

Knowledge Organiser

YEAR

7

“Young people - they care. They know that this is the world that they're going to grow up in, that they're going to spend the rest of their lives in.”

DAVID ATTENBOROUGH

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 for you to gain 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 30-40 minutes. Each time you revise and practise, you should complete the homework in your exercise book or homework book for that subject. Remember to include the title and the date. Your teacher will be regularly checking that you are revising.

HOW?

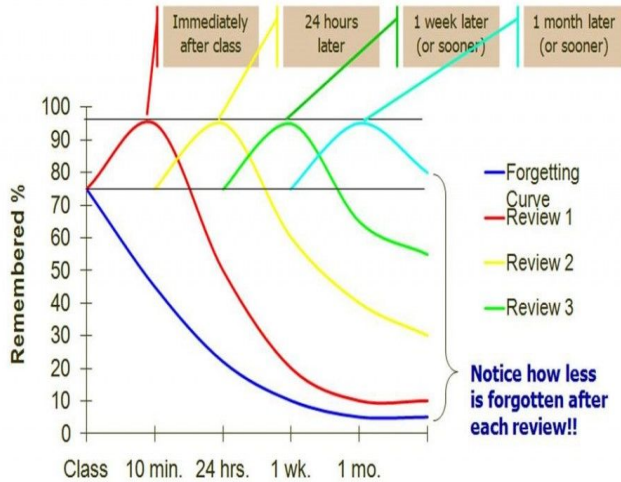
How will my teachers use them?

Each subject will set homework once a week 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 each 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 review and go 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](#)

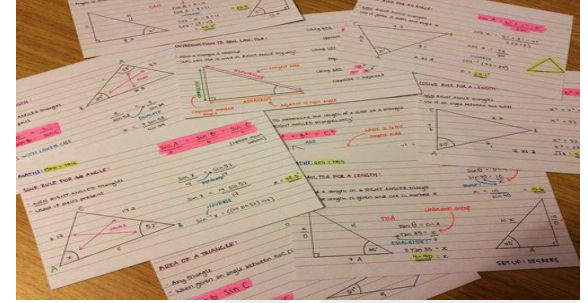
How we learn at Redmoor

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 you are trying to learn, and draw visuals to go with it.

Learn more about dual coding here:

[Link To The Learning Scientists](#)

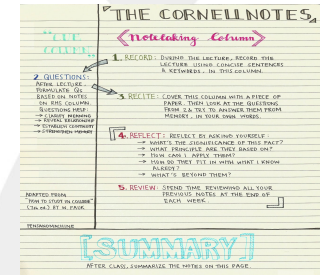
Try to come up with different ways to represent the information. For example: a timeline, a cartoon strip or a diagram of parts that work together.

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.

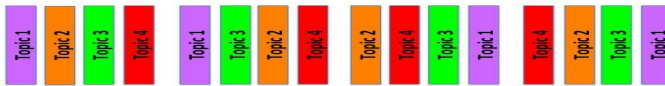
Eg. topic 1 cells, topic 2 digestive system

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.

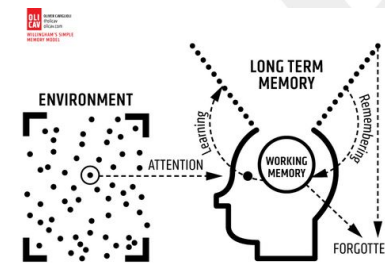
Mind maps help with memorisation of key knowledge as it helps to organise information and begin to make links and connections to different pieces of information.

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*

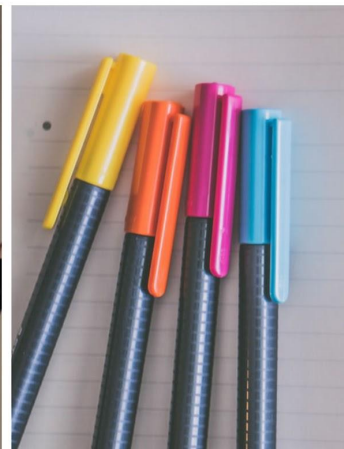
- **Future:** *e.g. I am going to run to the shops.*

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

English
Maths
Science
French
History
Geography
ICT
Art/ Design
Drama
ME
Music
PE
Literacy



## 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: The Ruby in the Smoke

<b>CONTEXT: How does the novella help us to understand life in Victorian England?</b>	
<b>Victorian period</b>	The period of Queen Victoria's reign, from 1837 to 1901. Britain was a powerful nation.
<b>Women</b>	The rights of women were limited at this time. Women lived with hardships and disadvantages.
<b>British Empire</b>	The group of countries ruled over by one monarch.
<b>Indian Mutiny</b>	A violent uprising against the British ruling in India in 1857.

<b>BIG QUESTION: How are conventional mystery antagonists and protagonists presented?</b>	
<b>Conventional</b>	A usual or accepted way of behaving.
<b>Antagonist</b>	A character who strongly opposes, struggles against or competes with the protagonist.
<b>Protagonist</b>	The main character of a story, sometimes a hero to the audience.

<b>BIG QUESTION: How is the structure of the novel used for effect?</b>	
<b>Structure</b>	The order in which the events in a story occur. It is how you shape your story.
<b>Narrative voice</b>	The perspective the story is told from.
<b>Opening hook</b>	An opening that is designed to engage the reader.
<b>Cliffhanger</b>	A technique where the writer leaves the reader not knowing what will happen next.
<b>Flashback</b>	A part of a story that goes back to events in the past.

<b>BIG QUESTION: How does Pullman use language to achieve effects?</b>	
<b>Apronym</b>	An apronym is a name that matches the character or occupation of its owner.
<b>Animal imagery</b>	A description where the writer gives animal characteristics (features) to a human or non-animal.
<b>Dialogue</b>	A conversation between the characters in a story.
<b>Metaphor</b>	An imaginative way of describing something by referring to something else which is similar in a particular way.
<b>Personification</b>	A description where an idea or object is given human feelings or actions, or is spoken about as if it's human.
<b>Simile</b>	A description that uses 'like' or 'as' to make a comparison.

<b>VOCABULARY BOOST</b>	
<b>Word</b>	<b>Definition</b>
<b>Antagonise (verb)</b>	To anger someone enough to dislike and oppose you.
<b>Bohemian (adj)</b>	A person who is interested in artistic and unusual things and lives free of conventional rules.
<b>Conventional (adj)</b>	A usual or accepted way of behaving.
<b>Exploit (verb)</b>	To use someone unfairly for your own advantage.
<b>Patriarchy (noun)</b>	A society controlled by men in which they use power to their own advantage.
<b>Stereotype (noun)</b>	A set idea that people have about what someone or something is like.
<b>Villainous (adj)</b>	Having a cruel or wicked character.



# Redmoor English Department: Narrative Writing - The Mystery Genre

BIG QUESTION: What do we expect from a mystery narrative?	
<b>Narrative</b>	Another name for a story.
<b>Genre</b>	A category or type of story, like mystery or fantasy.
<b>Plot</b>	The main events in a story.
<b>Setting</b>	The location and time when a story takes place.
<b>Character</b>	A character is a person, animal or being within a story.
<b>Crime</b>	Typically begins with a puzzling <b>crime</b> or murder.
<b>Investigation</b>	The mystery revolves around an <b>investigation</b> into uncovering the <b>culprit</b> or criminal.
<b>Clues</b>	The author may hide clues and motives, revealing information as the story progresses.
<b>Red herrings</b>	False clues that lead the reader and the detective away from the true culprit.
<b>Victim</b>	The person who is harmed, injured or killed as a result of a crime.
<b>Suspects</b>	There are always a set of <b>suspects</b> who come under suspicion before the crime is <b>resolved</b> at the end.

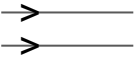
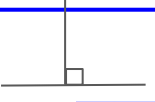

BIG QUESTION: How can sentences be manipulated to create effects?	
<b>Simple</b>	Has just one clause with a subject and a verb.
<b>Compound</b>	Joins two simple sentences together.
<b>Complex</b>	Communicates more than one idea but they are not equal. One part is a <b>main clause</b> and can stand alone. The other part, the <b>subordinate clause</b> , needs something else to support it.
<b>Embedded clause</b>	The subordinate clause goes into the middle of the sentence.
<b>Fronted adverbial</b>	The adverbial words or phrase is moved to the front of the sentence. Adverbials give more information to the sentence.









BIG QUESTION: How are words powerful?	
<b>Adjective</b>	Adjectives are describing words. In the phrase 'the red balloon', the word 'red' is an adjective.
<b>Adverb</b>	An adverb is simply a word that describes a verb. <i>He ate his breakfast <b>quickly</b>.</i>
<b>Noun</b>	A thing, such as an object, person or place. <b>Table, Wednesday</b> and <b>Love</b> are nouns.
<b>Pronoun</b>	A pronoun takes the place of a noun in a sentence. Examples are <b>him, her</b> and <b>they</b> .
<b>Verb</b>	Describes an action (doing something), a state of being (feeling something) or an occurrence (something that's happening) E.g. <i>The rabbit was <b>jumping</b> in the field, or: the monster <b>likes</b> pizza.</i>
<b>Simile</b>	Compares two things using the words 'like' or 'as'. <i><b>The snake moved like a ripple on a pond.</b></i>
<b>Metaphor</b>	A word or phrase describing something as if it were something else. For example, <i><b>A wave of terror washed over him.</b></i> The terror isn't a wave, but a wave!
<b>Personification</b>	Gives an inanimate object human feelings or actions. <i><b>The thirsty flowers begged for water.</b></i>
<b>Pathetic fallacy</b>	Giving nature human features. It is a type of personification.

BIG QUESTION: Why does structure matter?	
<b>Structure</b>	The order in which the events in a story occur.
<b>Opening hook</b>	An opening to a narrative designed to engage the reader.
<b>Mood shift</b>	A change in the mood of the narrative to create effect.
<b>Flashback</b>	<b>Flashback</b> shifts the story to move the reader/audience to a scene in the past.
<b>Cliffhanger</b>	When a story or plotline ends suddenly or a large plot twist occurs and is left unresolved.

Key Word	Definition
<b>Narrative</b>	A story or account of a series of events.
<b>Mystery</b>	Anything that is kept secret or remains unknown.
<b>Convention</b>	A formal agreement/A formal meeting
<b>Protagonist</b>	The main character.
<b>Antagonist</b>	A villain who ends up in conflict with the protagonist.

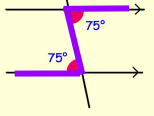
# Y7 Maths Spring Term - Angles

Keyword	Definition
Polygon	A Polygon is a <b>closed 2D shape</b> made of <b>straight</b> lines. poly = many      gon = angles
Parallel Lines	2 lines the same distance apart and never meet. 
Perpendicular Lines	2 lines that meet at a right angle. 
Regular Polygon	A polygon where all of the sides are equal and all of the angles are the same. 

<b>Radius</b> 	Line from centre to edge of circle
<b>Diameter</b> 	Line straight across circle through the centre
<b>Circumference</b> 	Perimeter of circle
<b>Tangent</b> 	Line that just touches the outside of the circle in one place
<b>Arc</b> 	Part of circumference
<b>Sector</b> 	Area inside 2 radii
<b>Chord</b> 	Line from one point of the circumference to another but not through the centre
<b>Segment</b> 	Area inside chord

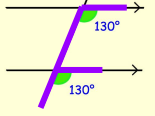
## Angles in Parallel Lines

**Alternate Angles**  
'Z' angles



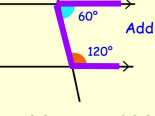
are equal

**Corresponding Angles**  
'F' angles



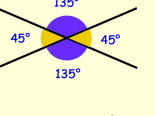
are equal

**Co-interior Angles**  
'C' angles



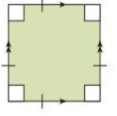
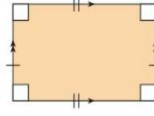






Add to 180°  
add up to 180°

**Vertically Opposite Angles**  
'X' angles

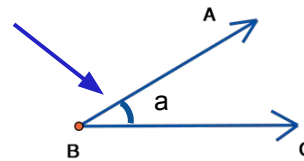


are equal

## Quadrilaterals

<p><b>Square</b></p>  <p>4 right angles 4 equal sides 2 pairs parallel sides</p>	<p><b>Rectangle</b></p>  <p>4 right angles 2 pairs equal sides 2 pairs parallel sides</p>	<p><b>Rhombus</b></p>  <p>2 pairs equal angles 4 equal sides 2 pairs parallel sides</p>	<p><b>Parallelogram</b></p>  <p>2 pairs equal angles 2 pairs equal sides 2 pairs parallel sides</p>
<p><b>Trapezium</b></p>  <p>1 pair parallel sides</p>	<p><b>Isosceles trapezium</b></p>  <p>2 pairs equal angles 1 pair equal sides 1 pair parallel sides</p>	<p><b>Kite</b></p>  <p>1 pair equal angles 2 pairs equal sides No parallel sides</p>	<p><b>Arrowhead</b></p>  <p>1 pair equal angles 2 pairs equal sides No parallel sides</p>

**ANGLES**  
You can describe this angle as angle **ABC** or angle **a**



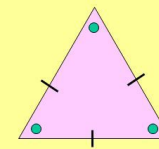
**Area of Circle**

$$A = \pi r^2$$

**Circumference**

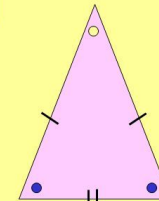
$$C = \pi d$$

### Types of Triangles



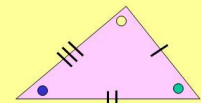
Equilateral Triangle

3 equal sides  
3 equal angles.



Isosceles triangle

2 equal sides  
2 equal angles (base)



Scalene triangle

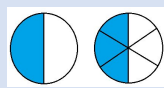
3 unequal sides  
3 unequal angles

# Maths: Fractions, Decimals, Percentages

Keyword	Definition
Fraction	The division of one integer (whole number) by another.
Simplifying Fractions	Find the highest common factor in both the numerator and denominator.
Equivalent Fractions	Fractions which represent the <b>same value</b> . e.g. $1/2 = 3/6$
Unit Fraction	A fraction where the <b>numerator is one</b> and the denominator is a positive integer.
Decimal	Decimal numbers are one way of expressing non-whole numbers; and are a fraction based on a power of ten. $0.1 = 10^{-1}$
Percentage %	Parts per 100 Per = for each; Cent=100
Multiplier	To find a multiplier, you convert your percentage (%) to a decimal
Fraction of an amount	Find part of a whole



$$\frac{8}{12} \div 4 = \frac{2}{3}$$



$$\frac{1}{4}$$

0.5



**Percent → Decimal**  
 $28\% = \frac{28}{100} = .28$

**$\frac{3}{4}$  of 36**

Divide by the denominator then multiply by the numerator  
 $36 \div 4 = 9 \times 3 = 27$   
 ( $\frac{3}{4}$  of 36 = 27)

## FRACTIONS

**1** Proper Fraction  
Numerator smaller than denominator

---

**6** Improper Fraction  
Numerator greater than denominator

---

**2** Mixed fraction  
Whole number and fraction together

$\frac{3}{5}$   
← numerator  
← denominator

## RECIPROCAL

The reciprocal of a number is a fraction flipped over

Fraction → Reciprocal  
 $\frac{2}{3} \rightarrow \frac{3}{2}$   
 $5 = \frac{5}{1} \rightarrow \frac{1}{5}$

## ADDING & SUBTRACTING FRACTIONS

It's a pain because the Denominators **MUST** be the same!

**STEP 1: MAKE THE DENOMINATORS MATCH**  
 $\frac{1}{3} + \frac{1}{6}$   
 Start by changing the fractions in the equation so they have the same denominator

**STEP 2: ADD THE NUMERATORS**  
 Once the denominators are the same, simply add the numerators

$\frac{2}{6} + \frac{1}{6} = \frac{3}{6}$

## Multiplying Fractions

Not a problem:  
top x top & then bottom x bottom!

$$\frac{2}{4} \times \frac{3}{6} = \frac{6}{24}$$

## Dividing Fractions

**K** - Keep the 1st fraction  
**F** - Flip the 2nd fraction  
**C** - Change  $\div$  to  $\times$

Dividing Fractions:  
is as easy as pie;  
Flip the 2nd fraction and multiply!

$$\frac{4}{11} \div \frac{5}{9} = \frac{4}{11} \times \frac{9}{5} = \frac{36}{55}$$

## Convert Fractions, Decimals and Percents

Fractions  $\frac{3}{4}$  → Divide numerator by denominator → Decimals 0.75 → Multiply by 100 → Percents 75%

Fractions  $\frac{2}{5}$  → Write as fraction and simplify → Decimals 0.4 → Divide by 100 → Percents 40%



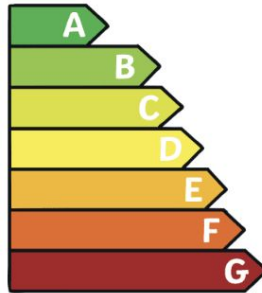
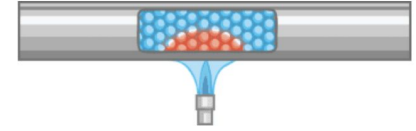
F	D	P
$\frac{1}{2}$	0.5	50%
$\frac{1}{4}$	0.25	25%
$\frac{3}{4}$	0.75	75%
$\frac{1}{3}$	0.33	33.3%
$\frac{1}{5}$	0.2	20%
$\frac{1}{8}$	0.125	12.5%

## BIG QUESTIONS:

1. How is energy stored and transferred?
2. Are all energy transfers useful?
3. How can we compare different energy resources and why is this important?

# Redmoor Science Department

## Physics - Energy



### 1. How is energy stored and transferred?

Energy	The ability to do work.
System	An object or group of objects.
Transferred	When something has been moved from one place to another.
Work done	Energy transferred.
Energy store	Different ways in which energy can be stored, including: chemical, thermal, gravitational potential, elastic potential, kinetic.
Conservation of energy	Energy cannot be created or destroyed. Energy can be transferred between energy stores or dissipated.
Dissipation	Process of energy being transferred, or lost, to the surroundings.
Energy transfer	The different ways in which energy can be transferred between stores, including: by force (mechanically), by heating, by radiation (waves) and by electrical current.

### 2. Are all energy transfers useful?

Thermal conductivity	A measure of how well a material conducts energy when it is heated.
Conductor	A material that allows thermal energy and charge to transfer through it easily. Has a high thermal conductivity.
Insulator	A material that does not allow thermal energy or charge to transfer through it easily. Has a low thermal conductivity.
Conduction	The transfer of heat through a material by transferring kinetic energy from one particle to another.
Convection	The transfer of heat energy through a moving liquid or gas.
Infrared radiation	Electromagnetic radiation emitted from an object.
Emitted	Process of sending out energy.
Reflected	When waves bounce off of a surface.

$$\text{Power} = \frac{\text{Energy or work done}}{\text{Time}}$$

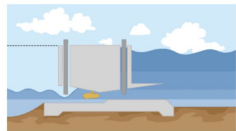
$$\text{Efficiency} = \frac{\text{Useful energy/power output}}{\text{Total energy/power input}}$$

Power is measured in Watts (W)  
Energy measured in Joules (J)

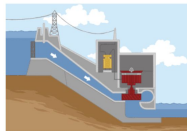
60 minutes = 1 hour  
60 seconds = 1 minute

### 3. How can we compare different energy resources and why is this important?

Energy resource	Useful supply or store of energy.
Finite	Something that has a limited number of uses before it is depleted.
Renewable	A resource that is replenished at the same rate it is used.
Non-renewable	A resource that is used up faster than it is replenished.
Fossil fuel	Natural resource formed from the fossilised remains of dead animals and plants. Examples include: oil, coal and natural gas.



Wave and Tidal



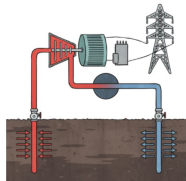
Hydroelectric



Solar



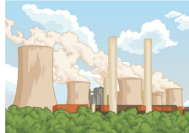
Wind



Geothermal



Biomass



Nuclear



Fossil fuels

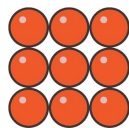


## BIG QUESTIONS:

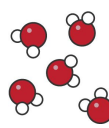
1. What are atoms and elements?
2. What are the patterns in the properties of elements?
3. How can we use the Periodic table to predict element properties?
4. Describe the reactions of different elements.

## Redmoor Science Department

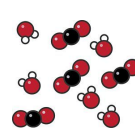
### Chemistry – The Periodic table



Element



Compound



Mixture

Groups		Periods															
1	2	3	4	5	6	7	0										
H							He										
Li	Be		B	C	N	O	F	Ne									
Na	Mg		Al	Si	P	S	Cl	Ar									
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Ac	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og

### 1. What are atoms and elements?

Metal	Shiny element that is a good conductor of electricity and heat and which forms basic oxides.
Non-Metal	Element that is a poor conductor of electricity and heat and forms acidic oxides.
Atom	Smallest part of an element
Element	Substance made of one type of atom
Compound	Substance made of more than one type of atom chemically bonded together.
Proton	Positively charged particle found in nucleus of atom
Neutron	Neutrally charged particle found in nucleus of atom
Electron	Negatively charged particle found on shells surrounding the nucleus of atom.

### 2. What are the patterns in the properties of elements?

Reactive	When a substance chemically bonds with another easily.
Unreactive	A substance that will not chemically react with another easily.
Trend	Pattern of reactivity of elements.
Chemical properties	Properties that are observed during a chemical reaction.
Physical properties	A property of a material that you can observe or measure.

### 3. How can we use the Periodic table to predict element properties?

Period	A horizontal row in the periodic table.
Group	A vertical column in the periodic table containing elements with similar chemical properties.
Melting point	Temperature at which a substance melts.
Reactivity	How readily a substance reacts with another substance.

### 4. Describe the reactions of different elements?

Alkali metals	Group 1 elements that are very reactive.
Halogens	Group 7 elements that are reactive and toxic.
Noble gases	Group 8/0 elements that are unreactive.
Displacement reactions	When a more reactive metal takes the place of a less reactive metal in a compound.
Oxidation	When an element reacts and gains oxygen.

	Metals	Non-metals
Appearance	Shiny	Dull
State at room temperature	Solid (except mercury, which is a liquid)	About half are solids, about half are gases, and one (bromine) is a liquid
Density	High (they feel heavy for their size)	Low (they feel light for their size)
Strength	Strong	Weak
Malleable or brittle	Malleable (they bend without breaking)	Brittle (they break or shatter when hammered)
Conduction of heat	Good	Poor (they are insulators)
Conduction of electricity	Good	Poor (they are insulators, apart from graphite)

# French Unit 2 - Chez Moi



## Key Vocabulary

**Noun** - people, places and things.

**Verb** - an action, state or occurrence

**Adjective** - used to describe a noun

**Adjectival Agreement** - the idea that adjectives must agree with masc/fem/plural nouns

**Conjugate** - to take an infinitive and change it into a tense.

**Tense** - describes when an action (verb) takes place.

**Conditional Tense** - to describe something that would happen.

## C'est de quelle couleur ? What colour is it?

Verb	Noun	Adjective (mas/fem)	
<b>Il y a</b> There is	<b>une table</b> a table	<b>blanc(he)</b> (white)	<b>orange</b> (orange)
<b>J'ai</b> I have	<b>un tapis</b> a rug	<b>bleu(e)</b> (blue)	<b>rose</b> (pink)
		<b>gris(e)</b> (grey)	<b>violet(te)</b> (purple)
		<b>jaune</b> (yellow)	<b>rouge</b> (red)
		<b>marron</b> (brown)	<b>vert(e)</b> (green)
		<b>noir(e)</b> (black)	<b>multicolore</b> (multicolored)

## Où habites-tu ? Where do you live?

(1) Phonics		(2) Verb	(3) PVS + Country		(4) Verb	(5) Adjective (masc/fem)		
oi [wa]	é [ay]	<b>J'habite</b> I live	<b>en France</b> in France	<b>aux Etats-Unis</b> in the USA	<b>et</b> and	<b>je suis</b> I am	<b>français / française(s)</b> French	<b>américain(s) / américaine(s)</b> American
ui [we]	è [eh]	<b>Tu habites</b> You live	<b>en Angleterre</b> in England	<b>en Belgique</b> in Belgium	<b>tu es</b> you are	<b>anglais / anglaise(s)</b> English	<b>belge(s) / belge(s)</b> Belgian	
an [on]	in [an]	<b>Il habite</b> He live	<b>en Italie</b> in Italy	<b>en Irlande</b> in Ireland	<b>il est</b> he is	<b>italien(s) / italienne(s)</b> Italian	<b>irlandais / irlandaise(s)</b> Irish	
ç [s]	ou [oo]	<b>Elle habite</b> She lives	<b>en Espagne</b> in Spain	<b>en Ecosse</b> in Scotland	<b>elle est</b> she is	<b>espagnol(s) / espagnole(s)</b> Spanish	<b>écossais / écossaise(s)</b> Scottish	
ain [an]	on [on]	<b>Nous habitons</b> We live	<b>au Pays de Galles</b> in Wales	<b>à Londres</b> in London	<b>nous sommes</b> we are	<b>gallois / galloise(s)</b> Welsh		
ch [sh]	qu [k]							
u [oo]	gn [nyuh]							

## Tu es de quelle nationalité? What nationality are you?

## Qu'est-ce qu'il y a dans ta maison ? What rooms do you have in your house?

(6) Sentence starter	(7) Verb	(8) PVS + Rooms	Connective	Negative	(8) Rooms
<b>Dans ma maison</b> (In my house)	<b>il y a</b> there is	<b>ma chambre</b> (my room)	<b>mais</b> but	<b>il n'y a pas de</b> there isn't	<b>cave. (m)</b> (basement.)
<b>Au rez-de-chaussée</b> (On the ground floor)	<b>j'ai</b> I have	<b>la chambre de mes parents</b> (my parents' room)	<b>cependant</b> however	<b>je n'ai pas de</b> I don't have	<b>garage (m)</b> (garage.)
<b>Au premier étage</b> (On the first floor)	<b>on a</b> we have	<b>la cuisine</b> (the kitchen)			<b>jardin. (m)</b> (garden.)
<b>A l'extérieur</b> (Outside)		<b>l'entrée</b> (the hallway)			<b>salle à manger. (f)</b> (dining room.)
<b>En bas</b> (Downstairs)		<b>les w.c</b> (the toilets)			<b>salle de jeux. (f)</b> (games room.)
<b>En haut</b> (Upstairs)		<b>la salle de bains</b> (the bathroom)		<b>on n'a pas de</b> we don't have	<b>bureau. (m)</b> (office.)
		<b>le salon/ la salle de séjour</b> (the lounge)			

**Tu aimes...? Pourquoi?** Do you like...? Why?

(9) Opinion	Noun	Connective		(10) Quality Vocab	(11) Adjective
<b>J'aime</b> I like <b>Je n'aime pas</b> I don't like <b>Je déteste</b> I hate <b>J'adore</b> I love <b>J'aime assez</b> I quite like <b>J'aime beaucoup</b> I really like <b>Je préfère</b> I prefer <b>Je ne supporte pas</b> I can't stand	<b>ma maison</b> my house <b>ma chambre</b> my bedroom <b>le salon</b> the lounge <b>la cuisine</b> the kitchen	<b>car</b> because  <b>parce que</b> because  <b>puisque</b> as	<b>c'est</b> it is  <b>ça peut être</b> it can be  <b>ce n'est pas</b> it isn't	<b>absolument</b> absolutely <b>complètement</b> completely <b>tellement</b> so <b>un peu</b> a bit <b>vraiment</b> really <b>plutôt</b> rather <b>trop</b> too <b>assez</b> quite <b>très</b> very	<b>grand</b> big <b>petit</b> small <b>vieux</b> old <b>moderne</b> modern <b>nouveau</b> new <b>confortable</b> comfortable <b>sale</b> dirty <b>bien rangé</b> tidy <b>en désordre</b> messy

**Comment est ta maison idéale ?** What would your ideal house be like?

(12) Sentence starter	(13) Verb (conditional)	(14) Nouns & Adjectives	
<b>Dans ma maison idéale</b> In my ideal house <b>Dans ma maison de rêves</b> In my dream house	<b>il y aurait</b> there would be <b>j'aurais</b> I would have <b>je voudrais</b> I would like	<b>une salle de jeux.</b> a games room. <b>une salle de cinéma.</b> a home cinema. <b>une piscine.</b> a swimming pool.	<b>un terrain de foot.</b> a football pitch. <b>beaucoup de chambres.</b> lots of bedrooms. <b>un dressing.</b> a dressing room
<b>Ma maison idéale</b> My ideal house <b>Ma maison de rêves</b> My dream house	<b>serait</b> would be <b>ne serait pas</b> wouldn't be	<b>vraiment grande.</b> really big. <b>très moderne.</b> very modern. <b>sans cloisons.</b> open-plan.	<b>assez vieille.</b> quite old <b>individuelle.</b> detached <b>très jolie.</b> very pretty

**Qu'est-ce que tu as dans ta chambre ?** What do you have in your bedroom?

	Verb	(15) Furniture	(16) Preposition	(15) PVS + Furniture
<b>Dans ma chambre</b> In my bedroom	<b>il y a</b> there is <b>j'ai</b> I have	<b>un lit</b> a bed <b>un lit superposé</b> a bunk bed <b>une armoire</b> a wardrobe <b>une console de jeux</b> a games console <b>une commode</b> a chest of drawers <b>une chaise</b> a chair <b>une table</b> a table	<b>sous</b> under <b>sur</b> on <b>entre</b> between <b>derrière</b> behind <b>devant</b> in front of	<b>le tapis</b> the rug <b>la console de jeux</b> a games console <b>les posters de...</b> the posters of... <b>l'ordinateur portable</b> the laptop
	<b>il n'y a pas de</b> there isn't <b>je n'ai pas de</b> I don't have		<b>à droite</b> on the right of <b>à gauche</b> on the left of <b>à côté</b> next to <b>en face</b> facing	<b>du bureau</b> the desk <b>de la télé</b> the TV <b>des posters de...</b> the posters of <b>de l'ordinateur</b> the computer

# YEAR 7 HISTORY: MEDIEVAL LIFE & POWER

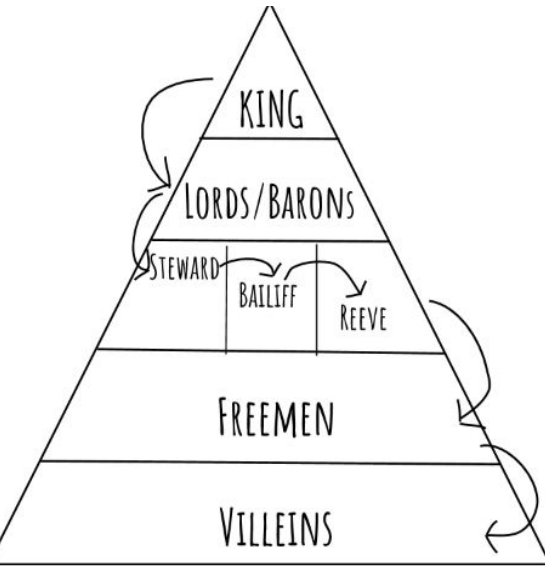


## EVERYDAY LIFE:

**Feudal System:** how society was organised  
**Week-work:** work for the Lord that would have had to be completed by a villein each week.  
**Boon-work:** work for the Lord that would have had to be completed by both villeins & freemen.  
**Duties:** extra jobs for the Lord of the Manor which peasants could pay to get out of.  
**Open Field System:** three-field system, where wheat and oats would be grown.  
**Strip Farming:** land was divided into strips and given out to peasants to farm.  
**Fallow:** a field left empty after being ploughed to restore its fertility.  
**Enclosure:** the practice of fencing off common land to farm sheep, ended strip farming.

## JUSTICE:

**Tithing:** A group of 10 males over 12 who were responsible for each other in the eyes of the law.  
**Hue and Cry:** a loud cry calling for the pursuit and capture of a criminal. Everyone in the village would be expected to pursue the criminal.  
**Manorial Court:** The court within each Lord's land that would deal with law and order.  
**Jury:** A group of peers who would hear cases at court and decide if innocent or guilty.  
**Trial by Ordeal:** a painful/extreme trial to decide innocence/guilt through the judgement of God.  
**Trial by Combat:** a trial (fight) to settle disputes with no witness or confessions.  
**1066:** Trial by Combat introduced.  
**1215:** Trial by Ordeal abolished.



## RELIGION:

**Heaven:** the place believed souls would go, after death, if they lived good lives.  
**Hell:** the place believed souls would go, after death, if they lived bad lives.  
**Sins:** doing something that God would not agree with.  
**Doom Paintings:** paintings in churches throughout Medieval England to remind peasants of what would happen if they lived good lives (Heaven) and what would happen if they lived bad lives (Hell).  
**Purgatory:** a place between heaven and hell where souls go to have their sins burnt away.  
**Church Courts:** Could try any churchman accused of crime.  
**Benefit of clergy:** priests tried in church courts, no death penalty  
**Right of sanctuary:** a criminal could not be arrested in church, if confessed could leave the country.

## POWER:

**Divine Right of Kings:** The belief that God gave complete control to the King.  
**Henry II:** A Plantagenet King of England.  
**1154-1189:** Henry II reign.  
**The Pope:** Head of the Catholic Church.  
**Thomas Becket:** A Churchman who was Henry's friend.  
**1161:** Becket was appointed as Archbishop of Canterbury.  
**John I:** Henry II's son  
**1199-1216:** John I's reign.  
**Barons:** a different term for the Lords.  
**1214:** John I cannot raise an army and loses the Battle of Bouvines to the French King.  
**1215:** The Magna Carta signed  
**Magna Carta:** a 'charter' that limited the King's power.  
**1216:** Civil War between the Barons and the John I.

## THE BLACK DEATH:

**Black Death:** A plague that devastated Europe in the fourteenth century. Spread by fleas.  
**Buboes:** Onion shaped swellings that were usually the first symptom of the Black Death.  
**Bubonic plague:** the most common type of plague, named after the buboes.  
**1347:** Black Death hits Venice (Italy)  
**June 1348:** Black Death arrived in England (Dorset).

## THE PEASANTS' REVOLT.

**Statute of Labourers:** a law which fixed peasant wages at the pre-Black death rate.  
**Peasants' Revolt:** major uprising across England in 1381.  
**Wat Tyler:** Leader of the Peasants' Revolt  
**1351:** Edward III introduces the Statute of Labourers  
**1377:** Poll tax - peasants had to pay more money to pay for a war with France.  
**May 1381:** Peasants refused to pay. Peasants' Revolt began.  
**15 June 1381:** Richard II meets the rebels. Wat Tyler was killed



# Year 7 Geography - Coasts

## Key term

**Swash** – the water that washes up a beach when a wave breaks on the shore

**Backwash** – the water that runs back down the beach to the sea

**Fetch** – the distance that the wind has been blowing over the water to form a wave – the longer a wave's fetch, the more energy it will have

**Coastal management** – strategies used to defend coastal environments, divided into three different approaches: hard engineering, soft engineering, and managed retreat

**Erosion** - the wearing away of rocks by the sea

**Hydraulic action** - As waves approach the coast they trap air and force it into gaps in the cliff. Eventually this weakens the rock.

**Abrasion** - Waves fling sand, pebbles and large rocks against the rock, wearing it away like sandpaper

**Attrition** - Rocks and pebbles being carried by the sea knock together and are broken down; the pebbles become smaller, smoother and rounder

**Solution** - Weak acids in the water dissolve rock particles and minerals

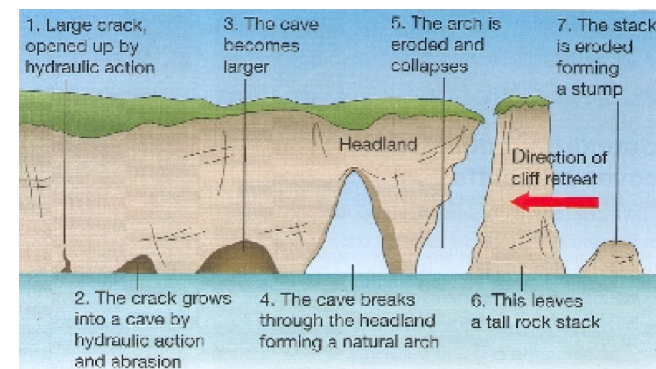
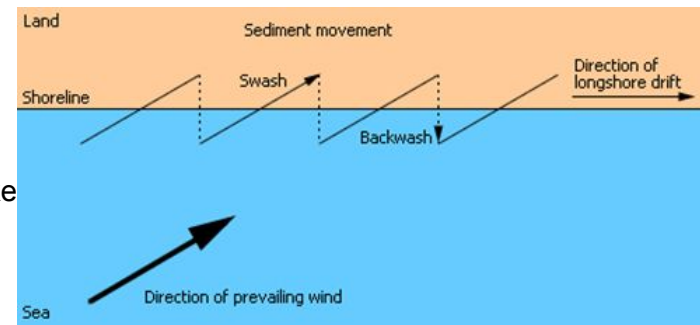
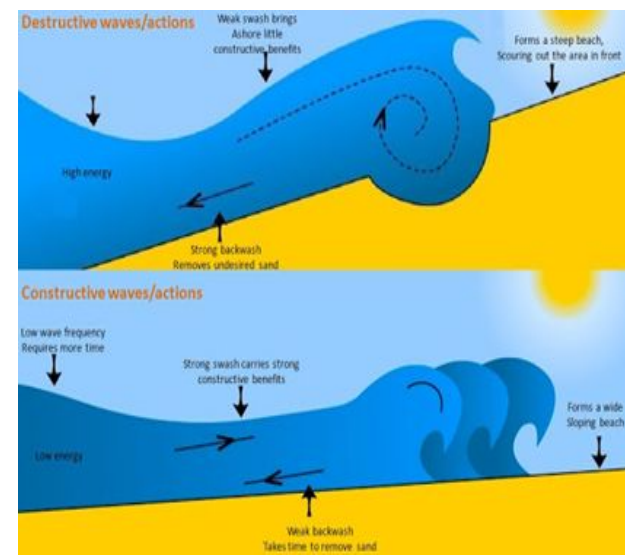
**Transportation** - the movement of material from one place to another

**Traction** - Large stones are rolled along the seabed

**Saltation** - Smaller stones bounce along the seabed over one another

**Suspension** - Small particles of rock, dirt, and plants are carried along floating in the water

**Solution** - Particles of rock and chemicals are dissolved and carried along in the water unseen



# Geography - Africa

## KIBERA - Kenya

- Largest slum in Kenya
- 60% of the people that live in Nairobi live in slums
- Between 800,000 and 1 million people live in Kibera
- 255 ha (around the size of 255 football pitches)
- Extremely high population density
- 1 meter of floor space per person
- There are around 100,000 orphans - this is due in part to the AIDS epidemic in Kibera

**The Average Age** across the population of Africa is 19 years. With only 15% of the world's people, Africa produces less than 5% of carbon dioxide emissions.

**Largest Country:** Algeria. This country is among the ten largest countries in the world. The most populous country in Africa, however, is Nigeria, with more than 185 million people, but the country is only a third of the size of Algeria.

**Largest City:** Lagos in Nigeria. With more than 21 million inhabitants, Lagos is also one of the biggest metropolitan cities in the world and is estimated to become the world's largest city by 2100.

**Smallest Country:** Seychelles, which is an archipelago (nation of islands) in the Indian Ocean. On the African mainland, the smallest country is The Gambia.

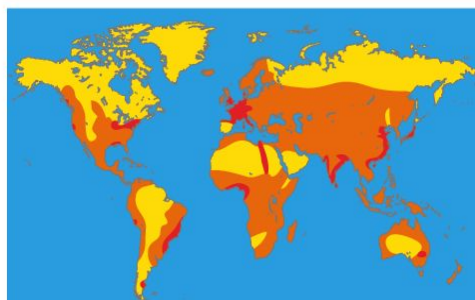
**Africa is Not A Country!  
It's a Continent of 54 countries**



## 16 Subject Specific Key Terms

<b>Africa</b>	One of the seven continents.	<b>Population Density</b>	The number of people in a given area. Usually measured in square km.
<b>Consumers</b>	Those who will purchase the finished product, e.g. someone who buys a chocolate bar from a shop.	<b>Population Distribution</b>	The spread of people across a given area; where people live.
<b>Country</b>	Humans have divided continents up into political units called countries. Africa contains 54 countries.	<b>Producers</b>	Those involved in supplying raw materials to sell on to companies who manufacture a product from this. Usually a farmer, e.g. cocoa producer.
<b>Equator</b>	The imaginary line that divides the northern hemisphere from the southern hemisphere. The equator runs through Africa, including Kenya, Uganda, Somalia and the DRC.	<b>Biome</b>	A <b>biome</b> is a specific <b>geographic</b> area notable for the species living there. A <b>biome</b> can be made up of many ecosystems.
<b>Fair Trade</b>	Trade between companies in richer countries and producers in poorer countries in which fair prices are paid to the producers.	<b>Pull Factors</b>	Reasons that attract people to the cities.
<b>Manufacturer</b>	The company who will turn the raw material into the finished product ready to sell on to the consumer, e.g. Cadbury's.	<b>Push Factors</b>	Reasons for people to leave rural areas.
<b>Migration</b>	The movement of people from one place to another.	<b>Safari</b>	An expedition to observe animals in their natural habitat, especially in East Africa.
<b>Population</b>	All the inhabitants of a particular place. In Geography, we normally mean people as the inhabitants.	<b>Tourism</b>	The commercial organisation and operation of holidays and visits to places of interest.

## Skills: Choropleth Maps



**Densely populated areas have a high number of people per km²**  
**Sparsely populated areas have a low number of people per km²**

## Welcome to Africa



# Year 7 Computing

## Data Representation

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

Why Binary?	
Transistor	A transistor is a tiny switch in the CPU that can be turned off or on. The digits 1 and 0 used in binary are used because of the on and off states of a transistor.
CPU/Processor	The circuits in a computer's processor are made up of billions of transistors that can be combined together to make any number and lots of different types of data.
Machine Code	The language your computer's language speaks is machine code. Machine code just looks like 1s and 0s.

Number Systems	
Denary	The number system we regularly use and you have been learning to use since you first discovered numbers. Has the symbols 0 to 9.
Binary	A number system that can only use the symbols 0 and 1. We can convert any of our normal numbers into binary.

128 64 32 16 8 4 2 1

1 0 0 1 1 0 1 1

---

$128 + 0 + 0 + 16 + 8 + 0 + 2 + 1$

$= 155$

withHow

# Year 7 Computing

## Python Turtle Programming

Key Term	Description
Code	The instructions for the computer telling it how to work.
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.
Syntax	The rules for how the code is written. Another word for the spelling and grammar of your code.
Syntax error	Where the code doesn't work because of a mistake in the code or because of how it is written.
Logic error	A logic error is where the code works but it doesn't give the result that you wanted.
Variable	A place to store a single piece of data.
Selection	Where code is only run if a condition is met. This basically is when the computer is able to make a decision
Loop	Where code repeats. It can repeat forever, a set number of times or until a condition is met.

Turtle Code	Description
<code>import turtle</code>	Make all the turtle commands available to your program
<code>turtle.speed(1)</code>	Set the animation speed of the turtle. 1 = slowest, 10 = fastest. 0 turns off animation completely
<code>turtle.goto(x, y)</code>	Go to position x, y
<code>turtle.forward(distance)</code>	Go forwards by amount distance
<code>turtle.backward(distance)</code>	Go backwards by amount distance
<code>turtle.right(angle)</code>	Turn right by angle degrees
<code>turtle.left(angle)</code>	Turn left by angle degrees
<code>turtle.penup()</code>	'Lift' the pen from the screen
<code>turtle.pendown()</code>	Put the pen down to draw
<code>turtle.pencolor(_____)</code>	Set the pen colour to the string given.
<code>turtle.stamp()</code>	Stamp the current turtle shape onto the screen.

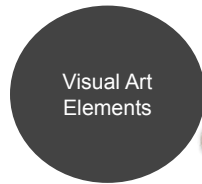


# Year 7 Art - Visual Art Elements

## Why are the Visual Art Elements the foundation of all artwork?

The Visual Elements of line, shape, tone, colour, pattern, texture and form are the building blocks of **composition** in art. When we analyse any drawing, painting, sculpture or design, we examine these different parts to see how they combine to create the overall effect of the artwork.

Line	Line is the beginning of all drawing. Line in an artwork can be used in many different ways. It can be used to create shape, pattern, form, structure, growth, depth, distance, rhythm, movement and a range of emotions.
Shape	Shape can be shown in a number of ways. Sometimes we can recognise the shapes, at other times, they can look like something we haven't seen before. This could be called ' <b>abstract</b> '.
Tone	Tone is the lightness or darkness of a color. Tone can be changed by using white or black to make a colour lighter or darker.
Colour	Colour is the visual element that has the strongest effect on our emotions. We use color to create the mood or <b>atmosphere</b> . For example, artwork that uses mainly reds and oranges, might make you feel angry.
Pattern	Pattern is made by repeating parts of the work. There are two basic types of pattern in art: Natural Pattern and Man-Made Pattern. The patterns could be made by repeating something in a certain way or completely random.
Texture	Texture is the surface effect used in art - the roughness or smoothness of the materials used to make the art.
Space	Space is an element of art by which positive and negative areas are defined or a sense of depth achieved in a work of art.



## What is colour theory?

The colour wheel helps us understand the relationships between colours.

The **primary colours** are red, yellow and blue. They cannot be made by mixing other colours together. All other colours can be mixed from red, yellow and blue.

**Secondary colours** are made by mixing equal amounts of primary colours together:

- Blue and red mixed together make purple
- Yellow and red mixed together make orange
- Blue and yellow mixed together make green

A **tertiary** colour is made by mixing equal amounts of a primary colour and a secondary colour together. There are six tertiary colours.

**Harmonious** colours sit beside each other on the colour wheel. These colours good for mixing together.

**Complementary** colours sit across from each other on the colour wheel. These are often referred to as opposite colours and even **contrasting** colours.

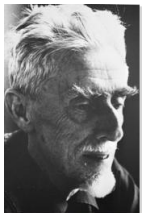
A **tint** is where an artist adds a colour to white to create a lighter version of the colour. An example of a tint is pink. Pink is a tint created by adding white to red.

A **shade** is where an artist adds black to a colour to darken it down.

## What is the significance of Escher's work?

### 5 facts about the artist

1. Escher (1898-1972) is one of the world's most famous graphic artists. His art is enjoyed by millions of people all over the world.
2. His work features mathematical objects including impossible objects, reflection, symmetry and **perspective**.
3. Early in his career, he drew inspiration from nature, making studies of insects, landscapes, and plants.
4. The prints Escher produced from 1941 on are his most well-known. He continued experimenting with repeating patterns and **geometric** mathematical concepts,
5. More recently, Escher's mind-bending visions have provided inspiration for the film Labyrinth 1986



# Year 7 Art - Pop Art

## Why was Andy Warhol successful?

1. His birth date was never recorded at a hospital. Andy Warhol liked to change his birthday and make up stories about his youth when doing interviews with the press.
2. He once said that "good business is the best art."
3. In 1961 Andy Warhol came up with the **concept** of using mass-produced **commercial** goods in his art. He called it Pop Art. He would use commercial images and reproduce them over and over. One early example of this was a series on Campbell's Soup cans.
4. Andy Warhol also used pictures of famous people. He would repeat the same portrait over and over, but use different colors and effects in each picture. Some of the celebrities he had as subjects include Marilyn Monroe.
5. He was also interested in film and music. He produced around 60 films and supported a band called the Velvet Underground. One of his movies was a 6 hour film of his friend sleeping called *Sleep*.

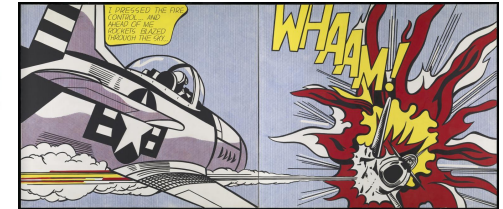


## How did Pop Art influence culture?

Pop Art is an art movement that started in the 1950s and was very popular in the 1960s in America and Britain. It was revolutionary for its use of bright and bold colours, particularly after the end of the war.

- Pop Art was normally related to everyday objects or people that were popular at the time.
- It made use of **popular** imagery, such as comics, films, advertising and household objects.
- It often used bright colours such as red, blue and yellow, as well as images of celebrities or **fictional** characters from TV or comics.
- Another well known pop artist was Roy Lichtenstein. His paintings and prints looked just like comic strips, including his most well known work entitled *Whaam!*

Pop Art influence the way people lived their lives. They wanted to take risks, wear bright colours and be extraordinary!



## How does tone impact art?

The lightness or darkness of something – this could be a shade, or how dark or light a colour appears. When we add white to a colour it's called a tint - this lightens the base colour.

When we add black to a colour it's called a shade - this darkens the base colour

Tone can be used to make something look **three dimensional** by blending tints and shades in specific areas.

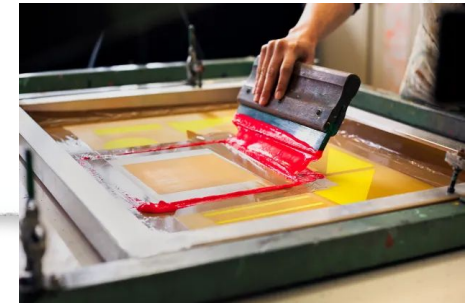
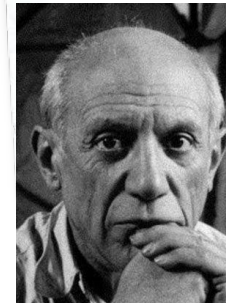
Shade

Base Colour

Tint



Creating tone in pop art was often created using screen printing. A method where ink is applied directly to the surface to be printed. The image to be printed is transferred to a very fine fabric (the screen) The parts that are non-printing areas are blocked off and the fabric becomes a stencil. The ink is wiped across the screen to pass through the unblocked areas and reach the underneath surface. For each colour to be printed a separate screen is prepared and the **process** is repeated. This is a process to **mass produce** an image.



# Year 7 Design - Principles of Design

## How can function follow form? Meet Haidée Drew

- For designers, **form** is the element that makes up our designs and **function** is the purpose of the design whether it is a sign giving directions or a book that entertains with a story.
- Haidée Drew is a London based Artist working across a range of areas from interiors and product to **sculpture**, and **Installation**.
- Haidée's work is informed by exploring the space between two and three **dimensions**, and the ideas created through the balance of form, colour, light and **illusion**.
- With a background in Silversmithing and Metalwork, her ideas are driven by material as she combines craft and technology.
- Her fascination for **mastering** new techniques and exploring their possibilities is **echoed** through her projects.

## What is Design and how does it impact our lives?

**Design** is EVERYWHERE. Almost everything that is made, is well thought out. Who is using the product? Why are they using it? Is it making their life better? From a tea-cup, lamp, or staircase, to the roof of a railway station or concert hall, a duvet cover, a company logo, or computer mouse, design, whether it is good or bad is a part of everyday life.

**Aesthetic Design** refers to the beauty of something. Products are usually designed in an artistic or **aesthetic** way. What does the product look like? Is it nice to look at? Is it interesting to look at? Does it fit a style or **genre**? If something is nice to look at, it is aesthetically pleasing.

**Artistic Design** is the **prettification** of objects, rather than the improvement of their function, performance or cost. Using the same **function** of a product, but changing the way it looks.

**Design Thinking** means the plan involved in creating something according to a set of requirements. Designers use many **techniques** to create products and solve problems. What are you aiming to achieve by designing that piece of work?

Designers rarely design a product that is brand new. Most ideas are based upon past or similar products or inspired by nature, artists or other designers or design movements.

A 'product **analysis**' allows designers to see what ideas already exist. These ideas are then analysed in detail. What works well and what doesn't? This then helps to inspire the work of the designer.

Today a number of companies and TV programs test a range of products and produce reviews on their performance for us as **consumers**, this encourages us to buy their products if they have a positive review. Word of mouth is extremely influential in design!

## The Principles of Design

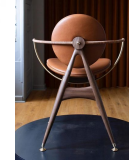


## How do the principles of design impact aesthetics?

These are the standards or rules to be observed by Designers; they are used to successfully design product and concepts.

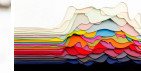
### Balance

A distribution of visual weight. Symmetrical balance uses the same characteristics on either side (it looks the same.) Asymmetrical uses different but equally weighted features in the design.



### Contrast

The arrangement of opposite elements. A feature may stand out against another. eg, light vs dark, smooth vs rough or small vs large.



### Emphasis

Used to make certain parts stand out. It creates the center of interest or a focal point. Your eyes are drawn towards it first.



### Movement

How the eye moves across the piece. Leading the attention from one aspect of the work to the other. This can also create an illusion.

### Pattern

The repetition of, or alternation of elements creating interest.



### Unity

Visually pleasing arrangement of all elements of design. Everything works together and looks like it fits.



# Designing for Purpose

## Why was Louise Nevelson's work monumental?

1. Louise Nevelson was an American sculptor known for her **monochromatic**, wooden wall pieces and outdoor sculptures.
2. Nevelson experimented with art using found objects, she often collected materials discarded on New York City streets to make her textured sculptures.
3. Usually created out of wood, her **sculptures** appear puzzle-like, with multiple cut pieces placed into wall sculptures or independently standing pieces, often 3-D.
4. One unique feature of her work is that her figures are often painted in monochromatic black or white.
5. Her work is seen in major collections in museums.. Nevelson remains one of the most important figures in 20th-century American sculpture.



"New York is my mirror"



## Inspiration or imitation, what's the difference?

Inspiration is the process of being mentally **stimulated** to do or feel something, especially to do something creative.

**Inspiration** gives us the energy to create new designs and to work hard to ensure they fit with our image or vision. It is when we are inspired that we produce our best work.

**Inspiration** assists us with brainstorming, mapping out new ideas and with bringing these new ideas to life.

In design, inspiration can be sourced from many places. Some examples are:

- A theme or topic eg. nature
- An era or time in history
- Looking at the work of others eg. Using a source like Pinterest
- Our surroundings and environment



## How can designers execute their ideas?

Three-dimensional work is made by one of four basic processes: carving, modelling, casting, constructing

### Carving

Carving is a sculptural technique that involves using tools to shape a form by cutting or scraping away from a solid material such as stone, wood, ivory or bone.

### Casting

Casting involves making a mould and then pouring a liquid material, such as molten metal, plastic, rubber or fibreglass into the mould. A mould can be cast more than once, allowing artists to create editions of an artwork.

### Modelling

Modelling is an additive process. This means a soft material is worked by the artist to build up a shape or form.

### Constructing and assembling

These are still life subjects made from scrap (found) materials glued together. Artists have used techniques including bending, folding, stitching, welding, bolting, tying, weaving, and balancing to construct sculptures from a wide variety of materials and found objects.

A **relief** is a sculpture in which the three-dimensional elements are raised from a flat base. The term relief is from the Latin verb *relevo*, meaning 'to raise'. To create a sculpture in relief is to give the idea that the sculpted material has been raised above the background.

The opposite of relief sculpture is **counter-relief**, intaglio, or *cavo-rilievo*, where the form is cut into the field or background rather than rising from it.

Reliefs are common throughout the world on the walls of buildings and a variety of smaller settings, and a sequence of several panels or sections of relief may represent an extended story.





## Drama Keywords

<b>Mime</b>	Acting out a moment, action, feeling without WORDS.
<b>Physical Theatre</b>	Use of the body & Movement to show a story, feeling, situation & object.
<b>Monologue</b>	An extended piece of script performed by one person and spoken to the audience.
<b>Split-staging</b>	Two scenes performed at the same time on stage, but the technique of this needs to be used.
<b>Gesture</b>	Body or facial movements of a character during a play.
<b>Body Language</b>	To show your emotion towards others with your body.
<b>Expression</b>	Use of Facial Expression to show how you feel.
<b>Reaction</b>	To respond to each other as characters, on stage. Reacting to their words, feelings, actions.
<b>Wash/Flood</b>	Covers the whole stage in light, allowing the audience to see everything.
<b>Spotlight</b>	A 'Spot' /Circle of Light in a small area - to focus on less actors.
<b>Pace</b>	The speed the dialogue is delivered to the audience.
<b>Transitions</b>	A change from one scene to another. Smooth Transitions in Drama are key!

[Drama techniques, skills and lighting.](#)

## Year 7 Drama: Unit 3: Devising: 'Arrival To A New Planet' Knowledge Organiser



### Key Knowledge

- In this unit, you will use all of the Drama skills (Projection, expression, tone of voice, gesture and body language) and techniques (narration, mime, dialogue, split-staging, tableau) that you have learnt over the first term.
- You will develop your creativity and imagination with making 3 scenes in your group performance; Scene 1 on the spaceship. Scene 2 introducing your characters through a video diary of saying your age, hobbies and why you're the best for this mission. Scene 3- what will happen on this new planet?
- As your character that you will create for this mission, you will think about and write your ideas for your voice, expression, body language, gesture. You will also think about your role on the spaceship.
- In your group performance, you will use your imagination to recreate the spaceship and landing on another planet- You will use split-staging to organise the space; Stage left for the spaceship, centre stage for the video diaries and stage right for the end scene.
- You will use mime, physical theatre, movement to act out this new planet and what you will find there. There may even be a dramatic ending!
- Dialogue (speaking to each other) will be used in each scene to will help the action/story to move forward and to show this to the audience.

### Use of Practitioners, Performance Spaces:

- **Stanislavski** - Creating as much Naturalism/Realism as possible on stage. Thinking about the 'Magic If': What if I was this character, what would I do? How would I feel?

**Thrust Staging**= Proscenium Arch staging with staging that comes out into the audience. This allows the audience/actors to feel closer to each other.



# Drama Keywords

<b>Physical Theatre</b>	Performances which incorporate dance elements into a dramatic theatre performance.
<b>Soundscape</b>	Using sounds to create the aural environment of a scene. This can be done by the actor vocally by making noise(s) or by repeating words/phrases.
<b>Split staging/ Cross-cutting</b>	Two or more pieces of action on stage at one time. Action freezes on one scene before the next continues.
<b>Physicality</b>	The physical attributes of a person, especially when overdeveloped or overemphasised.
<b>Blackout</b>	The act of turning off (or fading out) stage lighting.

## Drama techniques, skills and lighting.

### Genres:

Some genres we will cover:

- Fantasy (Fiction- not real. Inspired by the real world, but creating a new universe.)
- Horror (Fiction- not real. Creates a level of fear, dread, terror.)
- Superhero (A speculation story- with adventures and powers.)
- Silent movie/Comedy (No spoken dialogue, set to music, with funny gestures and slapstick comedy.)



# Year 7 Drama: Unit 4 Film Genres Knowledge Organiser



## Key Knowledge

- In this unit, you will explore and learn about different film genres.
- Genres show the style of a performance or film and this helps to show the story, characters, structure, atmosphere effectively.
- They are: Silent Movie/Comedy, Fantasy, Horror and Superhero.
- You will be looking at design aspects for your piece.
- You will also be completing peer assessments during this topic, to further show your understanding of the genre.

## Use of Practitioners:

### Practitioners:

*Berkoff*- Berkoff used exaggerated facial expressions, exaggerated and stylised mime and externalising emotions to create theatre. These can be used in genres such as **Fantasy** and **Silent Movie/Comedy**.



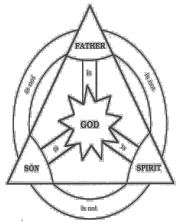
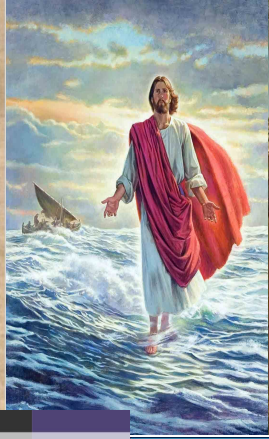
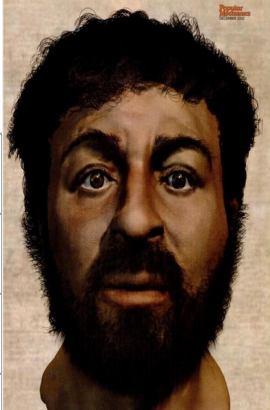
*Brecht* - Brecht used a range of theatrical devices or techniques so that the audience were reminded throughout that they were watching theatre. He did something called 'breaking the 4th wall' which is where the imaginary wall between the audience and performers is broken. This can be used in the **horror** genre.

It is also 'Multi-role'. This can be used in the **superheroes** genre.

# Morals and Ethics

**Keywords** Jesus Christ, Messiah, Son of God

<b>Baptism</b>	Welcomes a believer into the Christian church.
<b>Christian</b>	Someone who believes in Jesus Christ.
<b>Christmas</b>	Celebrating the birth of Jesus
<b>Crucifixion</b>	Method of execution used on Jesus
<b>Easter</b>	Celebrating the resurrection of Jesus
<b>Resurrection</b>	Jesus coming back to life after 3 days
<b>Ascension</b>	Jesus going to heaven to be with his Father.
<b>Miracles</b>	Unexplained events performed by Jesus in the Bible
<b>Parables</b>	Stories with a religious meaning Jesus told
<b>Samaritan</b>	Somebody who helps somebody else



**HOLY WEEK**

Palm Sunday March 25	Maunder Thursday March 29	Good Friday March 30	Easter Sunday April 1

**Matthew 29:31-46**

Depart

Left Hand

Cursed

Gave me no meat

Gave me no drink

Took me not in

Clothed me not

Visited me not

Inasmuch as ye have done *it* unto one of the least of these my brethren, ye have done *it* unto me. Matthew 29:40

**Sample**  
Primary 7:  
New Testament  
Lesson 27  
Parable of the Sheep and Goats

Includes Bookmark Idea

Inherit the Kingdom

Right Hand

Blessed

Gave me meat

Gave me drink

Took me in

Clothed me

Visited me



"A man was going down from Jerusalem to Jericho, and he fell among robbers, who stripped him and beat him and departed, leaving him half dead. Now by chance a priest was going down that road, and when he saw him he passed by on the other side. So likewise a Levite, when he came to the place and saw him, passed by on the other side. But a Samaritan, as he journeyed, came to where he was, and when he saw him, he had compassion. He went to him and bound up his wounds, pouring on oil and wine. Then he set him on his own animal and brought him to an inn and took care of him. And the next day he took out two denarii and gave them to the innkeeper, saying, 'Take care of him, and whatever more you spend, I will repay you when I come back.' Which of these three, do you think, proved to be a neighbor to the man who fell among the robbers?" He said, "The one who showed him mercy." And Jesus said to him, "You go, and do likewise."



# Year 7 Music: The Elements of Music

Types of Texture		
Type	Definition	Diagram
Monophonic	a single, unaccompanied melodic line	
Homophonic	melody with accompaniment	
Polyphonic	more than one melody performed at the same time	
Heterophonic	two melodic lines that follow each other, but with more ornamentation in the main melody	

Types of Musical Forms or Structures		
Type	Definition	Diagram
Monothematic	a piece of music based on a single melodic idea	
Binary	a piece of music with two main sections! A B or A A B B	
Ternary	a piece of music with three sections, the third is a return to the first! A B A	
Rondo	a piece of music with a return to the first section with a different section in between A B A C A	

There are 8 elements of music. Silence is also an element.

## Musical Elements

- Timbre** *Sound quality*
- Pitch** *High or low sounds*
- Texture** *How many sounds?*
- Tempo** *Fast or slow?*
- Duration** *Long or short?*
- Structure** *The musical plan*
- Dynamics** *Loud or quiet?*

### STRING FAMILY

violin, viola, cello, double bass, harp

### WOODWIND FAMILY

piccolo, flute, bass clarinet, saxophone, clarinet, oboe, English horn, bassoon, contra-bassoon

### BRASS FAMILY

trumpet, French horn, trombone, tuba

### PERCUSSION FAMILY

triangle, woodblock, guiro, maracas, tambourine, claves, cymbals, snare drum, bass drum, temple blocks, xylophone, orchestra bells, timpani

## TEMPO

<b>Largo</b> very slow (40-60)	<b>Adagio</b> slow (66-76)
<b>Moderato</b> medium (106-120)	<b>Allegro</b> quickly and bright (112-124)
<b>Andante</b> at a walking pace (76-106)	<b>Presto</b> very fast (166-200)

	crescendo getting louder
<b>ff</b>	fortissimo very loud
<b>f</b>	forte loud
<b>mf</b>	mezzo forte medium loud
<b>mp</b>	mezzo piano medium quiet
<b>p</b>	piano quiet
<b>pp</b>	pianissimo very quiet
	diminuendo getting quieter

### Note Values - Duration

1 semibreve (whole note)  
2 minims (half notes)  
4 crotchets (quarter notes)  
8 quavers (eighth notes)  
16 semiquavers (16th notes)

# Year 7 PE - Football

## KEY TERMS

Possession	Throw in	Penalty
Jockeying	Corner	Offside
Distribution	Free kick	
Tactics	Under pressure	



## 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.

## SKILLS IN ISOLATION

Passing	Tackling
Dribbling	Heading
Running with the ball	
Volleying	Control

## CONDUCTING A WARM UP

Phase 1: Pulse raiser – jogging, high knees, heel flicks, jockeying

Phase 2: Stretches – static and dynamic

Phase 3: Skill related – passing, dribbling, heading etc..

## 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.

- ★ What components of fitness do you need for football?
- ★ What are the 3 parts of a warm up called? Could you demonstrate these in a lesson?



# YEAR 7 PE - HANDBALL

## What is handball?

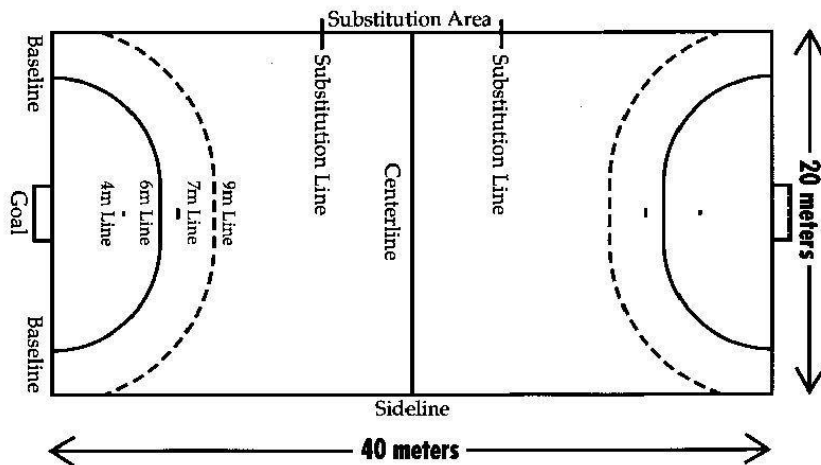
Handball is a team sport played with two opposing teams. Each team has 7 players in total, with 6 outfield players and one goalkeeper. The players are allowed to handle and throw the ball using their hands, but they must not touch the ball with their feet.

The objective of the game is to score and avoid getting goals. The team that scores more goals in a given period of time wins the match. The game is played at a very high speed and body contact is permitted. As a result, Fair Play has a central importance.

## How does a game of handball start?

A game of handball is started by firstly having a coin toss to see which team will have possession first.

The team that wins this will begin the game with a "throw off".  
Each team will stay in their own half.



# HANDBALL RULES

## Attacking – DOs

Throw and catch the ball using hands & arms.

Pass the ball to a teammate.

Take a maximum of 3 steps with the ball.

Bounce the ball with one hand and catch it again.

Play outside the goal area.



## Defence – Dos

Use your hands to block the ball.

Use open palms to take the ball away from the opponent.

Make body contact with an opponent (ONLY IN A FACE TO FACE POSITIONS).

Fair play

Stay outside the goal area



## Attacking – DON'TS

Block or kick the ball using your feet.

Hold the ball for more than 3 seconds.

Take more than 3 steps with the ball.

Double dribble – bounce the ball, catch it and bounce again.

Enter the goal area with the ball.

Charge an opponent or run into a defensive player.



## Defence – DON'TS

Pull or hit the ball out of the hands of an opponent.

Hold, push, run, jump into an opponent.

Endanger the opponent.

Interfere in with a free throw.



# Literacy

“IF YOU ARE GOING TO GET ANYWHERE IN LIFE, YOU HAVE TO READ A LOT OF BOOKS.”

*Roald Dahl*

## Questions to become an active reader...

Which sentences could help you to sum up the entire passage?

What do you think is going to happen next?

What did you think about as you read?

What else do you know about the topic?

What questions do you have about the book?

Which words do you not know or understand?

What clues from the passage help you to remember what has already happened?

How could you describe what you have just read to someone else?



## Key Vocabulary for our book discussions

Deduce	What you can understand based on the evidence in the text.
Skim	To read over the text quickly to get the main idea of what is going on.
Critic	A person who makes or gives a judgment of the value, worth, or quality of a book or text.
Recommend	To suggest that a book would be good or suitable for a particular person.

## Key Vocabulary for Talking POINTS

Human Nature	The characteristics of humans
Greed	Intense and selfish desire for something, especially wealth, power, or food.
Curiosity	A strong desire to know or learn something.
Envy	Wishing you could have the same thing or quality that someone else has.
Idle	Avoiding work; lazy.
Prideful	having an excessively high opinion of oneself.

## ABC Sentence Starters

**ADD:** To add a new idea to what someone else has been saying:

I would like to add to this...

I would have to agree with you because...

We might also consider...

We might also consider...

**BUILD:** To build on what someone else has been saying:

This could be developed by considering...

This links to...because...

Building onto this...

Taking this one step forward...

**CHALLENGE:** To challenge someone's ideas and offer the opposite viewpoint:

I would challenge this idea because...

From another perspective you might argue that...

Although I can see why ___ thinks... I disagree because...

On the other hand this idea could be challenged because...