



BOURNEMOUTH SCHOOL

# Year 7

## Knowledge Organiser 4

### Spring Term

Name: \_\_\_\_\_ Master 7

Registration Form: - \_\_\_\_\_

✓ Hard Work

✓ Discipline

✓ Smart Appearance

✓ Respect

## Bournemouth School

### Knowledge Organiser: Year 7 Spring Term 4

*'Knowledge is power' by Francis Bacon*

A knowledge organiser provides you with all the most important knowledge you need for each unit of study for that half term. Your aim is to transfer all of this information into your long-term memory so you can use it in your lessons and further expand your understanding of this work.

How to use your knowledge organiser (KO):

1. Ensure you have your KO and Homework Learning Journal with you at all times in school and when you need to do your homework at home.
2. In lessons when you have covered information that appears on your KO, your teacher will ask you to put a tick next to that section. This means that is now added to what you must learn for homework.
3. Follow the homework timetable you have devised over the last two terms to decide what to revise each evening.
4. There are 4 strategies that you can use to revise. They are progressively more challenging so always start with the first in the list.

#### **a. Look Cover Write Check**

- i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- ii. LOOK carefully at the subject and section of your KO you want to revise and try to remember as much as you can. Remember this should be a ticked section.
- iii. Now COVER this information so you can't read it.
- iv. WRITE out what you can remember word for word in your Homework Learning Journal.
- v. CHECK what you have written by comparing it to your KO. Tick each correct word in green pen and correct any errors you have made.
- vi. Repeat this process until you are confident you can remember everything you need.

**AIM:**

**You should be able to repeat the information by rote**

#### **b. Self or peer quizzing**

- i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- ii. Write out a list of questions you could ask either yourself or a friend about this section of the KO. Write these in your Homework Learning Journal.
- iii. If you are working on your own, cover the KO and write a full answer to each question.
- iv. If you are working with a partner swap books and copy down their questions and have a go at answering them.
- v. Now uncover the KO and with a green pen correct your work.

**AIM:**

**You should be able to repeat the information by rote but with a good understanding**

**c. Playing with words and sentences**

- i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- ii. You now want to check how well you have learnt the information in your KO.
- iii. Definitions – look at words that are used in this section. Can you write a definition in your own words?
- iv. Rephrasing – can you rewrite the sentences or explanations in your own words?
- v. Summary – can you summarise the main points of this section of the KO?
- vi. Synonyms – can you write synonyms for key words and ideas?
- vii. New Sentences – can you write a sentence that includes the key vocabulary or definitions that you have learnt?

**AIM**

**You should be able to use the information in your KO in a flexible and confident way in your writing.**

**d. Think it, Link it**

- i. This is a technique to use towards the end of the half term when you are revising all of the KO.
- ii. Think of the links or connections between different sections of your KO.
- iii. Write these out in your own words in your Homework Learning Journal.
- iv. Think about the links between a particular section of your KO and what you have learnt in your lessons. Can you expand on this section by linking it to your wider knowledge?
- v. Write this out in your Homework Learning Journal.

**AIM**

**You should be able to link your homework and your lessons to show a confident understanding of the work covered.**

**Homework Learning Journal**

1. Always write the subject and the date when you start your homework.
2. Always write the strategy that you are going to use for your homework.
3. Use a blue or black pen to complete your homework or a pencil if you need to draw.
4. Always use a ruler to underline titles and dates.
5. Use a green pen to complete corrections of your work.
6. **You are expected to complete half a side of your Homework Learning Journal each evening as a minimum.**

**Success Club**

You can attend Success Club every Monday to Thursday in room 53 until 4:30pm. This is a quiet room where you can complete your homework rather than doing it at home. There are also Sixth form helpers and staff who will be there to help you if you need it. You can also choose to work in the Library on a Monday, Tuesday and Thursday until 4:30 and a Friday until 4.

**Checking:**  
Your teachers will check your Homework Learning Journal at least once a cycle. If they are concerned that you aren't doing your homework properly they will offer support and guidance. If you don't respond to this guidance, you will be added to the afterschool Detention where you will be expected to complete your homework.

**Do Now tasks:**  
At the start of lessons, you should expect a Do Now task. This is a low stakes retrieval quiz on what you have learnt so far. If you have completed your homework this should be easy. The aim is to get 100% in each of these. If you miss this target occasionally, don't worry. If it happens regularly your teacher will have a chat and offer you support.

**Maths:**  
Your teacher will set you tasks to complete on Dr Frost Maths. This will be set every week on a Monday and will be collected in and checked on a Friday. If this has not been completed you will be issued a Detention on a Wednesday Lunchtime.

## How long should I spend on my homework?

Key Stage 3					
Week 1					
Time	Monday	Tuesday	Wednesday	Thursday	Friday
5 mins	MFL	MFL	Physical Activity	MFL	MFL
10	Maths	English		Maths	Art
10	Science	RS		Music	Science
10	Computing	FPAN/Graphics		History	Geography
25	Reading / Revision	Reading / Revision		Reading / Revision	Reading / Revision
Week 2					
Time	Monday	Tuesday	Wednesday	Thursday	Friday
5 mins	MFL	MFL	Physical Activity	MFL	MFL
10	Maths	English		Maths	Art
10	Science	RS		Music	Science
10	Computing	DT		History	Geography
25	Reading / Revision	Reading / Revision		Reading / Revision	Reading / Revision

- You should spend about **25** minutes revising your KO each day.
- You should spend **30** minutes either reading or revising each day.
- This timetable is a guide. If you want to spend longer revising one subject that you find more difficult and less time on one you find easy, that is your choice.
- We would like you to spend one evening involved in a physical activity. This might be a sports club, a run, a game of football with friends or just a nice walk with the dog. Ask your PE teacher if you need guidance with this. It doesn't have to be on a Wednesday.

❑ The **Formal Elements** are the parts used to make a piece of artwork. The art elements are **line, shape, space, form, tone, texture** and **colour**.

❑ A **line** is one of the simplest elements of art. Lines are marks upon paper or canvas. They can be horizontal, vertical, curved, or any other shape.

❑ Connecting lines together to enclose some areas is called **shape**. Shapes are often **organic**, meaning that they follow the kinds of shapes that one might find in nature and are more or less irregular. Some artists also use **geometric** shapes, which are the genre of shapes one might find in a mathematics textbook.

❑ **Space** in a work of art refers to a feeling of **depth** or three dimensions. It can also refer to the artist's use of the area within the picture plane. The area around the primary objects in a work of art is known as **negative** space, while the space occupied by the primary objects is known as **positive** space.

❑ A **pattern** is a repetition of elements (shapes, lines, colours, etc.) often with a consistent spacing and sequence. Patterns are created by repeating elements in a recognisable and systematic arrangement.

❑ **Composition** in art is the way in which different elements of an artwork are combined. In general, this refers to the key subjects of the artwork and how they are arranged in relation to each other.

❑ **Colour** includes hues (the pure colours of the spectrum), tone / value (lightness or darkness), and saturation (intensity). Colour can evoke emotions and set the mood of a piece. Artists use colour schemes to make areas or subjects stand out more.



❑ **Kwakiutl**, self-name Kwakwaka'wakw, North American Indians who traditionally lived in what is now British Columbia, Canada, along the shores of the waterways between Vancouver Island and the mainland. Their name for themselves means "those who speak Kwakwala."

❑ Types of Kwakiutl Artwork - Masks, Totem poles, Jewellery, Wood carving, Dance and Woven blankets

❑ **Focal Point** – where your eye is drawn to

❑ **Location:** The Kwakiutl are a First Nations group of indigenous people who traditionally lived in British Columbia, Canada, on or near Vancouver Island.

❑ **Language:** The Kwakiutl's native language is Kwak'wala.

❑ **Potlatches:** The Kwakiutl are famous for their ceremonial feasts called potlatches, which were held to celebrate important occasions or to make amends for offenses against the tribe.

❑ **Housing:** The Kwakiutl lived in large, rectangular houses made from cedar wood.

❑ **Canoes:** The Kwakiutl made dugout canoes from the trunks of cedar trees.

❑ **Food:** The Kwakiutl got most of their food by fishing and hunting deer and moose.

❑ **Clothing:** In the past, the Kwakiutl wore very little, except in winter when they wore moccasins, long shirts, and cloaks made of bark and deerskin.

❑ **Copper:** The Kwakiutl had a system where pieces of copper were given names based on their value, which was defined by the number of wool blankets they were last traded for.

❑ **Names:** Highly ranked members of the Kwakiutl communities often had the Kwak'wala word for "copper" as part of their names.

❑ **Population:** In the early 21st century, there were more than 4,000 Kwakiutl living in Canada.

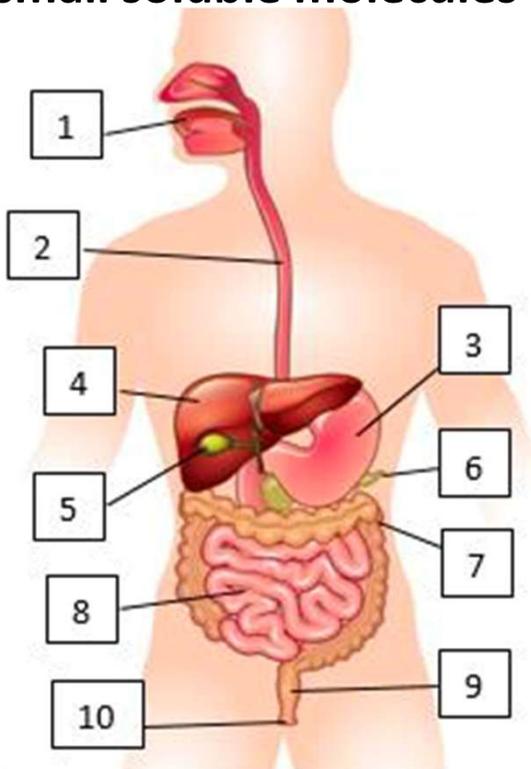
❑ **Totem poles** are sculptures carved from large trees, usually cedar, by cultures of the Indigenous peoples of the Pacific Northwest Coast of North America.

❑ The word "totem" is derived from the Ojibwe word *odoodem*, "his kinship group"



Nutrients	Role in the body	Foods they are found in
Carbohydrates	Main source of energy	Bread, pasta, rice.
Lipids	Energy source, provide insulation and protect organs.	Meats, fried foods, crisps
Proteins	Repair body tissues and growth of new cells.	Eggs, cheese, milk.
Vitamins & Minerals	Needed in small amounts to stay healthy	Vegetables and fruit.
Water	Keep your cells healthy.	Water, tea, squash and juice.
Fibre	Helps with normal digestion and keeps the gut healthy	Fruit and vegetables, past and rice.

## Digestion is the breakdown of large insoluble molecules into small soluble molecules



Parts of the digestive system			✓
1	Mouth	Mechanical digestion by chewing. Some chemical digestion	
2	Oesophagus	Muscular tubing where peristalsis takes place	
3	Stomach	Mechanical digestion by churning.	
4	Liver	Produces bile	
5	Gall bladder	Stores bile	
6	Pancreas	Produces digestive enzymes	
7	Large intestine	Absorbs water from waste back into the bloodstream	
8	Small intestine	Chemical digestion; larger molecules are broken down into small soluble molecules which are absorbed into the blood	
9	Rectum	Stores faeces	
10	Anus	Ring of muscle allowing faeces to exit the body	

Key term	Definition	✓
Physical change	When the physical properties of a substance change, but no new substance is formed	
Chemical reaction	A change in which a new substance is formed	
Reactants	Substances that react together, shown before the arrow in an equation	
Products	Substances formed in a chemical reaction, shown after the arrow in an equation	
Combustion	A reaction with oxygen in which energy is transferred to the surroundings as heat and light	
Fuel	Stores energy in a chemical store which it can release as heat	
Thermal decomposition	A reaction where a single reactant is broken down into simpler products by heating	
Conserved	When the quantity of something does not change after a process takes place	

Signs of a chemical reaction
Colour change
Temperature change
Bubbles to show gas forming
Solid precipitate forming
A change in properties e.g. magnetism

### Chemical equations:

Reactants go on the left-hand side.

Products go on the right-hand side.

Arrow sign is between reactants and products to show that a reaction happens.

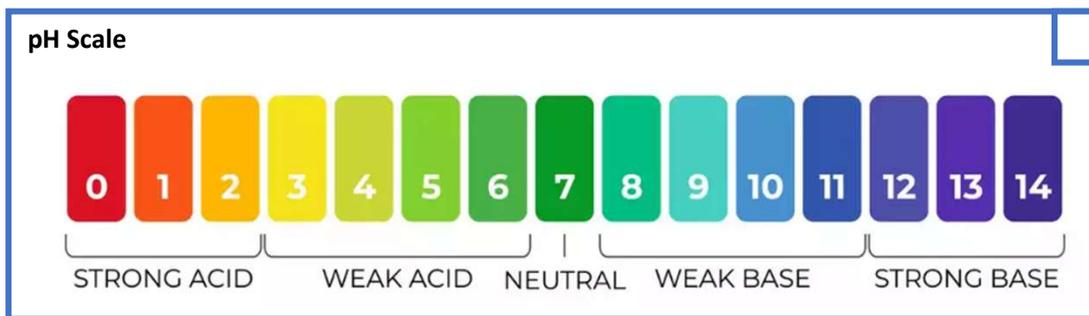
reactants → products

A chemical equation must be balanced because mass is conserved.

## Chemistry CE: Acids and Bases



Key term	Definition
Acid	Acids can be strong or weak. Strong acids have a lower pH than weak acids.
Base	A base will react with an acid in a neutralisation reaction.
Alkali	An alkali is a base which can dissolve in water.
pH	A scale of acidity and alkalinity from 0-14.
Indicator	An indicator will change colour due to pH. Used to identify if a solution is acid or alkaline.
Neutralisation	A reaction between an acid and a base to produce a neutral solution.
Salt	A neutral compound formed during neutralisation reactions between an acid and a base.



Type	Name		
Strong acid	Hydrochloric	Sulfuric	Nitric
Weak acid	Ethanoic	Citric	

Indicator	Colour in acid	Colour in alkali
Universal Indicator	Red	Purple
Phenolphthalein	Colourless	Pink
Methyl orange	Red	Yellow
Litmus	Red	Blue

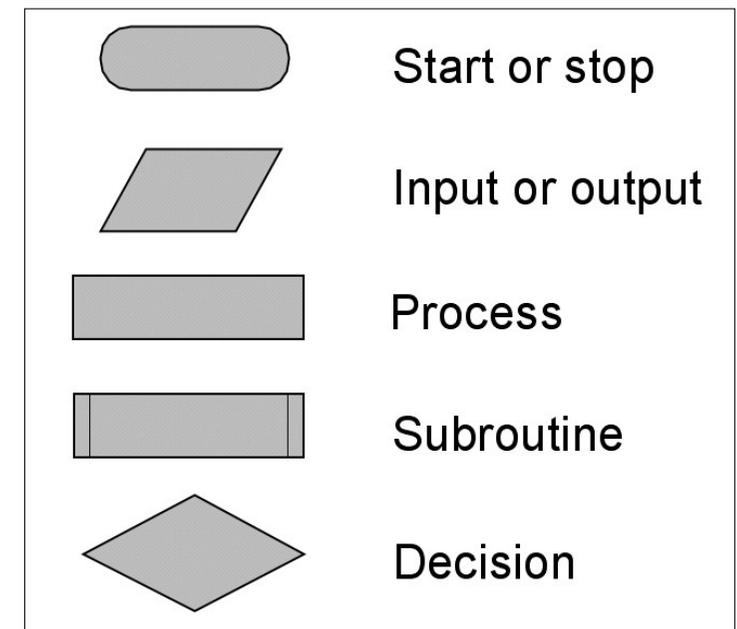
**Neutralisation Reactions – general equations**

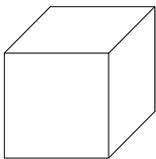
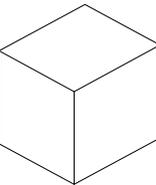
Acid + alkali → salt + water  
 Acid + metal oxide → salt + water  
 Acid + metal carbonate → salt + water + carbon dioxide

# Flowcharts with Flowol

Phrase	Definition	✓
Decomposition	Breaking down a big problem into smaller, sub-problems.	
Abstraction	Removing unnecessary details so you can focus on important information needed to solve the problem.	
Pattern Recognition	Spotting similarities or repeated features in problems to help us solve them more easily.	
Algorithm	A set of instructions to solve a problem.	
Flowchart	A diagram that represents a set of instructions.	
Sequence	Putting the instructions in the right order.	
Iteration	A process that repeats many times.	
Subroutine (subprogram)	A set sequence of steps, part of larger computer program.	
Input	Getting the information into the system.	
Output	Getting information out of the system.	
Process	A set of instructions for the system to do something with some input.	

## Flowchart Symbols



Tick here	Drawing type	Picture	Description
	Oblique		<ul style="list-style-type: none"> <li>• Drawn at 45°</li> <li>• Designs can be distorted from this angle</li> <li>• Very basic</li> <li>• Can't see all of the sides</li> </ul>
	Isometric		<ul style="list-style-type: none"> <li>• Drawn at 30°</li> <li>• Lines are parallel</li> <li>• Used by product designers</li> <li>• Can see all of the sides</li> </ul>

Tick here	Key word	Definition
	Biomimicry	Being inspired by nature – both in form and functionality.
	Ergonomics	Relates to products being comfortable and easy to use.
	Function	How a product is used – its intended purpose.

Tick here	Tool name	Function
	Try square	Marks out a right angle.
	Steel rule	Measures small distances.
	Tenon saw	Cuts timber in straight lines.
	Bench hook	Keeps timber in place whilst cutting it.
	Bastard cut file	This is the roughest file, used to roughly smooth sides.
	Smooth cut file	This is the smoothest file, used to smooth sides.
	Coping saw	Cuts timber and plastics into shapes/curves.
	Plane	Finely shaves away timber.
	PVA	Glues wood to wood only.

### Activities to try out at home (optional – not compulsory):

- Write down the functions of a bobbin sander, belt sander, line bender and pillar drill
- Research what the letters CAD and CAM stand for
- Research the advantages of using CAD/CAM when designing and making a product
- Research what the term anthropometrics mean. How does this link to Design Technology?
- Practise drawing every day products in both oblique and isometric drawing (see your teacher for an isometric grid)

# Year 7 English

## *The Ruby in the Smoke*

<b>The plot</b>	
'The Ruby in the Smoke' is a mystery novel set in Victorian London.	
Sally Lockhart's father has just died. Sally goes to the offices of her father's shipping firm, Selby and Lockhart.	
She has received a letter that warns her about the 'Seven Blessings'. She asks a company employee about this and there are shocking consequences.	
A boy called Jim overhears and decides to help Sally with her mystery.	
Sally returns to Mrs. Rees' house, a distant relative whom she has been living with since her father died.	
Sally begins to investigate and is soon drawn into two dangerous mysteries: one revolving around a much-desired ruby, and the other concerning her father's death.	

Key character	Description	
<b>Sally Lockhart</b>	The female protagonist. An orphan who has recently lost her father.	
<b>Mrs Holland</b>	The novel's wicked antagonist. She runs a lodging house and has the young Adelaide working for her. She is obsessed with getting hold of the Ruby of Agrapur.	
<b>Frederick Garland</b>	A handsome photographer who meets Sally by chance and offers to aid her.	
<b>Jim Taylor</b>	A mischievous but loyal young man who works at the Lockhart and Selby shipping firm. He has a love of mystery and adventure stories and likes to think of himself as a bit of an amateur detective.	
<b>Rosa Garland</b>	Fred's outspoken sister, who works as an actress. Fred and Rosa are always arguing, but care about each other deeply.	
<b>Adelaide</b>	She works for the terrifying Mrs Holland who apparently killed her last maid. She finds friends and safety in Sally and Fred.	
<b>Matthew Bedwell</b>	He worked for Sally's father and was on board the ship that sank which downed Mr Lockhart. He has become an opium addict which sends him into a downwards spiral.	
<b>Nicholas Bedwell</b>	Brother to Matthew. He is a religious man and a talented boxer.	
<b>Mr Berry</b>	A hired thug who works for Mrs Holland. He's a large strong man who has no objection to committing terrible crimes. He is however fiercely opposed to drinking alcohol.	
<b>Trembler</b>	A nervous ex-criminal who now works for Fred in his photography studio. He is a kind-hearted man and feels great sympathy for Adelaide.	

Key contextual points	
The story is set in 1872, at the height of the Industrial Revolution, when Britain's Empire spread far across the globe.	
The Empire brought wealth, jewels, spices and drugs to England. In addition, it brought new ideas and new technology.	
Women had fewer rights than men during the Victorian Era, despite Queen Victoria being a woman.	
A woman's place was expected to be 'in the home' and revolved around being a wife and a mother.	
Women who didn't have a male or senior chaperone were vulnerable and were at risk of damaging their reputation.	
The Opium wars were fought in the mid 19 <sup>th</sup> Century between China and Britain, and were connected to trade and the production and selling of popular drugs such as opium.	
Laudanum (made from opium) was extremely popular and easy to buy. It was used to treat all sorts of everyday illnesses and was highly addictive.	

Key vocabulary		
Abashed	(adj.) Embarrassed or ashamed	
Amiable	(adj.) Having a friendly manner	
Anguish	(noun) Pain or suffering	
Blight	A disease in plants (noun) or a thing that spoils something.	
Cravat	(noun) A short, wide piece of fabric worn around the neck.	
Decrepit	(adj.) Worn out or ruined by age or neglect.	
Elude	(verb) To escape from something/someone in a sly way.	
Furtive	(adj.) Acting in a way to avoid notice or attention often due to guilt.	
Insinuate	(verb) To suggest something bad in an unkind way.	
Laudanum	A drug which comes from opium.	
Loquacious	(adj.) Talkative	

Key vocabulary		
Magistrate	(noun) Someone who conducts a court that deals with less serious offences.	
Maharaja	(noun) A prince in India.	
Omnibus	(noun) A vehicle pulled by horse carrying passengers.	
Parson	(noun) A vicar.	
Portmanteau	(noun) A bag used for travelling.	
Pugnacious	(adj.) Ready to start a fight or argument.	
Reptilian	(adj.) Reptile/snake-like; cold and evil.	
Rheumy	(adj.) Having watery eyes.	
Surreptitiously	(adverb) Secretively.	
Termagant	(noun) A bad-tempered woman.	
Thwart	(verb) To get in the way of someone's plans.	

### 8 tips for healthier eating

These eight practical tips cover the basics of healthy eating, and can help you make healthier choices.

1. Base your meals on starchy carbohydrates.
2. Eat lots of fruit and veg.
3. Eat more fish – including a portion of oily fish.
4. Cut down on saturated fat and sugar.
5. Eat less salt (max. 6g a day for adults).
6. Get active and be a healthy weight.
7. Don't get thirsty.
8. Don't skip breakfast.

### Hydration

Aim to drink 6-8 glasses of fluid every day. Water, lower fat milk and sugar-free drinks including tea and coffee all count. Fruit juice and smoothies also count but should be limited to no more than a combined total of 150ml per day.

## Diet and Health

Please see [www.gov.uk/government/publications/the-eatwell-guide](http://www.gov.uk/government/publications/the-eatwell-guide) for a larger colour version

### Meals and snacks can be sorted into The Eatwell Guide food groups.

#### Composite/combination food - Lasagne

Pasta (lasagne sheets): **Potatoes, bread, rice, pasta or other starchy carbohydrates**

Onions, garlic and chopped tomatoes: **Fruit and vegetables**

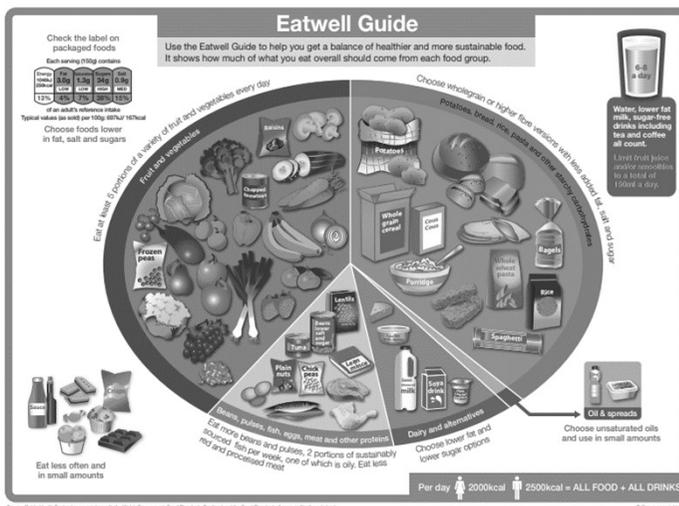
Lean minced meat (or meat substitute): **Beans, pulses, fish, eggs, meat and other protein**

Cheese sauce made with milk and cheese: **Dairy and alternatives**

Olive/vegetable oil used to cook onions and mince: **Oil and spreads**

### Fibre

- Dietary fibre is a type of carbohydrate found in plant foods.
- Food examples include wholegrain cereals and cereal products; oats; beans; lentils; fruit; vegetables; nuts; and, seeds.
- Dietary fibre helps to: reduce the risk of heart disease, diabetes and some cancers; help weight control; bulk up stools; prevent constipation; improve gut health.
- The recommended average intake for dietary fibre is 30g per day for adults.



### Composite/combination food

Much of the food people eat is in the form of dishes or meals with more than one kind of food component in them. For example, pizzas, casseroles, spaghetti bolognese and sandwiches are all made with ingredients from more than one food group. These are often called 'combination' or 'composite' foods.

### Key terms

**The Eatwell Guide:** A healthy eating model showing the types and proportions of foods needed in the diet.

**Hydration:** The process of replacing water in the body.

**Dietary fibre:** A type of carbohydrate found in plant foods.

**Composite/combination food:** Food made with ingredients from more than one food group.

**Balanced Diet-** A diet that provides adequate amounts of nutrients and energy- to have a balanced diet you need to eat a mixture of foods from each of the main food groups and the correct amount of energy to carry out daily activities.

**Free Sugars** -are sugars added to foods and drinks by the producers, cooks or consumers, they are also found naturally in Honey, Syrups and Fruit Juices.

**Not Free Sugars** are those found naturally in foods, i.e. Lactose in Milk, Sucrose in Apples.

**5 a Day-** To encourage us to eat more fruit and vegetables the government introduced the "5 a Day" campaign. This is to ensure that you get a variety of vitamins, minerals, trace elements and fibre in your diet. This will include the antioxidants and plant chemicals you need for good health.

**Cutting down on Salt-** Reducing the amount of salt we consume can reduce blood pressure, reduce the risk of heart disease, reduce the risk of a stroke. Adults should have no more than 6g of salt a day and children should have less, remember- Salt is added to many of the foods you buy so you need to check labels carefully. It is also used as a preservative in bacon and cheese.

Les ordinateurs et les portables Computers and mobile phones	
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Un ordinateur	A computer
Un portable	A mobile phone
Je joue à des jeux vidéo	I play video games
Je surfe sur Internet.	I surf the net.
Je tchatte sur SnapChat	I chat on SnapChat
Je regarde des clips vidéo.	I watch video clips.
Je télécharge de la musique.	I download music.
J'envoie des SMS/des textos	I text/I send texts
Je parle avec mes amis	I talk to my friends
J'envoie des e-mails.	I send e-mails.

Frequency phrases	
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quelquefois	sometimes
souvent	often
tous les jours	every day
tous les soirs	every evening
tout le temps	all the time
de temps en temps	from time to time
une fois par semaine	once a week
deux fois par semaine	twice a week

Qu'est ce que tu aimes faire? What do you like doing?	
--	--

retrouver mes amis en ville.	meeting my friends in town.
regarder la télévision	watching TV.
jouer sur mon PlayStation.	playing on my PlayStation.
écouter de la musique.	listening to music.
faire les magasins.	going shopping.
faire du sport.	doing sport.
jouer au foot(ball)	playing football.
traîner avec mes copains.	hanging out with my friends
téléphoner à mes copains	phoning my friends

La météo	The weather
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quand il fait beau	when it's good weather
quand il fait chaud	when it's hot
quand il pleut	when it rains
quand il fait froid	when it's cold
Il neige	It's snowing
Il y a du brouillard	It is foggy
Il y a du vent	It's windy

Les saisons	The seasons
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au printemps	In spring
en été	in summer
en automne	In autumn
en hiver	In winter

High frequency words		
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sur	on	
quand	when	
d'habitude	usually	
d'abord	first of all	
ensuite	then/next	
puis	then/next	

Regular ER verbs (infinitives)		
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regarder	to watch	
jouer	to play	
parler	to speak	
manger	to eat	
télécharger	to download	
tchatter	to chat(online)	

Regular -ER Verbs: Regarder		
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je regarde	I watch	
tu regardes	you watch	
il/elle/on regarde	he/she/we watch	
ils/elles regardent	they watch	

**Qu'est ce que tu fais? What do you do?**

<b>Je fais</b>	<b>I do</b>	
... du judo	I do judo	
... du parkour.	I do parkour.	
... du patin à glace.	I go ice-skating.	
... du roller.	I go roller-skating.	
... du skate.	I go skateboarding.	
... du vélo	I go cycling.	
... de la danse.	I dance.	
... de la gymnastique	I do gymnastics.	
... de la natation.	I go swimming.	
... de l'équitation.	I go horse-riding.	
... de l'athlétisme	I do athletics	
... des promenades.	I go for walks.	

<b>Jouer</b>	<b>To play</b>	
Je joue	I play	
Tu joues	You play	
Il/elle/on joue	He/she/ we play	
Nous jouons	We play	
Ils/elles jouent	They play	

**Frequency/Time phrases**

le soir	in the evening	
le week-end	at the weekend	
le matin	in the morning	
l'après-midi	in the afternoon	
le samedi soir	on Saturday evening	
le vendredi matin	on Friday morning	
le mercredi après-midi	on Wednesday afternoon	

**Le sport**

Le basket	basketball	
Le foot	football	
Le rugby	rugby	
Le tennis de table	table tennis	
La natation	Swimming	
L'équitation	Horse-riding	

**Je joue- I play:**

au basket	basketball	
au foot/au rugby	Football/rugby	
au hockey	hockey	
au tennis	tennis	
au tennis de table	table tennis	
au volley	volleyball	
à la pétanque	bowls	
sur la wii	on the wii	

**Tu es sportif?**

Je suis sportif	I'm sporty.	
Je suis assez sportif	I'm quite sporty.	
Je suis très sportif	I'm very sporty.	
Je suis vraiment sportif	I'm really sporty.	
Je ne suis pas sportif	I'm not sporty.	

**Irregular verbs**

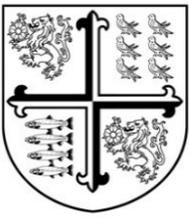
<b>être</b>	<b>to be</b>		<b>Faire</b>	<b>to do</b>	
je suis	I am		je fais	I do	
tu es	you are		tu fais	you do	
il/elle/on est	he/she is/ we are		il/elle/on fait	he/she does/ we do	
ils/elles sont	they are		ils/elles font	they do	

**Il est actif – He is active**

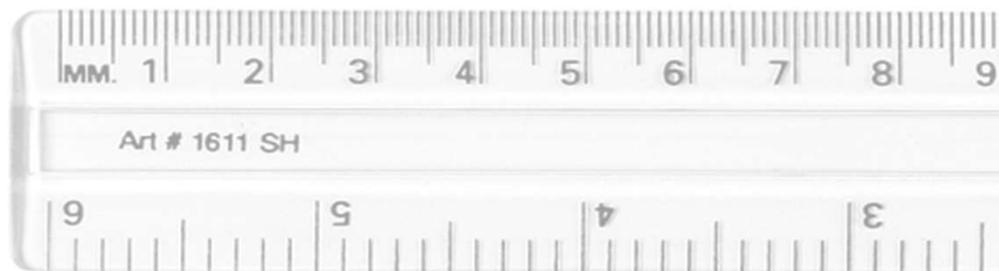
il/elle fait	He/she does	
il/elle est	He/she is	
il/elle s'entraîne	He/she trains	
il/elle regarde	He/she watches	
il/elle aime	He/she likes	
il/elle adore	He/she loves	

**Ils sont actifs – They are active**

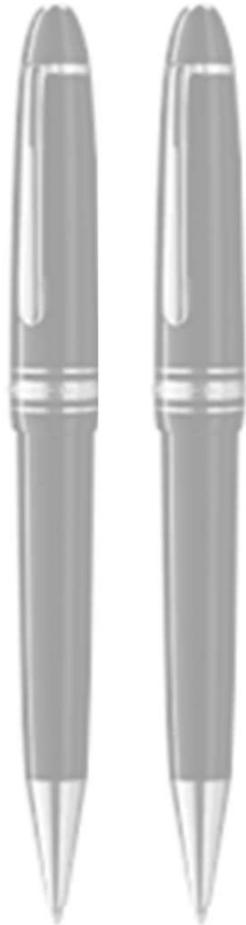
ils/elles font	They do	
ils/elles écoutent	The listen	
ils/elles jouent	They play	
ils/elles regardent	They watch	
ils/elles sont	They are	
ils/ elles aiment	They like	



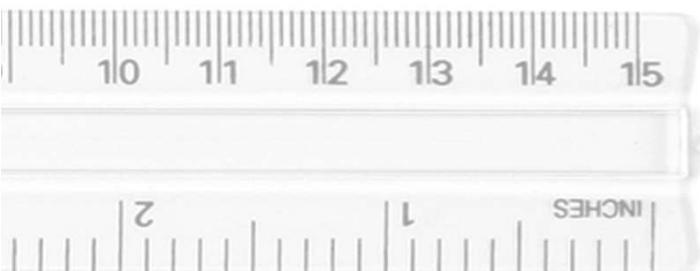
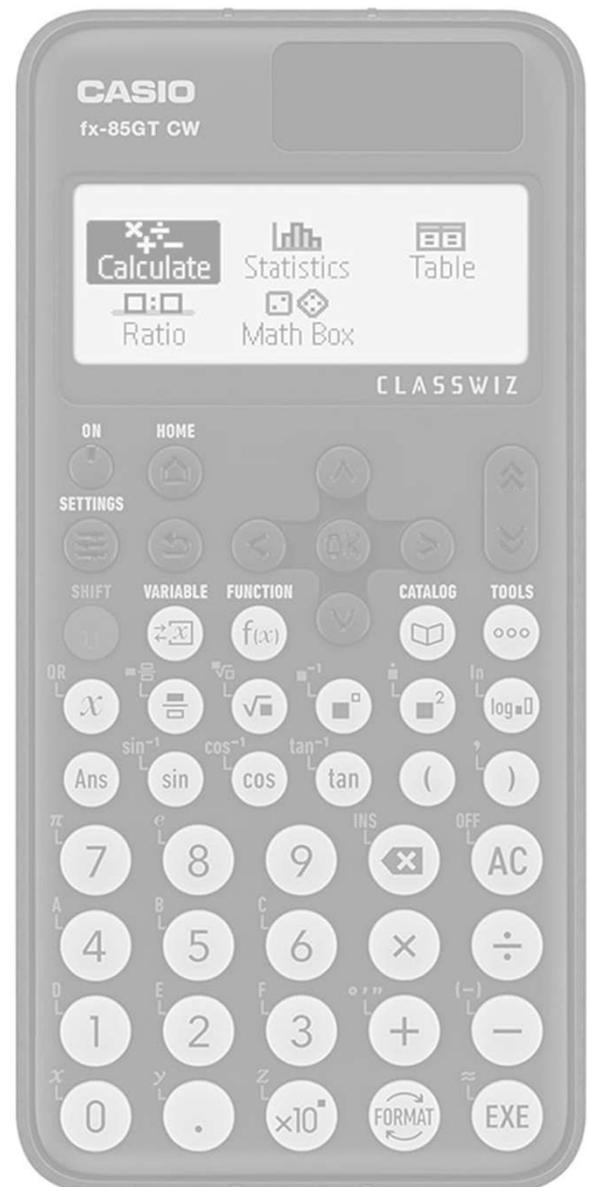
# Equipment



# Check



- ID card
- Green and purple pens
- Whiteboard pens
- Black/blue pens
- Glue stick
- Pencil
- Ruler
- Calculator





**Section 1: What is development?**

- **Development** is a measure of how advanced a country is socially, economically, or technologically.
- **Economic development** is the level of a country's wealth and standard of living.
- **Social development** is the level of access to services and the well-being of people.
- **Environmental development** is the quality of the built and natural environment.
- **Political development** is the stability of the government (how effectively the country is run) and the freedom and rights of the people who live there.

**Section 2: How do we measure development?**

- **Development indicators** are factors that tell geographers how developed a country is.
- Economic development is measured by **Gross national income (GNI) per capita** or **Gross domestic product (GDP) per capita**.
- Social development is measured by **Literacy rate** is the percentage (%) of people aged 15 and above who can read and write. **People per doctor** is the number of people to one doctor, per 1000 people. **Life expectancy** is the average age you are expected to live to in a country.

**Section 3: Is there a better way to show development?**

- We can use a **composite index**, when two or more development indicators are averaged together to give a more reliable view of a country's level of development.
- The **Human Development Index** is a composite measure of a country's development by considering factors such as life expectancy, education, and income
- HDI is presented as a number between 0 and 1. A HDI of 0.8-1.0 is high. A HDI between 0.4 and 0.6 is low.

**Section 4: What influences development?**

**Physical factors**

- Being landlocked e.g. Chad, Mongolia
- Natural disasters e.g. Haiti Earthquake
- Natural resources e.g. oil in Dubai
- Climate e.g. drought in Ethiopia

**Human factors**

- War/conflict e.g. Iran, Iraq
- Corrupt government e.g. Venezuela & Nigeria
- Colonisation e.g. British Empire

**Section 5: Why is the DRC a developing country?**

**Physical Geography**

- It is in an area that has lots of volcanoes and earthquakes.
- It has a tropical climate hot and wet with lots of rainforest.
- It is hard to build roads because of the forests and volcanoes.
- It has lots of valuable minerals.
- It is landlocked with only a small coastline.

**Human Geography**

- It has a large population with many young people.
- It was once colonised and ruled by another country.

**Section 6: Aid**

**Short-term aid**  
Most often given after a natural disaster as relief. This includes medicines, water etc.

**Long-term aid**  
Aid over a prolonged period of time, with the aim to support a country to develop.

**Top-down aid**  
When large organisations or governments provide aid directly to a government, who then decide what to do with it.

**Bottom-up aid**  
Money given by Non-Governmental Organisations directly to the people of a country in order to help develop small scale projects.

**Section 7: How can countries develop sustainably?**

- **Sustainable Development** – Development that benefits local people now and in the future without damaging the environment
- **NGO** - Non-Governmental Organisation a non-profit group (charity) that functions independently of any government.
- The **UN Sustainable Development Goals (SDGs)** are a set of 17 world wide goals created in 2016. They were created to improve quality of life around the world in different areas.



## Lesson 1 Adjustment Layers

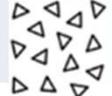
<b>Adjustment layers</b>	Adjustment layers are non-destructive overlays in Affinity Photo that apply tonal and colour corrections to the image below them.
<b>Levels</b>	<b>Levels:</b> Corrects image <b>tonality</b> and <b>contrast</b> by adjusting the black point, white point, and mid tones.
<b>Invert</b>	<b>Invert:</b> Completely <b>reverses</b> the <b>colours</b> and <b>luminosity</b> of the image to create a negative effect.
<b>Posterise</b>	<b>Posterise:</b> Reduces the number of <b>tonal values</b> in an image to create a flatter, stepped and graphic appearance.
<b>HSL</b>	<b>HSL (Hue, Saturation, Luminosity):</b> adjusts the <b>colour</b> (hue), <b>intensity</b> (saturation), and <b>brightness</b> (luminosity) of specific colours.



## Lesson 2 Selecting and masking

<b>Selection tools</b>	Are features that allow you to isolate specific parts of an image, so you can edit or apply effects to only those areas without affecting the rest of the picture.
<b>Masking</b>	Instead of permanently deleting parts of your image, professionals use masks. A mask is a non-destructive way to hide parts of a layer.
<b>Hierarchy</b>	The system for arranging and ordering text to visually guide the reader to the most important information first

## Lesson 3 Creative Effects, Filters and Brushes

<b>Balance</b>	 When elements are arranged symmetrically or asymmetrically to create the impression of balance
<b>Pattern</b>	 A regular arrangement of altered or repeated elements (like shapes, lines) or motifs

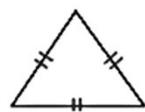
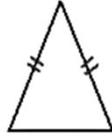
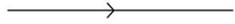
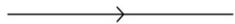
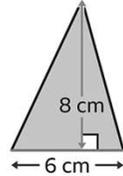
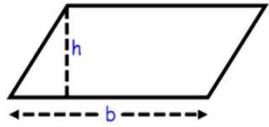
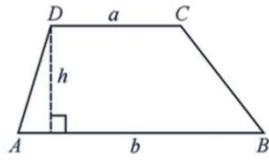
## Lesson 4&5 Top Trump Cards design

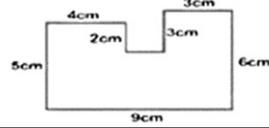
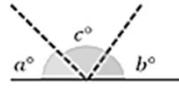
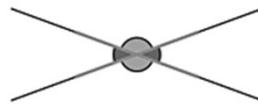
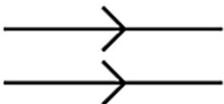
<b>Prototype</b>	Creating a basic, testable version of the design.
<b>Iterations</b>	Prototyping, testing and experimenting showing alternatives possibilities and choices
<b>Design Brief</b>	A document that clearly defines a design project's goals and expectations, serving as a guide for designers and a roadmap for the project.
<b>Specification</b>	A <b>design specification</b> is a list of criteria a product needs to address. Using the brief as a starting point for research, a specification can be written when more facts are known.

# Bournemouth School: History Department: Knowledge Organiser: Spring 2: The later Tudors

Tudors: Key terms/definitions			Changes to religion in England during the 16 <sup>th</sup> Century		✓			
Term	Definition	✓	Henry VIII: Anglo Catholic	Mary I: Roman Catholic				
<b>English Reformation</b>	Changes that took place in English churches in the 16 <sup>th</sup> and 17 <sup>th</sup> C		<b>King head of the Church</b> <b>Churches still decorated</b> <b>Services in English</b> <b>Bible in English</b> <b>Priests remain unmarried</b>	<b>Pope head of Church</b> <b>Services &amp; bible in Latin</b> <b>Churches decorated</b> <b>Priests unmarried</b> <b>Protestants persecuted</b>				
<b>Roman Catholic</b>	relating to, or being of the Christian church in Rome; having a hierarchy of priests and bishops under the authority of the Pope,							
<b>Protestant</b>	Christians who broke away from the RC Church in the 16 <sup>th</sup> C and formed their own church, during the Reformation							
<b>Clergy</b>	Churchmen – also known as priests or vicars							
<b>Martyr</b>	A person who dies for their beliefs							
<b>Vestments</b>	Robes worn by the clergy							
<b>Persecution</b>	Deliberate bad treatment based on religion							
<b>Act of Supremacy</b>	Law that made Elizabeth I Supreme Governor of the Church of England		<b>The ‘Religious Rollercoaster’.</b> 					
<b>Act of Uniformity</b>	Law that made all church services the same & restored protestant worship in England		<b>Edward VI: Protestant</b>	<b>Elizabeth I: Protestant</b>				
<b>Anglican Church</b>	The Church of England		<b>King Head of the Church</b> <b>Churches undecorated</b> <b>Services in English</b> <b>Priests allowed to marry</b>	<b>The Religious Settlement:</b> <b>Queen Governor of the church;</b> <b>Some decoration in churches;</b> <b>Services in English;</b> <b>priests allowed to marry</b>				
<b>Recusants</b>	People who refused to attend Elizabeth’s church services							
<b>Excommunication</b>	An order from the Pope expelling Elizabeth from the RC Church							
<b>Puritans</b>	Extreme protestants, who rejected Elizabeth’s Religious Settlement							
<b>Portrait</b>	A commissioned and posed painting of an important individual							
<b>Armada</b>	A fleet of Spanish Warships that attacked England in 1588							
<b>Key Events in the reign of the Tudors</b>			<b>Key people</b>					
<p><b>1547:</b> Henry VIII died and Edward VI succeeded him as King</p> <p><b>1547-49:</b> The English Church became more protestant</p> <p><b>July 1553:</b> Edward VI died; Lady Jane Grey declared as Queen for only 9 days</p> <p><b>July 1553:</b> Mary I became Queen after English people support her over Jane</p> <p><b>1554:</b> Mary I married Philip II of Spain; English Church returns to Catholicism</p> <p><b>1558:</b> Mary I died; succeeded by Elizabeth I as the new Queen of England</p> <p><b>1559:</b> The Religious Settlement introduced; This saw the restoration of Protestantism with an attempt to <b>compromise</b> with Roman Catholics</p> <p><b>1587:</b> Mary Queen of Scots executed for treason after a series of Plots</p> <p><b>1588:</b> The Spanish Armada attempted and failed to invade England. It was sent by King Phillip II of Spain and led by the Duke of Medina-Sidonia. Sir Francis Drake and Lord Howard of Effingham led the English ships and defeated the Armada by a combination of superior tactics and leadership decisions, favourable weather conditions and more effective planning.</p>			✓			✓		
				<b>Edward VI</b> (1547-53) Protestant boy King; ruled with his uncles, Somerset & Northumberland	✓		<b>Mary I</b> (1553-58): Roman Catholic Queen; married Philip II Spain; persecuted Catholics; also known as ‘Bloody Mary’ and Mary Tudor	✓
				<b>Elizabeth I</b> (1558-1603) returned England to Protestantism; defeated the Armada			<b>Mary Queen of Scots</b> overthrown by Scottish Lords & fled to England; imprisoned and then executed by Elizabeth I in 1587	

Year 7 – Maths – Spring 2

Keyword	Definition	Example(s)
Polygon	A 2D closed shape with straight sides.	Triangles and Hexagons are polygons
Triangle	A polygon with three sides. The interior angles sum to 180°.	  <p>Equilateral      Isosceles</p>
Quadrilateral	A polygon with four sides. The interior angles sum to 360°.	 Square  Rectangle  Rhombus  Trapezium  Parallelogram  Kite
Notation	Symbols and annotations that can represent shape properties	 
Perimeter	The distance around the edge of a 2D shape	Perimeter of a square with side length 3cm is $3 + 3 + 3 + 3 = 12\text{cm}$ .
Area	The amount of space inside a 2D shape.	Area of a square with side length 3cm is $3 \times 3 = 9\text{cm}^2$ .
Area of a triangle	Area of a triangle = $\frac{1}{2} \times \text{base} \times \text{height}$ where the base and height are perpendicular to each other	$A = \frac{1}{2} \times 8 \times 6$ $A = 24\text{cm}^2$ 
Area of rectangle /square /parallelogram	$\text{Area} = \text{base} \times \text{height}$ where the base and height are perpendicular to each other	
Area of trapezium	$\text{Area} = \frac{1}{2}(a + b)h$ where a and b are the parallel sides and h is the perpendicular height	

Keyword	Definition	Example(s)
Compound Shape	A shape that is made up of two or more basic shapes.	
Acute angle	An angle less than 90°	
Obtuse angle	An angle between 90° and 180°	
Reflex angle	An angle between 180° and 360°	
Angles on a straight line	Angles at one point along a straight line add to 180°.	
Angles around a point	Angles around a point sum to 360°.	
Vertically opposite angles	Vertically opposite angles are opposite each other at a vertex. They are equal.	
Parallel Lines	Lines that are equidistant from each other. Shown by using arrowhead notation.	
Corresponding angles	Corresponding angles are equal. The lines made a F shape.	
Alternate angles	Alternate angles are equal. The lines make a Z shape.	
Co-interior angles	Co-interior angles add up to 180°. The lines made a C shape.	

Year 7 – Maths – Spring 2

Keyword	Definition	Example(s)															
Qualitative data	Non-numerical data	Colours, Names, Flavours															
Quantitative data	Numerical data	Distance, Height, Time															
Discrete data	Data that can only take specific values	Shoe size, Number of children															
Continuous data	Data that can take any value within the range	Height of a plant, Time of a journey															
Frequency tables	A way of organising large sets of data in a more manageable way	<table border="1"> <thead> <tr> <th>Marks</th> <th>Tally</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>1 to 5</td> <td>  </td> <td>2</td> </tr> <tr> <td>6 to 10</td> <td>    </td> <td>8</td> </tr> <tr> <td>11 to 15</td> <td>    </td> <td>7</td> </tr> <tr> <td>16 to 20</td> <td>    </td> <td>3</td> </tr> </tbody> </table>	Marks	Tally	Frequency	1 to 5		2	6 to 10		8	11 to 15		7	16 to 20		3
Marks	Tally	Frequency															
1 to 5		2															
6 to 10		8															
11 to 15		7															
16 to 20		3															
Bar chart	A chart with rectangular bars whose heights show the values they represent.																
Pie chart	A circular chart that has sectors (or slices) to show the proportion of the data in each group.																
Sector angle (in pie chart)	The angle of each sector is used to show the proportion represented. To calculate the angle, $\frac{360}{frequency} \times group\ size$	<p>Angle (blue):</p> $\frac{360}{40} \times 25 = 225^\circ$ <table border="1"> <thead> <tr> <th>Colour</th> <th>Freq</th> </tr> </thead> <tbody> <tr> <td>Blue</td> <td>25</td> </tr> <tr> <td>Red</td> <td>15</td> </tr> </tbody> </table>	Colour	Freq	Blue	25	Red	15									
Colour	Freq																
Blue	25																
Red	15																

Keyword	Definition	Example(s)
Ratio	Ratios are used to compare two or more quantities and are usually written in the form a:b	2:5 represents 2 parts to 5 parts.
Simplifying ratio	A ratio can be simplified by dividing each part by the same number.	10:15 can be simplified 2:3 by dividing both sides by 5.
Equivalent ratio	Both sides of the ratio can be multiplied by the same number to give an equivalent ratio	If squash is mixed with water in the ratio 1:4, this can be scaled up to 100ml:400ml
Sharing ratio	Ratios can be used to divide a quantity into parts.	<p>£20 shared in the ratio 3:2</p> $20 \div (3 + 2) = 4$ $4 \times 3 = 12$ $4 \times 2 = 8$ <p>£12 and £8</p>



**Orchestra** A large group of string, woodwind, brass and percussion instruments directed by a conductor

**Conductor** Directs the orchestra, using their hands or a baton

**Key** The set of notes that a piece uses, and the note that it uses as ‘home’

**Major key** music which uses the major scale is in a major key. The major scale has a fixed pattern of where the semitones come:  
 The key of C major only uses white notes on the keyboard.



**Bar** regular groupings of beats in a piece of music, in which some are stronger than others. The most common groupings are 2, 3 or 4 beats.

**String instruments** (instruments where a vibrating string makes the sound):

- Violin** A high pitched string instrument played with a bow
- Viola** A larger (and lower) version of the violin
- Cello** The largest instrument in the same family as the violin and viola
- Double bass** A low pitched string instrument played with a bow
- Harp** A plucked string instrument with one string for each note

**Woodwind instruments** (instruments where the sound is made by a vibrating column of air):

- Piccolo** A smaller (and higher) version of the flute
- Flute** A woodwind instrument played by blowing over a hole in the mouthpiece
- Oboe** A high pitched woodwind instrument with a double reed
- Cor Anglais** A larger (and lower) version of the oboe
- Clarinet** A high pitched woodwind instrument with a single reed
- Bassoon** A low pitched woodwind instrument with a double reed

**Brass instruments** (instruments where the player uses their lips to make the air vibrate):

- Trumpet** A high pitched brass instrument which has valves
- French horn** A brass instrument with keys. Horns are often associated with hunting
- Trombone** A low pitched brass instrument with a slide
- Tuba** A low pitched brass instrument with valves

**Percussion instruments** (Instruments which are hit— or scraped or shaken — to make sound)

**Pitched percussion** instruments can play a definite note

- **Glockenspiel**
- **Timpani**
- **Xylophone**

**Unpitched percussion** instruments make a sound which isn’t a definite note

- **Bass drum**
- **Castanets**
- **Cymbals**
- **Snare drum**
- **Tambourine**
- **Tam-tam**
- **Triangle**
- **Whip**
- **Woodblock**



### Form and structure

**Question and answer phrases** a pair of two musical phrases which balance each other, one acting as a question and the other as an answer

**Drone** a continuously sounding note

**Ostinato** a repeating pattern

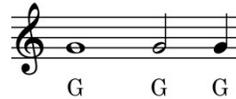
**Binary form** a structure in music with an A section followed by a contrasting B section AB

**Ternary form** a structure in music with an A section, a contrasting B section and then a return to the A Section. ABA

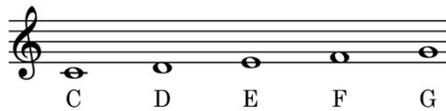
**Rondo form** a structure in music with a recurring A section separated by contrasting episodes e.g. ABACABA

### Treble clef

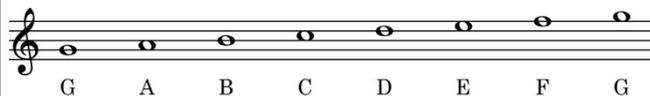
The **treble clef** sets the note G as the second line up on a musical **stave**. Any note with the note head (the round bit) covering that line is a G:



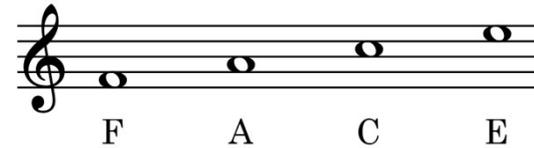
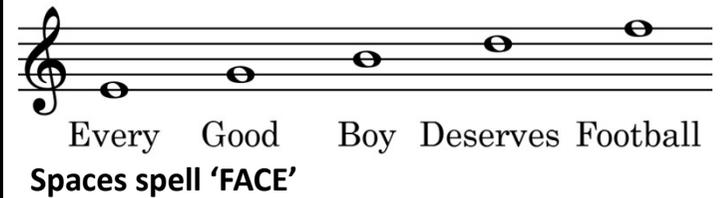
Notes are arranged in alphabetical order, using lines and spaces. It's always the note head that tells you which note it is. The first C (middle C) needs to be on a line, but there isn't one, so it gets its own (a **ledger line**).



Because we only use the letters A-G, the note above G is A, and we start again.



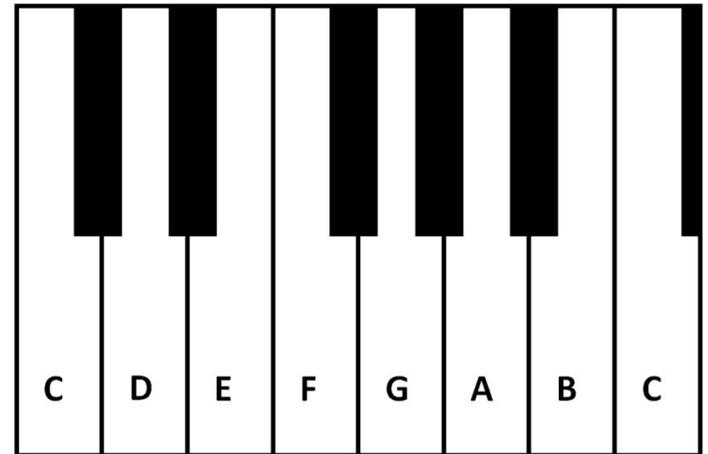
### Notes on lines—an easy way to remember



### Notes on the keyboard

The notes are arranged in alphabetical order, from low to high.

Look for the pattern of black notes. C is always the white note to the left of the group of two black keys.



Keyword	Learn	✓
Drug	A substance which has a physiological effect when ingested or otherwise introduced into the body	
Addiction	Is a very strong urge to do something that is hard to control or stop	
Peer Pressure	Feeling like you have to do something because of the people around you	
Risk	Exposure to danger, harm or loss	
Consequence	The result or effect, typically one that is unwelcome or unpleasant	
Physical changes	(during puberty) include changes in height, weight, body shape, sexual organs, body hair, skin, voice, and sweatiness.	
Emotional changes	(during puberty) make affect you desires, your mood, or your tolerance.	
Relationship	the way in which two or more people or things are connected, or the state of being connected.	
Independence	not having to depend on anyone or anything else.	
Controlling	Maintain or assert influence or authority over someone.	
Consent	is an agreement by choice made by someone with the freedom and capacity to consent.	

***Never starting is easier than giving up an addiction!***

**Drugs - signs of concern**

It can be hard to recognise when someone has a problem with drugs. Below are some common signs to be aware of:

- The drug use is no longer under control, they feel they cannot cope without it – they “need” to do it.
- There is a tolerance to the drug, they might start to need more and more of it in order to feel the effects.
- They get withdrawal symptoms when they don’t take it. For example, feeling sick, or anxious.
- They often have unexplained injuries, blackouts, confusion and difficulty remembering things.
- They feel secretive and ashamed about what they are doing.

**Where to get help:**  
Talk to your parents, your tutor or your head of year. Use the websites listed below

**Puberty & Adolescence**

Puberty is the stage in someone’s life when they develop from a child into an adult because of changes in their body that make them able to have children. These physical changes are accompanied by changes that can affect emotions as hormones change and people’s identities develop

For more information go to these websites:  
[Puberty - information and support – Teen Health 11 - 19 Service](#)

**Please remember that you are not alone.  
Everyone has either gone, is going or is about to go through puberty!**

**Qualities of healthy relationships**

**Respect:** Freedom, individuality, respecting boundaries, equality  
**Communication:** Listening, forgiveness, empathy, affection, gratitude, kind disagreement, clarity, understanding  
**Safety:** Support, responsibility, commitment, trust, honesty, consistency

‘**Consent** is agreement by **choice** made by someone with the **freedom** and **capacity** to consent.’

- the choice must be made without pressure
- the person must be able to make the choice

**Helpful websites:**

<https://www.childline.org.uk>  
[Sexual Health & Wellbeing - Brook – Fighting for healthy lives](#)  
[Honest information about drugs | FRANK \(talktofrank.com\)](#)  
[Home - With You \(wearewithyou.org.uk\)](#)



**Key Words:**

- ❑ **Telos:** An end, fulfilment, purpose, goal or aim.
- ❑ **Teleological argument:** A rational argument that attempts to prove the existence of God (a posteriori – meaning an argument based on evidence and experience).
- ❑ **Anthropic Principle:** That the earth appears to be designed with human beings in mind.
- ❑ **Analogy:** A comparison between things that have similar features, often used to help explain a complicated idea or principle
- ❑ **Order:** To arrange something in a specific pattern or sequence; a command given to make something happen.
- ❑ **Ontological:** relating to ontology, which means ‘concerned with being’ or existence (a priori – meaning an argument based on pure logic).
- ❑ **Deductive:** Moving from a set of statements to a conclusion that, if the argument is sound, is indisputable.

**William Paley’s Watch analogy:**

- ❑ If you stumbled across a stone on a heath, it would seem reasonable to suggest that this stone has just been there for ever.
- ❑ However, imagine instead that you stumble upon a pocket watch. This has several features that are significant – complexity, order, the fitting together of parts – and all for the purpose of telling the time.
- ❑ It would not be reasonable to suggest that this watch has just been there forever.
- ❑ Instead, it must have come from a designer who planned to place the parts together, in that particular order, for the reason of time-telling.

**Scientific theories for the origins of the universe:**

- ❑ **Big Bang theory:** The theory states that around 14 billion years ago all matter and energy in the universe was at a point of infinite density and temperature known as a singularity, which then expanded rapidly. Eventually stars, galaxies and planets formed. This expansion was the beginning of time and continues to this day.
- ❑ **Evolution:** The process by which different creatures are believed to have developed from earlier less complex life forms. Charles Darwin (1859 Origin of the Species) was a pioneer in evolutionary science.
- ❑ **Natural Selection:** The process by which evolution is believed to work. Organisms such as animals are continuously adapting and develop changes in the genes (genetic traits such as eye and skin colour) that, if give better chances of survival are more likely to be passed on to offspring.

**The First Cause argument:**

- ❑ Everything I’ve seen in the universe has a cause
- ❑ What is true of everything *in* the universe must be true of the universe too.
- ❑ Therefore, the universe needs a cause too
- ❑ This would be the First Cause and it would need to be outside of the universe.
- ❑ Therefore, God exists to have caused the universe.

**Ontological argument:**

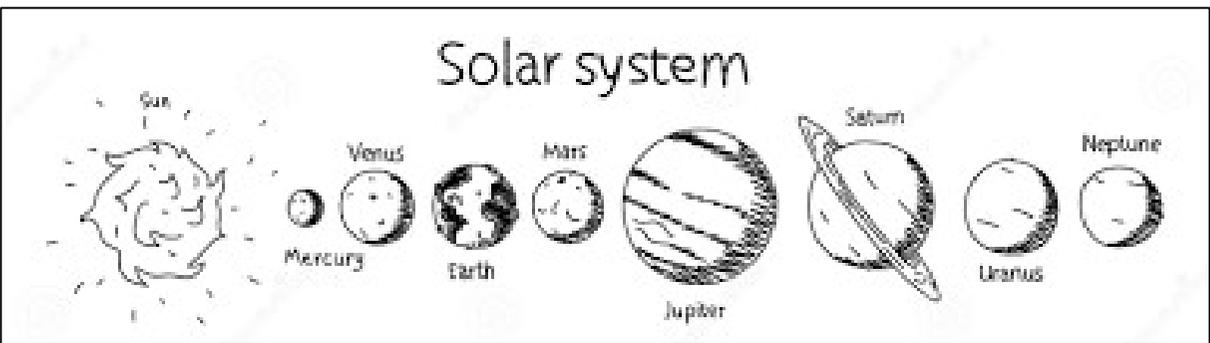
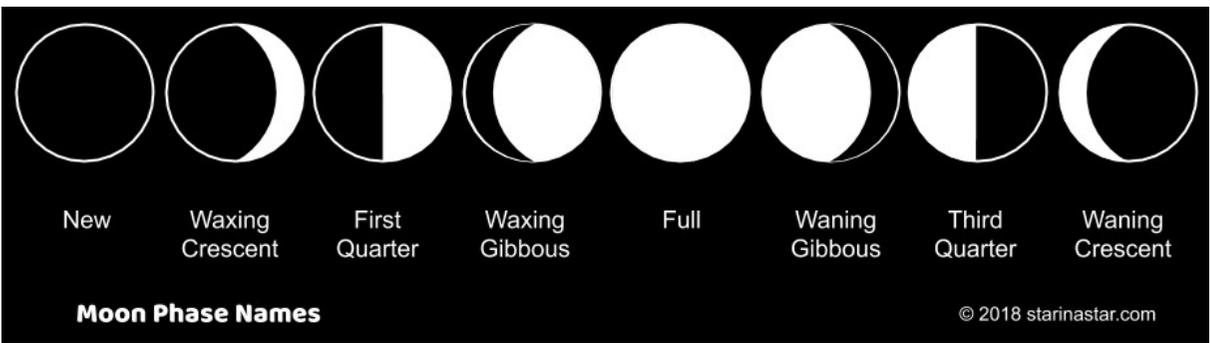
- ❑ God is the greatest being that can be thought of
- ❑ God exists in our minds as a concept
- ❑ If God existed only in our minds but lacked existence outside of our minds, we could imagine something greater that exists both in reality and in our minds
- ❑ That being would be greater than God.
- ❑ Therefore, God must exist in reality and our minds.

**The Design argument – The archer and the arrow:**

- ❑ St Thomas Aquinas: Noted that everything in existence undergoes constant changes.
- ❑ For Aquinas, non-intelligent things can only be moved by intelligent things to achieve their ‘end’s’.
- ❑ Aquinas compared this to an archer who aims the arrow towards a target.
- ❑ The arrow has the ability to hit the bullseye, but it is the archer who directs the arrow to the target.
- ❑ For Aquinas, God is the archer and he has given everything including humans telos (purpose) that he directs us towards.

## Physics topic C: Space

Keyword	Definition
Day	Planet rotating on its axis once. 1 Earth day = 24 hours
Lunar month	The moon orbiting the Earth once
Year	The planet orbiting the Sun once. 1 Earth year = 365.25 days
Seasons	4 season in one year. Changes in the temperature and daylight hours due to the tilt of the Earth
Moon	The natural satellite of Earth
Planet	An object which orbits the Sun
Sun	The star at the centre of our solar system
Asteroid	Metallic rock (usually) orbiting the Sun
Comet	Ball of ice (and dust) orbiting the Sun
Satellite	Object orbiting another object, usually a planet
Solar eclipse	When The moon blocks the sunlight from Earth
Lunar eclipse	When the Earth blocks the sunlight from the Moon
Galaxy	Large group of stars
Big Bang	Beginning of the universe



**Weight = mass x gravitational field strength**

Weight = force due to gravity, measured in N

Mass = amount of matter, measured in kg

Gravitational field strength = the attraction between an object and the centre of a planet, measured in N/kg

	Present tense verb endings			
	-AR	-ER	-IR	
I (yo)	o	o	o	
You (tu)	as	es	es	
He/she/it (el/ella)	a	e	e	
We (nosotros)	amos	emos	imos	
You all (vosotros)	áis	éis	ís	
They (ellos/ellas)	an	en	en	

Possessive adjectives			
<i>Possessive adjectives are the words for 'my', 'your', 'his', 'her', etc.</i>			
<b>My</b>	<b>mi</b> hermano	<b>mis</b> hermanos	
<b>Your</b>	<b>tu</b> hermano	<b>tus</b> hermanos	
<b>His / her</b>	<b>su</b> hermano	<b>sus</b> hermanos	

**Adjectives and agreement**

	Singular		Plural	
	Masculine	Feminine	Masculine	Feminine
<b>Ending in o/-a</b>	pequeño	pequeña	pequeños	pequeñas
<b>Ending in - e</b>	inteligente	inteligente	inteligente	inteligente
<b>Ending in a consonant</b>	azul	azul	azules	azules

Adjectives describe nouns. Their endings change to agree with the noun they describe. Adjectives fall into 3 main groups. The endings for each group work as seen above.

High-frequency words		
<b>además</b>	in addition	
<b>porque</b>	because	
<b>sin embargo</b>	however	
<b>pero</b>	but	
<b>o</b>	or	
<b>bastante</b>	quite	
<b>muy</b>	very	
<b>un poco</b>	a bit	

Question words		
<b>¿Cómo?</b>	How?	
<b>¿Dónde?</b>	Where?	
<b>¿Por qué?</b>	Why?	
<b>¿Cuándo?</b>	When?	
<b>¿Qué?</b>	What?	
<b>¿Cuál?</b>	Which?	

**Irregular verbs**

Tener	To have	
<b>tengo</b>	I have	
<b>tienes</b>	you have	
<b>tiene</b>	he/she has	
<b>tenemos</b>	we have	
<b>tenéis</b>	you all have	
<b>tienen</b>	they have	

Ser	To be (Description)	
<b>soy</b>	I am	
<b>eres</b>	you are	
<b>es</b>	he / she is	
<b>somos</b>	we are	
<b>sois</b>	you all are	
<b>son</b>	they are	

Estar	To be (Location)	
<b>estoy</b>	I am	
<b>estás</b>	you are	
<b>está</b>	he / she / it is	
<b>estamos</b>	we are	
<b>estáis</b>	you all are	
<b>están</b>	they are	

**¿Cuántas personas hay en tu familia?**

<b>En mi familia hay...</b>	In my family there is ...	
<b>mis padres</b>	my parents	
<b>mi madre</b>	my mum	
<b>mi padre</b>	my dad	
<b>mi abuelo</b>	my grandfather	
<b>mi abuela</b>	my grandmother	
<b>mi bisabuela</b>	my great-grandmother	
<b>mi tío</b>	my uncle	
<b>mi tía</b>	my aunt	
<b>mis primos</b>	my cousins	
<b>su hermano</b>	his/her brother	
<b>sus hermanos</b>	his/her brothers	

**Los números 20-100**

<b>veinte</b>	20	
<b>treinta</b>	30	
<b>cuarenta</b>	40	
<b>cincuenta</b>	50	
<b>sesenta</b>	60	
<b>setenta</b>	70	
<b>ochenta</b>	80	
<b>noventa</b>	90	
<b>cien</b>	100	
<b>treinta y uno</b>	31	

**¿Cómo es?**

<b>es...</b>	he / she is	
<b>no es muy ...</b>	he / she isn't very	
<b>alto/a</b>	tall	
<b>bajo/a</b>	short	
<b>delgado/a</b>	slim	
<b>gordo/a</b>	fat	
<b>guapo/a</b>	good-looking	
<b>inteligente</b>	intelligent	
<b>joven</b>	young	
<b>viejo/a</b>	old	
<b>tiene pecas</b>	he has freckles	
<b>tiene barba</b>	he has a beard	
<b>mi mejor amigo</b>	my best friend	
<b>su mejor amigo</b>	his / her best friend	

**¿Cómo es tu casa o tu piso?**

<b>Vivo en ...</b>	I live in ...	
<b>una casa</b>	a house	
<b>un piso</b>	a flat	
<b>antiguo/a</b>	old	
<b>bonito/a</b>	nice	
<b>cómodo/a</b>	comfortable	
<b>moderno/a</b>	modern	
<b>pequeño/a</b>	small	

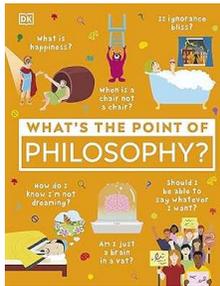
**¿Cómo tienes el pelo ?**

<b>Tengo el pelo ...</b>	I have ... hair	
<b>castaño</b>	brown	
<b>negro</b>	black	
<b>rubio</b>	blond	
<b>liso</b>	straight	
<b>rizado</b>	curly	
<b>largo</b>	long	
<b>corto</b>	short	
<b>soy pelirrojo/a</b>	I'm a redhead	
<b>soy calvo</b>	I am bald	
<b>Tengo los ojos azules / marrones</b>	I have blue / brown eyes	

**¿Dónde está?**

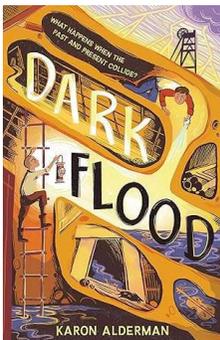
<b>Está en ...</b>	It is in ...	
<b>el campo</b>	the countryside	
<b>la costa</b>	the coast	
<b>una ciudad</b>	a city	
<b>el desierto</b>	the desert	
<b>la montaña</b>	the mountains	
<b>un pueblo</b>	a town / village	
<b>el norte</b>	the north	
<b>el sur</b>	the south	
<b>el este</b>	the east	
<b>el oeste</b>	the west	





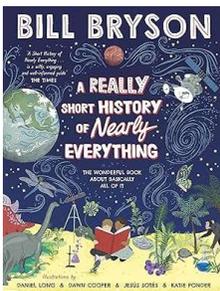
### What's the Point of Philosophy

Why is philosophy important? What's so great about it? Take a leap into the world of philosophy and discover questions about life, the universe, and human behaviour that great thinkers have pondered throughout history, and which are still being asked today.



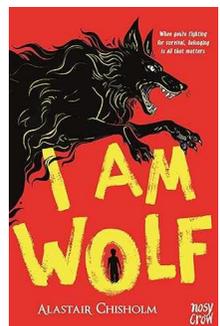
### Dark Flood by Karon Alderman

Everyone knows the history of the famous Heaton Main coal mine accident - but that's never interested Archie. Why would he bother about the past when he's got more than enough to worry about right now? But when timelines collide during an unexpected storm, Archie is pulled more than two-hundred years into the past, and into an experience that will change his life forever. . . If he can make it back.



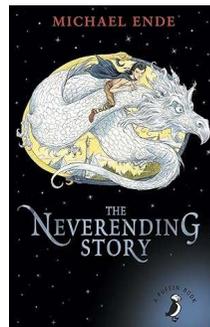
### A Really Short History of Nearly Everything by Bill Bryson

This title covers the wonder and mysteries of time and space, the crackpot theories which held sway for far too long, the discoveries which advanced whole areas of science when people were looking for something else, and the fact that, somehow, the universe exists and, against all odds, life came to be on this planet we call home.



### I am Wolf by Alastair Chisholm

Coll belongs to Wolf. He lives with his crew on a Construct, a huge technological "creature" driven by the crew's combined willpower. Together they roam their world, fighting other Constructs and absorbing them into their own. But when a new and dangerous Construct attacks them, Coll is thrown clear from Wolf and left behind. Now he must survive life on ground and get back to his crew.



### The Neverending Story by Michael Ende

Bastian is nobody's idea of a hero, least of all his own. Through the pages of an old book he discovers a mysterious magical world - a world of dragons, monsters, witches and giants. A world that is doomed unless a human can save it. Can Bastian succeed in battling terrible foes and find the strength he needs to give the Empress a new name?



### Saving Celeste by Timothée de Fombelle

The day that Celeste comes into the boy's classroom changes everything for him. He can't stop thinking about her, and when she suddenly disappears in the smoke-filled high-rise city, he is determined to track her down. He finds her in the most polluted part of the city, sick and weak. As sick and weak as the planet itself. Can he save Celeste and, in doing so, save the world?



### City of Rust by Gemma Fowler

Railey dreams of winning the drone races with her bio-robotic gecko friend, Atti. But when a bounty hunter crashes their biggest race yet, the pair are forced to flee to the feared Junker clans who mine the rubbish orbiting the Earth. Rescued by a couple of Junker kids, they discover a danger bigger than anything they'd imagined...



### Politics for Beginners by Alex Firth, Rosie Hore & Louie Stowell

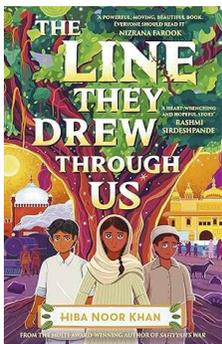
What is an election? Who gets to be Prime Minister or President? What does immigration mean? This essential introduction to politics answers all these questions and many more. Topics debated include capitalism, socialism and nationalism, terrorism, voting systems, free speech and human rights.





### **Murder at Twilight** by Fleur Hitchcock.

When Viv has a fight with Noah, she doesn't think it'll be the last time she sees him. But when she gets back from school, he's nowhere to be found and there are police cars everywhere. Viv sets off to look for him, and when she finds him, she realises that a dangerous story is unfolding around them...



### **The Line They Drew Through Us** by Hiba Noor Khan

Three best friends are born on the same day under miraculous circumstances. But by their twelfth birthday, Jahan, Ravi and Lakshmi's lives are about to change forever. The British announce Indian independence and draw lines of Partition that tear apart the country, and the friends. One of them flees, one of them disappears, and the other is left wondering, could a miracle bring them back together?



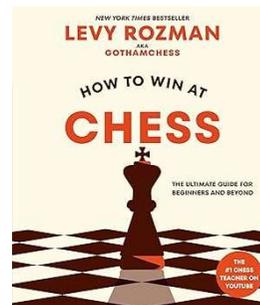
### **Dungeon Club: Roll Call** by Molly Knox Ostertag & Xanthe Bouma

Middle school is a dungeon ... At least, that's how Jess sees it. Luckily, she and her best friend Olivia know how to escape, playing the fantasy roleplaying game, *Dungeons & Dragons*. But when Olivia wants to add new players to their group, Jess finds herself struggling to share their game. Will their epic campaign withstand all this change?



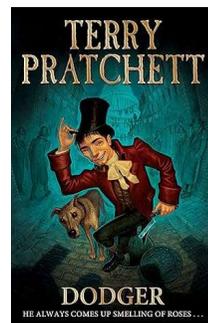
### **Pigeon Post** by Arthur Ransome

Reunited for the summer, the Swallows and Amazons with Dick and Dorothea launch an expedition to find the lost gold mine of the high hills above the lake, but the mining camp runs into all sorts of trouble.



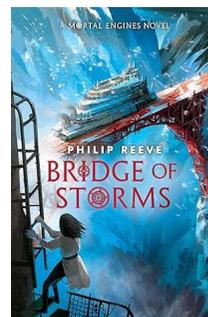
### **How to Win at Chess** by Levy Rozman

How to Win at Chess teaches you everything you need to know about the game, including all the important moves and strategies to start off strong and keep you thinking several steps ahead.



### **Dodger** by Terry Pratchett

Dodger is a sewer scavenger living in the squalor of Dickensian London. Everyone who is nobody knows Dodger. Anyone who is anybody doesn't. But when he rescues a young girl from a beating, suddenly everybody wants to know him. And Dodger's tale of skulduggery, dark plans and even darker deeds begins.



### **Bridge of Storms** by Philip Reeve

Brave fighter Tamzin Pook and her oddball gang of mercenaries are caught up in another adventure across the Hunting Grounds. They find themselves unexpectedly chased by a gang of bloodthirsty raiders intent on their capture. Their epic attempt to escape leads to a showdown on a majestic bridge during a ferocious ice storm - can Tamzin and her friends escape the danger?



### **Space** by Carole Stott et al.

Take an incredible journey through Space, starting from a launchpad on Earth, to the Solar System, the Milky Way and beyond, and finally to the very edges of the visible Universe.



