Year 8
Cycle 3
Assessments
Revision
Support

In this booklet, you will find **tips for parents**, **knowledge organisers** and **'what I need to know'** checklists for each subject.

Use these to support your preparation for assessments. These begin on **Monday 10th June 2019** and will take place in lesson time.

Five simple revision tips for parents

Exam season is fast approaching and you're probably feeling the pressure of trying to help your child prepare. We've compiled some revision tips to help you banish the stress of exam prep.

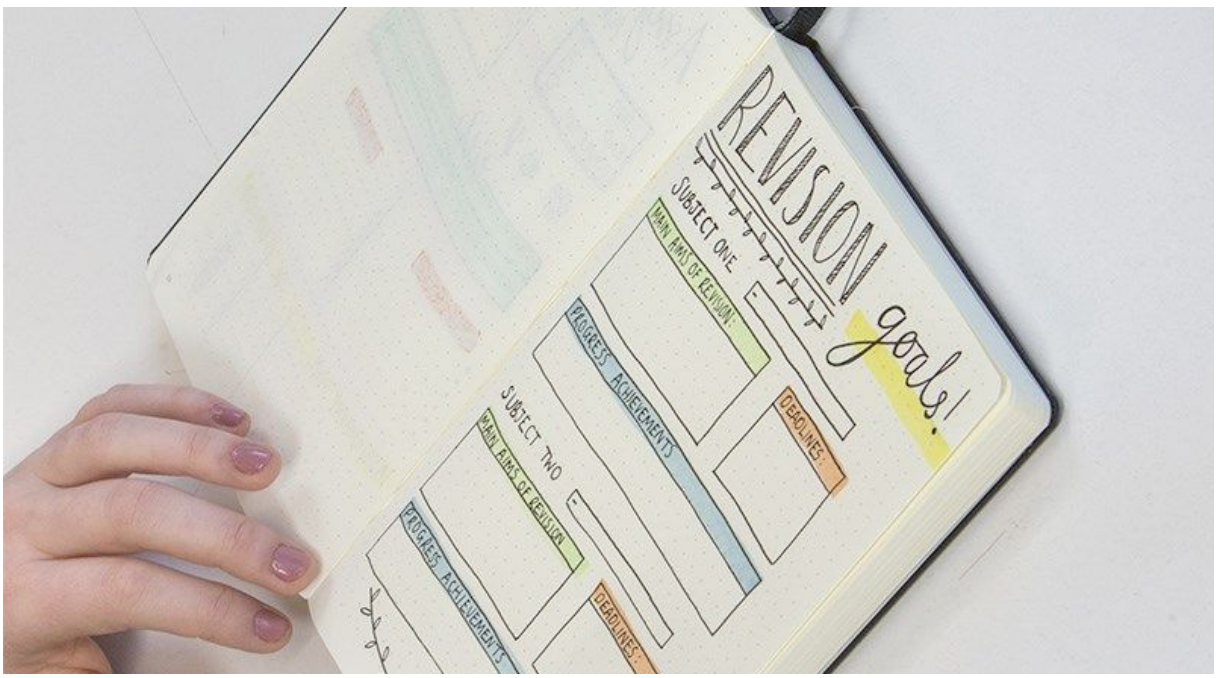
1- Establish effective study habits

Help your child create a study plan early on (this will make you aware of their exam dates too), making sure it is realistic and achievable to avoid de-motivation. Planning in advance will also help avoid ineffective cramming sessions further down the line. Encourage them to use a weekly planner so they are accountable for their work. Don't micro-manage. Provide extra support if they need or ask for it.

2- Take a break!

Don't try and force them to work for hours at a time. Their concentration span is limited and it will hinder the success of their revision if they are trying to do mammoth sessions. Suggest the use of a timer as well as regularly changing revision subject, to avoid getting stuck in a rut. Check out our Pomodoro video as it's a really simple way for students to manage their time effectively:

https://youtu.be/RlidoiSrpB0



Parent Tips

3- Practise past papers

Past papers encourage your child to think contextually, rather than just trying to memorise an entire text book. You can help by creating a realistic, timed, exam scenario when they are completing practice papers .This will encourage them to get used to working under pressure and develop exam strategies, helping them feel less anxious on the day.

4- Watch for signs of frustration

It's important that your child is in the right frame of mind for revising. If they are struggling over something in particular, it may be best to park it for the night, reassess the next day and break it down into manageable chunks. Look out for stress and worry over exams that have been and gone. Be sure to ask them how their exam went, then shift their focus to what's coming up next and encourage them to say in a positive mind-set. It is important to remember the role of a healthy diet, plenty of water and exercise in keeping a healthy outlook on exams.

5- Ask for help

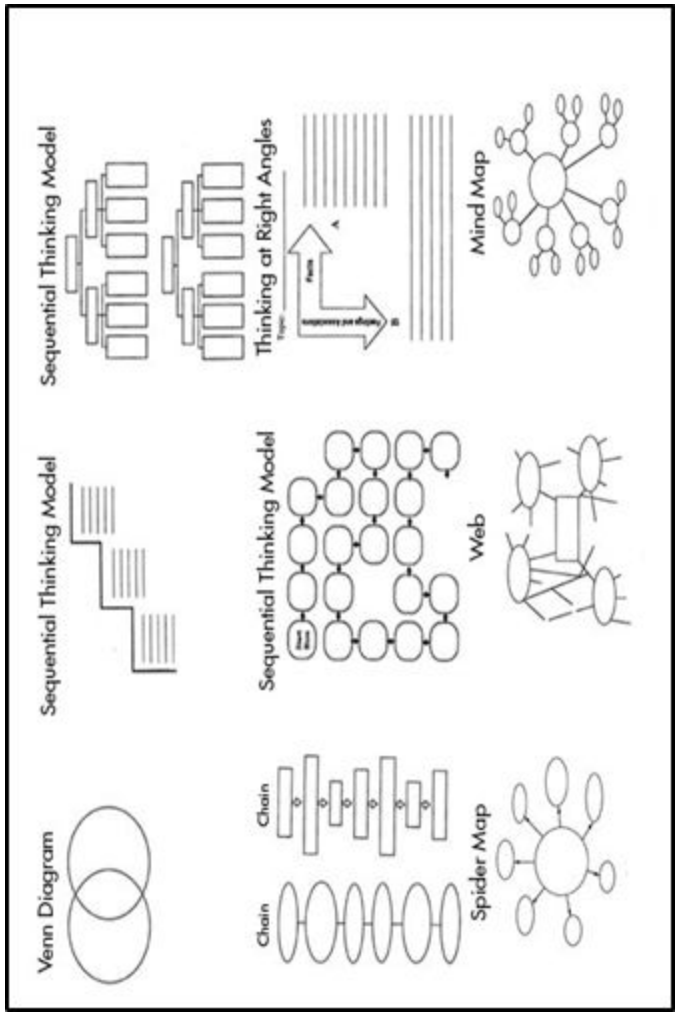
If you are working closely with your child to help them study, but feel the work is beyond your own skill set, it may be worth seeing if there is another family member who can assist. Or, if you feel this may be a long term issue and your child needs extra support, it may be worth hiring a private tutor to help improve your child's understanding of the subject. Alternatively there is lots of free support online, offering revision help for a huge range of subjects. Don't forget- teachers are just at the end of a phonecall and are ALWAYS happy to help!

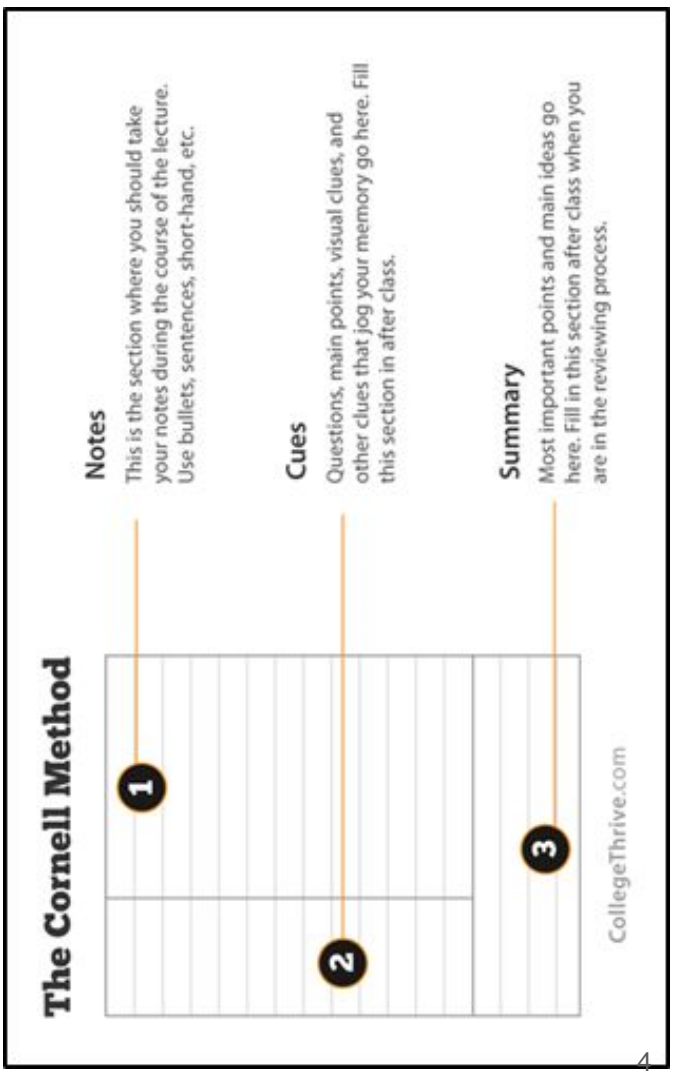
TOP TIPS

Use these knowledge organisers to revise for your assessment. Try:

- practice questions;
- getting someone to quiz you;
- making flashcards to use when quizzing;
- graphic organisers (see right);
- the Cornell method (see right);
- talk for a minute on the given term/topic – no pauses, no hesitations. Slips or repetitions or micro pauses lose a ‘life’ – three strikes and you’re out!

- Ask someone at home to use the ‘what I need to know’ checklists to test you on what you have learned.





Weekly Revision Timetable

Name: _____

Day	9:00 – 10:00	10:00 – 11:00	11:00 – 12:00	12:00 – 1:00	1:00 – 2:00	2:00 – 3:00	3:00 – 4:00	4:00- 5:00	5:00 – 6:00	6:00 – 7:00	7:00 – 8:00	8:00 – 9:00	9:00 – 10:00
Monday													
Tuesday													
Wednesday													
Thursday													
Friday													
Saturday													
Sunday													

School Day

***Remember: make sure you give yourself breaks and allow time to relax and do the things your want to do and enjoy doing.*

Year 8

English

Year 8 English Revision

What I Must Know			
I can spell the key vocabulary and use vocabulary in context.			
I identify character and list their character traits.			
I understand the context of the novella.			
I can recall key quotations from the text.			
I can plot key events from the novella in chronological order.			
I can identify the themes of the novella and understand their importance.			

Year 8 Knowledge Oragniser
Of Mice and Men

"Knowledge is of no value unless you put it into practice." *Anton Chekhov*

Key Context

- John Steinbeck was born in Salinas, California in 1902. Although his family was wealthy he was interested in the lives of farm workers and spent time working with then. He used his experiences as material for his writing.
- On October 29th 1929, millions of dollars were wiped out in The Wall Street Crash. It led to people losing their life savings and a third of America's population being unemployed.
- A series of droughts in southern mid-western states like Kansas, Oklahoma and Texas led to failed harvests and dried up the land. Farmers were forced to move off their land; they couldn't repay the bank loans that helped them buy the land so had to sell to pay their debts.
- Racism/sexism were common especially in the Southern States due to economic climate and the history of slavery.

Linking Context and Theme

- Steinbeck encourages us to empathise with **the plight of the migrant worker** during the **Great Depression**.
- The American Dream is shown to be impossible: **reality** defeats **idealism**
- The novella explores the human need for **companionship** and the tragedy of **loneliness**.
- Steinbeck reveals the predatory nature of mankind; the **powerless** are targeted by the **powerful**.
- Steinbeck explores the tension between the inevitability of fate and the **fragility of human dreams.**
- Steinbeck explores the contrasts **of Nature Vs Man.**
- The novella is indictment of the way society treats the dispossessed.

Key Characters

George	Protagonist – frustrated, devoted, a dreamer
Lennie	George's friend – childlike, unassuming, physically powerful
Candy	Unloved, an outcast, ageing
Curley	Insecure, unmerciful, jealous
Curley's wife	A seductive temptress, objectified, lonely, nameless
Crooks	Cynical, proud, isolated
Slim	Compassionate, wise, respected
Carlson	Heartless, insensitive

Key Quotations

- **George** – C1: "Guys like us…that work on ranches, are the loneliest guys in the world. They got no family. They don't belong no place."
- **Lennie** –C1: "Slowly, like a terrier who does not want to bring a ball to its master, Lennie approached, drew back, approached again."
- **Slim** – C2: "Not many guys travel around together,' he mused. 'I don't know why. Maybe ever' body in the whole damned world is scared of each other."
- **Candy** – C3: "I ought to have shot that dog myself, George. I shouldn't of ought to let no stranger shoot my dog."
- **Crooks** – C4: "Just like heaven. Ever' body wants a little piece lan'. I read plenty of books out here. Nobody gets to heaven. Nobody gets land."
- **Curley's wife** – C5: "And the meanness and the planning and the discontent and the ache for attention were all gone from her face. She was very pretty and simple, and her face was sweet and young."
- **Chapter 6** – "A silent head and beak lanced down and plucked it out by the head, and the beak swallowed the little snake while its tail waved frantically."

Key Vocabulary/Spellings		
Word	**Definition**	**Example**
Isolation	Being alone/apart from others.	Curley's wife feels a sense of isolation as her husband does not like her talking to others on the ranch.
Racism	Prejudice, discrimination or antagonism directed towards someone based on the belief that one's own race is superior.	Crooks is subjected to racism. He believed people didn't listen to him as he was "just a nigger talking."
Segregation	The action or state of setting someone or something away from others.	Crooks feels separated from the other workers. "I ain't wanted in the bunk house."
Migrant	A person who moves from one place to another in order to find work or better living conditions.	George and Lennie are migrant workers. They move from place to place to find work. Usually, migrants would travel alone.
Hierarchy	A system in which members of an organisation or society are ranked according to status or authority.	Curley's father is at the top of the hierarchy as he is the owner of the ranch.
Loneliness	Sadness because one has no friends or company.	Curley's wife feels a sense of loneliness as she is not allowed to have friends and has no female company on the ranch.
American Dream	The ideal by which equality of opportunity is available to any American, allowing the highest aspirations and goals to be achieved.	George and Lennie's dream of owning a farm and living off the "fatta the lan" symbolizes the this dream.
Great Depression	A long and severe recession in an economy.	In October 1929, millions of dollars were wiped out in the wall street crash. This led to the Great Depression, which crippled the country between 1930 and 1936.
The Dust Bowl	A large area of land were vegetation has been lost and soil reduced to dust and eroded, because of a drought.	The dustbowl was a key reason why workers had to move so regularly due to land being dry and not being able to farm there.

Key Themes

Friendship	Injustice
Loneliness	Prejudice
Hopes and dreams	Power and powerless
Man Vs The Natural world	Brutality and dignity

Plot

Plot
It is a parable about what it means to be human. Steinbeck's story of George and Lenni's ambition of owning their own ranch, and the obstacles that stand in the way of that ambition, reveal the nature of dreams, dignity, loneliness, and sacrifice.

Protagonist
The protagonist of the story is George. He is the kind-hearted ranch hand who is concerned about his friend Lennie and watches out for him.

Rise in Action
George trying to care for the handicapped Lennie. Lennie has a giant's body and a child's mind. This leads him into trouble on many occasions. When Lennie accidentally kills Curley's wife he unknowingly kills the dream of owning a farm with George. Their American Dream is over.

Climax
The climax occurs when Lennie accidentally kills Curley's wife. George knows that he can no longer save Lennie, as Curley will want revenge.

Resolution
Of Mice and Men ends in tragedy. George feels compelled to mercifully kill his friend and companion, Lennie, in order to save him from a brutal death. The death of Lennie also marks the death of the beautiful dream they have been nurturing.

Year 8

Maths

Year 8 Maths Revision

What I need to know			
Inequalities: ● Represent inequalities on a number line. ● Find integer solutions to an inequality. ● Solve linear inequalities.			
Pie Charts ● Draw and interpret pie charts.			
Shapes: ● Calculate the perimeter of 2D shapes, including compound shapes and circles. ● Calculate the area of 2D shapes, including compound shapes and circles.			
Measures and Units: ● Change freely between standard units of time, length, area and volume. ● Convert between cm^2 and m^2. ● Work with compound measures such as speed and density.			
Ratio: ● Simplify ratios ● Use equivalent ratios to scale quantities up or down. ● Divide a given quantity into two or more parts. ● Use a known part of a ratio to find the other parts of the ratio. ● Write ratios as fractions.			
Problem Solving with Ratios: ● Use ratios to solve problems involving recipes, best buy questions and exchange rates			

Inequalities – Key Symbols

In maths, an **inequality** sign shows the relationship between the **sizes** of two **values**. The symbols show whether the values are equal to each other, or whether one of the values is bigger (or smaller) than the other.

$=$	Equals
$\neq$	Not equals
$<$	Less than
$\leq$	Less than or equal to
$>$	Greater than
$\geq$	Greater than or equal to

$x < 5$ means "x is less than 5"
x can be any number smaller than 5, but it cannot be equal to 5

$x \leq \frac{1}{2}$ means "x is less than or equal to $^1/_2$"
x can be any number smaller than $^1/_2$, or it could be equal to $^1/_2$

$x > -1$ means "x is greater than –1"
x can be any number greater than –1, but it cannot be equal to –1

Pie Charts

A **pie chart** is a **circle** that shows the different categories for a set of data. The size of each **sector** shows the relative size (or **proportion**) of each category when compared to the overall data set.

The table shows the tracks on a music CD

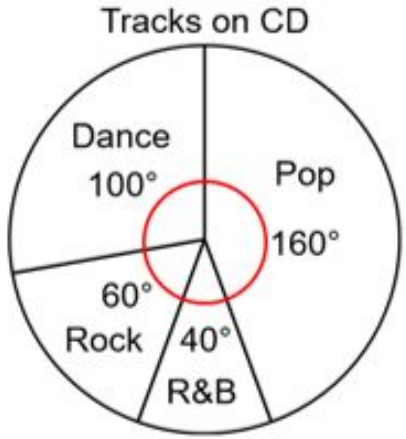
Track	Freq	Working out	Angle
Pop	8	8 x 20°	160°
R&B	2	2 x 20°	40°
Rock	3	3 x 20°	60°
Dance	5	5 x 20°	100°
Total	18	360 ÷ 18 = 20°	360°

Step 1: Find the total frequency.

Step 2: Divide 360° by the total frequency – this gives you the number of degrees per item.

Step 3: Multiply each frequency by the degrees per item – this gives you the size of each sector.

Step 4: Plot the sectors on the pie chart – make sure to label each section with the name of that category.



$$\text{Fraction of the total} = \frac{\text{Angle of Category}}{360°}$$

Example: $\text{Fraction of Rock tracks} = \frac{60°}{360°} = \frac{1}{6}$

$$\text{Frequency of category} = \frac{\text{Angle of Category}}{360°} \times \text{Total Frequency}$$

Example: $\text{Number of Pop tracks} = \frac{160°}{360°} \times 18 = 8 \text{ tracks}$

Solving Inequalities

An **inequality** consists of two expressions that are linked together by an **inequality sign** ($<$, $\leq$, $>$ or $\geq$).

To **solve** an inequality, you follow the same steps that you would use for solving an equation.

- Always do the same thing to both sides of the inequality.
- To get rid of something, do the opposite operation:
  - Opposite of + is –
  - Opposite of x is ÷

Example 1

Solve: $2x - 3 \geq 7$

$(+3)\ (+3)$

$2x \geq 10$

$(\div 2)\ (\div 2)$

$x \geq 5$

$2x$ means "$2 \times x$"

Example 2

Solve: $\frac{x}{3} + 2 < 7$

Keep the same inequality sign on each line

$(-2)\ (-2)$

Fraction bar is the same as a divide sign

$\frac{x}{3} < 5$

$(x3)\ (x3)$

$x < 15$

The **integer solutions** of an inequality are just the **whole numbers** that could be used instead of the letter in the inequality.

Example 3: Write down the integers that satisfy the inequality

$-1 \leq x < 4$

$-1 \leq x$ means that x is greater than or equal to 1

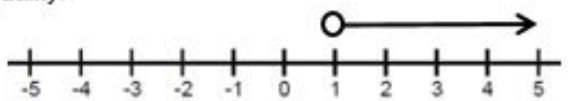
$x < 4$ means that x is less than 4, but cannot be equal to 4

Answer: $-1, 0, 1, 2, 3$ ← Write out the values as a list

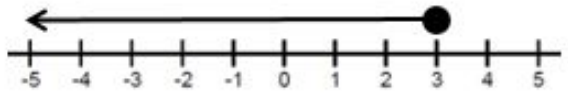
Inequalities on a Number Line

Lines and circles are used to show the numbers that are in the range of the inequality.

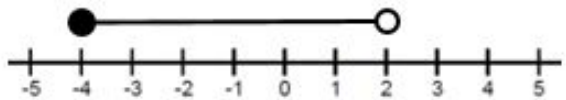
○	Open circle	Used for **strict** inequalities < and >
●	Closed circle	Used for **inclusive** inequalities ≤ and ≥



$x > 1$



$x \leq 3$

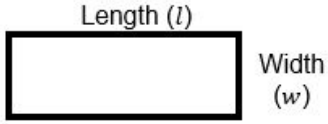


$-4 \leq x < 2$

Perimeter and Area

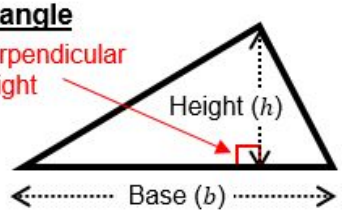
Perimeter is the **distance** around the **outside edge** of a shape.
Area is the space **inside** the perimeter of the shape. It is measured in **square units**.

Rectangle



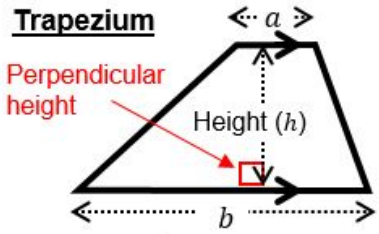
$$Perimeter = 2l + 2w$$
$$Area = l \times w$$

Triangle



$$Area = \frac{1}{2} \times b \times h$$

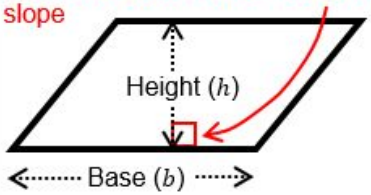
Trapezium



$$Area = \frac{1}{2} \times (a + b) \times h$$

Parallelogram

Must be perpendicular height, not slope

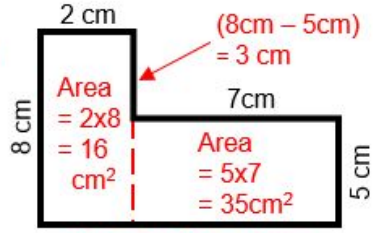


$$Area = b \times h$$

Compound Shapes

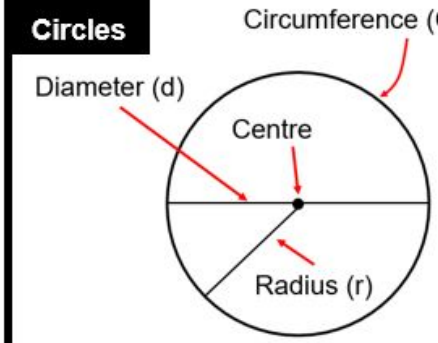
Perimeter: Work out the values of any missing sides, then go round the edge of the shape, adding together all the sides.

Area: Split the shape into basic shapes like rectangles and triangles. Work out the area of each basic shape separately, then add the parts together.



$$P = 2 + 3 + 7 + 5 + 9 + 8 = 34cm$$
$$A = 16 + 35 = 51cm^2$$

Circles



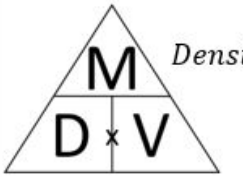
$$Circumference = 2 \times \pi \times r$$
or
$$Circumference = \pi \times d$$

$$Area\ of\ circle = \pi \times r^2$$
$$Area\ of\ semi\ circle = \frac{\pi \times r^2}{2}$$

Compound Measures

A compound measure is a quantity that is made up of two or more other measures. The formula tells you how to calculate the compound measure from the other values.

$$Speed = \frac{Distance}{Time} \qquad Time = \frac{Distance}{Speed}$$
$$Distance = Speed \times Time$$



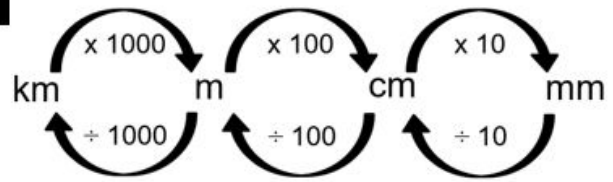
$$Density = \frac{Mass}{Volume} \qquad Volume = \frac{Mass}{Density}$$
$$Mass = Density \times Volume$$

How to use the formula triangle:
1) Use your finger to cover up the thing that you want to find, and write down the formula that is shown
2) Put the values for the other two things into the formula, and calculate the missing value.

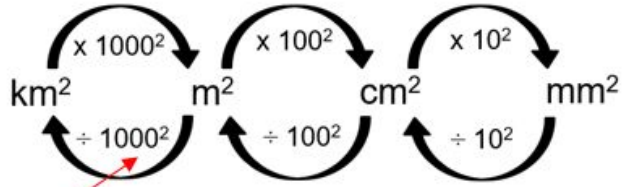
Converting Units and Measures

A **conversion factor** tells you how many times bigger or smaller one thing is compared to another. It lets you change between different units of measure.

Lengths

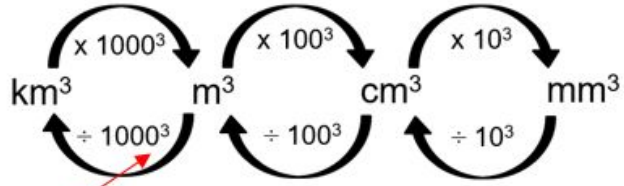


Areas

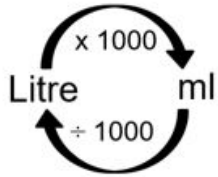


Area is measured in **square units**, so the conversion factors have been squared too.

Volumes



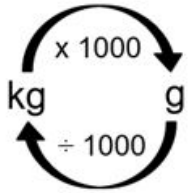
Volume is measured in **cubic units**, so the conversion factors have been cubed too.



1 cm³ = 1 ml

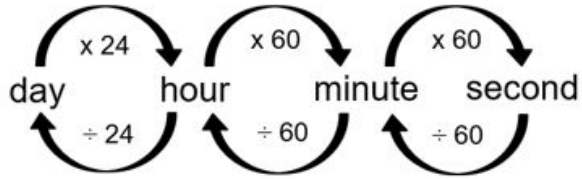
1000 cm³ = 1 litre

Mass



1 tonne = 1000 kg

Time



Equivalent Ratios

Ratios tell you how much there is of one item compared to another. They are usually written in the form **x : y** where x and y are the quantities of the items.

Black squares : White squares = 3 : 2

Scaling Up Ratios:

Multiply all the numbers in the ratio by the **same thing**.

Example: A bag contains red and yellow sweets in the ratio 4 : 3. If there are 24 red sweets in the bag, how many yellow sweets are there?

scale up × 6

Red : Yellow

4 : 3

24 : 18 (× 6)

18 yellow sweets

Simplifying Ratios:

Divide all the numbers in the ratio by the **same thing**

15 : 35 (÷ 5)

3 : 7 (÷ 5)

Keep going until the numbers cannot be divided any further.

80 : 32 (÷ 8)

10 : 4 (÷ 2)

5 : 2

Decimals:

Multiply by 10, 100, 1000 etc. (to get rid of the decimals), then **simplify the ratio** if needed.

Example: Write the ratio 2.8 : 6.3 in its simplest terms.

2.8 : 6.3 (× 10)

28 : 63 (÷ 7)

4 : 9

Mixed Units:

Convert to the smaller unit, then **simplify** if needed.

Example: Reduce the ratio 15mm : 3.3 cm to its simplest form

15 mm : 3.3 cm

(×10) ↓ cm to mm

15 mm : 33 mm

15 : 33 (÷ 3)

5 : 11

Form 1 : n or n : 1

Divide both sides by the number that is on the side where you want the "1" to be.

Example: Write 4 : 9 in the form 1 : n

4 : 9 (÷ 4)

1 : 2.25

Example: Write 7 : 2 in the form n : 1

7 : 2 (÷ 2)

3.5 : 1

Ratios and Fractions

To write one part of a ratio as a **fraction of the total**, put the part that you want over the total of all the parts of the ratio.

Example:

The ratio of oranges to apples in a box is 7 : 4

Fraction that is oranges $= \frac{7}{11}$

Fraction that is apples $= \frac{4}{11}$

Total parts = 7 + 4 = 11

Dividing in a Given Ratio

For these questions, the **total amount** is split into parts in a **certain ratio**

Example: Share £48 in the ratio 5 : 3

Step 1: Add up the parts — 5 + 3 = 8 parts in total

Step 2: Divide to find one part — £48 ÷ 8 = £6 per part

Step 3: Multiply to find the values for each part of the ratio

5 : 3 (× £6)

£30 : £18

Sharing in Part of a Ratio

If the **difference** between the parts of the ratio is known, then you can find the value of each part of the ratio.

Example:

Amy and Ben share some money in the ratio 7 : 10.
Ben gets £12 more than Amy.
How much money does each person get?

Step 1: Subtract the parts — 10 – 7 = 3 parts difference

Step 2: Divide to find one part — £12 ÷ 3 = £4 per part

Step 3: Multiply to find the values for each part of the ratio

7 : 10 (× £4)

£28 : £40

Best Buys

These questions need you to work out which item is **best value for money**

Method 1 – Divide by the **price in pence** (to get the **amount per penny**), then choose the **biggest answer**

Example: Boxes of cornflakes come in two different sizes: 500g for £2.20 and 900g for £3.75. Which is better value for money?

500g box — 500g ÷ 220p = **2.27g per penny**

900g box — 900g ÷ 375p = **2.4g per penny**

This gives the most cornflakes per penny, so the 900g box is better value for money

Method 2 – Divide by the **amount being bought** (to get the **cost per unit**), then choose the **smallest answer**

Example: A pack of 3 toilet rolls costs £1.29 and a pack of 8 toilet rolls costs £3.76. Which pack is better value?

Pack of 3 toilet rolls
£1.29 ÷ 3 = **43p per roll**

Pack of 8 toilet rolls
£3.76 ÷ 8 = **47p per roll**

This is the lowest price per unit, so the 3-pack is better value for money.

Recipes

Divide to find the quantities for **one person**, then **multiply** for the new number of people.

Example: Use the ingredients for 12 flapjacks to work out the amounts needed for 5 and 20 flapjacks

	Number of Flapjacks			
Ingredients	**12**	**1**	**5**	**20**
Oats	180 g	15 g	75 g	300 g
Butter	75 g	6.25 g	31.25 g	125 g
Syrup	36 ml	3 ml	15 ml	60 ml
Sugar	42 g	3.5 g	17.5 g	70 g

÷ 12 | × 5 | × 4

Exchange Rates

Set the **exchange rate** as a ratio, then scale it up or down by multiplying (or dividing) all the numbers in the ratio by the same thing

Example 1: If £1 = $1.32, convert £50 into US dollars

£ : $

1 : 1.32 (×50)

£50 : $66

Example 2: If £1 = $1.32, convert $198 into UK pounds

£ : $

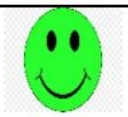
1 : 1.32 (× 198/1.32)

£150 : $198 (× 198/1.32)

Year 8

Science

Year 8 Science Revision

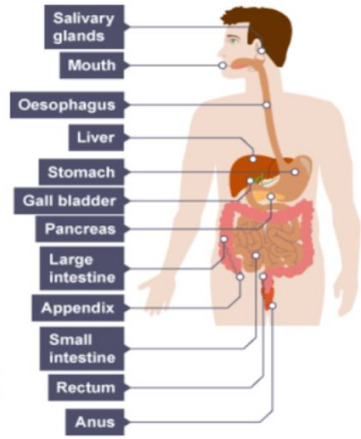
What I must know Biology:			
Describe: Graphs showing limiting factors of photosynthesis.			
Identify: Mineral deficiencies in plants.			
Explain: The role of the stomata.			
Define: Photosynthesis.			
Calculate: Rates of photosynthesis			
Label: A cross-section of a leaf's structure.			
Explain: Adaptations in plants and animals			
Explain: Inheritance and hereditary diseases			
Define: A mutation			
Label: The digestive system			
What I must know **Chemistry:**			
Describe: Energy level diagrams.			
Identify: Renewable and Non-renewable fuels.			
Explain: Thermal decomposition.			
Define: Chemical reactants and products.			
Define: Exothermic and Endothermic.			
Label: Balanced symbol equations.			
Label: Energy level diagrams.			
State: What is meant by conservation of mass.			
Identify: The products of combustion			
What I must know **Physics:**			
Describe: Three types of energy transfer- Conduction, Convection and Radiation.			
Identify: Contact and non-contact forces.			
Explain: Drag and friction.			
Define: Equilibrium.			
Label: Force diagrams.			

There are 7 major food groups, a balanced diet will contain the correct amounts of all of these for the person's needs, e.g. someone who does a lot of exercise will need a lot more carbohydrate than someone who does not. The seven food groups are summarised below:

Food Group	Example	Function
Protein	Fish, meat, dairy	For growth and repair.
Fat	Butter, oils, nuts	To provide energy. Fat provides a long term store of energy. It also provides insulation for the body.
Carbohydrate	Bread, pasta, sugar	To provide energy.
Fibre	Vegetables, Bran	To help food move through the gut.
Minerals	Dairy (calcium)	Required in small amounts to remain healthy, for example calcium is crucial for healthy teeth and bones.
Vitamins	Oranges (vitamin C), Carrots (vitamin A)	Required in small amounts to remain healthy, for example vitamin D is needed to keep teeth and bones healthy.
Water	Water, fruit juice, milk	Needed to form the cytoplasm of the cells and other fluids.

Key Terms	Definitions
Kilojoules (kJ)	A unit used to measure energy in foods
Deficiency Disease	A disease caused by the lack of a nutrient

Food is digested in the digestive system, this is an organ system. You should be able to name all parts of diagram below:

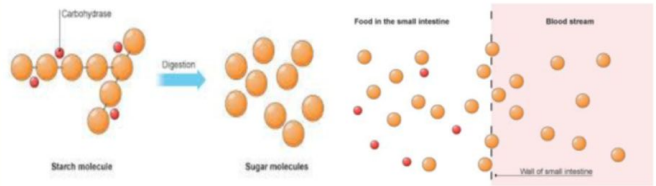


- The mouth has teeth that mechanically digest the food, it also has a salivary gland that releases enzymes to break the food down.
- The oesophagus is a muscular tube that pushes the food into the stomach
- The stomach churns the food up, while also adding acid and enzymes to break the food down.
- In the small intestine, food is broken down further and is absorbed thorough the walls of the intestine into the blood stream.
- The large intestine absorbs any remaining water
- Finally the food passes through the anus as faeces

Key Terms	Definitions
Enzymes	Protein molecules that speed up chemical reactions
Digestive System	The organ system that breaks down food into small molecules
Mechanical Digestion	When large pieces of food are broken down into smaller ones (e.g. by chewing)
Chemical Digestion	When food is broken down into small soluble chemicals, enzymes help with this

Enzymes

Enzymes help to break down larger food molecules into smaller ones, so that they can be absorbed through the walls of our small intestines, into our blood stream.
Proteins, carbohydrates and fats each have their own enzyme that breaks them down.



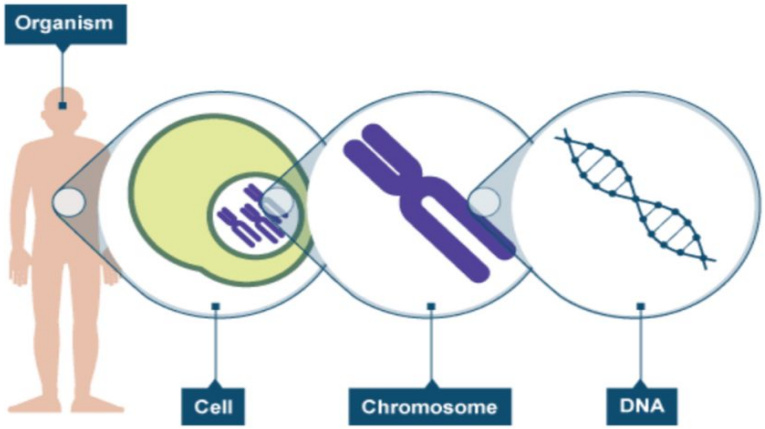
Biology - Interleaved content

Year 8 Biology Knowledge Organiser
Topic 4: Adaptations

KPI 2: Explain how characteristics can be inherited by individuals

DNA

- DNA contains all the instructions needed to make an organism
- Everybody has unique DNA (apart from identical twins)
- DNA is found in the nucleus of every cell
- The DNA molecules are twisted and folded into tiny structures called chromosomes
- DNA has a double helix structure – this means it is twisted twice
- A short length of chromosome which codes for a characteristic is called a gene
- Genes contain the information to produce proteins
- DNA and therefore genes are passed on from parents to their offspring
- Alleles are different forms of the same gene



Key Terms	Definitions
DNA	The molecule containing all the instructions to make an organism
Chromosome	A structure containing DNA found inside the nucleus of a cell
Gene	A section of DNA coding for a characteristic
Allele	A form of a gene
Dominant	An allele that is always expressed (capital letter)
Recessive	An allele that is only expressed if there is no dominant allele present (lower case letter)

Inheritance

- Alleles can be dominant or recessive
- Dominant alleles will always be expressed (the characteristic they code for will be seen in the individual), they are given a capital letter
- Recessive alleles will only be expressed if the dominant allele is not present (the characteristic they code for will only be seen if the dominant characteristic is not present), they are given a lower case letter
- Punnet squares can be used to show how alleles are inherited:

Genes from father \ Genes from mother	B	b
B	BB	Bb
b	Bb	bb

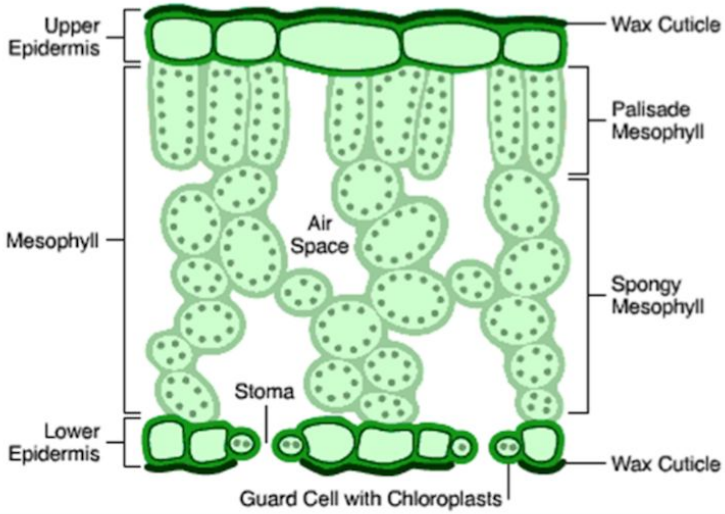
- B is the dominant allele for brown eyes
- B is the recessive allele for blue eyes
- Offspring BB and Bb would have brown eyes as they have the dominant allele
- Offspring bb would have blue eyes as there is no dominant allele
- There is a 1 in 4 chance of the offspring having blue eyes
- There is a 3 in 4 chance of the offspring having brown eyes

Year 8

Knowledge Organiser - Plants, Photosynthesis and Respiration

Science Department

1 Understand the structure of leaves and the role minerals play in plant ent
2 Describe photosynthesis in a word equation representing products and reactants.
3 Describe how leaves are adapted to carry out photosynthesis.



The layers are different *tissues* within a leaf – each has a particular role in this organ (the leaf)

- Upper epidermis: has a waxy cuticle for protection and to prevent water loss.
- Palisade mesophyll: carries out photosynthesis so cells are packed with chloroplasts and cells are arranged upright to use space efficiently.
- Spongy mesophyll: has a large surface area for gas exchange.
- Lower epidermis: has holes called stomata to allow gases to enter and exit the leaf

You need to know what mineral ions a plant needs and what it uses these for:

Mineral	Use	Deficiency symptoms
Nitrate ions (NO_3)	Building proteins and growth	Poor growth and yellow leaves
Phosphate ions (PO_4)	Respiration and growth	Poor root growth and discoloured leaves
Potassium ions (K^+)	Respiration and photosynthesis	Poor flower and fruit growth, discoloured leaves
Magnesium ions (Mg^{2+})	Used to make chlorophyll	Yellow leaves

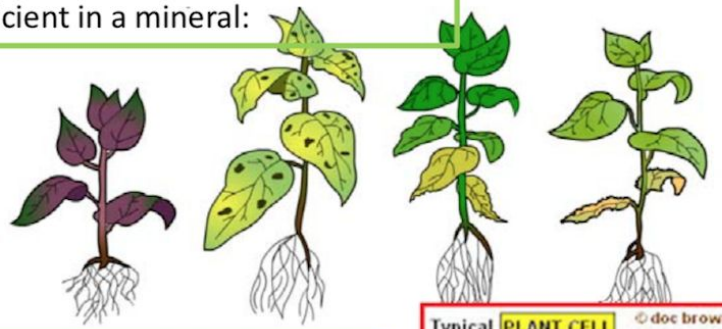
Proteins are used to make cells

Respiration releases energy used to grow

Respiration releases energy used to grow

Chlorophyll is the green pigment in leaves

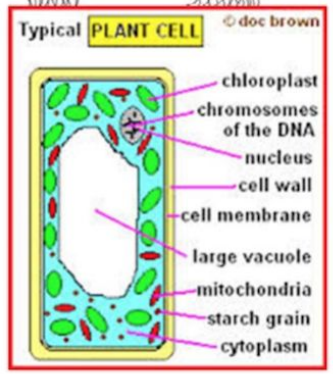
You can see here what plants might look like if they are deficient in a mineral:



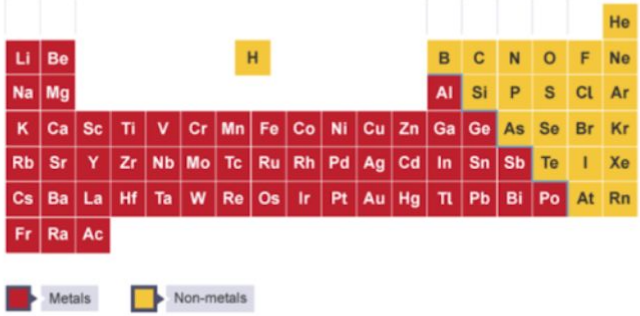
Equation for photosynthesis:

Carbon Dioxide + Water → Glucose + Oxygen

This process takes place in the chloroplasts of plant cells. Light intensity, carbon dioxide concentration and temperature all affect how fast a plant will do photosynthesis.



All the different elements are arranged on the periodic table. The elements are arranged in order of increasing atomic number.
On the periodic table, we can see the metal elements and non metal elements.

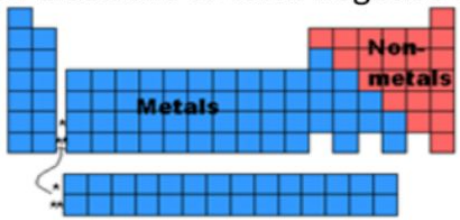


The section in the middle of the periodic table is known as the transition metals.

Key Terms	Definitions
Group	The vertical groups of elements in the periodic table
Period	The horizontal groups of elements in the periodic table

Metals and Non-Metals

- Metals are found on the left hand side of the periodic table, the majority of elements are metals.
- When metals react, they lose electrons to form positive ions.
- Non metals gain electrons to form negative ions.



- Properties of metals are, high density, high melting point (except mercury) and good conductors of heat and electricity.
- Only three metals are magnetic (iron, cobalt and nickel).
- Metals react with oxygen to make metal oxides e.g.

Magnesium+ Oxygen → Magnesium Oxide

Key Terms	Definitions
Atom	Contains protons neutrons and electrons, and makes up all elements
Proton	A sub atomic particle with a positive charge
Electron	A sub atomic particle with a negative charge
Neutron	A sub atomic particle with a neutral charge
Atomic number	The number of protons in an atom

	Physical properties	Chemical Properties	Equation	Trends/Explanation
Group 1 (Alkali metals)	Soft, low density	React vigorously with water releasing hydrogen	Sodium + Water→ Sodium Hydroxide + Hydrogen	More reactive as you go down, electron further from the nucleus easier to lose
Group 7 (Halogens)	Low melting point, exist as pair (Cl_2)	React with group 1 metals to form compounds. Can carry out displacement reactions	Sodium + Chlorine → Sodium Chloride Sodium Bromide + Chlorine → Sodium Chloride + Bromine	Higher melting point as you go down the group (higher molecular mass). Less reactive as you go down the group.
Group 0 (Noble Gases)	Low melting point/boiling point Eight electrons in outer shell (except helium)	Unreactive	N/A	Higher melting point and boiling point as you go down the group (due to increase ion density)

Chemistry - Interleaved content

Knowledge organiser: Energetics and rates

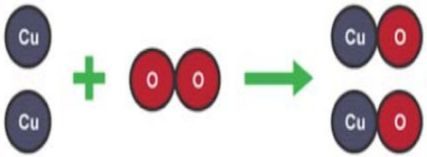
Word equations to symbol equations:

- replace names of each substance symbols or formula
- use numbers to balance the equation

Example:

. copper + oxygen → copper oxide

$2Cu + O_2 \rightarrow 2CuO$



Two copper atoms (2Cu) react with **one oxygen molecule (O_2)** to produce **two units of copper oxide (2CuO)**

The diagram on the left shows that there are always the same number of atoms on either side of a chemical reaction. This is known as the **law of conservation of mass.** This is why balancing a symbol equation is important.

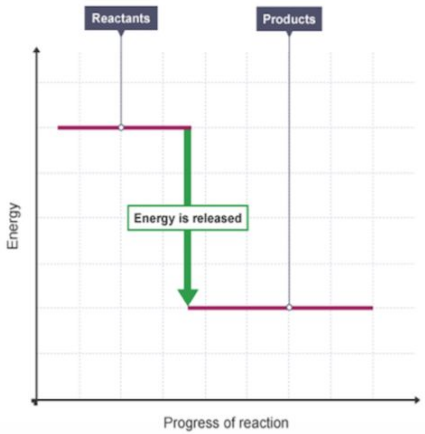
Thermal decomposition is the breakdown of a product using heat. Thermal decomposition is a type of endothermic reaction. An example is:
Metal carbonate → metal oxide + carbon dioxide

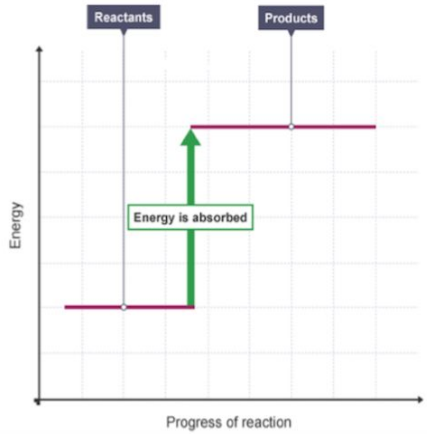
Oxidation is a reaction of a substance with oxygen. In other words, one of the reactants is **always** oxygen. For example:
Magnesium + Oxygen → Magnesium Oxide

Reduction is the loss of oxygen from a substance. For example, copper oxide can be reduced to form copper if it is reacted with hydrogen:
Copper oxide + hydrogen → copper + water

Exothermic reactions transfer energy to the surroundings. A temperature increase would occur.
Endothermic reactions take in energy from the surroundings. A temperature decrease would occur.

➢ Make sure you know the common examples of each reaction

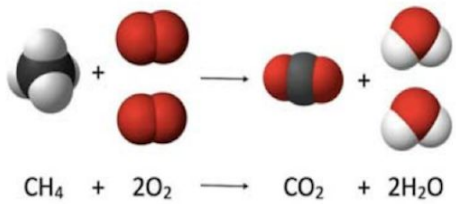




Combustion involves the burning of a fuel.

A hydrocarbon is a compound made from hydrogen and carbon and is a fuel.

Complete combustion is when a fuel burns completely in oxygen. This produces carbon dioxide and water. An example of a combustion reaction is:



$CH_4 + 2O_2 \longrightarrow CO_2 + 2H_2O$

Incomplete combustion occurs when the fuel does not burn completely in oxygen. This produces carbon, carbon monoxide and water.
Hydrocarbon (fuel) + Oxygen → Carbon Monoxide + Carbon + Water

You need to know the difference between the products formed in complete and incomplete combustion.

You need to be able to recognise that the graph on the left shows an exothermic reaction and the graph on the right shows an endothermic reaction

A force can be a **push or a pull,** for example when you open a door you can either push it or pull it. You can not see forces, you can only see what they do.

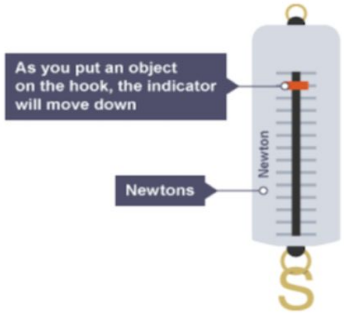
When a force is applied to an object it can lead to a change in the objects

- **Speed**
- **Direction of movement**
- **Shape (think about a rubber band)**

Forces can also be divided into 2 types, contact forces and non contact forces.

1. Contact forces for example friction, are caused when two objects are in contact.
2. Other forces for example gravity, are non contact forces. The two objects do not need to be in contact for the force to occur.

The unit of force is the **Newton (N),** this is named after Sir Isaac Newton, who came up with many theories including those to do with gravity and the three laws of motion. We measure force using a piece of equipment called a Newton metre. See the picture below.



Key Terms	Definitions
Newton	The unit of force
Newton meter	A piece of equipment that can be used to measure the size of the force
Contact Force	A force caused by the contact between two objects
Non Contact Force	A force between two bodies that are not in contact for example gravity
Free body force diagram	A diagram which shows all the forces acting on an object

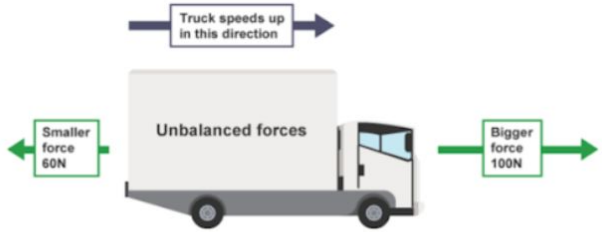
Unbalanced Forces

If the forces are unbalanced on an object there are two things that could happen:

1. If the object is stationary then it will move in the direction of the resultant force
2. If the object is moving, then the object will speed up or slow down in the direction of the resultant force.

For example, what is the resultant force on the lorry below?

100N-60N= 40N (to the right)



Remember the resultant force does not tell you what direction the lorry is moving in.

- If the resultant force is in the same direction as the movement of the lorry then the lorry will speed up
- If it is in the opposite direction the lorry will slow down

The larger the resultant force the larger the change in movement.

Key Terms	Definitions
Resultant force	The total force acting on an object
Balanced force	When the resultant force on an object is 0
Unbalanced forces	When the resultant force on an object is more or less than 0

Physics - interleaved content

Year 8 Physics Knowledge Organiser
Topic 6: Energy

KPI 2: describe how thermal energy transfers from one place to another

Temperature and Heat

Temperature and heat are linked, but are not the same thing. The heat of a material depends on the **potential energy** of the particles AND the **kinetic energy** of the particles is it made from. What this does mean is that the more heat (thermal energy) a substance stores, the higher its temperature will be. You can increase the heat stored in a substance without increasing its temperature though: just get more of it. This means you have more particles, so there is more thermal energy all together in the substance.

But do not get confused, a cup of tea at 80°C has a higher temperature than a swimming pool at 30°C but because there are many more water particles in the swimming pool so the energy is higher.

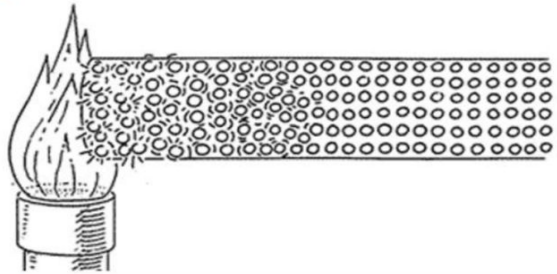
Key Terms	Definitions
Temperature	The measure of the average amount of kinetic energy of all the particles in a substance.
Heat	The energy stored in substances thanks to the energy of their particles. Also called thermal energy.
Conduction	One way that thermal energy can be transferred. Objects that are touching can transfer thermal energy, from the hotter object to the cooler one.
Radiation	Another way that thermal energy can be transferred. All objects give out **infra red radiation**. Hotter objects give out (emit) infra red radiation that is absorbed by cooler objects.
Infra red radiation	A form of light that we cannot see; infra red radiation transfers thermal energy from one object to other objects or the surroundings.
Emit	To give out.
Absorb	To take in.

Thermal energy transfer

Thermal energy will always be transferred from hotter objects to cooler objects. This includes hot objects transferring thermal energy to the surroundings (the air, nearby surfaces and so on). You can reduce the amount of thermal energy transferred by **insulating** the hot object.

Thermal energy transfer by conduction

Hot materials can transfer thermal energy to other materials that they are touching. This is called **conduction** of thermal energy. As the diagram shows, the particles that are heated increase in kinetic energy when they are heated. They bump into neighbouring particles and pass on (transfer) thermal energy. This is why a table feels warm after a hot cup of tea is lifted from it, and the reason why thermal energy can pass through the bottom of a saucepan to cook your dinner.



Thermal energy transfer by radiation

All objects give out some infra red radiation, but the hotter they are the more radiation they give out. All objects can also absorb infra red radiation: when they do, they heat up. Radiation can travel through empty space – so this is how the Sun heats up the Earth. The objects don't have to be touching, unlike in conduction, and there are no particles involved. .

Year 8 Physics Knowledge Organiser
Topic 6: Energy

KPI 1: describe examples of energy transfers
***KPI 3*:** apply the law of conservation of energy to situations involving energy transfers

Energy Stores

Energy can be stored in objects, or when objects are doing something. It is a quantity measured in joules (J). Examples to know:

- Energy is stored in fuels as **chemical potential energy**
- Energy is stored in anything elastic when it is stretched, as **elastic potential energy**
- Energy is stored in any object that has been lifted up, because the object stores **gravitational potential energy**
- Energy is stored in moving objects as **kinetic energy**.
- Energy is stored in any object as **heat energy**. (Obviously, if it is cold, it doesn't store much heat energy!) This is also known as *thermal energy*.

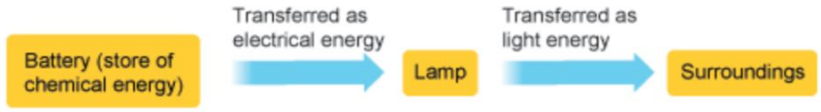
Energy Transfer

An energy transfer is when energy changes from one store to another. VERY IMPORTANTLY, the **total amount of energy does not change**. Energy cannot be created or destroyed. All that can be changed is how it is stored. This ideas is called **the law of conservation of energy.**

Energy is transferred, so it changes store, in loads of situations. Examples to know:

- When a fuel is burned, the chemical potential energy in the fuel ends up stored as thermal energy in the surroundings;
- When an object falls off a shelf, the gravitational potential energy it stores is transferred (changed) to kinetic energy while it is falling.
- When the object hits the floor, all the gravitational potential energy it had to start with ends up stored as thermal energy in the surroundings.
- When a spring that's been stretched is released, the elastic potential energy it stored is transferred to kinetic energy then to thermal energy.

Key Terms	Definitions
Energy	Energy is a quantity that is stored in many objects and situations. Anything storing energy can do **work**.
Work	Work is done when energy changes from one store to another.
Potential energy	Potential energy is energy stored in objects that don't seem to be doing anything. See the examples.
Chemical potential energy	Energy stored in fuels (like wood, or the gas we run Bunsen burners on) is called chemical potential energy.
Elastic potential energy	Elastic objects, like springs or rubber bands, store elastic potential energy when they are stretched.
Gravitational potential energy	Any object that is not on the ground has gravitational potential energy. This is because they are lifted up in a gravitational field, and could fall down!
Kinetic energy	Movement energy. Any moving object stores kinetic energy.
Thermal energy	Also known as heat energy. All objects store some thermal energy, because the particles are moving. The higher the temperature of an object, the more thermal energy it stores.
Conservation of energy	The law that says energy cannot be created or destroyed. It can only change how it is stored.



This shows how energy changes where it is stored twice while you use a light bulb (lamp):
From chemical potential energy to electrical energy to heat (thermal) energy in the surroundings.

Year 8
History

Year * History Revision Tudors and Stuarts

What I must know	G		R
Describe and explain the challenges Elizabeth I faced on her accession to the throne in 1558: legitimacy, gender, age, marriage, religion, economy, internal threats and threat of invasion			
Describe the need for Elizabeth I to marry			
Explain why Elizabeth I chose not to marry and its significance for England			
Describe Elizabeth I's aim in her Religious Settlement			
Describe the key features of the Act of Supremacy in 1559 and Act of Uniformity in 1559			
Describe the key features of the Spanish Armada: causes, plans, battle, key leaders			
Explain why the Spanish Armada was defeated in 1558			
Judge the key reasons for the defeat of the Spanish Armada in 1558			
Describe the key features of the Gunpowder Plot: causes, plans			
Explain why the Gunpower Plot if 1605 failed			
Describe the causes of the English Civil War			
Explain why the English Civil War broke out and its key cause			
Describe the sides at war			

Year * History Revision Tudors and Stuarts

What I must know	G	A	R
Explain how the English Civil War was fought			
Explain why Charles I was executed in 1649			
Describe key features of life in England under the rule of Cromwell			
Explain how a limited monarchy was restored in 1660			
Describe key features of the Great Plague 1665			
Explain the effect of the Great Plague on England 1665			
Explain the cause and effect of the Great Fire of London 1666			
Describe beliefs about witchcraft 1500-1700			
Explain how and why there was increasing punishments for witchcraft 1500-1700			
Explain the usefulness of a source looking at the content of the source and linking it to your own knowledge.			
Evaluate the usefulness of the source: POND – Purpose (why the source was made/intended audience, Origin: author, Nature: source type…speech, portrait), Date: when it was made, put the source in context.			

Writing frames to learn in this topic:

Describe 2 key features

One key feature of …….. was…….

Explain two consequences of (PEAL)

One cause/consequence of ……. was…… . This meant that……..which led to…….. . This then……..

Therefore……

Write a narrative account analysing how…

This is a CHRONO LINK with ANALTYICAL PHRASES. This means it is a chronological retelling of an event with links explaining how one part of the event links to another part of the event whilst supporting it with detailed knowledge. Think causes – what actually happened in order and how one aspects led to another- the consequences

How useful is Sources B for an enquiry into…?

Source B is useful …. *(explain what the content shows us- then say how that would help an enquiry into and link in your own knowledge)*

Source B is useful as it is from……. This makes it useful as……. The nature of the source is…….. which is useful for an enquiry as…….

It's purpose is to……which makes it more/less useful because…….

Statement: How far do you agree with this statement?

I agree/ disagree with the statement to a limited extent / to an extent/ to a large extent. I would argue that ……..

The statement can be agreed with as…….

However, the statement can be challenged and disagreed with as……

In conclusion, I would therefore agree/disagree with statement as I would argue that…….. was the most important…… as

Explaining phrases

This meant that…

This shows that…

This led to…

As a result…

If this hadn't happened...

Connectives

However…

Consequentlly…

Also...

Moreover...

Measuring phrases

To an extent…

Totally different…

To a limited degree…

To a large extent…

Assess phrases

Without this… then…

In the long term…

For the short term…

If this hadn't happened…

This is more/less important…

ChronoLink Phrases

Therefore…

Due to this..

As result…

Then….

This led to…

Hence…

Combined with……

Thus..

A further consequence was..

KO Y8 – Tudors and Stuarts 1485-1714

Period: Tudor England 1485-11714

1	Tudor England is the period 1485-1714 which was also the 15th ,16th, 17th and 18th centuries. This is also known as Early Modern Britain

Key Events

1558-1603 Elizabeth I ruled England, she was the last Tudor
1559- Act of Supremacy, Act of Uniformity and Royal Injunctions. Elizabeth sets out her Religious Settlement as also known as the Middle Way
1588- The Spanish Armada is launched against Elizabeth and England.
1603- Elizabeth I died leaving the throne to James VI of Scotland, the Stuarts then ruled England and Scotland.

1605- Gunpowder Plot against James I

1625 Charles I, James I's son become King.
1642 – Parliament and the King raise armies to fight one another. The first battle is at Edgehill. Oliver Cromwell (a member of Parliament) is watching and decides that Parliament need a better army.
1643 – Oliver Cromwell forms and trains the 'New Model Army' for Parliament.
1644 – The N.M.A. wins the Battle of Marston Moor.
1645 - The N.M.A. wins the Battle of Naseby. Charles realises he can't win, so he surrenders to Scotland.
1646 – The Scots hand Charles over to Parliament, in return for £400,000! He is held prisoner.
1649 – Charles is put in trial by Parliament, for waging war against his own people. He is found guilty and beheaded in front of his favourite place, the Palace of Westminster.
1649-1660 – England is a Republic (=no Monarch) called the Commonwealth, ruled by Oliver Cromwell at first.
1660- Monarchy is restored with restricted powers to the throne.

1645-1647 Witch hunts in England
1665 Great Plague
1666 Great Fire of London

Key Concepts

2 English Civil War	The war that broke out between Charles I and Parliament in England in 1642 over power and Charles' style of monarchy. It divided the nation and led to the end of the monarchy in England.
3 Commonwealth	This was the period England was ruled as a republic under at first Oliver Cromwell and then his son. This period saw significant religious change and Puritan England saw Puritan beliefs guide laws and customs.
4 Witchcraft	Henry VIII introduced the death penalty for witchcraft in 1542. James I wrote his book of Demonologie which increased beliefs in witches. The English Civil War saw a hunt for witches under the famous Witchfinder General Matthew Hopkins.

Key Words

5	**Roman Catholic**	A form of Christianity, followers of the Roman Catholic Church.
6	**Puritan**	A member of Church of England community which claimed the reform of this church was not complete.
7	**pandemic**	When an infectious disease is spread across a large area.
8	**Protestant**	A follower of the Protestant faith
9	**propaganda**	The deliberate attempt to make someone believe something usually political
10	**Act of Supremacy**	Law which gave English monarch control over the church in England, established the Church of England
11	**Cause**	The reason why something happens
12	**consequence**	The result of a cause: positive or negative

KO Y8 – Tudors and Stuarts 1485-1714

More detailed events.. Cause-Event-Consequence

29	**Spanish Armada 1588** 	**Causes**: religion, Philip II wanted to make England RC, wealth, New World, Francis Drake and theft from Spain, Genoese Loan, Elizabeth helping Dutch Protestant rebels, marriage refusal, use of England as a port **Plan**: **Spanish** Led by Medina Sedonia 130 Spanish ships sail in a crescent formation with 8000 sailors and 18,000 soldiers to Flanders, collect 30, 000 soldiers and then invade England, remove Elizabeth and conquer it. **English** had 80 ships led by Drake and Howard, beacons lit to warn of approaching Armada, aim to cut of ports to Spanish and break formation before soldiers could board in Flanders **Why was it defeated?** **Poor Spanish planning and mistakes**: lack of gunners, no plan B, inexperience of Medina Sedonia, ships too slow/big, not enough sailors, food rots and water stale, no port to harbour in Flanders, did not attack English when stuck in port, communication failed so no soldiers in Flanders to collect, **English leadership**: Drake and Howard experienced, loyalty from their men, Elizabeth I gave them freedom to adapt and all 3 inspired their men **English ships:** agile, smaller **English tactics:** kept distance from Spanish canons and grappling hooks, Line-A-Stern, **FIRESHIPS**: 8 ships set alight and sent towards Spanish, they cut anchors and broke formation which meant the English could go in and attack them! **Consequences**: English win, Spanish caught in storms and destroyed. World super power lost= beginning of Spain's decline
30	**Gunpowder Plot 1605**	**Who?** A group of Catholics led by Guy Fawkes and including Robert Catesby, Thomas Winter, Thomas Percy and John Wright. **WHY?** Some Catholics felt the King was treating Catholics unfairly this was because they had to practise their religion in secret. You could be fined if you did not go to a Protestant church on Sunday. Rumours that James I planned to ban Catholicism. Some wanted rid of RC and may have framed them (Cecil- King's chief Minister as Protestant) **AIM?** Kill the king and replace him with his daughter and make her Catholic. WHAT? A plot to kill the King of England James I by blowing parliament up. Rented a cellar under the House of Lords filled with 36 barrels of gunpowder (first lot went off). Blow up Parliament in London 5th November 1605 as this was state opening day, when the Kings, Lords and Commons would all be present in the Lords chamber. **WHY FAILED?** Delayed a year, took more people into the plot, letter sent to Lord Monteagle, Cecil had a double agent, Guy Fawkes arrested, confesses (?), plotters surrounded in hiding and killed/arrested. **CONSEQUENCES**: Guy Fawkes killed for treason, RC not trusted, not allowed to work for government, Bonfire Night set up to remember it. **BUT**... framed? Confessions re-written, no tunnel, no witnesses, all who could say Cecil set them up killed....

KO Y8 – Tudors and Stuarts 1485-1714

31, Causes

Religion

• Charles I married Marie Henrietta, French Roman Catholic. • He did not support further reform of the Church of England. • He tried to introduce an English Book of Prayer in Scotland which caused a conflict with Scottish Church. • He dismissed and replaced the bishops that refused to introduce the Prayer book.

Politics

• Charles believed in Divine Right of Kings. • He used Star Chamber instead of courts which made the parliament angry because he had the right to appoint all of its members. • When parliament disagreed with him he dissolved it and ruled without it for eleven years – this was known as Eleven Years Tyranny.

Economics

• Charles I wanted to make his own taxes and not ask the Parliament for permission. • He restored Ship Money, a tax forcing everyone to pay towards a cost of the navy, even if they lived miles away from the coast. • He restored a law meaning that everyone with an income of more than £40 had pay to become a knight. If they refused he would fine them the same amount of money as the cost of the title.

Foreign Policy

• He failed in war against France in 1627. • He failed in the war against Spain in 1625. • He withdrew from the Thirty years War on the continent but most English protestants wanted him to continue fighting against Roman Catholics

English Civil War

32. Warfare during English Civil War. SIDES AT WAR

Cavaliers this was a group name for the supporters of the king. Their strongest advantage was a group of horsemen and that is where the name came from. The majority of Charles' support came from Cornwall, Wales and Northern England. He also used mercenaries, paid professional soldiers very common in 17th century. Most of these came from France and Ireland. Both of these caused claims he was not supported by the English people but foreigners. The cavaliers were known for their colourful clothes.

Roundheads this was a group name for the supporters of the Parliament. There are two suggestions where the name came from: the first one suggests that it came from the shaved heads of the apprentices in London who supported the Parliament; the second that the name came from the characteristic shape of the helmets worn by the soldiers of the Parliament army. The majority of Parliament support came from the cities, mainly merchants and business owners therefore most of the time the Parliament had more money to spare. The Parliament allied with Scotland against Charles I but as the war progressed the alliance failed.

33. Why did the Roundheads win the war?

• The Parliament was supported by wealthy merchants and business owners so it had more money to spend on the army. • As the parliament had control of London it was able to collect taxes and so had more money available to pay its soldiers and buy weapons. • Oliver Cromwell introduced a New Model Army which was more effective then royalist army. • Parliament used the alliance with Scotland to gain more soldiers. • Parliament had support of the south east and central England. This was wealthier and more populated area so it was easier for them to get the food and soldiers for their army.

34.Charles I trial and execution. • English King Charles I was trialled on the basis of an old Roman law which allowed an army to overthrow and trial a tyrant.. • Charles I was going to be judged by the members of the Parliament and given a punishment most appropriate for the behaviour during his rule and during the Civil War. • There were doubts over the legality of the trial and many judges refused to attend and even those who did, did not all sign the death warrant. Charles I was found guilty of 'treasons, burnings, murders' as well as preventing Parliament from doing its job. He was sentenced to death and was publicly executed on 30th January 1649.

KO Y8 – Tudors and Stuarts 1485-1714

35. Views on Oliver Cromwell

Harsh & Unpopular Ruler

- ✗ Cromwell's actions in Ireland, particularly at Drogheda, are still remembered for their cruelty and bloodshed
- ✗ Popular entertainment and hobbies such as gambling, the theatre and even makeup were banned
- ✗ Most popular aspects of Christmas were banned!

A Tolerant Defender of Democracy

- ✓ Cromwell was surprisingly tolerant of other religions and was the first ruler to allow Jews to re-settle
- ✓ Prevented the King from destroying Parliament (although he eventually got rid of it himself!)
- ✓ Built England into a formidable military power

36.The Great Plague, 1665

Causes

The bubonic and pneumonic plague was transmitted to humans by fleas transported on rats or it was an airborne disease

The filth and squalor in London created the perfect breeding conditions for these rats and fleas

Science was too primitive for germ theory to have been developed – Londoners blamed the plague on God, foreigners or poisoned air ('miasma')

People fleeing the plague carried the disease from one town or district to another

People seldom washed!

Impact

Plague doctors attended sick people, houses with infected people had a RED CROSS put on the door and everyone locked in.

100, 000 Londoner died = 15% of London

Trade, transport, food supplies affected. Fear of contamination. Chaos in cities as bodies piled up (use of lime pits to bury dead

37, The Great Fire of London, 1666

Causes

Long, hot and dry summer

Torches used to light packed London streets

Wooden houses, closely packed

Bakery oven door left open and there was a paper, rope, oil and timber warehouse nearby.

Strong winds spread the fire

No proper fire brigade who had access to water

People ignored fire at first and many just left homes

Impact

80% of London was destroyed

St Paul's burned down

Charles II passed new laws about housing and materials

Christopher Wren redesigns the city

38. Witchcraft

CAUSES: Increased beliefs in witchcraft, Elizabeth I passed a law that gave the death penalty to any witch that killed someone, James I increased that to the death penalty for summoning evil spirits and published a book, Demonologie, as he was an enthusiastic witch hunter. The book set trials for witches. Fear of the Devil and idea that life was a battle against evil, attitudes toward women, the uncertainty caused by the ECW, economic problems caused falling wages and high unemployment and people wanted someone to blame. Fear of homeless and jobless (vagabonds)

SUSPECTS: lone women, had a familiar (pet that tied a witch to the Devil), birthmark where the familiar feeds, where the devil touched a witch- the witch would not bleed.

HUNTED: Matthew Hopkins, Witchfinder General, hunted witches and got confessions by restricting food, water and sleep!

TRIALS: by water to see if the innocent would sink! Stabbed with a thick needle to find where she did not bleed.

PUNISHMENT: 1000 executed 1542-1736, mainly hung. Hopkin's responsible for 112 executions.

KO –Practice questions

Describe questions	Describe two key features of the Spanish Armada Describe two key features of the ECW Describe two key features of the Act of Supremacy 1559 Describe two key features of Elizabeth I's marriage choices Describe two key features of the Gunpowder Plot 1605 Describe two key features of Great Plague 1665 Describe two key features of the Charles I's execution
Explain question	Explain two consequences of Charles I's execution Explain two consequences of the ECW Explain two consequences of the Spanish Armada 1588 Explain two consequences of the Gunpowder Plot 1605 Explain two cause for the growth in witch hunts
Narrative account	Write a narrative account analysing how the ECW happened Write a narrative account analysing how Elizabeth dealt with problems she faced in her reign Write a narrative account analysing how the Great Fire of London happened in 1666 Write a narrative account analysing the Spanish Armada 1588 Write a narrative account analysing the Gunpowder Plot of 1605
How far do you agree?	'THE ECW broke out over money.' How far do you agree with this interpretation? 'The ECW caused a fear in witchcraft.' How far do you agree with this interpretation? 'Elizabeth I achieved her aims as a monarch.' How far do you agree with this interpretation? 'Mary Queen of Scots was the greatest threat that Elizabeth I faced.' How far do you agree with this interpretation? 'The Gunpowder plotters were framed.' How far do you agree with this interpretation?

Year 8

Geography

Year 8 Geography Revision

What must I know?			
Diverse and dynamic - how is Asia being transformed?			
How does India rely on the monsoon climate?			
How do floods threaten lives in Asia?			
How does life adapt to the mountain biome?			
Why is the population of Asia diverse and dynamic?			
How is urbanisation changing lives?			
Is China helping to create an independent world?			
How is Asia developing into the most important global economic region?			

KO Asia China; India and Russia

Selected Key words and definitions	
Asia	One of the seven continents.
Population	How many people live in a place.
Population density	The average number of people living in a place, per square kilometre.
Populous	Has a large population.
Independence	When a country that had been a colony begins to govern itself.
Diverse	For example Asia has more people, more cultures and a large range of climates and environments.
Plateau	An area of fairly flat high land.
Biome	A very large area with a similar climate, plants and animals.

Useful web-site
http://nationalgeographic.org/encyclopedia/asia/

Key Concepts

- What and where is Asia?
- Asia's countries and regions
- A little history
- What's Asia like?
- Asia's physical features
- Asia's population
- Asia's biomes

Links to other topics in geography

- Coastal landscapes
- River Landscapes
- Tectonic landscapes
- Population
- Urbanisation
- Weather and climate

Selected key words	
Tundra	A cold region where the ground is deeply frozen; only the surface thaws in summer, allowing small plants to grow.
Taiga	Region of coniferous forests which lies between the tundra and steppes.
Steppes	A large flat area of treeless grassland.
Temperate forest	Between the steppes and the coast it is much wetter. This is the temperate forest biome, with deciduous trees. Summers are hot here. Winters are cold, and very cold in some places.
Cold desert	South of the steppes it is very dry. Summers are hot, but cloudless skies mean cold nights. Winters are brutally cold (-40°C or less).
Hot desert	Hot deserts are very hot during the day, and cold at night – little vegetation.

Did you know?
Asia is separated from North America by only 82km of water – The Bering Strait

KO China

Selected Key words and definitions	
Asia	One of the seven continents
Physical features	The natural environment, including; coasts, rivers, mountains and biomes
Climate	What the weather in a place is usually like, over the year, measurements are taken over long periods and the averages calculated
Relief	How the height of the land varies
Monsoon rains	They fall in summer in some regions, when moist winds are drawn in from over the oceans
Inequality	The unequal sharing of wealth in a society
Urban area	A built up area (large town or city); it's the opposite of rural

Useful web-site

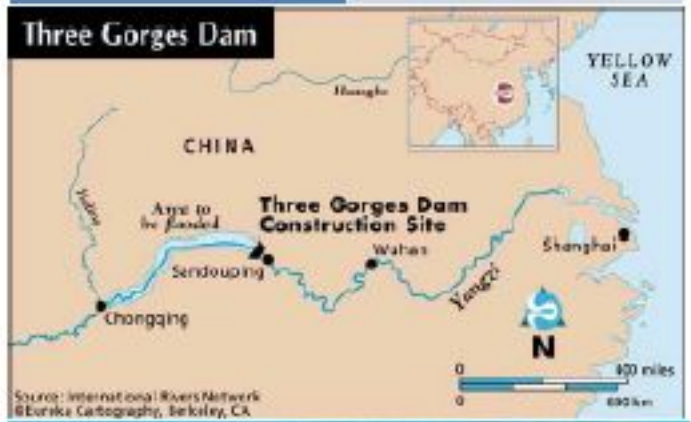
https://www.travelchinaguide.com/intro/geography

Key Concepts
China an overview – physical features and population distribution
The rise of China - urbanisation
China's Southwest region
Chongqing – the area with the fastest growing urban area on the planet
Tibet – the highest and least populated area of the region
The rivers and dams – including the Three Gorges dam

Links to other topics in geography

Coastal landscapes
River Landscapes
Tectonic landscapes
Population
Urbanisation
Weather and climate
Our warming planet

Selected key words and definitions	
Megalopolis	A very large urban area made of a chain of built up areas
Hukou system	In China you have rural or urban hukou (status) depending on where you were born; if your hukou is rural, you don't have full rights in a city
Deforestation	Cutting down forests, opposite of Afforestation



Change in China

TIMELINE

2010 – China overtakes Japan as second largest economy

2005 – 600 million lifted out of poverty since 1981, according to World Bank

1990 – Stock markets open in Shanghai & Shenzhen

1989 – Tiananmen Square massacre

1984 – Opens up 14 cities & 3 regions to foreign investment, including Shanghai

1978 – Reformist leader Deng Xiaoping announces open door policy

1950

-China is a poor country
-The **One Child Policy** which started in 1979 means that families only have one child.
-The country is **building housing & factories rapidly** which has led to pollution.
-There is **little social mobility** (poor people stay poor)
-**Extended Families** tend to live together (3 generations in 1 house)

1990

-China is **becoming richer**
-**Families have stopped living together** as people move due to work.
-**Pollution is still bad** as building continues.
-More people have **access to electricity and entertainment** such as televisions.
-People can afford **larger apartments.**
-**Children are often left alone** while parents work

2000

-China is now a **NEE (Newly Emerging Economy)** and has a **large economy**
-**Pollution levels have dropped** as most building is complete.
-China's population are more **educated.** By 2005 there are 17 million pupils attending university in China
-There is **more social mobility**

Why has China's economy grown so quickly over the last 30 years?

Labour Costs are low while productivity is high	**Wages have always been less than half of those compared to USA and European countries.** On average, a Chinese person will work for **2,300 hours a year** compared with only 1,800 hours in the USA. This keeps labour costs low, while productivity is high.
Trading by sea is easy	The **east coast of China** is well situated for access to the Pacific Ocean. **Deep natural harbours** mean that very large container ships can dock for imports and exports. This makes China **ideally placed to trade** with the rest of the world.
China has a well educated workforce	Chinese children **graduate** from high school at 18. There are over **100 large universities** in China and in 2006 alone **3.5 million students graduated** from Chinese universities with **science or engineering degrees.**
Pollution and Health & Safety Laws are not strict	In the rush to become an industrial powerhouse little attention has been paid to pollution caused by factories or **health and safety** for the workers. Smog is a problem in many Chinese cities and rivers are badly polluted. The Chinese work long hours on low pay and have few rights in the workplace.
The Chinese government has encouraged industry	In the 1980s the Chinese government set up five **Special Economic Zones.** These are areas where **trade** with foreign companies is **encouraged.** Improving transport links, reducing the amount of tax that businesses have to pay and investing in scientific research are all ways that the government has tried to develop and attract industrial growth in these areas.

The Three Gorges Dam

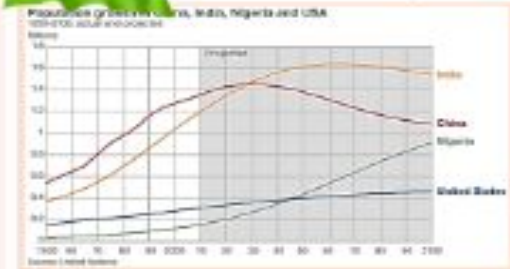
ADVANTAGES

- ✓ **Hydro-electric power (HEP)** has been generated
- ✓ **HEP** will enable the **growth of industry** in China
- ✓ **HEP is a clean fuel** and will reduce China's reliance on coal-fired power stations. This will **reduce CO_2 emissions**
- ✓ The river level will be constant allowing ships to use the length of the river
- ✓ **100 million people** living downriver will be protected from flooding
- ✓ A ship-lift will enable large vessels to reach the upper part of the river. The current lock system takes 4 hours. **The ship lift will take 30 minutes.**

DISADVANTAGES

- **1.24 million people have had to be relocated** as the valley in which they lived has been flooded
- The **Baiji** (a dolphin found only in the Yangtze River) has now been declared **extinct** due to increased use of the river
- Much **good quality farmland has been lost** due to the deliberate flooding of the valley
- There has been an increase in the **amount of landslides** occurring where the reservoir has been created
- **13 cities, 140 towns and 1350 villages have been submerged** by the reservoir.

Population & Slums in India



- India's population is **growing rapidly** and is predicted to **overtake China's by 2050.**
- This will cause problems with **housing, food supply, education & unemployment.**

Slum Conditions

- People living in slums don't have access to basic services such as **clean running water, proper sewers or electricity.**
- People may not have access to **education** so they are unable to develop skills needed to get a proper job. **Unskilled work** is often long hours for little pay.
- **Sewage** and toxic chemicals can get into rivers, **harming wildlife.**
- People who move to the city often live in **illegal slums.** These are often **badly built and overcrowded.**
- There can be high levels of **unemployment** and **crime.**
- **Air pollution** comes from burning fuel, vehicle exhaust fumes and factories.
- **Unclean conditions** and lack of access to medical services often leads to **poor health.**
- **Rapidly growing cities struggle to collect rubbish.** This often ends up in big rubbish heaps. This can damage the environment, especially if its toxic.
- **Dharavi slum** in Mumbai contains over **1 million people.** It was made famous by the film 'Slumdog Millionaire'.

Year 8

Design and Technology

Year 8 Spinner Revision

What I must know			
Describe – use of hand tools			
Identify – ferrous, non ferrous metals and alloys			
Explain – how to produce a CAD design for cutting on the laser cutter			
Define – the terms ferrous, non ferrous and alloys			
Calculate – the total length of material used in a product			

Equations/ writing frames to learn in this topic:

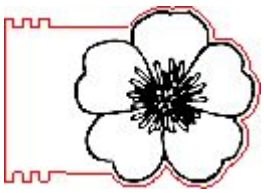
Use the writing frames for:

- Hand tools
- Metals and their uses
- Preparing an image for the laser cutter
- Engineering drawing for the bracket

Year 8 Spinner Revision

Ferrous Metals	Ferrous metals contain iron, so can rust and are magnetic. Common ferrous metals include – steel and iron
Non ferrous Metals	Non ferrous metals do not contain iron, so can not rust and are not magnetic. Common non ferrous metals include – aluminium and copper
Alloys	Alloys are combinations of two or more metals to make a better metal – common alloys include – stainless steel and brass
Thermoplastics	Thermoplastics are those plastics that go soft when they get hot, this allows them to be shaped and formed. In school we most often use acrylic with the laser cutter and HIPPS with the vacuum former.
Thermosetting plastics	Thermosetting plastics are plastics that set when they are heated or compressed under heat. We don't use thermosetting plastics in school as they are not easy to work. Epoxy resin adhesive is a common thermosetting plastic.
CAD	Computer Aided Design – the CAD packages we use most often in school is 2D Design, we use this to produce the designs that we cut on the laser cutter.
CAM	Computer Aided Manufacture – the laser cutter is the CAM machine we use the most often, we use this to cut out the designs for the blades of the spinner.

	Scribe - marking out lines on the aluminium		Pillar drill - drilling the holes in the aluminium
	Engineers square - used to mark lines at 90 degrees		File - used to smooth the cut edges on the work
	Steel rule - to measure where to mark out		Junior hacksaw - cut the aluminium to length
	Centre punch - mark where the holes will be drilled		Engineers vice - hold the work whilst cutting/filing
	Ball pein hammer - to strike the centre punch		Marker pen - makes scribed lines easier to see



For the image above to be ready for the laser cutter, what do we need to do?

RED line – cutting, BLACK areas – etched onto the acrylic. The first stage was to copy in a black and white clipart, we then turned it transparent before contouring it in red. The lines were joined to the bracket and then the unwanted lines were deleted.

Year 8 Food Revision

What I must know			
Describe –			
Identify –			
Explain –			
Define –			
Calculate –			

Equations/ writing frames to learn in this topic:

Use the writing frames for:

To understand flour and its many functions

The eat well guide and how it can help us to have a healthy diet

The Eatwell Guide

The Eatwell Guide is a guide that shows you the different types of food and nutrients we need in our diets to stay healthy

Why is the Eatwell Guide important?

The Eatwell Guide shows you how much (proportions) of food you need for a healthy balanced diet.

What are the consequences of a poor diet?

A poor diet can lead to diseases and can't stop us from fighting off infections.

What are the sections on the Eatwell Guide?

1. Fruit and vegetables
2. Potatoes, bread, rice, pasta and other starchy food
3. Dairy and alternatives
4. Beans, pulses, fish, egg, meat and other proteins
5. Oils and spreads

How many portions of fruit and vegetables should we eat, daily?

As a minimum, we should eat at least 5 portions each day.

How many glasses of water should we drink daily?

As a minimum, we should drink 6-8 Glasses of water each day.

Tips for Healthy Eating!

1. Eat more fibre (helps waste move through the gut)
2. Eat more fruits and Vegetables (contain fibre, vitamins and minerals)
3. Eat more fish, 2 portions a week, 1 should be oily (salmon, mackerel etc)
4. Eat less salt - less than 6g per day for adults
5. Eat less fat, especially saturated fats
6. Eat less sugar
7. Choose wholegrains like brown rice, pasta and wholemeal bread
8. Drink 6-8 glasses of water per day

Knead	To thoroughly mix ingredients in a dough and in the case of bread, develop the gluten structure, creating an elastic dough.
Rubbed in method	Rub fat into flour using the tips of your fingers only as this is the coolest part of the hand. The particles of flour are coated in fat to reduce the formation of gluten. This method is used for scones, pastry and a rubbed in sponge cake.
Prove	Dough relaxes and yeast works, forming carbon dioxide bubbles which make the dough rise. The gluten structure forms a stretchy skin, like a balloon, to hold the bubbles of gas.

	Pastry cutter. Cut accurate shapes from pastry or scone dough. Used to create many identical products.		Electric kettle. Used to safely and quickly boil water.
	Sauce pan Used to combine and heat ingredients, often used to simmer or boil soups or sauces.		Colour coded chopping boards. Used to protect the work surface when chopping ingredients. The colour coding can help uses to prevent cross contamination.
	Baking tray. Used to cook food products, like scones, and to transport them to and from the oven.		Electric hob used to transfer heat (via metal plates) to a pan in order to cook or reheat food.
	Weighing scales used to accurately weigh larger quantities of usually dry ingredients. Weighs in increments of 1g.		Gas hob used to transfer heat (via gas flames) to a pan in order to cook or reheat food.
	Measuring jug		Mixing bowl

Year 8 Textiles Revision

What I must know			
Describe – facts about the Pop Art movement. You should use P-E-E paragraphs to answer these questions: POINT – Give your answer EXPLAIN – Explain/describe what this means EXAMPLE – Include a real example, statistic, etc to prove it			
Identify – the work of major artists from the Pop Art movement			
Explain – how American and British Pop Art, differed.			
Define – a seam allowance			
Calculate – the dimensions of a 2D net, taking mobile device dimensions and seam allowances into consideration.			

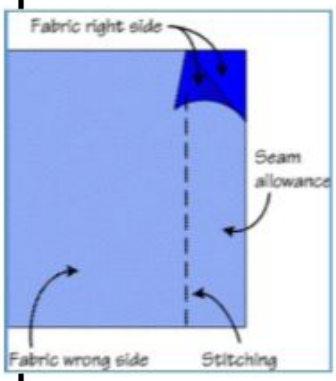
Equations/ writing frames to learn in this topic:

Use the writing frames for:

Year 8 Textiles

Why is a seam allowance needed?

Seam allowance refersto the area between the stitching and the raw-edge of the fabric. The seam allowance is an important part of a seam and is usually unseen, inside the garment.



Keywords and definitions:

stitching = a short length of thread that has been passed through one or more pieces of material, either for decoration or to join pieces together

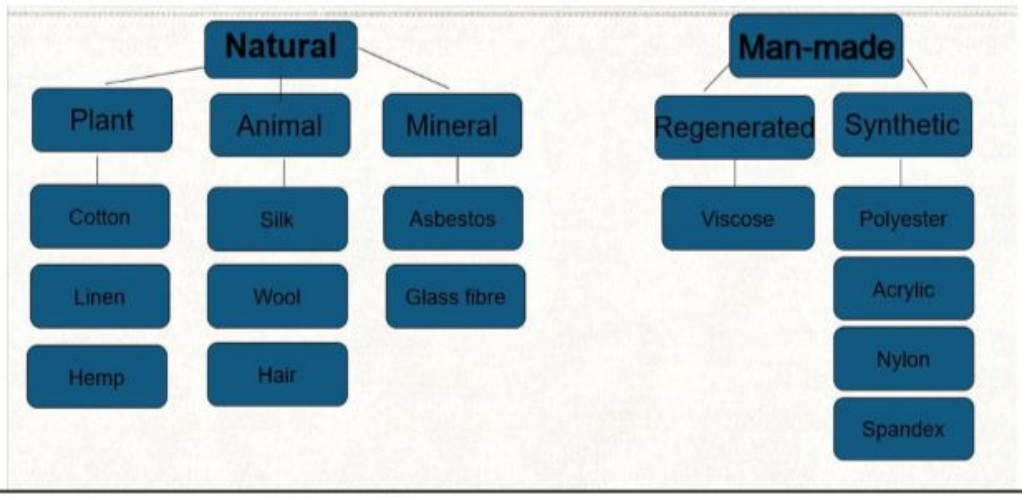
raw-edge = with an unhemmed, sometimes frayed or untidily cut edge

Fabric = any type of cloth made from woven, knitted, or felted thread or fibres

Seam allowance = the line along which pieces of cloth or leather are joined by sewing

Garment = a piece of clothing

Classification of fibres



Properties and characteristics of fibres and fabrics.

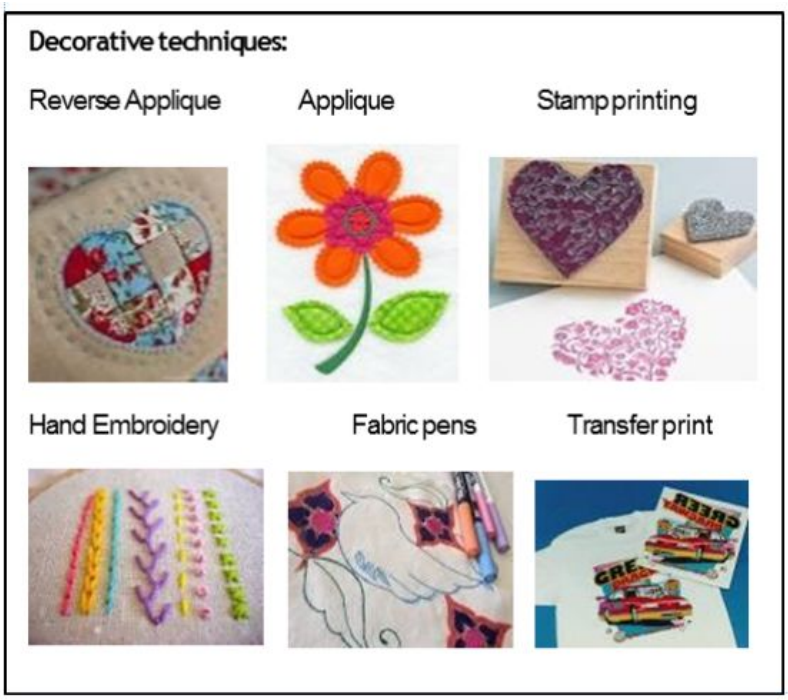
Fabrics and fibres behave in different ways this can be good or bad thing, the way they behave is known as properties and characteristics.

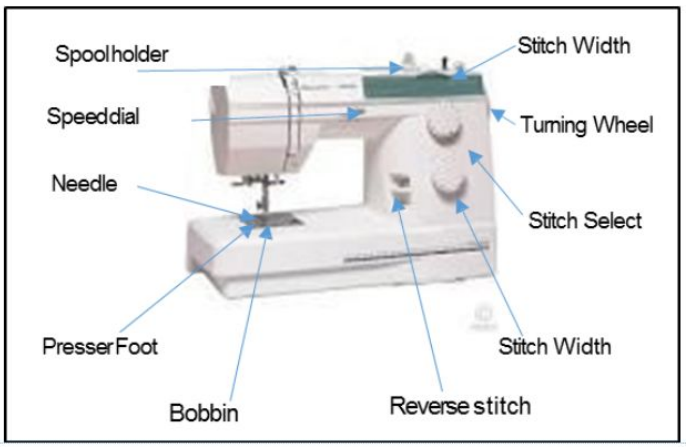
Good properties- strong, absorbent, comfortable, hard wearing, drapes well, does not crease, cheap, environmentally friendly.

Bad properties- expensive, creases easily, shrinks, burns easily, bobbles, itchy, weak when wet, takes a long time to dry.

Properties and use of natural fibres

Natural Fibre	Properties	Uses
Cotton	Strong, absorbent, cool to wear, hard wearing, creases easily, easy to care for	Clothing, soft furnishings
Wool	Warm, absorbent,	Warm outer wear e.g. jumpers, carpets, blankets, soft furnishings
Silk	Comfortable to wear, soft, absorbent, expensive, natural sheen	Luxury clothing and furnishing



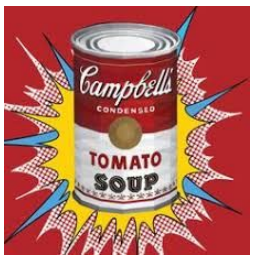


Pop Art was an art movement in the late 1950s and 1960s that reflected everyday life and common objects. Pop artists blurred the line between fine art and commercial art.
Fine art = is rooted in drawing and design-based works such as painting, printmaking, and sculpture.
commercial art = graphic art produced for purposes such as advertising and packaging

Britain vs America – Pop Art
Although they were inspired by similar ideas, subject matter and shared ideals, there were distinct differences between American pop art and British pop art:
American Pop Art: Pop Art made in America about America
British Pop Art: Pop Art made in Britain about America
Pop Artists used common images from everyday culture as their sources including:
- Advertisements
- Consumer goods
- Celebrities
- Photographs
- Comic strips

Another famous pop artist is **Roy Lichtenstein.** He liked to appropriate images from comic books.
Pop Artists used bold, flat colours and hard edge compositions adopted from commercial designs like those found in:
- Billboards
- Murals
- Magazines
- Newspapers

Andy Warhol was one of the most famous Pop Artists. Part of his artistic practice was using new technologies and new ways of making art including:
- Photographic Silk-Screening
- Repetition
- Mass production
- Collaboration
- Media events



Year 8

Art

YEAR 8 ART REVISION

What I Must Know			
How to confidently apply tone and shade to an observational drawing			
How to use an artist's viewfinder to draw a scaled section from a secondary source			
How to hold a pencil in the correct way for applying tone and shade to a drawing			
How to use pattern to create a range of different zentangle patterns			
To understand where the practice of the Zentangle came from and why it is used as an art form			
To be able to describe a piece of artwork using subject specific terminology			
To be able to evaluate your own work using art specific terminology. To identify possible areas for improvement			

Year 8 Art and Design

Art Vocabulary

1. **Develop** - Working in a variety of materials to find which works the best
2. **Refine** - Changing a drawing or painting in order to improve the outcome
3. **Media** - The materials or techniques that an artist might use
4. **Complementary** - Colours opposite to each other on the colour wheel
5. **Still Life** - A drawing or painting featuring inanimate objects
6. **Portrait** - A drawing or painting of a living being
7. **Blend** - Combining two or more colours to create a gradual transition
8. **Tone** - The lightness or darkness of an area
9. **Highlights** - The lightest areas of a drawing
10. **Shadows** - The darkest areas of a drawing
11. **Inanimate** - An object that is not living nor has ever been alive
12. **Abstract** - Art that does not represent an accurate depiction of reality

The Formal Elements

The formal elements are the parts (or the ingredients) needed to make up a piece of artwork. They consist of:

Line - The path left by a moving point. Eg. A pencil or paintbrush
Shape - An area enclosed by a line
Colour - There are different categories of colour, the main two are primary and secondary colours
Form - the 3 Dimensional quality of an object or shape
Texture - the surface quality of an object (how it looks or feels)
Pattern - A design created by repeating lines, shapes, tones or colour

Cycle 3 Artist Research

Maria Thomas and Rick Roberts - Zentangles

1. A Zentangle is a mindfulness art technique created by artists maria Thomas and Rick Roberts.
2. Zentangles involve the process of creating unique pattern or 'tangles' using only a pen and a piece of paper.
3. A whole range of patterns can be used to create a Zentangle but the artist must be completely relaxed and in a state of mindfulness in order to do the activity properly
4. Creating Zentangles has been shown to help boost self esteem, confidence and focus and can even be used as a treatment for anxiety
5. A basic Zentangle is created using black ink on a tile of white paper. There is no right or wrong way to create a Zentangle, the artist is encouraged to allow their creativity to guide them

Still Life

1. A still life *(French: nature morte)* is a piece of artwork that features a drawing or painting of inanimate objects.
2. Usually, these items are set on a table and often include organic objects like fruit and flowers and household items like glassware and textiles.
3. The earliest known still life paintings were created by the Egyptians in the 15th century BCE. Funerary paintings of food—including crops, fish, and meat—have been discovered in ancient burial sites. The most famous ancient Egyptian still-life was discovered in the Tomb of Menna, a site whose walls were adorned with exceptionally detailed scenes of everyday life.
4. The still life remained a popular feature in many modern art movements. It made its major modern debut during the Post-Impressionist period, when Vincent van Gogh adopted flower vases as his subject and Cézanne painted a famous series of still lifes featuring apples, wine bottles, and water jugs resting on topsy-turvy tabletops.

Year 8

French

Year 8 FRENCH Revision

What I Must Know			
Describe where you live in detail.			
Describe your house, using adjectives, connectives and opinions.			
Describe your bedroom, including prepositions, adjectives, the negative form and opinions.			
Describe what you do in your house using the present tense, the negative form, adverbs and opinions.			
Describe what you did last night or last week-end - (Perfect tense).			
Describe what you will do tonight or next week-end - (Future tense).			

Tu habites où ? – Where do you live ?

J'habite à ……près de …… dans le nord- est de l'Angleterre
I live in ……near …… in the north-east of England.
à la campagne – in the countryside
à la montagne – in the mountains
au bord de la mer – by the sea
en ville – in town
dans un village – in a village
en banlieue – in the suburbs
dans une maison – in a house
dans un appartement – in a flat
dans un immeuble – in a block of flats

Les pièces - Rooms

Au rez-de-chaussée, il y a..
On the ground floor, there is…

Au premier étage, il y a …
On the first floor, there is…

le salon – lounge
le bureau – office
le jardin – garden
le grenier – attic
le garage –garage
le sous-sol – basement
la cave – cellar
la salle-de-bains – bathroom
la chambre – bedroom
la cuisine – kitchen
la salle-à-manger – dining-room
l'entrée – the hallway
la chambre **de** mes parents – my parents' bedroom
les toilettes – toilets

Prepositions

dans – in
sur- on
sous-under
entre – in between
devant – in front of
derrière – behind
en face de : opposite
à droite – to the right
à gauche – to the left
à côté du + masc – next to
à côté de la + feminine – next to
en face de - opposite

pour + verb – to/in order to/for

travailler – to work
dormir – to sleep
me relaxer – to relax
lire – to read
faire mes devoirs – to do my homework
jouer aux jeux-vidéos – to play videos-games

Describing what I have in my room

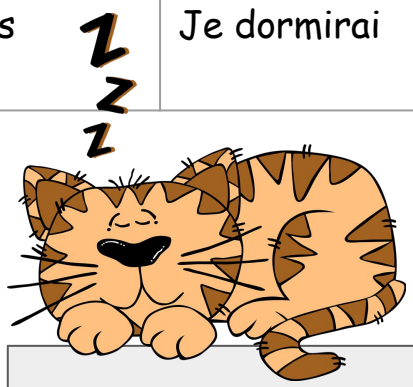
Dans ma chambre – In my bedroom
J'ai – I have
Il y a – there is/are
un bureau – a desk
un lit – a bed
un tapis – a rug
un coussin – a cushion
un ordinateur – a computer
une étagère – a shelf
une armoire – a wardrobe
une lampe- a lamp
une chaise – a chair
une commode – drawers
des nounours – teddies
Je n'ai pas de bureau – I don't have a desk

Qu'est ce que tu fais dans ta chambre?
What do you do in your room? (Present)

Qu'est-ce que tu as fait à la maison hier soir?
What did you do last night? (Past)

Qu'est-ce-que tu feras ce week-end?
What will you do this week-end? (future)

INFINITIVE	PERFECT (Past)	PRESENT	FUTURE
manger To eat	J'ai mangé	Je mange	Je mangerai
regarder To watch	J'ai regardé	Je regarde	Je regarderai
écouter To listen	J'ai écouté	j'écoute	J'écouterai
faire To do	J'ai fait	Je fais	Je ferai
lire To read	J'ai lu	Je lis	Je lirai
boire To drink	J'ai bu	Je bois	Je boirai
dormir To sleep	J'ai dormi	Je dors	Je dormirai



Negatives

ne…pas – not –
Je **ne** mange **pas** de bonbons –
I don't eat sweets.
ne …jamais – never –
Je **ne** mange **jamais** de bonbons –
I never eat sweets.
ne …plus – no longer –
Je **ne** mange **plus** de bonbons –
I no longer eat sweets.
ne…rien – nothing/anything –
Je **ne** mange **rien** ! –
I don't eat anything!

Adverbs/expression of frequency (how often)

normalement - normally
souvent –often
parfois – sometimes
quelquefois – sometimes
toujours – always
à l'occasion – occasionally
rarement – rarely

Year 8

German

Free Time Activities / New Technology

Year 8 German Revision

What I Must Know			
Describe what you do in your free time			
Use adverbs of frequency to describe how often you do things			
Say what friends/family do in their free time			
Describe a weekend in the past tense			
Describe what you will do tonight or next weekend			
To describe new technology and your use of it			

Cycle 3 German Knowledge Organiser: Free Time Activities / New Technology

Was machst du in deiner Freizeit?
What do you do in your free time?

Ich spiele:	**I play:**
Fußball	Football
Tennis	Tennis
Tischtennis	Table tennis
Basketball	Basketball
Netzball	Netball
Federball	Badminton
Hockey	Hockey
Rugby	Rugby

Ich gehe:	**I go:**
In die Stadt	to town
Ins Kino	to the cinema
In den Park	to the park
Schwimmen	swimming
Reiten	horse riding
Ins Einkaufszentrum	to the shopping centre

Wie oft machst du das?
How often do you do that?
Frequency phrases

oft	often
jeden Tag	every day
jede Woche	every week
manchmal	sometimes
ab und zu	now and then
selten	rarely
jeden Abend	every evening

REMEMBER:
When describing the frequency of an action, the adverb of frequency comes directly **AFTER** the **VERB**.

E.g. Ich spiele **jeden Tag** Fußball.

KEY VERBS (spielen & gehen)	PAST	PRESENT	FUTURE
ich	habe gespielt bin gegangen	spiele gehe	werde spielen werde gehen
du	hast gespielt bist gegangen	spielst gehst	wirst spielen wirst gehen
er/sie	hat gespielt ist gegangen	spielt geht	wird spielen wird gehen
wir	haben gespielt sind gegangen	spielen gehen	werden spielen werden gehen

	Deutsch	Englisch		Deutsch	Englisch
1	benutzen	to use	11	der Computer	computer
2	laden	to load	12	der Bildschirm	screen
3	posten	to post (photos)	13	der Laptop	laptop
4	herunterladen	to download	14	die Maus	mouse
5	verschicken/senden	to send	15	das soziale Netzwerk	Social network
6	arbeiten	to work	16	die Zeitung	newspaper
7	chatten	to chat	17	das Magazin	magazine
8	schicken/senden	to send	18	das Risiko	risk
9	surfen	to surf	19	der Chat-Raum	Chat room
10	empfangen	to receive	20	die Tastatur	keyboard

Year 8

ICT

YEAR 8 CYCLE 2 PHOTOSHOP, ANIMATION, COMPUTER BASICS & MORE...

What I must know			
Define a variable			
Define a constant			
Define a algorithm			
Identify components from an algorithm			
Label an *IF / Else IF* statement			
Label a *Forever loop*			
Label a *Repeat until loop*			
Define a animation			
Explain the purpose of a key frame			
Explain the purpose of layers			
Identify tools in Macromedia flash			
Explain the function of RAM			
Explain the function of ROM			
Explain the differences between RAM and ROM			
Explain the purpose of the CPU			
Explain how ICT can be used in different industries			
Explain how ICT can be utilised for people who have special needs / mobility issues			
Explain the differences between hardware and software			
Identify examples of hardware and software			
Identify tools in Macromedia Photoshop			
Explain the term "airbrushing"			
Explain possible implications of airbrushing in social media			
Explain the need for secondary storage			
Explain which secondary storage type would be used for a scenario and why			
Identify the characteristics of secondary storage			
Explain Virtual Memory			
Identify Pros and Cons of Virtual memory			

YEAR 8 COMPUTER SCIENCE REVISION

Use this knowledge organiser to revise for your assessment. Try:practice questions (use your white book);

- using ***Craig and Dave / The computer science tutor*** on YouTube to revisit topics;
- getting someone to quiz you;
- making flashcards to use when quizzing;
- graphic organisers (e.g Mind maps)

Input Devices	Output Devices	Storage Devices
A hardware device used to input data into a pc/device to be processed.	A hardware device used to display the data that has been processed.	A hardware device used to permanently store data for long term use.
Keyboard Mouse Microphone Touch screen Joystick / controller	Monitor / screen Printer Speakers Projector	Magnetic – *Hard Disk drive* Optical – *CD & DVD* Solid State – *USB stick, SD Card & Solid State drive*

MEMORY

RAM – holds currently running programs instructions and data - memory is volatile it is temporary

ROM – Boots up the PC and loads the OS- memory is non-volatile it is permanent

Differences: RAM is volatile / ROM non-volatile , RAM can be written to, ROM cant not be written to and their jobs are different (see above for job info)

Virtual Memory – When RAM is full the hard disk drive can be used to work as RAM.

Pros/Cons of using Virtual Memory:

- Pro: It allows you to open more programs when RAM is full.
- Con: Slower than RAM as its using the hard drive.

Cache – Stores the frequently used programs instructions and data (a very small, fast memory located in the CPU, if used speeds up the FDE cycle as its less distance to travel)

1/0 = bit
1024 bytes = 1 kilobyte
1024 megabytes = 1 gigabyte
4 bits = 1 nibble
1024 kilobytes = 1 megabyte
1024 gigabytes = 1 terabyte
8 bits = 1 byte

WHAT IS A VARIABLE?
A value stored in the program that can change

WHAT IS A CONSTANT
A value stored in the program that can NOT change

WHAT IS A NETWORK?
A network is one or more devices connected together to communicate

WHAT ARE THE DIFFERENCES BETWEEN HARDWARE AND SOFTWARE?
Hardware is the physical components such as monitor, keyboard, mouse, printer.
Software is the non-physical components – programs and applications

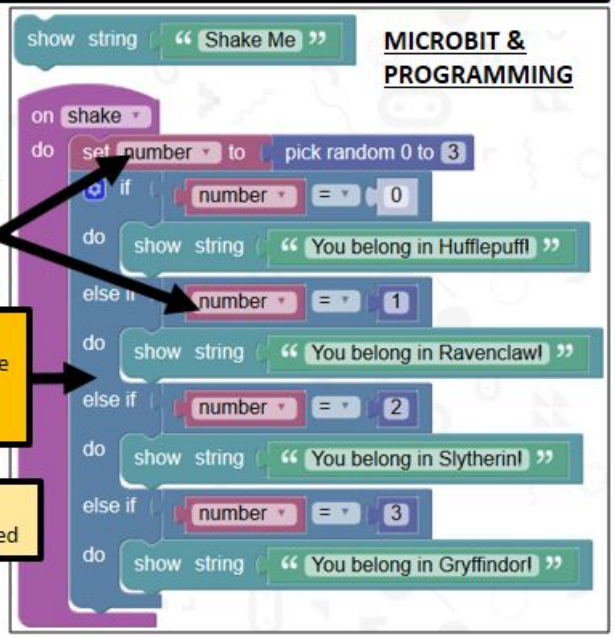
WHAT IS A CONSTANT
A value stored in the program that can NOT change

WHAT IS A VARIABLE?
A value stored in the program that can change

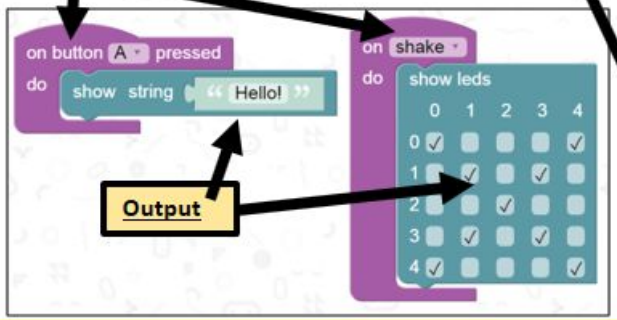
WHAT IS AN IF STATEMENT?
a way to make a decision in the code to follow one path or another.

WHAT IS A LOOP?
A piece of code that is repeated

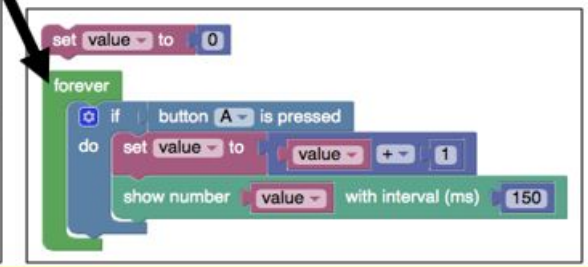
MICROBIT & PROGRAMMING



input



Output



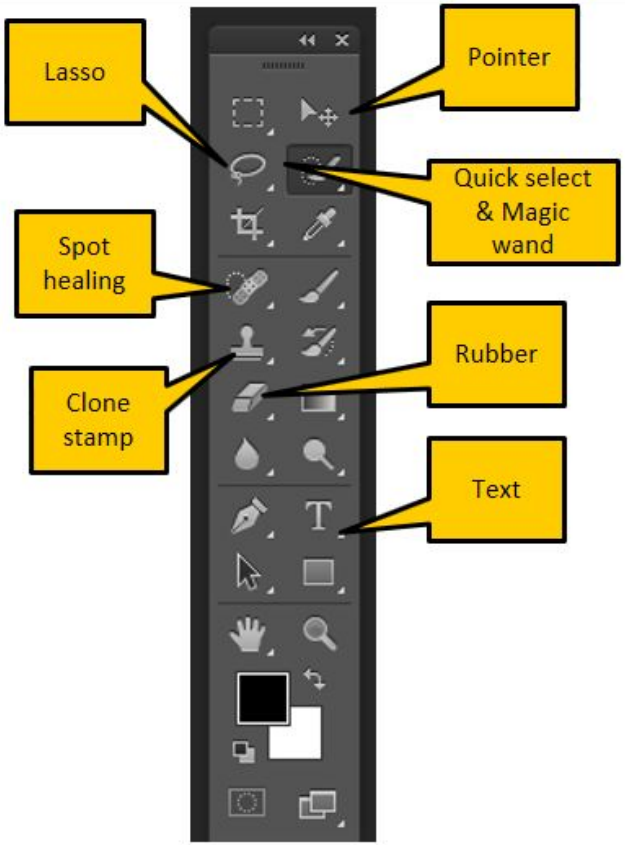
YEAR 8 COMPUTER SCIENCE REVISION

PHOTOSHOP

BASIC TERMINOLOGIES & KEY CONCEPTS

Airbrushing– when an image has been altered / improved in some way
Layers – holds each item separately so can move independently to the others. Can be locked.
Hue / Saturation – colour tones
Main tools:

Liquify	Lasso	crop
spot healing brush	clone stamp	Magic wand
Patch	quick selection	



SECONDARY STORAGE

A long term, permanent/non-volatile storage when the device is turned off

Magnetic, Optical and Solid State

Capacity *(How much can it store)*

Cost *(Cost per Kb / Mb)*

Durability *(How hard wearing something is… can it be dropped and still work)*

Portability *(How easy is it to carry around)*

Access Speed *(How fast can it read data and write data to it)*

Physical Size *(How physically large or small it is)*

Reliability *(Is it likely to just stop working?)*

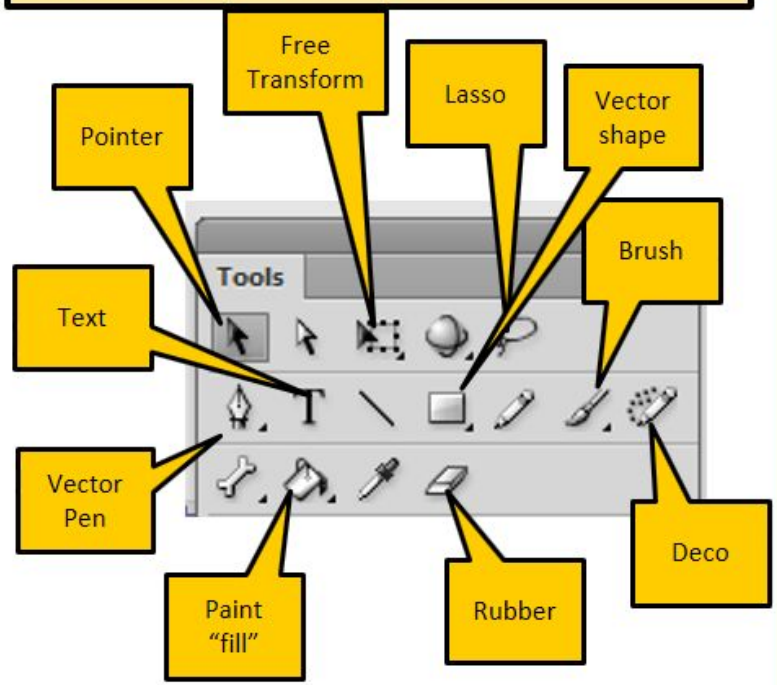
ANIMATION

BASIC TERMINOLOGIES & KEY CONCEPTS

Animation– A collection of static images with slight changes and when played in quick succession, they look as if they are moving.

Keyframes – holds an images inside of a layer

Layers – holds each item separately so can move independently to the others. Can be locked.

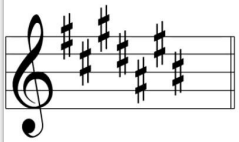


Year 8

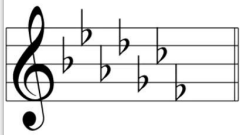
Music

Year 8 Music Revision (Key signatures)

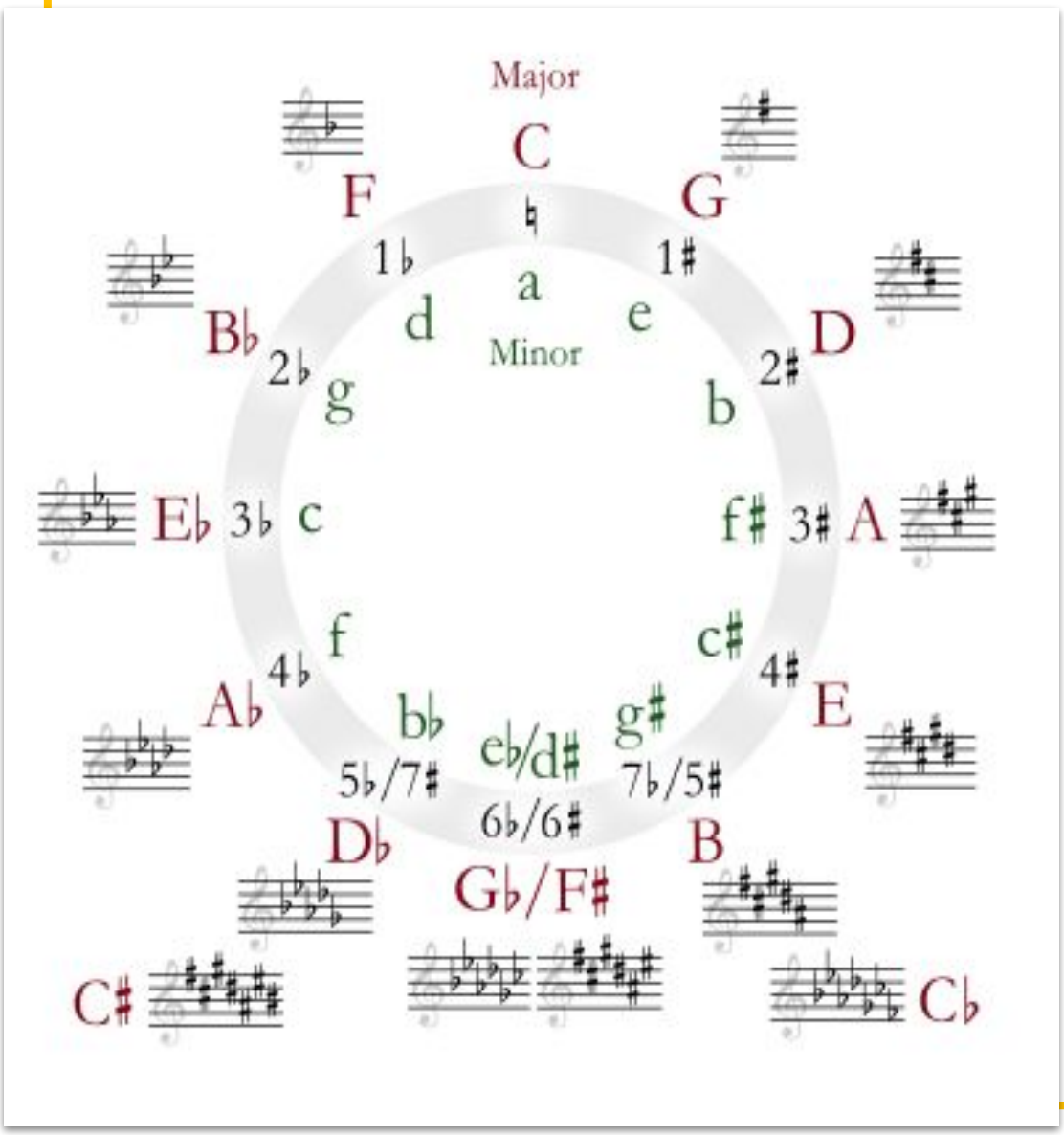
Order of Sharps and Flats

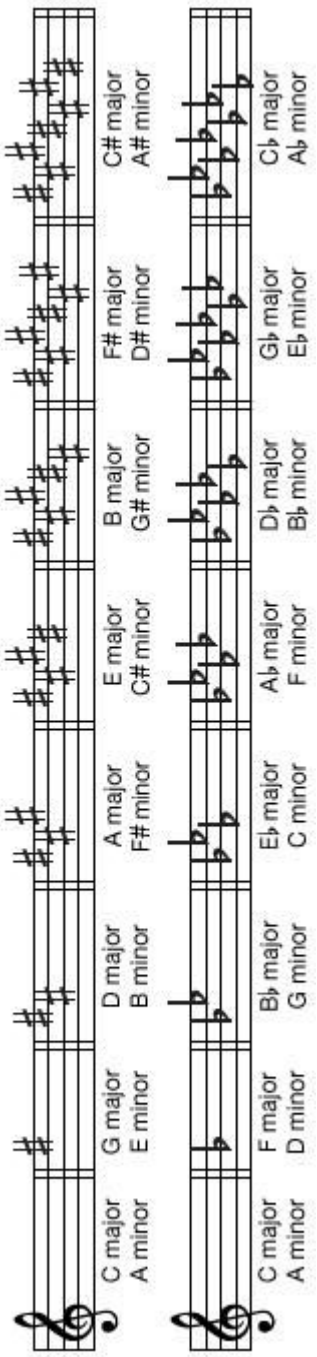


Father Charles Goes Down And Ends Battle



Battle Ends And Down Goes Charles' Father





Year 8

P. E.

Use the checklist to assess your understanding of the topics you need to know.

EXTRINSIC FACTORS			
			
I know how the type of activity can affect the injury risk			
I can describe how coaching supervision can affect the risk of injury			
I can identify environmental factors that might affect the risk of injury			
I know how equipment can influence the risk of injury			
I can identify hazards in sport			
INTRINSIC FACTORS			
I can discuss how physical preparation can reduce the risk of injury			
I can describe individual variables that a coach needs to consider			
I can identify psychological factors to reduce the risk of injury			
I can identify causes of poor posture			
I know the 5 injuries related to poor posture			

Extrinsic factors which can affect the risk of injury in Sport

Environmental factors

Weather

Playing surface/performance area

Other participants

Type of activity

Some sports have a higher risk and present different injury risks.

E.g. contact to non-contact sports

Coaching/Supervision

Poor/incorrect techniques

Ineffective communication

Importance of rules and regulations

Equipment

Protective equipment (shin pads, gum shield)

Performance equipment (e.g. hockey stick, cricket bat)

Suitability of clothing/footwear

Extrinsic factors are out of our control - as a performer we cannot control these.

Intrinsic factors which can affect the risk of injury in Sport

Individual variables

Flexibility-women are more flexible than men

Age-Young children and old people have lower levels of fitness, compared to young people

Nutrition-we need enough calories for energy to do sport

Sleep-fatigue can increase injury risk as we may miss things

Gender-men are stronger than women

Previous/recurring injuries-higher risk of injuring these again

Physical Preparation

Training

Warm up

Cool down

Fitness levels

Overuse

Muscle imbalance

Intrinsic factors are things that we can control ourselves, or they are personal to us.

Motivation

Motivation will increase concentration and focus so a performer can time tackles correctly and perform skills safely.

Aggression

Too much aggression can cause a performer to perform a technique such as a tackle too hard and cause injury to themselves/others.
This may lead to them breaking the rules.

Posture

Pelvic Tilt

This is a condition where the hips are not level.

Lordosis

A condition in which the spine in the lower back has an excessive curvature

Kyphosis

An excessive curvature of the upper spine causing the back to appear slouched or hunched.

Round shoulder

A condition where the shoulders resting position has moved forward from alignment.

Scoliosis

A back condition that causes the spine to curve to the side in an 'S' shape.

CAUSES OF POOR POSTURE

Poor stance – bending your knees or hunching the shoulders when standing

Sitting positions – slumping/slouching instead of sitting upright

Physical defects – Muscles weaken around an injured area

Fatigue – Tired muscles are unable to support skeleton properly

Clothing/footwear- wearing shoes with high heels can affect posture through slouching or putting your head down.

Emotional factors – low self-esteem or confidence can affect posture

Year 8

R. E.

Year 8
Ethics & Beliefs Revision

What I must know & do			
Know the key term definitions			
Know what a prophet is			
Know who Jesus of Nazareth was			
Know sources of authority associated with Jesus of Nazareth			
Know Christian practices based on their belief in Jesus			
Know who Moses was			
Know sources of authority associated with Moses			
Know Jewish practices based on their belief in Moses			
Know who Muhammad was			
Know sources of authority associated with Muhammad			
Know Muslim practices based on their belief in Muhammad			
Know what prayer is			
Know what Muslim prayer consists of			
Know sources of authority associated with Muslim prayer			
Know what Jewish prayer consists of			
Know sources of authority associated with Jewish prayer			
Know what Christian prayer consists of			
Know sources of authority associated with Christian prayer			
Know exam answer types and structures			
Practice questions using the content on the knowledge organiser			

KS3 Ethics and Belief
Cycle 3 Assessment Revision Knowledge Organiser

What is a Prophet

✔ A messenger from God
✔ They speak on behalf of God
✔ They give messages to humans from God

What is Prayer

✔ A conversation with God.
✔ Prayer can be silent or said out loud.
✔ It can use set words, or a person's own words.

Jesus of Nazareth

✔ A Jew who lived around 2000 years ago from the middle east.
✔ A teacher and religious leader
✔ The Gospels claim that he performed miracles and cured the sick.
✔ Christians believe that Jesus was God living as a human
✔ Christians celebrate Jesus' birth every year at Christmas
✔ Christians pray to Jesus because they believe he is God.
✔ Christians believe Jesus was the saviour to save them from the Romans. Jesus preached peace and criticised the religious leaders.
✔ The religious leaders didn't like this so had him crucified.
✔ Christians remember the crucifixion every year on Good Friday.
✔ In the Bible it claims that three days after Jesus died he resurrected.
✔ Christians celebrate the Resurrection every year at Easter
✔ Jewish people and Muslims do not believe that Jesus was God, that he is a prophet

Christian Prayer

✔ Jesus knew God, and was God (Trinity).
✔ Jesus spoke of God as a loving Father who is always at hand to listen to the prayers
✔ Jesus said: "Ask and it will be given to you; seek and you will find; knock and the door will be opened to you. For everyone who asks receives; he who seeks finds; and to him who knocks the door will be opened." Matthew 7: 7-8.
✔ Christians believe that God will answer prayer in his own way
✔ They also believe that prayer is not a 'quick fix'.
✔ A person should be prepared to work with God to achieve what is being asked for
✔ The theologian Soren Kierkegaard (1813-1855) said "Prayer does not change God, but it changes him who prays."

Moses

✔ Was a Hebrew (Jew) who lived around 3500 years ago.
✔ His story can be found in the book of Exodus, in the Bible.
✔ He was adopted by the Egyptian royal family and brought up as a prince in Egypt.
✔ God spoke to Moses through a burning bush and asked him to tell the Pharoah to let the Hebrew free from slavery. Pharaoh refused, so Moses helped them escape.
✔ God parted the Red Sea in two to let them escape Egypt.
✔ Jews remember the escape from Egypt every year during the Passover.
✔ God gave Moses the 10 Commandments to share with the Hebrews
✔ Moses is a prophet for Christians, the Jewish people and Muslims.

Muslim Prayer (Salat)

✔ Performed five times each day: Before sunrise, midday, the late part of the afternoon, just after sunset, and between sunset and midnight.
✔ This prayer timetable gives Muslims the pattern of their day.
✔ In Islamic countries, there is a public call to prayer from the mosques
✔ Connects them to Allah and each Muslim to the ummah.
✔ The Qur'an states that prayer must be genuine: "Woe to those who pray, but are unmindful of their prayer, or who pray only to be seen by people." Qur'an 107:4-6.
✔ Muslim perform a whole series of set movements
✔ Muslims must be clean before they pray. So they perform wudhu.

Muhammad

✔ Born around 1400 years ago in Arabia.
✔ An angel gave him messages in a cave, just outside of the city of Mecca.
✔ These messages are what is known as the Qur'an.
✔ Muslims treat the Qur'an with great reverence.
✔ His followers became known as Muslims.
✔ Christians and Jewish people do not believe Muhammad to be a prophet.

Jewish Prayer

✔ It builds the relationship between God and human beings.
✔ When people pray, they spend time with God.
✔ Praying obeys God's commandment: "...to love the Lord your God, and to serve him with all your heart and with all your soul." Deuteronomy 11:13.
✔ Pray three times a day; morning, afternoon, and evening.
✔ The Jewish prayer book (it's called a siddur)

KS3 Ethics and Belief C3 Assessment Practice Questions, Model Answers & Structures

Question Structures	Model Answers	Practice Questions
<u>Section 1</u> Complete the 10 different sentences using your knowledge of the Key Terms **<u>Section 2</u>** **(a) Outline 3 ways_____ [3 marks]** *Firstly…* *Secondly…* *Finally...* **(b) Describe 2 ways____ is different to__ [4 marks]** *Firstly...,* *whereas...* *Secondly...,* *whereas...* **(c) Explain 2 ways_____ [5 marks] You must support your reasons with evidence from the Bible.** *Firstly…,* *because…* *Therefore/For example…* *Secondly…,* *because…* *Therefore/For example…* *This is supported by…,* *because/therefore/this means…*	**(a) Outline 3 ways that participate in the Genesis creation story [3 marks]** *Firstly, God gives humanity dominion over all creatures and the earth. Secondly, humanity has a duty to be stewards over the earth by taking care of it for the next generations. Finally, woman is created using the rib of the man Adam.* **(b) Describe 2 ways that the Genesis creation story is different to scientific theories [4 marks]** *Firstly, the Genesis creation story describes the world being created in 6 days, whereas the theory of evolution shows us that the universe was formed over 13.8 billion years. Secondly, the genesis creation story describes God making all living creatures, whereas the theory of evolution suggests that all living creatures evolved from more simple life forms.* **(c) Explain 2 reasons why Christians believe Jesus saves them from their sins [5 marks] You must support your reasons with evidence from the Bible.** *Firstly, Christians believe Jesus saves them from their sins, because in life people can separate themselves from God. Therefore, they need God's forgiveness which is given to them through Jesus' death on the cross. Secondly, Christians believe Jesus saves them from their sins, because they believe all people are born with original sin. This means that they share in the first sin of Adam and Eve. This is supported by the book of Genesis which states that "God banished them from the Garden of Eden", because of their original sin. Therefore all their descendants are born outside of Eden.*	a) Outline 3 reasons why Jews pray [3 marks] (a) Outline 3 reasons why Jesus is viewed as a Prophet [3 marks] (a) Outline 3 ways that Moses communicated with God [3 marks] (a) Outline 3 reasons why Jesus was crucified [3 marks] (b) Describe 2 ways that prayer for Muslims is different to prayer for Christians [4 marks] (b) Describe 2 ways that prayer for Muslims is different to prayer for Jews. [4 marks] (c) Explain 2 reasons why a Christian might not view Jesus as a prophet. [5 marks] You must support your reasons with evidence. (c) Explain 2 reasons why Christians pray. [5 marks] You must support your reasons with evidence.

Key Terms

Prophet
A person giving a message to humans from God.

Gospels
The life stories of Jesus

Saviour
A person who saves people (a title given to Jesus).

Crucifixion
When Jesus was nailed to a wooden cross to die.

Resurrection
When Jesus came back to life.

Mecca
The holy city for Muslims (where Muhammad was from, in Saudi Arabia).

The Qur'an
The messages given to Muhammad from the angel

Prayer
Communication with God.

Trinity
The Christian belief that God is Father, Son (Jesus) and the Holy Spirit.

Salat
The Muslim form of prayer.

Ummah
The worldwide Muslim community.

Wuduh
Muslim ritual of washing before praying.