Divide by 2

→ (4, 6)



**Sharing amounts in a given ratio**

Divide 40 in the Ratio 2 : 3

For the Ratio 2 : 3, the **Total Parts** are  $2 + 3 = 5$

Amount for One Part =  $\frac{\text{Total Amount Shared}}{\text{Total Parts}}$

One Part =  $40 / 5 = 8$

The "2" in 2 : 3 is 2 Parts =  $2 \times \text{One Part} = 2 \times 8 = 16$  ✓

The "3" in 2 : 3 is 3 Parts =  $3 \times \text{One Part} = 3 \times 8 = 24$  ✓

# Topic: Bioenergetics and Interdependence

## Lesson 1&2: Aerobic and Anaerobic Respiration

Aerobic Respiration



Anaerobic Respiration



Anaerobic respiration occurs in the absence of oxygen

**Lactic acid** needs to be removed by reacting it with oxygen - this called the **Oxygen Debt**

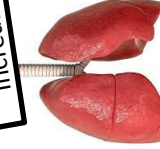


## Lesson 3: Response to Exercise

Changes that occur in **response to exercise** increase the **Oxygen** and **Glucose** being delivered to cells for **Respiration**

Breathing Rate increases

Heart rate increases



## Lesson 4: Biotechnology

When yeast undergoes **anaerobic respiration** it turns **glucose** into **ethanol** and **carbon dioxide**

The carbon dioxide can make bread dough rise...

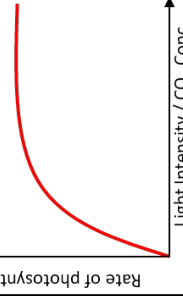
...and the ethanol provides the alcohol for beer and wine

## Lesson 5 & 6: Photosynthesis and Limiting Factors

Photosynthesis



Photosynthesis is the opposite reaction to **Aerobic Respiration**



As light intensity / [CO₂] increases the rate of photosynthesis also increases before plateauing □

□ As temperature increases the rate of photosynthesis also increases before decreasing back to 0 – at this point the enzymes have denatured

Light Intensity / CO₂ Conc

Temperature (°C)

## Lesson 7 & 8: Leaf Structure and Plant Minerals

How are leaves adapted to carry out photosynthesis?

Contain **Chloroplasts** for **Diffusion**

Large **Surface Area** control gas exchange

**Xylem** transports water and **phloem** transports glucose

The reactants for **Photosynthesis**

**Nutrient** **Ion** **Function**

**Magnesium** Mg²⁺ Used to make chlorophyll

**Potassium** K⁺ Allows stomata to open and close

**Nitrates** NO₃⁻ Used for protein synthesis

**Phosphates** PO₄³⁻ Required for healthy roots

## Lesson 9 & 12: Ecosystems and Competition

An **Ecosystem** contains a **community** of animals (>1 **population**) living in a **habitat** and the factors that affect that habitat

In an **ecosystem** animals will **compete** for...

In an **ecosystem** plants will **compete** for...

Space

Nutrients

Mates



## Lesson 10 & 11: Food Chains and Food Webs

Plant

Caterpillar

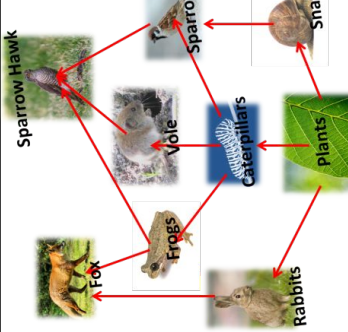
Sparrow

Sparrow Hawk



A **food chain** shows the transfer of **energy**

A **food web** shows the transfer of **energy** in an entire **ecosystem**



Can you find the original **food chain** in this **food web**?

Food webs are important in maintaining steady population numbers within an ecosystem

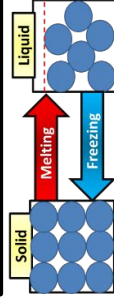
## Keywords

Reactants	Mitochondria	Ethanol	Ecosystem	Consumer
Products	Oxygen debt	Photosynthesis	Habitat	Predator
Aerobic respiration	Anaerobic respiration	Limiting Factor	Population	Prey
			Community	
			Environment	
			Producer	

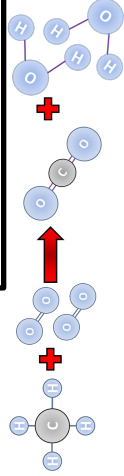


# Topic: Chemical Reactions

## Lesson 1 & 2: Chemical and Physical Changes



- Physical changes:**  
The arrangement of particles changes no bonds are broken



## Lesson 3 & 5: Acids and Alkalis

↑ **Chemical Reactions**  
Bonds between atoms are broken, the atoms rearrange, and new bonds are formed

*Notice that there are the same number of C, H, and O atoms **before** and **after** the reaction

Can you use this to explain the **conservation of mass**?

## Lesson 4 & 6: pH, Indicators, & Neutralisation

Common acids

Common alkalis



## Lesson 7 & 8: Reactions of Metals

Metals react with oxygen to form metal oxides

Universal Indicator



Indicators can be used to determine if a solution is acid or alkali

pH values <7 are acidic

pH values >7 are alkali

pH value of 7 is neutral

## Keywords

Chemical Reaction	Catalyst	Fuel	Non-renewable	Endothermic	Base
Physical Change	Reactant	Combustion	Thermal Decomposition	Exothermic	Alkali
Reversible	Product	Oxidation	Conservation of Mass	Acid	Neutral

## Lessons 9: Displacement Reactions

Metals react with acids to form a **salt** + hydrogen **gas**



Iron + Oxygen  Iron Oxide

Magnesium + Oxygen  ?

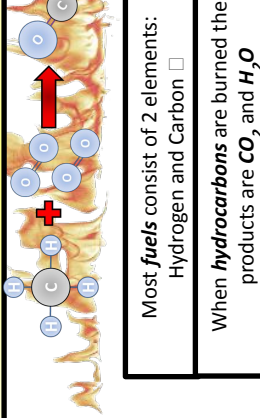
Zinc + Oxygen  ?

What are the products of the reactions above?

## Lesson 10: Combustion

Displacement reactions can occur between halides (group 7 ions) or metals

Most **fuels** consist of 2 elements: Hydrogen and Carbon



These are called **hydrocarbons**

## Lesson 11: Thermal Decomposition

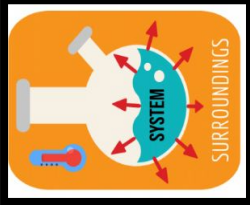
A **decomposition** reaction is identified by having only **one reactant** and **multiple products**



Copper Carbonate **Decomposes** to form... Copper Carbonate **-AND-** Carbon Dioxide

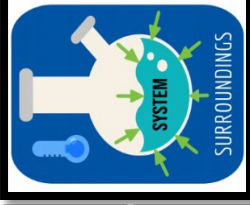
Why is it called "**THERMAL**" decomposition?

## Lesson 12: Endothermic and Exothermic Reactions



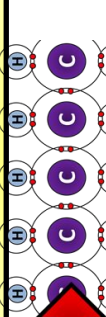
**Exothermic** reactions release **energy** into the surroundings

**Endothermic**  reactions absorb **energy** into the surroundings

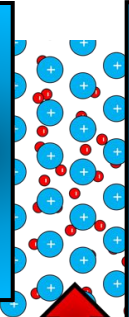


# Topic: Electricity and Magnetism

## Lesson 1: Charging Up



No free electrons



Charged particles can flow

Like charges will **repel**



Opposite charges **attract**



When 2 **insulators** are rubbed together **electrons** are transferred from one material to the other

Resulting in a **positively charged** object and a **negatively charged** object

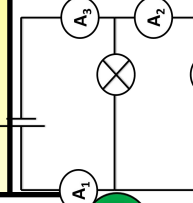
## Lesson 5: Resistance

Current flows through a circuit and reaches a **component**

It is more difficult for **current** to pass through the **component**

**Resistance** is the measure of how difficult it is for **current** to pass through a **component**

## Lesson 6: Parallel Circuits



A parallel circuit contains more than one loop

Current will split when it reaches a branch in a circuit

Ammeter	Current (A)
A ₁	4.50
A ₂	2.25
A ₃	4.50

The p.d. across each branch of the circuit is the same as the p.d. of the battery/cell

9V

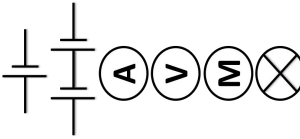


## Lesson 2: Current and Circuit Symbols

Circuits are difficult to draw – so we use **symbols** to represent the components of a circuit

**Current** is the flow of **charge** and is measured in **Amperes (A)**

The current flowing through a circuit can be measured using an ammeter

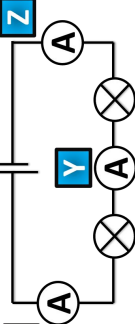


## Lesson 3: Current and Series Circuits

A series circuit has a single **X** loop leading to and from the battery/cell

↑ This circuit has 3 ammeters (X,Y,Z) and 2 bulbs.

The current measured by the ammeters were

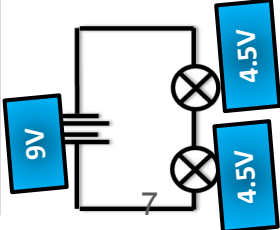


Ammeter	Current (A)
X	3
Y	3
Z	3

## Lesson 4: Potential Difference (or Voltage)

The **potential difference** (p.d.) of a **cell** or **battery** tells you the amount of **ENERGY** a battery or **CELL** can supply.

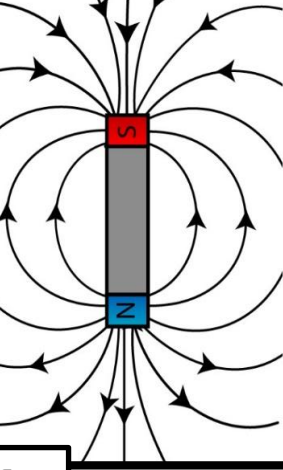
You measure p.d. with a **VOLTMETER**. The **VOLTAGE** of a **battery** tells you the p.d. across it and the **VOLTAGE** on a bulb tells you the p.d. it is designed to work at.



The total **voltage** of the **battery/cell** (9V) is shared across the **components** of a **series** circuit

The 2 bulbs in this circuit have the same potential difference across them. This implies the bulbs are identical

## Lesson 7: Magnets and Magnetic Fields



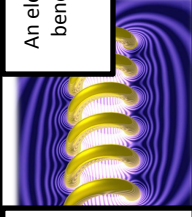
The area around a magnet is called a **magnetic field**

The **magnetic field** is the strongest at the poles of the magnet

## Lesson 8: Electromagnets

If you pass a current through a coil of insulated wire, the coil (**solenoid**) will act like a magnet

An electromagnet has the benefit of being turned on/off



If you put a magnetic material such as an iron nail into the centre (**core**) the **magnetic field** becomes stronger



## Keywords

Electron	Current	Magnetic Field
Conductor	Potential Difference	Relay
Insulator	Resistance	Motor

# French

**Tu aimes quelles matières?** What subjects do you like?

Phonics (1)	Opinion phrase (2)	School Subject (3)			Quality Vocab (4)	Reason (5)	
<p><b>e</b> [uh]  <b>é</b> [ay]  <b>è</b> [eh]  <b>ç</b> [ss]  <b>an</b> [on]  <b>th</b> [t]  <b>in</b> [an]  <b>ui</b> [we]  <b>ai</b> [ay]  <b>qu</b> [kuh]  <b>tion</b>                      [see-on]  <b>oi</b> [wa]</p>	<p><b>Ma</b> matière préférée est                      (My favourite subject is)  <b>Mes</b> matières préférées                      sont                      (My favourite subjects are)  <b>J'adore</b>                      (I love)  <b>J'aime bien</b>                      (I really like)  <b>Je préfère</b>                      (I prefer)  <b>Je n'aime pas</b>                      (I don't like)  <b>Je déteste</b>                      (I hate)  <b>Je ne supporte pas</b>                      (I can't stand)</p>	<p><b>l'</b>anglais                      (English)  <b>le</b> français                      (French)  <b>les</b> sciences                      (Science)  <b>les</b> maths                      (Maths)  <b>les</b> travaux                      manuels                      (Design Tech)  <b>l'</b>espagnol                      (Spanish)  <b>le</b> théâtre                      (Drama)</p>	<p><b>le</b> dessin                      (Art)  <b>l'</b>EPS                      (PE)  <b>la</b> religion                      (ME)  <b>la</b> cuisine                      (Cooking)  <b>l'informatique</b>                      (Computing)  <b>l'</b>histoire                      (History)  <b>la</b> géo                      (Geography)</p>	<p><b>car</b>                      (because)   <b>parce</b>  <b>que</b>                      (because)   <b>puisque</b>                      (as)</p>	<p><b>pour moi</b>                      (for me)  <b>je pense que</b>                      (I think that)  <b>j'estime que</b>                      (I reckon that)  <b>la plupart du</b>  <b>temps</b>                      (most of the time)  <b>je suis l'opinion</b>  <b>que</b>                      (in my opinion)  <b>je dirais que</b>                      (I would say that)  <b>heureusement</b>                      (fortunately)  <b>malheureusement</b>                      (unfortunately)</p>	<p><b>c'est</b>                      (it is)  <b>ce n'est pas</b>                      (it isn't)  <b>ça peut-être</b>                      (it can be)</p>	<p><b>important</b> (important)  <b>utile</b> (useful)  <b>inutile</b> (useless)  <b>difficile</b> (difficult)  <b>facile</b> (easy)  <b>barbant</b> (boring)  <b>une perte de temps/énergie</b>                      (a waste of time/energy)</p>
						<p><b>J'aime le prof</b> (I like the teacher)  <b>Je déteste le prof</b> (I hate the teacher)  <b>il y a trop de devoirs</b>                      (there's too much homework)  <b>ce n'est pas mon tasse de thé</b>                      (it's not my cup of tea)  <b>le prof explique bien</b> (the teacher explains well)</p>	

**Décris ton horaire du temps** Describe your timetable

Time Phrase	Time	Verb	Noun
<p><b>Le lundi</b> (on Monday)  <b>Le mardi</b> (on Tuesday)  <b>Le mercredi</b> (on Wednesday)  <b>Le jeudi</b> (on Thursday)  <b>Le vendredi</b> (on Friday)</p>	<p><b>à huit heures</b>                      (at 8 o'clock)  <b>à neuf heures</b>                      (at 9 o'clock)  <b>à dix heures</b>                      (at 10 o'clock)  <b>à sept heures trente</b>                      (at half past 7)  <b>à six heures et quart</b>                      (at quarter past 6)</p>	<p><b>j'ai</b>                      (I have)  <b>on a</b>                      (we have)</p>	<p><b>sciences</b>                      (Science)  <b>anglais</b>                      (English)  <b>dessin</b>                      (Maths)</p>
<p><b>Le collège commence</b>                      (School starts)  <b>Le collège finit</b>                      (School finishes)  <b>Les cours commencent</b>                      (Lessons start)  <b>La pause déjeuner commence</b>                      (Lunch starts)  <b>La récré commence</b>                      (Breaktime starts)</p>			

**Qu'est-ce que tu vas faire après avoir quitté le collège?** What are you going to do when you leave school?

Time Phrase	Future structure	Infinitive	
<p><b>Après avoir quitté le collège Redmoor</b>                      (After leaving Redmoor)  <b>L'année prochaine</b>                      (next year)  <b>A l'âge de dix huit ans</b>                      (When I am 18)  <b>A l'avenir</b>                      (In the future)</p>	<p><b>je vais</b>                      (I am going)  <b>je voudrais</b>                      (I would like)  <b>j'ai l'intention de</b>                      (I intend)  <b>je veux</b>                      (I want)  <b>je ne vais pas</b>                      (I am not going to)  <b>je ne veux pas</b>                      (I don't want to)</p>	<p><b>aller</b>                      (to go)</p>	<p><b>au lycée</b>                      (to college)  <b>à l'université</b>                      (to university)</p>
		<p><b>faire</b>                      (to do)</p>	<p><b>un apprentissage</b>                      (an apprenticeship)</p>
		<p><b>devenir</b>                      (to become)  <b>être</b>                      (to be)</p>	<p><b>professeur</b> (teacher)  <b>médecin</b>                      (doctor)  <b>fermier</b>                      (farmer)</p>



# History

Economic Study: 1500 - Modern Day

**Economic:** relating to money or wealth of a country

**Political:** relating to the government / ruling elite

**Social:** relating to society or the people



## The Transatlantic Slave Trade

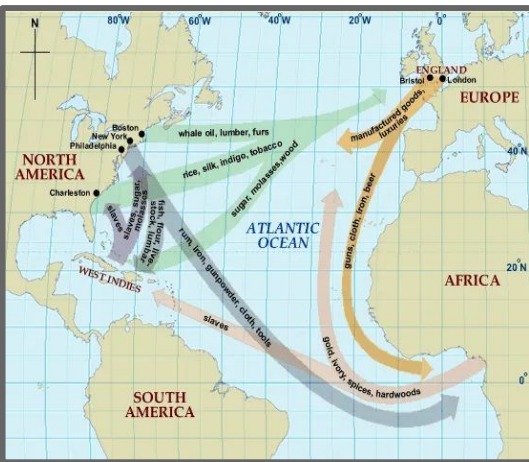
- 1492:** Columbus lands in the Caribbean
- 1562:** John Hawkins takes first ship of enslaved people to the West Indies.
- 1619:** Transatlantic Slave Trade in North America begins with first ship full of enslaved Africans docking in Virginia colony (now USA)
- 1789:** Publication of Olaudah Equiano's autobiography
- 1807:** The slave trade is abolished by Great Britain
- 1833:** Slavery is abolished in all British colonies
- 1839:** Amistad slave ship rebellion

- Exploration:** travelling to find new parts of the world
- Trade Triangle:** the slave trade system Europe/Africa/America
- The Middle Passage:** the voyage from Africa to America, transporting the enslaved Africans.
- Labour:** work or workers
- Trade:** the action of buying and selling goods
- Exploitation:** The action of treating someone unfairly in order to benefit from their work.
- Plantation:** A large scale farm where crops such as coffee, sugar, and tobacco were grown.
- Abolition:** to oppose or end something

- Overseer:** a person who supervised the enslaved or factory workers
- Olaudah Equiano:** a former enslaved man who wrote about his life
- Harriet Tubman:** American abolitionist and activist. She was the organiser of the 'underground railway'.
- Thomas Clarkson:** campaigned for abolition of slavery
- Granville Sharp:** used legal means to try to abolish slavery
- William Wilberforce:** MP who campaigned to abolish slavery

## Empire

- Empire:** collection of colonies ruled by one state with means to gain power
- Colony:** an area controlled by a foreign power as part of an empire
- Imperialism:** a policy to extend a country's power and influence by building an empire
- 1497-1783:** English seamen reached places Europeans had not previously been. Britain then set up colonies and used them to trade all over the world
- 1783-1924:** By 1924 Britain controlled a fifth of the land in the world.
- After 1924:** After the World War One it became increasingly difficult for Britain to hold on to the Empire
- Australia:** used as a location for criminals. Criminals would be shipped to Australia, where they would be used as a workforce.
- The Caribbean:** Because of the warm climate, the Caribbean grew important crops that Britain could not.
- Africa:** Britain enslaved the people of Africa. The Gold Coast was important because it held lots of gold, ivory and silver.
- India:** Was an important producer of spices and of materials that were traded for money across the Empire
- East India Company:** A British trading company which had its own army. Helped the colonise India for the British Empire.





# History

Economic  
Study: 1500 -  
Modern Day

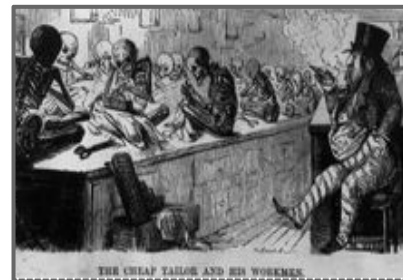


## The Industrial Revolution

- 1600s - 1700s** Enclosure Acts
- 1712:** Newcomen develops steam powered pump
- 1761:** Bridgewater Canal opens
- 1765:** James Watt's steam engine
- 1770:** The Spinning Jenny invented by Hargreaves,
- 1771:** Arkwright builds Cromford Mill textile factory
- 1790s:** Canal Mania
- 1840's:** Railway Mania
- Industrial Revolution:** change from an economy based on agriculture to manufactured goods
- Rural:** countryside areas/settlements
- Urban:** town or city areas/settlements
- Steam power:** using pressure from heating water to power machines
- Iron:** main metal used in manufacturing.
- Canal:** transporting heavy good by water
- Turnpike Trust:** Private toll roads
- Domestic System:** manufacturing items in the home
- Factory System:** manufacturing in a specially constructed building
- Industry:** The process of making products by using machines and factories
- Mass production:** The production of many products in one go e.g. textiles
- Richard Arkwright:** pioneered the factory system
- George Stephenson:** engineer and railway pioneer
- Poverty:** the state of not having enough resources for a minimum standard of living
- Textiles:** Cloth or clothing production by spinning and weaving
- Apprentice:** an child (sometimes orphans) who worked in factories in return for food and lodging
- Workhouse:** a place where poor people could get food and shelter in return for work
- Depression:** severe downturn in the economy, causes mass unemployment

## AO2: Skills

- Point:** give a broad reason / factor that answers the question. Use the wording from the question to structure this sentence.
- Evidence:** give specific factual detail that relates to the point you have given. **Specific Factual Detail:** This could be facts / dates / people / statistics / laws.
- Explanation:** : explain why or how your evidence answers the question.
- Explanation Phrases:** : This meant that / This led to / Consequently / As a result/ This proves.



## AO3: Skills

- Inference:** making judgements from sources
- Message:** what a source says
- Purpose:** why a source was created
- Nature:** the type of source
- Origin:** who created a source
- Utility:** what a source is useful for
- Interpretation:** a view / opinion on the past

We study History so that we can know the past,  
engage in the present and impact the future ¹⁰

# Year 8 Geography - Rivers K0

## River landforms

### Upper course

**V-shaped valleys** – steep valleys that are formed as the river erodes the land it passes over.

**Waterfalls** – steep drops formed by uneven rates of erosion as rivers pass over differing bands of hard and soft rock.

### Middle course

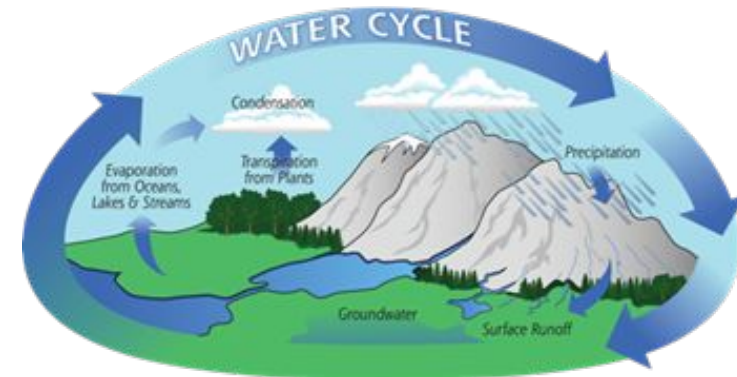
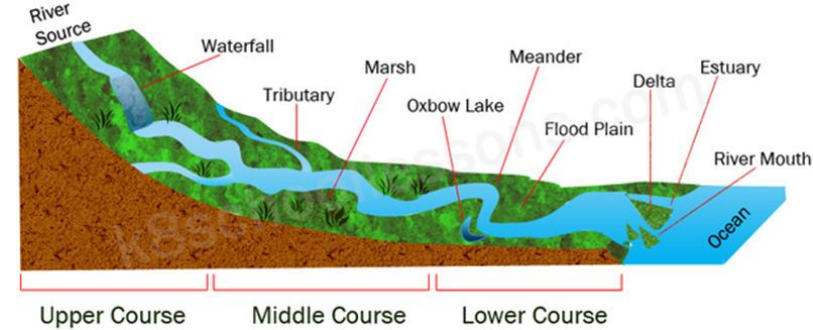
**Meanders** – bends in the river that are made more extreme as water flows more forcefully around the outside bend, eroding the riverbank further there and leading to deposition around the inside bend.

**Ox-bow lakes** – when a meander bends so much that the river takes a shortcut and leaves part of the meander cut off from the rest of the river.

**Levees** – steep banks built up along a river intentionally or as a result of material being deposited on the banks during flooding.

### Lower course

**Deltas** – material that is deposited and builds up at the mouth of a river.



## Erosion

- **Hydraulic action** — as water rushes by, it forces air into cracks in the rock, which continue to widen and break.

- **Abrasion** — sand and rock are thrown against the riverbed and banks, wearing them away like sandpaper.

- **Attrition** — pieces of rock are thrown against each other, causing sharp edges to break off and eventually becoming smaller and rounder.

- **Corrosion** — weak acids in the water break down the rock in the riverbed and banks.

## Transportation

- **Traction** — large stones are rolled along the riverbed.

- **Saltation** — smaller stones bounce along the riverbed over one another.

- **Suspension** — small particles of rock, dirt, and plants float in the water of a river, making it look cloudy.

- **Solution** — particles of rock and chemicals are dissolved and carried along in the water unseen.

## Deposition

Rivers **deposit** (drop) eroded material as they lose speed when:

- the river becomes shallower

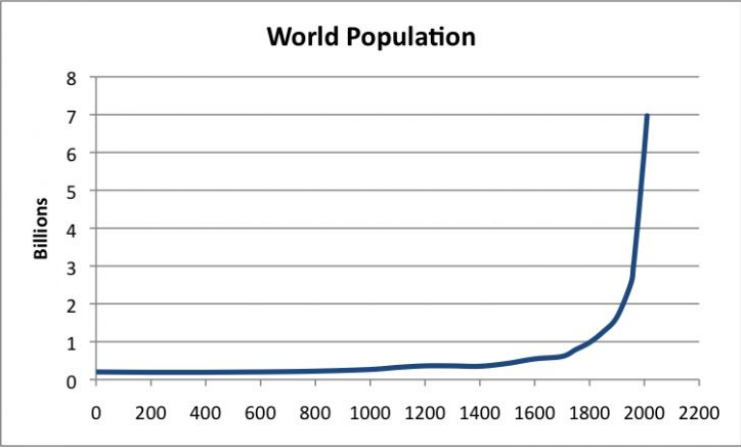
- the amount of water is reduced

- the amount of material being carried increases

- the river reaches its mouth

They do this because they no longer have the **energy** to carry it.

# Geography Population and Migration



You need to be able to explain what has happened to World Population over time. Study the graph above and make some notes.

There is a 2000 km border between the USA and Mexico as illegal migration is a huge problem. U.S. Border Patrol guards the border and tries to prevent illegal immigrants from entering the country. Illegal migration costs the USA millions of dollars for border patrols and prisons.

Many Americans believe that Mexican immigrants are a drain on the economy. They believe that migrant workers keep wages low which affects Americans.

However other people believe that Mexican immigrants benefit the economy by working for low wages. Mexican culture has also enriched the USA border states with food, language and music.

Key Term	Definition
Population	All the inhabitants of a particular place. E.g The population of the UK is just over 65 million.
Migration	The movement of people from one place to another, usually to live or to work.
Life Expectancy	The average period (years) that a person would expect to live. This varies from country to country.
Birth Rate	The number of live births per 1000 people per year.
Death Rate	The number of deaths per 1000 people per year.
Natural Increase	Birth Rate is higher than Death Rate so the population grows.
Natural Decrease	Death Rate is higher than Birth Rate so population lowers.
Immigration	The movement of people into a country to live or to work.
Emigration	The movement of people out of a country to live or to work.
Exponential Growth	When the rate of growth increases all the time creating an ever steeper upward curve.
Population Density	The number of people living in a given area. E.g 350 people per KM squared.
Sparsely Populated	A low number of people living in a given area. E.g 3 people per KM squared.
Urban	Relating to towns or cities.
Rural	Relating to the countryside.
Push Factor	Factors that make you want to leave an area E.g War, famine, lack of education.
Pull Factor	Factors that make you come to a certain area E.g low levels of crime, better quality housing.

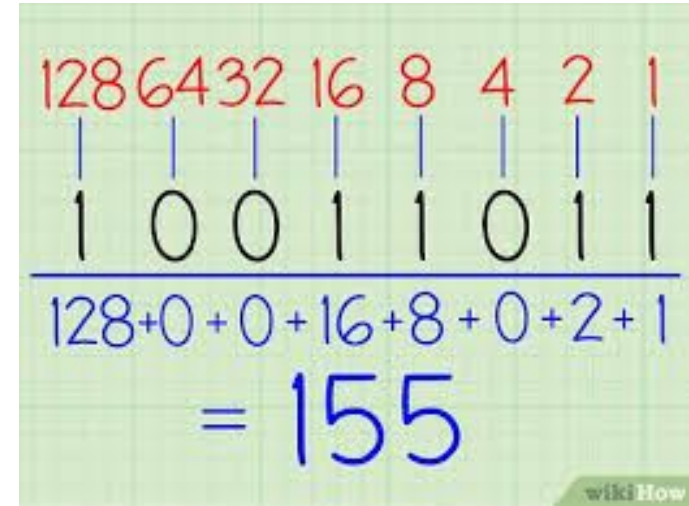


Population pyramids show the makeup of a country in terms of age and gender. Look at the following website and make comparisons between the population pyramids of poor and rich countries.  
<https://www.populationpyramid.net/world>

# Year 8 Computing

## Computer Architecture, Memory and Storage

Internal Parts of a Computer (Inside the box)	
Motherboard	The main circuit board of a computer that holds most of the components of the computer together.
Processor/CPU	This processes all the instructions in the computer needed to perform a task. It follows the fetch-decode-execute cycle picture on the right.
Random Access Memory (RAM)	A temporary storage for the computer. It stores unsaved works and open programs.
Hard Drive	A storage device that holds data permanently for when the computer is switched off.
Graphics Card	Processes all of the instructions to do with graphics on the screen. Takes the load off the CPU.
Power Supply Unit	The part of the computer that gives power and electricity to all of the other parts.



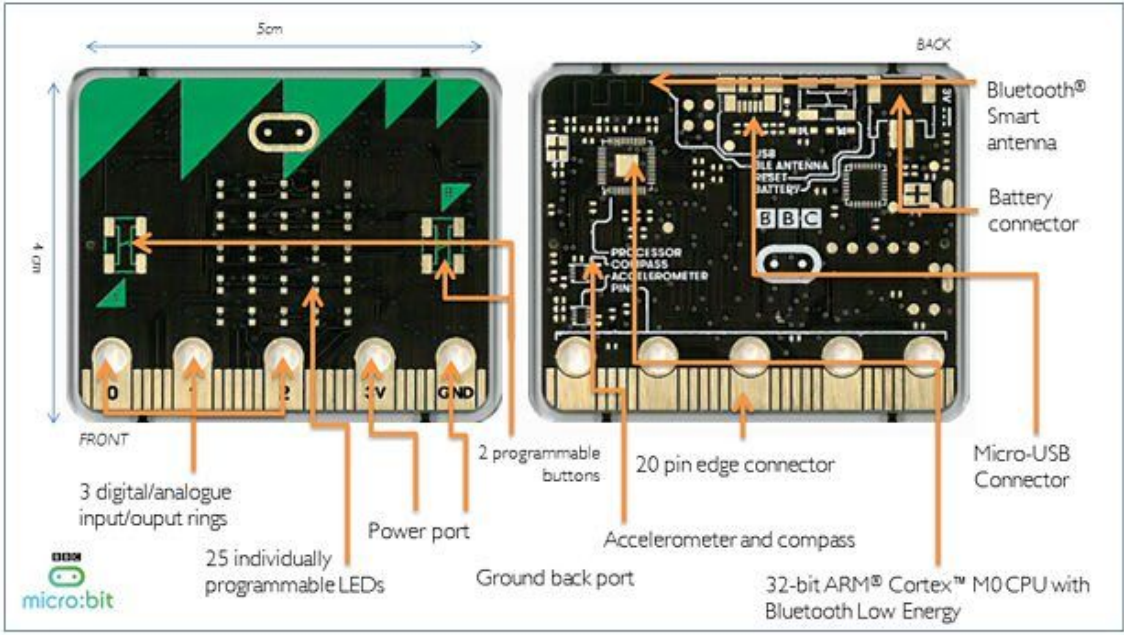
Different Types of Storage	
Optical	A type of storage that uses a laser to make marks on a disk to store data permanently. These marks can be read by a laser to put data back into a computer.
Magnetic	A type of storage that uses magnetism to magnetise parts of a disk to store data.
Solid State	A type of storage that has no moving parts. It uses electricity and switches to store data.

Units of Data	
Bit	A single binary digit. A 0 or a 1.
Nibble	4 bits
Byte	8 bits
Kilobyte	1000 bytes
Megabyte	1000 kilobytes
Gigabyte	1000 megabytes
Terabyte	1000 gigabytes
Petabyte	1000 terabytes



# Year 8 Computing

## Python Programming on the BBC Microbit



BBC Microbit	
Sensor	An input device for a computer that can measure part of the outside world. We can use these in programming to trigger part of our code to work when something in the outside world happens.
Accelerometer	A type of sensor that can measure if the device has moved or not and how far it has moved and in what direction.
Thermometer	A type of sensor that can measure the temperature.

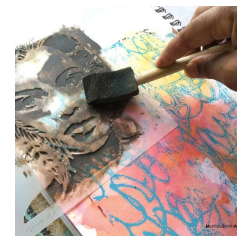
Key Terminology	
Python	A text based programming language that is very close to written English.
Algorithm	A set of steps or instructions to complete a task.
Variable	A place to store a single piece of data.
Input	Where data is entered into a computer by a user/human.
Output	Where data is displayed by the computer. Examples include: text, images, sound, or video displayed on a monitor or through speakers.
Assignment	When one variable is set equal to another e.g. $x = y$
Sequence	When code is run in a specific order, usually from top to bottom.
Selection	Also called a decision, when a program takes a course of action based on an answer. <pre>IF ELIF ELSE if answer == 0:     print("Even") else:     print("Odd")</pre>
Loops	When one or more lines of code are repeated. <pre>While For for i in range(11):     print ("The count is: " + str(i))</pre>

# Year 8 Art - Graffiti

## Can graffiti be transformed into valuable art?

Alecks Cruz is a successful artist that uses graffiti style lettering to create his sculptures. His work is showcased in galleries across the world.

1. Born in Chicago in 1984, Alecks is a self-taught visual artist and **graphic** designer
2. 2011 when Alecks began gaining local recognition by winning design competitions.
3. He explores the **composition** of individual letters and the unique beauty that each character has to offer.
4. Alecks took his love for graffiti art and constructs cardboard graffiti pieces that quickly became his **trademark**.
5. His work shows arrows, barcodes and colours that pop out with hard angles, straight sides and swooping edges.



## What are lettering styles and why are they important?

Lettering or hand lettering is a creative skill to create beautiful handwritten letters or hand-drawn designs and art. Lettering styles allow the artist or writer to get complete freedom on the canvas and explore numerous styles, designs, and methods. For example, lettering styles do not just have to be about pen and paper but can be used with paint, brush, watercolors, and several other materials.

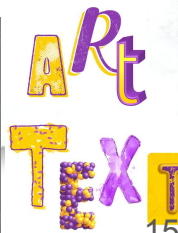
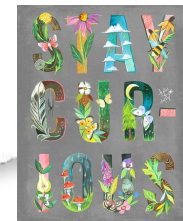
Lettering styles are still quite significant despite the rising popularity of documents and artwork now being made digitally. It is important especially for young children, as handwriting and drawing have proven to help young minds unleash their creative flow and even grasp language more effectively.

Some of the other ways lettering styles are used are:

- Handwritten letters
- Blueprints
- Comic books
- Decorative letters
- Posters
- Custom graphics
- Print advertisements
- Graffiti
- Chalkboard



Broken



## Is graffiti an acceptable art form?

- **Graffiti** art as a term refers to images or text painted usually onto buildings, typically using spray paint. Graffiti is marks, scratchings or drawings made on a surface in a public place.
- Graffiti art has its origins in 1970s New York, when young people began to use spray paint and other materials to create images on buildings and on the sides of subway trains. Such graffiti can range from bright graphic images (wildstyle) to the stylised monogram (tag).
- Today, many graffiti are very complicated mixtures of writing and pictures. When done without a property owner's permission it is considered **vandalism**. Sometimes it is just a person's name or a word. Sometimes it is as a public **political protest**.

A **stencil** is device for applying a pattern, design, words, etc. to a surface, consisting of a thin sheet of cardboard, metal, or other material from which figures or letters have been cut out, a coloring substance, ink, etc., being rubbed, brushed, or pressed over the sheet, passing through the **perforations** and onto a surface.





## Drama Keywords

<b>Naturalism</b>	Theatre that attempts to create an illusion of reality.
<b>Emotion memory</b>	Emotional memory is when the actor finds a real past experience where they felt a similar emotion. They then 'borrow' those feelings to bring the role to life.
<b>Magic If</b>	Stanislavski said that the character should answer the question, 'What would I do if I was in this situation?'
<b>Non naturalism</b>	A large term for all performance styles and theatre conventions that are not dependent on the lifelike representation of everyday life.
<b>Episodic</b>	Scenes stand alone and are constructed in small chunks, rather than creating a lengthy and slow build of tension.
<b>Thought Tracking</b>	A thought-track is when a character steps out of a scene to address the audience about how they're feeling.
<b>Pace</b>	The speed the dialogue is delivered to the audience, or the speed of the movement.
<b>Transitions</b>	How to change from one scene to another - could be smooth, could be abrupt, could use lighting/sound.
<b>Blocking</b>	The position and movement of the actors in a scene when you are rehearsing.
<b>Verbatim</b>	Creating a play using precise words spoken by people interviewed about an event or topic

## Year 8 Drama - Autumn Term 1 Naturalism vs Non-naturalism

### Key Knowledge

- We will explore the history of theatre and how non-naturalistic theatre grew in response to the Naturalism movement
- We will learn about theatre practitioners who influenced acting techniques, performance styles and approaches to theatre
- We will create both naturalistic and non-naturalistic theatre through the exploration of script and devising
- We will explore a range of naturalistic and non-naturalistic plays to discover what techniques have been used and the impact they have on the audience



## Year 8 Drama - Autumn Term 2 World War 1

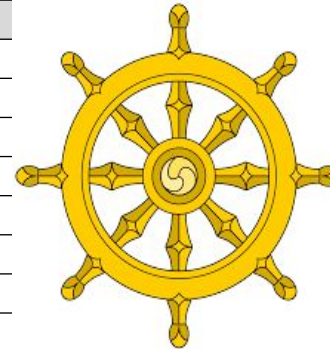
### Key Knowledge

- We will look at the conditions of the trenches in WW1 (1914-1918) and explore stories of real life soldiers
- We will be using **Tableaux**, **Thought-Tracking**, **Movement** and **Soundscape** to create *atmosphere* and *mood*.
- We will devise our own performances, and also use some scripted elements to develop our performances
- We will use **tone of voice**, **body language**, **facial expression** and other skills to portray characters



# Morals and Ethics - Pursuit of Happiness

<b>Dhamma</b>	The <b>teachings of the Buddha</b> and the <b>Universal Law</b> . Important to Buddhists because by following it they will reduce their own suffering and the suffering of others, which is the ultimate aim of Buddhism	
<b>Three Marks of Existence</b>	1. <b>Anicca</b> (impermanence): Everything changes and <b>nothing lasts forever</b> . Failure to recognise this leads to clinging and suffering, whereas awareness of it results in letting go of attachment and suffering.	
	2. <b>Anatta</b> (no fixed self): <b>There is no 'you'</b> that is permanent or eternal. Awareness of this can help you become less angry when someone harms 'you'.	
	3. <b>Dukkha</b> (unsatisfactoriness of life, suffering): <b>Suffering is an inevitable part of life</b> and can only be overcome by becoming enlightened.	
<b>The early life of the Buddha</b>	<b>Siddhartha Gautama</b> was born an Indian prince around 2500 years ago. He grew up surrounded by <b>luxury</b> and never experienced hardship or suffering.	
<b>The Four Sights</b>	Siddhartha came across a <b>sick man, old man, dead man and holy man</b> . These inspired him to give up his life of luxury and leave his wife and child.	
<b>The Buddha's Enlightenment</b>	Siddhartha <b>meditated</b> under a tree and was tempted by the demon <b>Mara</b> . Over <b>three watches</b> of the night he became enlightened and from then on known as the Buddha.	
<b>Nibbana</b>	Literally means ' <b>blown out.</b> ' <b>Freedom from suffering and rebirth.</b>	
<b>Four Noble Truths</b>	1. <b>The truth of suffering</b> (dukkha): Life is full of suffering.	
	2. <b>The truth of the causes of suffering</b> : Suffering is caused by <b>craving (tanha)</b> and also by the <b>Three Poisons</b> of <b>ignorance, greed and hatred</b> .	
	3. <b>The truth of the end of suffering</b> : Suffering can be ended by ending craving and the three poisons. When a person ends suffering they become enlightened and achieve <b>nibbana</b> .	
	4. <b>The truth of the path to end suffering</b> : The path to end suffering is the <b>Middle Way</b> and consists of eight practices (the <b>Eightfold Path</b> ) that are sometimes grouped into three sections (the <b>Threefold Way</b> ).	
<b>The Threefold Way and Eightfold Path</b>	<b>Aspect of Eightfold Path</b>	<b>Explanation</b>
	Right Speech	Speak truthfully and kindly.
	Right Action	Practice the five moral precepts.
	Right Livelihood	Have a job that does not cause suffering.
	Right effort	Work hard to become enlightened.
	Right mindfulness	Become aware of yourself and the world
	Right concentration	Develop focus and concentration.
	Right understanding	Understand the dhamma.
	Right intention	Follow the path with the right intention.
<b>Key quote</b>	<i>"But if any one goes for refuge to the Buddha, the Dhamma and the Sangha he perceives with proper knowledge the four noble truths: suffering; the cause of suffering, the end of suffering and the noble eightfold path leading to the end of suffering."</i> The Buddha in the Dhammapada verses 190-191	



## Musical knowledge - World Music

### Definitions

1. **Gamelan** – Traditional music from Indonesia
2. **Musical cycle** – A repeated musical phrase often longer than a bar of music.
3. **Scale** – A set of pitches used to write melodies.
4. **Interlocking melody** – Two or more melodies played at the same time that sound like one melody
5. **Drone** – A continual note
6. **Raga** – A scale used for different moods and emotions
7. **Texture** – Describes how melodies, rhythms and harmonies are layered in music

### Layers of sound

**Melody = tune. One note at a time.** Can be sung or played on an instrument.

1. **Melody**



See opposite

2. **Chords**



**Bass line = the lowest part. One note at a time.**

3. **A bass line**



4.

**A beat**



**Beat = rhythm.** Played on unpitched instruments such as **drums**.

### Performing in an Ensemble

- Always count the group in at the correct **tempo**.
- Always count out loud to start with to keep everyone in **time**.
- Discuss the **structure** of the music.

### Texture

#### THICK TEXTURE

If there are many layers of melodies, rhythms or harmonies playing at once it is called a thick texture.

#### THIN TEXTURE

If there are only a few layers of melodies, rhythms or harmonies playing at once it is called a thin texture.

#### MUSICAL TEXTURES



#### MONOPHONIC

Contains one melody with no harmonies, although there may be a rhythmic accompaniment.



#### POLYPHONIC

Contains two or more melodies playing at the same time.



#### HOMOPHONIC

Where there is more than one independent melody playing at the same time.

### How to read pitches

1. The blobs of the notes are arranged on the lines and spaces of the staff. The higher the blob on the staff, the higher the pitch.



2. Notes alternate being on a line and in a space.
3. Notes higher or lower than the staff have their own little line called a **ledger line**, like middle C shown above.
4. You can remember the notes on the **lines** with '**Every Good Boy Deserves Football**', and the notes in the **spaces** spell '**FACE**'. Remember to go **upwards** when doing this!



# Year 8 PE - Netball

## KEY TERMS

**Court** – The area netball is played on.

**Goal Third** – The 2 areas of the court including the shooting circle.

**Centre Third** – The area in the middle including the centre circle.

**Umpire** – The name of the person who officiates the match.

**Other areas of the court:** back line, side line, centre circle, shooting semi-circle.

**Intercept / Interception** – Gaining the ball by getting in between a pass from the opposing team.

**Possession** – Keeping the ball.

## SKILLS IN ISOLATION

**Passing** – chest, shoulder, overhead (bounce).

**Handling** – ball control.

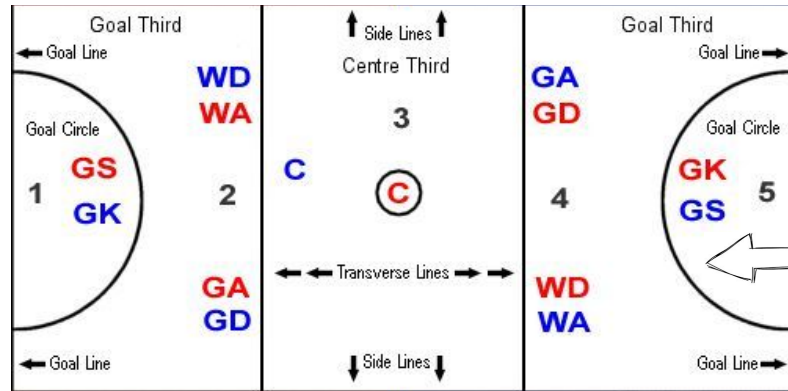
**Catching** – 1 and 2 handed.

**Footwork** – split and 1-2 landings, pivot to change direction.

**Attacking** – holding space, dodging to get free from a player.

**Shooting** – 1 or 2 handed.

**Defending** – stage 1 man to man marking, stage 2 defend the pass.

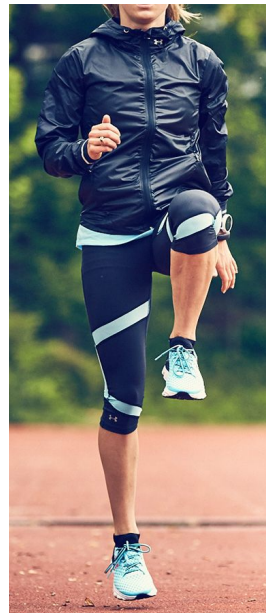


*A netball match lasts for 4 x 15 minute quarters = 1 hour*

## HOW TO WARM UP FOR NETBALL AND OTHER SPORTS

A good warm up must consist of 3 parts:

- 1 – **Pulse raising** activity e.g. jogging
- 2 – **Stretches** (dynamic and static)
- 3 – **Skills practice** e.g. passing



## APPLICATION OF SKILLS

- Set plays e.g. centre pass, back lines
- Decision making
- Demonstrate communication on court
- Adapt to the environment

## POSITIONS – BLUE TEAM

**How many players on 1 team?**

**Where can they go?**

**Defence:**

- GK – 1 & 2
- GD – 1, 2 & 3
- WD – 2 & 3

**Attack:**

- GS – 4 & 5
- GA – 3, 4 & 5
- WA – 3 & 4

C – 2, 3 & 4

**Which areas can the RED team go into?**

## BIG Questions

1. Can you identify or perform the main skills in netball?
2. Can you identify the key components of fitness required for netball and give examples?
3. Can you explain the difference between a free and penalty pass?



## RULES AND REGULATIONS

**Rules resulting in a FREE PASS** (Involves 1 player):

**FOOTWORK** – A player must not move their landing foot before passing the ball.

**OFFSIDE** – A player must stay in their playing area. See diagram above.

**HELD BALL** - The ball can only be held for 3 seconds by a player.

**REPLAYING** – A player must not bounce the ball to themselves when playing.

**Rules resulting in a PENALTY PASS** (Involves 2 players):

**CONTACT** – A player must not touch another player whilst on court.

**OBSTRUCTION** – Any player must stand 1 meter away from the player with the ball.

# Year 8 PE - Football

## KEY TERMS

- Back Foot
- Touch
- Formations
- Corner
- Lofted Pass
- Goal kick
- Jockeying
- Attacking
- Throw-in
- Free kick
- Scanning

## SKILLS IN ISOLATION

- ★ Passing
- ★ Tackling
- ★ Dribbling
- ★ Running with the ball
- ★ Volleying
- ★ Control



## COMPONENTS OF FITNESS

**Cardiovascular Fitness** – being able to exercise the whole body for long periods of time

**Agility** – Change direction quickly with control

**Speed** – the rate in which you perform a movement

**Strength** – the amount of force a muscle can generate

**Power** – performing a forceful movement as quickly as possible

**Coordination** – moving two or more body parts together

## POSITIONS

**Goalkeeper** – the player who can use their hands and is the last line of defence to stop the ball entering the goal

**Defenders** – players who have the main responsibility to stop the opposition from scoring. They also start the attacks.

**Midfielders** – lie between the defence and the attack. Responsible for stopping oppositions reaching the defence and providing the attackers with opportunities to score.

**Strikers** – responsible for scoring and setting up goals

## RULES AND REGULATIONS

- Game is started by a kick off in the centre of the pitch.
- In a full sided game each team consists of 11 players.
- If the ball goes off the side of the pitch it is a throw in to the team that didn't touch the ball last.
- If the ball goes off the end of the pitch it is a corner or a goal kick depending who the ball touched last.
- Depending on where the incident takes place, a free kick or a penalty is awarded if the player in possession of the ball is illegally infringed.
- The goalkeeper is the only player allowed to touch the ball with their hands and can only do this inside their 18 yard box.
- To score a goal, the ball must cross the opposition's goal line.
- If a player is past the opponent's last defender and in the opposition half when the ball is passed they are offside and a free kick is awarded to the opposition team.

# Year 8 PE - Fitness

## COMPONENTS OF FITNESS

**Cardiovascular Fitness** – being able to exercise the whole body for long periods of time

**Agility** – Change direction quickly with control

**Speed** – the rate in which you perform a movement

**Strength** – the amount of force a muscle can generate

**Power** – performing a forceful movement as quickly as possible

**Coordination** – moving two or more body parts together

**Muscular Endurance** - repeatedly using the same muscles without them getting tired.

**Balance** - maintaining your body stable when static or moving.

**Flexibility** - the range of movement at a joint.

**Body Composition** - percentage of bone, muscle and fat.

**Reaction time** - ability of your body to reaction to a stimulus.

## FITNESS TESTS - CAN YOU LINK THE FITNESS TEST TO THE COMPONENTS OF FITNESS BEING TESTED?

- 12 Minute Cooper Run
- Standing Stork Test
- Bleep Test
- Sit and Reach Test
- 1 Minute Press Up Test
- BMI
- 1 Minute Sit Up Test
- 30 Meter Sprint
- Illinois Agility Test
- Vertical Jump
- Ruler Drop Test
- Hand Grip Test
- Standing Broad Jump
- Alternate Hand Wall Throw Test



## METHODS OF TRAINING

**Continuous** – working with no rest over a long period of time

**Interval**– periods of high intensity work and rest

**Resistance** – uses free weights or machine to improve strength and power

**Circuit** – a series of stations to improve specific components of fitness

**Fartlek** – ‘speed play’. Continuous running of a variety of intensities and terrains.

**Plyometric** – explosive movements to improve power

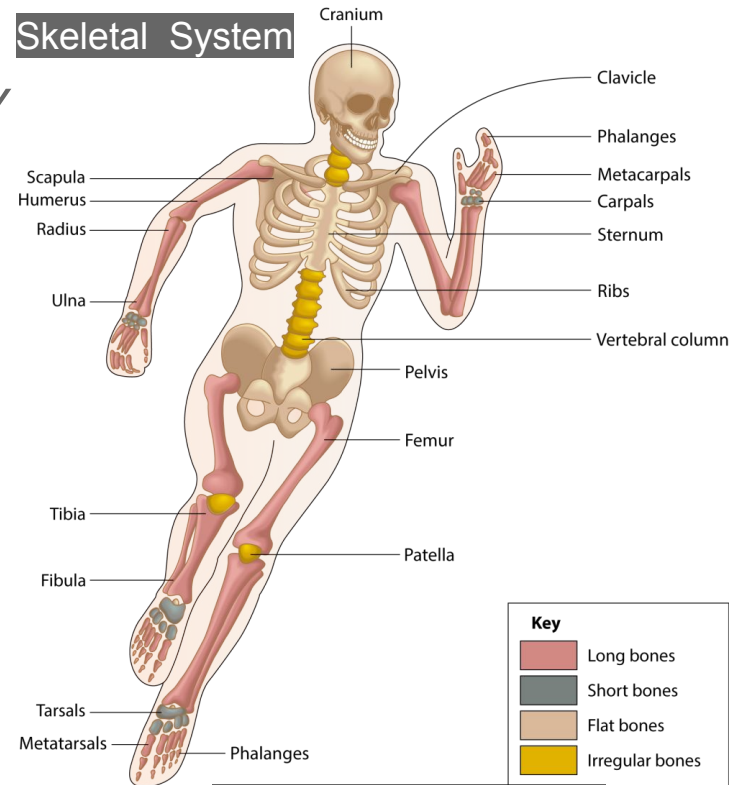


# Short term effects of exercise

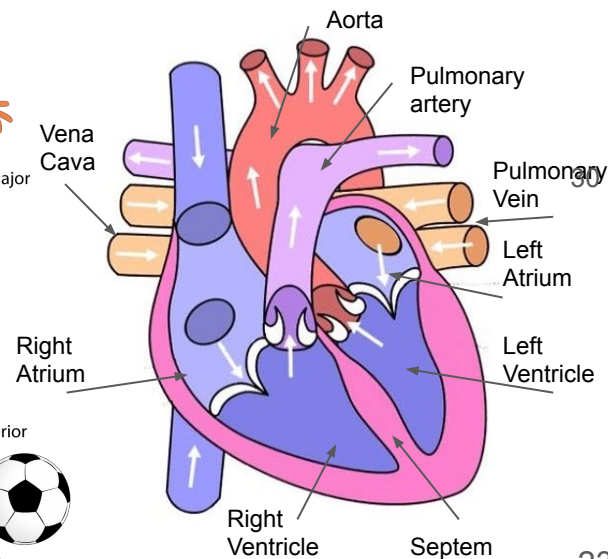
# YEAR 8 PE THEORY

Short Term Effects of Exercise	What happens to the following when we exercise?
HR	Your HR will increase as there is a greater demand for oxygenated blood in your working muscles
Breathing rate/Depth	As there is a greater demand for O ² in the muscles, our lungs have to work harder. Our breathing becomes more frequent and deeper
Sweat/Heat	When our muscles produce energy, heat is given off as a by product so our bodies temperature will increase. Our CV system will divert blood to the surface of the skin to release this heat causing sweat to form.
Lactic Acid	When we exercise at a higher intensity (anaerobically), our muscles produce energy without O ² . A by product of this process is Lactic Acid. This builds up in our muscles and causes them to fatigue. You will have felt this before after a long sprint!

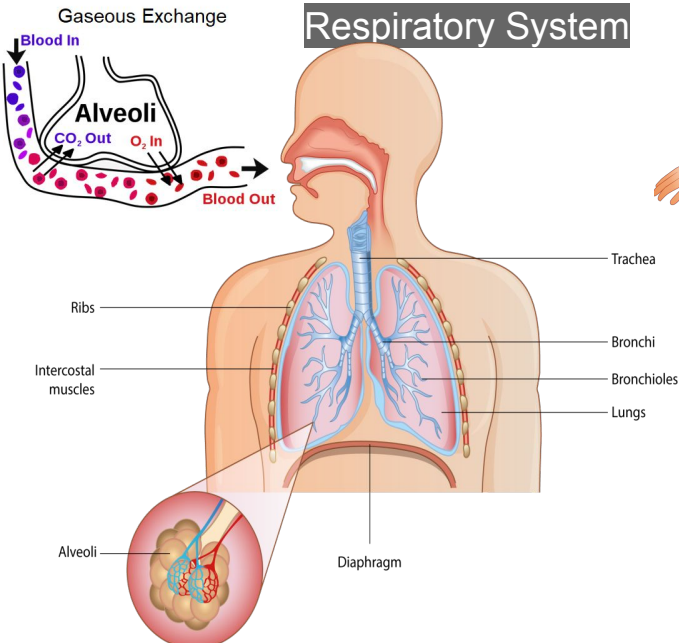
## Skeletal System



## Cardiovascular System



## Respiratory System



## Muscular System

