ISCA ACADEMY

INSPIRATION FOR LIFE

SPRING 2020

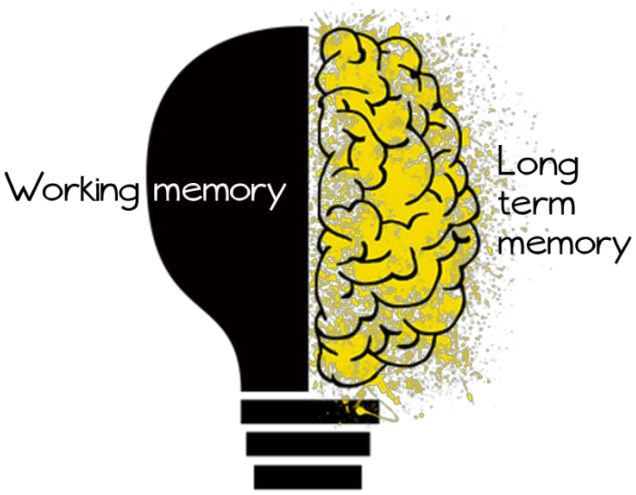
KNOWLEDGE BOOKLET

YEAR 7

CONTENTS

WHAT IS A KNOWLEDGE ORGANISER?

Your mind is split into two parts: the working-memory and the long-term memory. Everybody's working-memory is limited, and can very easily become overwhelmed and this is known as overload. Your long-term memory, on the other hand, is effectively a limitless storehouse for information.



You can support your working memory by storing key facts and processes in your long-term memory. These facts and processes can then be retrieved to stop your working memory becoming overloaded:

Let's look at an example, the basic number fact: 7 x 8 = 56

If you can instantly recall that 7 x 8 = 56, your working memory has more space to think about a more difficult problem, like 37 x 8. The answer of 56 comes effortlessly, and you can focus on 30 x 8, then add the product to the 56 in your head.

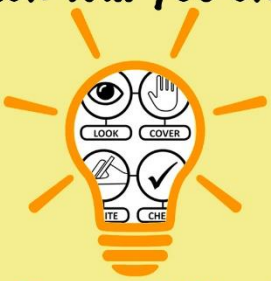
If you do not know that 7 x 8 = 56 straight away, you are more likely to become confused and frustrated. Being able to very quickly recall key facts is a way of hacking your working memory, making thinking about difficult stuff much easier.

This booklet contains knowledge organisers for all of your subjects for the Autumn term. Each knowledge organiser has the key information, which needs to be memorised to top up your long-term memory in order to help you master your subject and be successful in lessons. You will be expected to follow the homework schedule on page 4.

HOW TO USE YOUR KNOWLEDGE ORGANISER

Challenge yourself

Which will you choose?

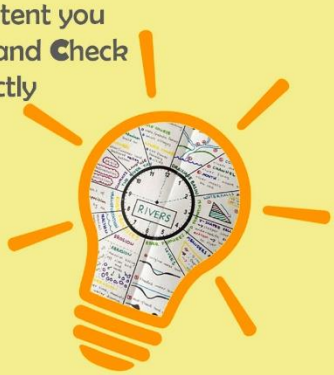


Look Cover Write Check

Look at your knowledge organiser, **C**over a section of it, **W**rite out the content you have just covered from memory and **C**heck you have recalled it correctly

Mindmaps

Place the key word/concept in the middle. Go wild with colourful, flowing shapes that link the key definitions and concepts.



Revision Clock

Draw a clock and add the topic in the middle. Then, break it down into 10 minute sections. Add notes in each segment. Cover the clock and recite all the information out loud.

Mnemonics

Creating mnemonics is a great way for remembering groups or lists of words. For example, to remember the order of planets in the solar system:
My Very Excited Mother Just Served US Nachos

Flash Cards

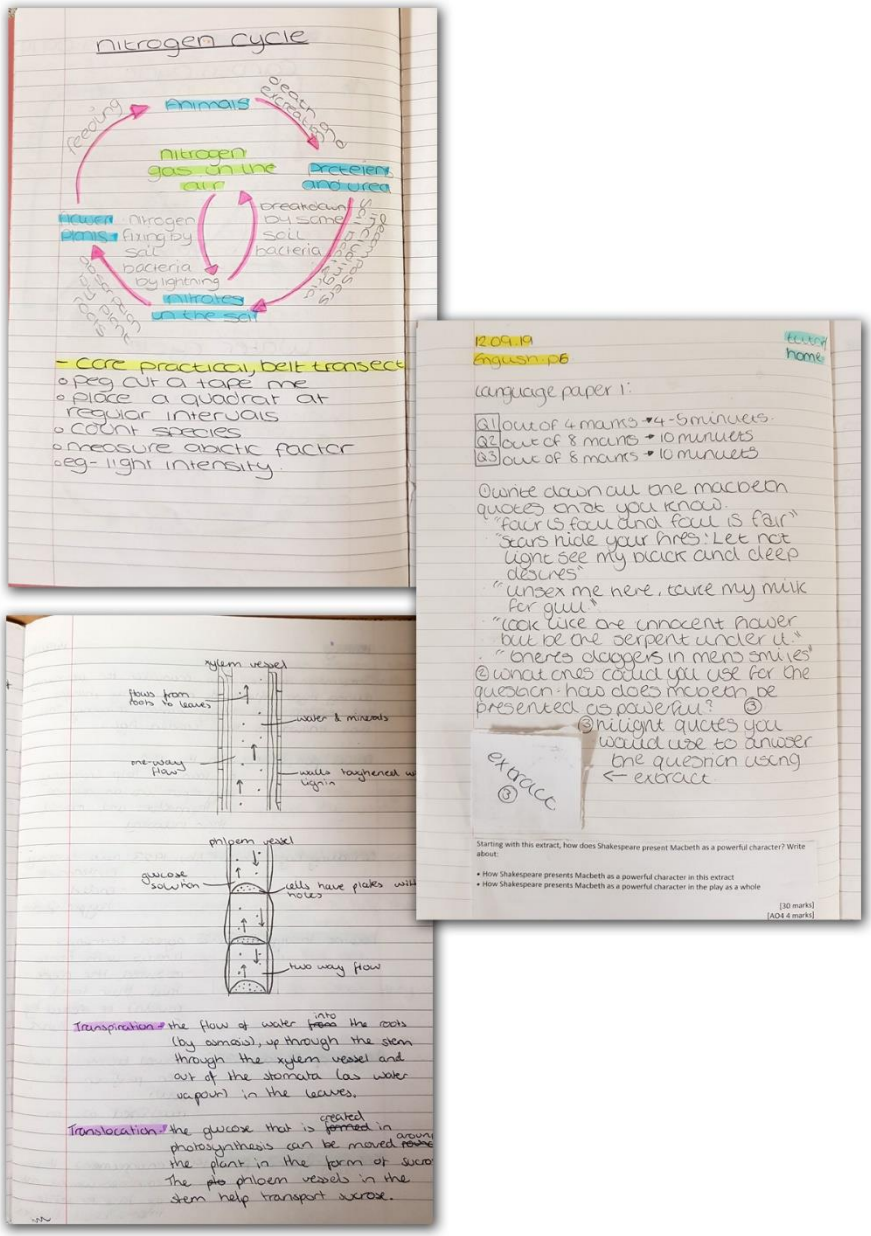
Write down the word/term on one side and a definition/explanation on the other side. Once you have notes written in your own words and summarised – move onto testing yourself quickly.

EXPECTATIONS OF YOU

1. Check the schedule on the next page to see which knowledge organisers you should use each day for your homework
2. Complete **one full page for each subject** on the schedule in your knowledge book **every day**
3. Use your knowledge organiser after you have finished to **mark and correct** your own work
4. **Sign your self-check sheet at the end of each week** after you have finished your full page each day
5. Get your self-check sheet **signed by your tutor** during your knowledge organiser tutor time session

T	on Time
A	Accurate
N	Neat
C	Complete

Homework should be **TANC**. Below is an example of homework that would meet the expected standard. If it does, your tutor will sign your log on the morning you are working in silence on your knowledge organiser.



YOUR SCHEDULE

Week A	
Day	Subject
Monday	Maths
Tuesday	Science
Wednesday	History
Thursday	Art/DT/Music/Drama (rotation)
Friday	PE
Week B	
Day	Subject
Monday	English
Tuesday	MFL
Wednesday	Geography
Thursday	RE
Friday	Computing

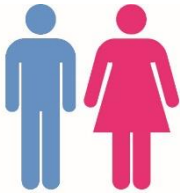
You will need to sign to confirm you have completed the knowledge organiser homework. Your tutor will check this each week.

Week commencing	Self Check	Tutor Sign	Week commencing	Self Check	Tutor Sign
13/1/2020			24/2/2020		
20/1/2020			2/3/2020		
27/1/2020			9/3/2020		
3/2/2020			16/3/2020		
10/2/2020			23/3/2020		

You will notice on each knowledge organiser that there are green and blue edged boxes with text in. Text in a green edged box is key vocabulary you need to learn and writing in a blue edged box are the key concepts/knowledge you will need to learn.

Key Vocabulary will be written in a green edged box like this.

Key concepts/ideas will be written in a blue edged box like this



Gender identity: Non – fiction writing

5 ENGLISH

Key vocabulary:

Parity

Disparity

Inequality

Imbalance

Stereotype

Gender

Perspective

Sexism

Domestic violence

Body image

Pay gap

Ingredients for WRITING non – fiction

- **PLAN**
- **Powerful and ambitious vocabulary**
- **A range of language techniques**
- **A range of punctuation ; ! ?**
- **Varied sentences:** long, short and discourse markers: connectives, adverbials, prepositions etc.
- **Structure:** paragraphing, one line paragraphs, sub headings, repetition.
- **Structural features**: juxtaposition, anaphora, cyclical structures.

What ideas are there to consider?

Sexism: prejudice, stereotyping, or discrimination, typically against women, because of their sex.

Stereotypes: a widely held but fixed and oversimplified image or idea of a particular type of person or thing.

Gender pay gap: an equality measure that shows the difference in average earnings between women and men.

Gender inequality in sport: there are differences in men sports and women sports**; women do not compete with men.**

Domestic violence: involves violence or abuse by one person against another in a familial or intimate relationship

Male body image: a male's perception of the aesthetics or sexual attractiveness of his own body.

You will need the correct purpose, audience and form:

Purpose: why am I writing this? It could be to argue, inform, describe etc.

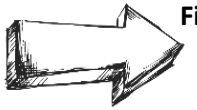
Audience: who do you want to read this? It could be a local MP, an editor, the prime minister, the head teacher, or your class mates etc.

Form: what type of writing is this? E.g. formal, informal, a speech, a letter, an article etc.

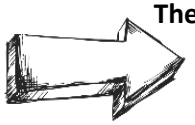
AFOREST techniques:

- Clear purpose for writing
- Direct address ('you', 'your')
- Anecdotes
- Polite tone
- Facts
- Opinions stated as facts
- Request

Planning and writing a formal letter explaining your views:



First, plan your viewpoint. The more convincing the better!



Then create 3 supporting points (these will be a paragraph for each point).

Finally, follow the structure outlined in the example letter:

Your address and the date.

The recipient's title and address.

Opening paragraph.

3 main paragraphs,

Conclusion and closing paragraph

your name and signature.

Maidstone Road
Leicester
LE2 OTU

3rd September 2018

The Editor
Leicester Mercury
New Walk
Leicester
LE1 6TF

Dear Sir,
Re: Community Concern

Opening paragraph

About three or four middle paragraphs

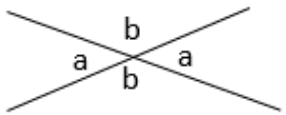
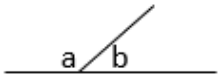
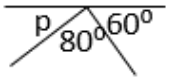
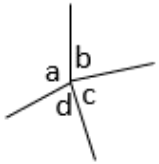
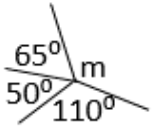
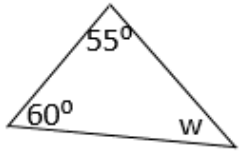
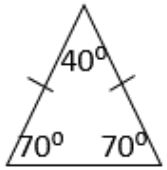
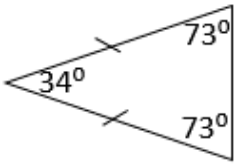
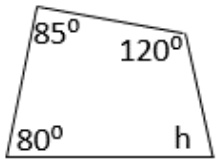
Closing paragraph

Yours faithfully.

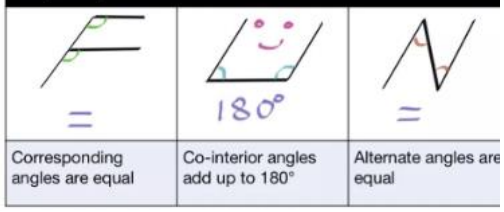
Brian Killeen

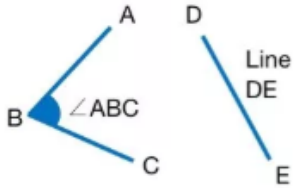
Don't Forget!

6 MATHS

Topic/Skill	Definition/Tips	Example
Opposite angles	**Vertically opposite angles are equal**	
Angles that form a straight line	**Angles that form a straight line sum to 180°**	 a + b = 180°  80 + 60 = 140 180 – 140 = 40 so p = 40°
Angles around a point	**Angles around a point sum to 360°**	 a+b+c+d = 360°  65+50+110 = 225 360 – 225 = 135 so m = 135°
Angles in triangles	**Angles in triangles sum to 180°**	 60 + 55 = 115 180 – 115 = 65 so w = 65°
Angles in Isosceles Triangles	**Isosceles** triangles have **two equal base angles**	 
Angles in Quadrilaterals	**Angles in a quadrilateral sum to 360°**	 85+80+120 = 285 360 – 285 = 75 so h = 75°

Angles in parallel lines facts

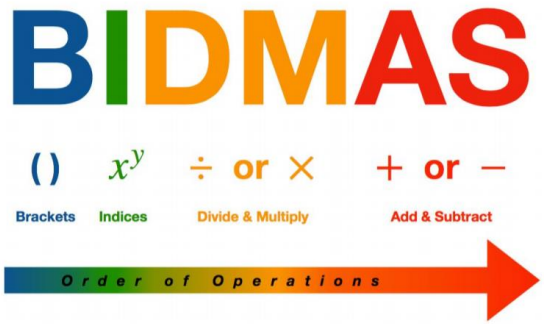




Polygon	A **2D shape** made from 3 **straight sides** or more
Regular polygon	A **polygon** with **all sides equal** in **length** and **all interior angles equal** in size
Isosceles triangle	A triangle with **two equal length sides**. The two **base angles are equal** in size
Equilateral triangle	A triangle with **three equal length sides**. The **three interior angles** are **equal** in size
Interior angle	An angle between **two adjacent sides inside** a **polygon**
Exterior angle	An angle between a **side of a polygon** and an **adjacent side extended outward**
Parallel	**Lines** that have the **same distance continuously between** them. They **never intersect**

The prime numbers between 1 and 50 are **2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43 and 47.**

Factors are numbers that divide exactly into another number. For example, the factors of 8 are: **1, 2, 4, 8**



7 MATHS

Metric length

10 mm = 1 cm

100 cm = 1 m

1000 m = 1 km

Metric Weight

1000 g = 1 kg

1000 kg = 1 tonne

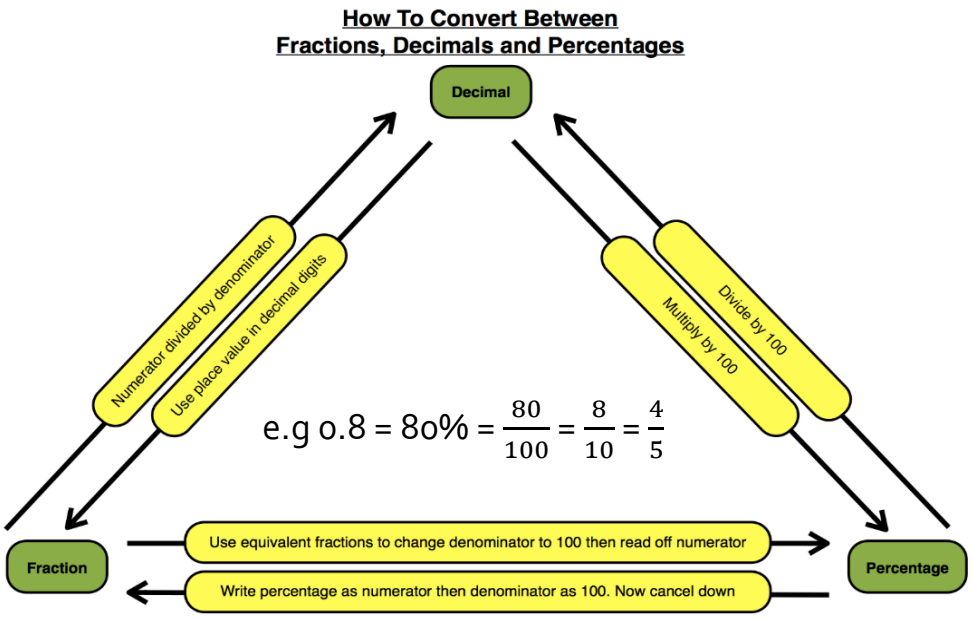
Metric Volume

1000 ml = 1 litre

1 cm³ = 1 ml

1000 cm³ = 1 litre

1000 litres = 1 m³



Mixed numbers to improper fractions

$a)\ Convert\ \frac{16}{5}\ into\ a\ mixed\ number$

$16 \div 5 = 3r1\ so\ 3\frac{1}{5}$

$b)\ Convert\ 3\frac{2}{7}\ into\ an\ improper\ fraction$

$3 \times 7 + 2 = 23\ so\ \frac{23}{7}$

Adding and subtracting fractions

Multiply to make the denominators the same

a) $\frac{2}{7} + \frac{4}{7} = \frac{6}{7}$

b) $\frac{1}{4} + \frac{2}{3} = \frac{3}{12} + \frac{8}{12} = \frac{11}{12}$

c) $\frac{6}{7} - \frac{4}{5} = \frac{30}{35} - \frac{28}{35} = \frac{2}{35}$

d) $4\frac{2}{5} - 1\frac{1}{2} = \frac{22}{5} - \frac{3}{2} = \frac{44}{10} - \frac{15}{10} = \frac{29}{10}$

Fractions of amounts

÷ by the denominator, x by the numerator

a) $\frac{1}{2}\ of\ 24 = 24 \div 2 = 12$

b) $\frac{1}{5}\ of\ 45 = 45 \div 5 = 9$

c) $\frac{2}{3}\ of\ 36 = 36 \div 3 \times 2 = 24$

d) $\frac{3}{4}\ of\ 20 = 20 \div 4 \times 3 = 15$

e) $\frac{4}{7}\ of\ 420 = 420 \div 7 \times 4 = 240$

Multiplying and dividing fractions

a) $\frac{2}{3} \times \frac{5}{7} = \frac{10}{21}$

Multiply the numerators, multiply the denominators.

b) $\frac{6}{7} \div \frac{3}{10} = \frac{6}{7} \times \frac{10}{3} = \frac{60}{21}$

Keep the first fraction, flip the second fraction, change the ÷ into a ×

c) $2\frac{1}{3} \times 3\frac{2}{5} = \frac{7}{3} \times \frac{17}{5} = \frac{119}{15}$

Multiples

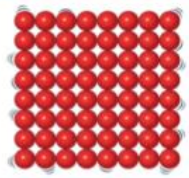
A multiple is in the times table of that number.
The first 5 multiples of 7 are:

7, 14, 21, 28, 35

Year 7 chemistry

8 SCIENCE

The kinetic particle theory of matter is a model that describes the arrangement, movement and energy of particles in a substance. The model is used to explain the physical properties of solids, liquids and gases.

State	Particle diagram	Arrangement of particles	Movement of particles
Gas		random far apart	fast in all directions
Liquid		random close together	move around each other
Solid		regular close together	vibrate about fixed positions

B Particles in the solid state contain the smallest amount of stored energy; particles in the gas state contain the most.

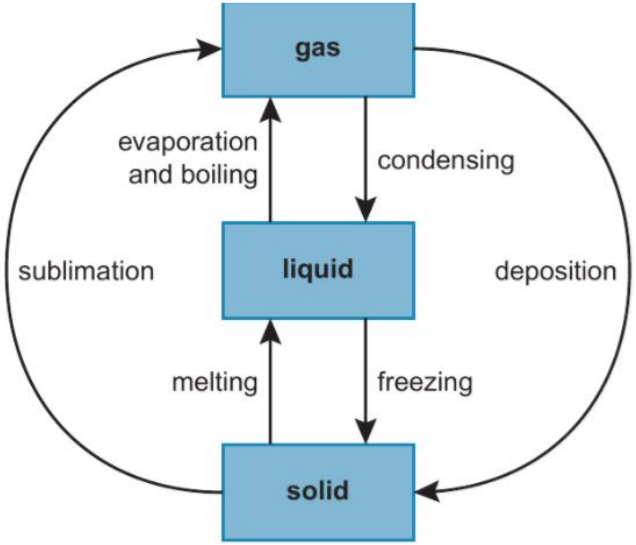
In terms of relative energy, gas particles have the most energy, solid particles have the least energy and liquid particles are somewhere in between. (All compared at the same

Explaining change of state

Melting, evaporating and boiling

Energy must be transferred, by heating, to a substance for these changes of **state** to happen. During these changes the **particles** gain energy, which is used to break or overcome **bonds** between particles.

Evaporation can take place below the **boiling point** of a substance. This is why damp clothes dry when they are hung from a washing line. Boiling happens at the boiling point, when the rate of evaporation is at its maximum.



Condensing and freezing

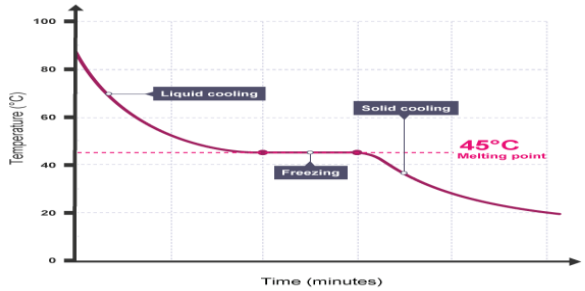
Energy must be transferred from a substance to the environment for **condensation** and **freezing** to happen. During these changes of state, the particles lose energy as bonds form between the particles.

Some substances can change directly from solid to gas, or from gas to solid, without becoming a liquid in between. This is called **sublimation**. Solid carbon dioxide ('dry ice') and iodine can **sublime**.

Changes of state are **physical changes**. Unlike chemical reactions, no new substances are formed during changes of state.

Different types of chemical substance

- An **element** contains just one type of **atom**
- A **compound** contains two or more types of atom joined together
- A **mixture** contains two or more different substances that are not joined together
- the different substances in a mixture can be elements or compounds.



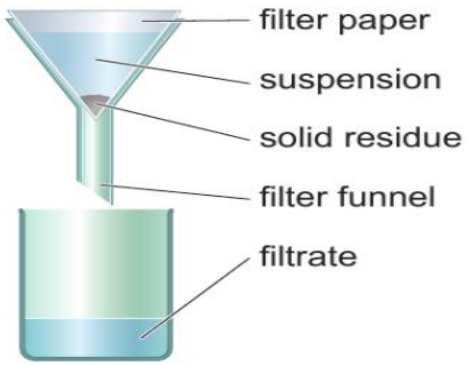
Distinguishing between pure substances and mixtures

Pure substances have a sharp **melting point** but mixtures **melt** over a range of temperatures. This difference is most easily seen when the temperature of a hot liquid is measured as it cools and **freezes**. The graph shows the cooling curve for a sample of a compound called salol. The horizontal part of the graph shows that the salol has a sharp melting point, so it is a pure substance.

Keywords:
Insoluble – describes a substance that cannot dissolve in a solvent.
Solution – when a substance has dissolved in a liquid
Solute – the substance that has dissolved in a liquid to make a solution.
Solvent – the liquid the solute dissolves in to make a solution
Soluble – describes a substance that can dissolve in a liquid

9 SCIENCE

Filtration
Filtration is used to separate an **insoluble** solid from a liquid. Filtration works because the filter paper has tiny holes, or pores, in it. These are large enough to let small **molecules** and **dissolved ions** through, but not the much larger particles of undissolved solid.



Crystallisation is used to produce solid **crystals** from a solution. When the solution is warmed, some of the **solvent evaporates** leaving behind a more concentrated solution.

Paper chromatography is used to separate mixtures of **soluble** substances. These are often coloured substances such as food colourings, inks, dyes or plant pigments. It can be used to find out which colours are mixed together.

How it works

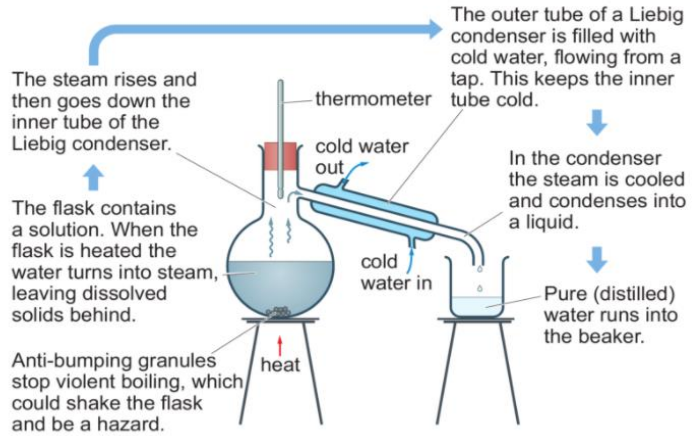
1. A dot of each mixture is placed on a pencil line near the bottom of the special chromatography paper.
2. The bottom of the paper is dipped into the solvent.
3. The solvent carries the coloured substances in the mixture of ink or paint up the paper to form a pattern called a **chromatogram**. The substances are carried at different speeds which separates them out from each other.

R_f values

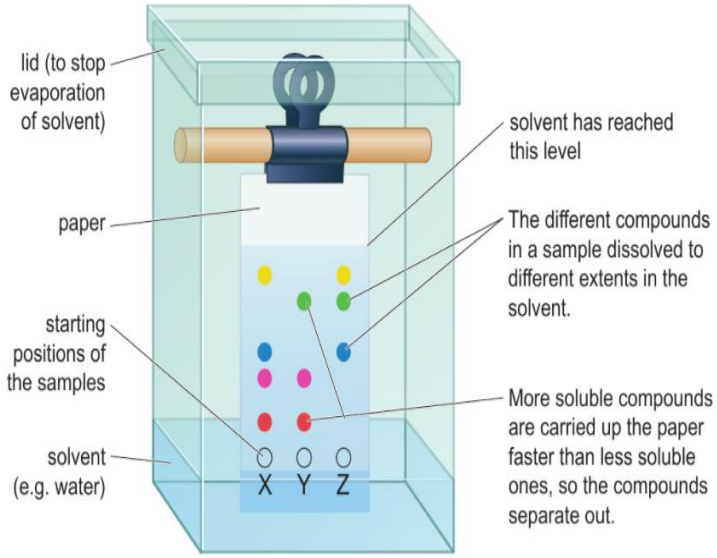
R_f values can be used to identify unknown chemicals if they can be compared to a range of reference substances. The R_f value is always the same for a particular substance. To calculate the R_f value:

distance travelled by substance / distance moved by the solvent

The R_f value is always between 0 and 1.



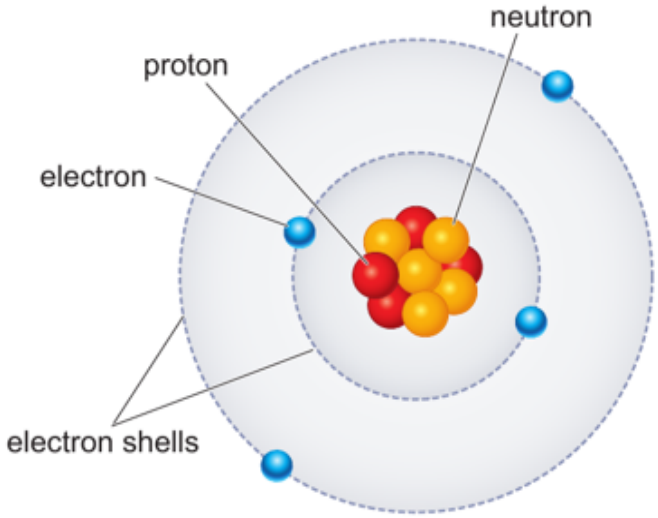
Simple distillation is used to separate a **solvent** from a **solution**.



B paper chromatography

John Dalton published his ideas about **atoms** in 1803. He thought that all matter was made of tiny **particles** called atoms, which he imagined as tiny solid balls.
The Dalton model has changed over time because of the discovery of **subatomic particles**.

Scientists have worked out that atoms are made up of three smaller parts: **protons**, **neutrons** and **electrons**. At the centre of atoms is a tiny **nucleus**. containing protons and neutrons. This is surrounded by fast moving electrons arranged in **electron shells,** at different distances from the nucleus.



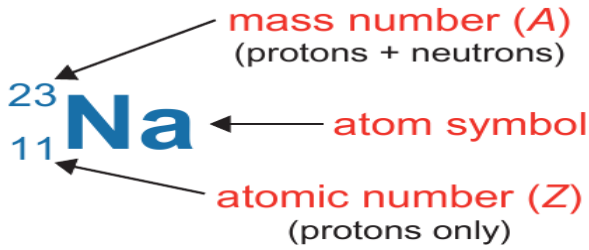
Particle	Charge	Mass
Proton	+ 1	1
Neutron	0	1
Electron	- 1	1/1835

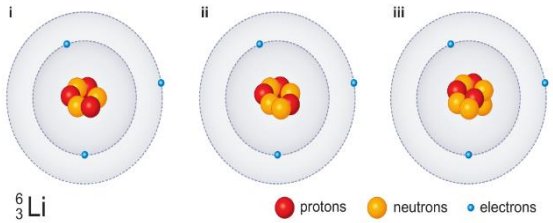
The parts that make up an atom are called subatomic particles. These subatomic particles have very, very small masses and electric charges. So rather than use their actual masses and charges, it is easier to describe them by looking at their relative masses and charges compared to a proton. The mass of an electron can also be described as 'negligible' – its so small that it can be ignored.

An **isotope** is a different version of an atom with the same number of electrons and protons but a different number of neutrons.
The mass number of an element isn't always whole because it is an average mass depending on the percentage number of atoms there are of that isotope form.

You can use a periodic table to find the number of subatomic particles each element has.

The **atomic mass number** = the number of protons and neutrons
To find the number of neutrons in an atom subtract the atomic number from the atomic mass
The **atomic number** = the number of protons and is also the same as the number of electrons.
This is because all atoms have no overall charge, so the number of positive protons must equal the number.



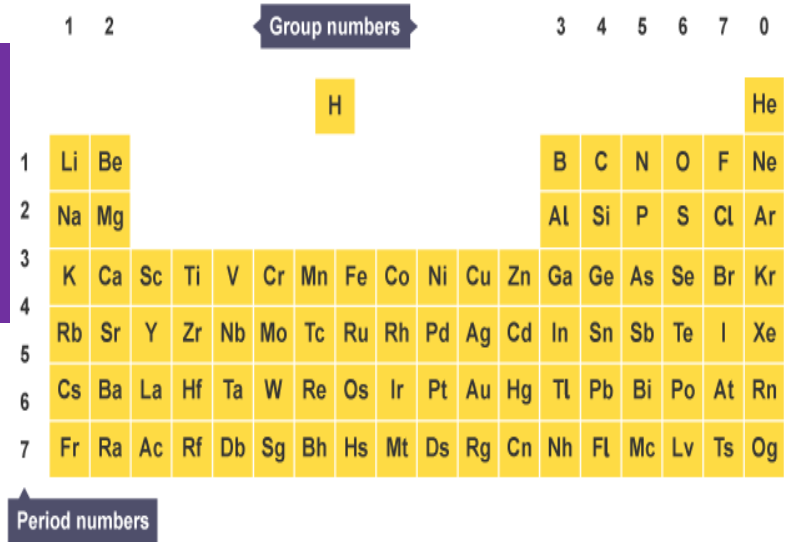


A Isotopes of the same element are chemically identical because they have the same number of protons and electrons.

11 SCIENCE

The Periodic Table

The Russian chemist Dmitri Mendeleev was looking for ways to organise the known **elements**. Mendeleev published his first periodic table of the elements in 1869. Mendeleev arranged the elements in order of increasing **relative atomic mass.** When he did this he noted that the **chemical properties** of the elements and their **compounds** showed a **periodic trend**. He then arranged the elements by putting those with similar properties below each other into groups.
In the **modern** periodic table, the elements are arranged according to their atomic number.



In the periodic table the elements are arranged into:

- rows, called **periods**, in order of increasing atomic number
- vertical columns, called **groups**, where the elements have similar **properties.**

Electron configuration

An electronic configuration is the way in which **electrons** are arranged in an **atom**.

Electrons in shells

Different shells can hold different maximum numbers of electrons. Electrons occupy shells starting with the innermost one. They begin to occupy the next shell when a shell becomes full.

The 1st shell can hold a maximum of 2 electrons

The second shell can hold a maximum of 8 electrons

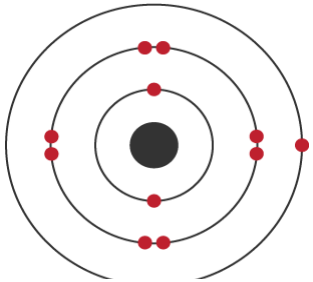
The third shell can hold a maximum of 8 electrons

Predicting an electronic configuration

The electronic configuration of an atom can be predicted from its **atomic number**. For example, the atomic number of sodium is 11. Sodium atoms have 11 **protons** and so 11 electrons.

This electronic configuration can be written as 2.8.1 (each dot separates one shell from the next).

This electronic configuration can also be shown as a diagram

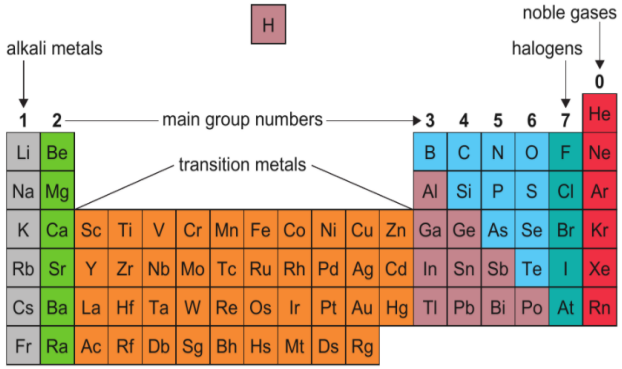


Electronic configurations and the periodic table

The electronic configuration of an element is related to its position on the periodic table.

The links are:

- the number of circles (shells) in the electronic configuration of an element is represented in the periodic table as the period number that element is situated in
- the number of electrons in the outermost shell of an element is represented in the periodic table as the group number that element is situated in
- the number of electrons in all shells of an element is represented in the periodic table as the element's atomic number



A Groups 1, 7 and 0 in the periodic table have special names.
Columns are called groups.
Rows are called periods

Extreme Environments

12 GEOGRAPHY

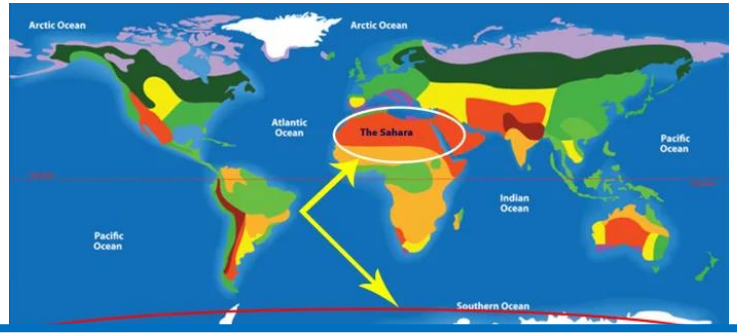
Antarctica – an extreme cold environment

Antarctica is a continent covered with ice and surrounding the South Pole (see map right)

Antarctica is land covered with an average thickness of 2000 metres of ice – in place it is over 4000 metres…
It is surrounded by the Southern Ocean – the world's roughest sea.
Antarctica is the world's last great wilderness area and has been protected by the Antarctic Treaty since 1961, which stops it being used for mining, military bases or permanent human settlement.
It is technically also a desert (a cold desert of course) and receives hardly any snow.
Climate change is now melting ice faster than ever e.g. Ross Ice Shelf collapsing.

Key vocabulary

Treaty = an international agreement signed by many countries
Wilderness = an area which is still mostly untouched by human development
Krill = a small, prawn-like creature in the ocean
Climate Change = recent times have seen a



How do animals and plants adapt to these harsh places?

Hot Deserts

Animals have to be specially adapted to live in hot deserts. For example, camels can close their nostrils in a sandstorm, and drink 50-60 litres of water at one go when they have the chance. Gerenuk antelope never drink, but get the water they need by eating plants. Many animals are nocturnal – they only come out at night when it is cooler.
Plants often have thorns instead of flat leaves to avoid moisture being lost, and have waxy skins to stop water loss. Thorns also prevent plants being eaten by animals. Many plants have lots of shallow roots so when it does rain they can soak up the water quickly before it evaporates.

Antarctica

There are virtually no **plants** in the Antarctic – it is too cold. A few lichens and mosses survive, but little else.
Animals mostly live in and around the sea, as this is where the food is. For example penguins need fish to survive, the fish eat smaller animals like krill.

Sahara Desert – an extreme hot environment

The Sahara is a large hot desert region of North Africa (see map left for location)

A "desert" is an area which receives very little rainfall. Hot deserts are very hot in the daytime when the sun gets high, but can drop to below freezing at night with no blanketing cloud cover to keep in the warmth.
The Sahara is the world's largest hot desert. Few people live in the Sahara. Their homes usually have flat roofs as there is no point in building a sloping roof when there is no rain…
Temperatures can be above 40 degrees Celsius in the daytime.
The constant range of temperature (hot/cold) breaks up rocks by "exfoliation", which turn eventually to sand…

Key vocabulary

Desert = land which receives little or no rainfall
Africa = a continent with 54 countries in it (not a country)
Nocturnal = refers to animals which only come out at night when it is cool enough
Exfoliation = a process of weathering which breaks rocks up by constant heating and

KS3 History Knowledge Organiser

How did our world view change 1500 – 1750? What was the civil war?

13 HISTORY

	KEY TERM	DEFINITION
1	Commonwealth	Independent state or community without a monarch.
2	Death warrant	Piece of paper ordering someone's execution.
3	Divine Right of Kings	The belief that kings and queens could do as they wished because they were appointed by god.
4	Execution	Killing or beheading an enemy or convicted criminal.
5	Lord protector	The title of the head of state in England between 1653 and 1659, a position first held by Oliver Cromwell.
6	Civil War	War when the two sides fighting are from the same country.
7	Monarch	King or Queen
8	Musket	Type of long gun
9	Musketeer	Soldier who carries a musket
10	Parliamentarian	Supporter of Parliament during the English Civil War.
11	Pike	Long pole, tipped with a steel pike; used as a weapon.
12	Pikeman	Soldier who uses a pike.
13	Protestants	Group of Christians who protested against the Catholic church.
14	Republic	Country without a king or queen.
15	Restoration	The return of a monarch to the throne of England when Charles II became king in 1660.
16	Roundhead	Nickname for Parliaments soldiers during the English Civil War.
17	Royalist	Supporter of the king during the English Civil War.
18	Tyrant	Cruel or demanding ruler
19	Ship tax	Sum of money, introduced by Charles I, paid by people who were living by the sea.
20	Standard	Royal flag that represented the start of war
21	Cavalier	Nickname for the King's soldiers
22	Puritan	Type of Protestant who wanted life to be very simple

What is a civil war? This is a conflict between people of the same country. The English civil started in 1642 and lasted until 1649. It divided the country, families and Parliament.

Historical context. When Elizabeth I died, she had no children and her nearest relative became the next ruler. This was James VI of Scotland. He became James I of England. He was the son of Mary, Queen of Scots. She had been executed by Elizabeth for plotting a Catholic rebellion against her. James as the first Stuart King. Elizabeth tried to please both Catholics and Protestants in England and in 1604 James met with church leaders to find a similar solution. However, he failed to impress the Protestants and upset the Catholics. In 1605, a group of Catholics plotted to kill the King – this was the Gunpowder Plot. It failed but James was concerned. In 1606 James was calling himself King of Great Britain and first union flag was created that combined the Scottish and English flags. James was a harsh ruler and believed in the Divine Right of Kings. This meant he thought God had given him the right to rule England alone. In 1611 he even told MPs in Parliament to go home and he ruled England alone!!
In 1625 James died and his son became King Charles I. Charles married a French, Catholic princess called Henrietta Maria. Parliament were unhappy that a Catholic might be soon be the next ruler of England.

What were the causes of the English civil war? For many years, **Parliament** had worked with the king or queen. Now they were at war with the king. Parliament was meant to help make laws, discuss wars and raise taxes. However, King Charles I began to argue regularly with parliament. These arguments would end in the **English Civil War**.

The final straw came when Parliament sent Charles a long list of complaints about him and the way he was running the country. Some of the complaints were:
- Charles was making the country more **Catholic** as his wife, Henrietta Maria was Catholic and the strict Protestants known as Puritans did not like this.
- Charles **taxed** people. One tax was for people living by the sea. This was called **Ship tax**. Many thought this was unfair, especially when he made everyone else pay it too!
- Charles believed he had overall control as he was appointed by God. He believed in the **'Divine right of kings'** and refused to allow MPs in Parliament a say in how the country should be run.

Charles was angry. He tried to arrest the MPs who were the main troublemakers, but they fled. He went north to Newark, near Nottingham and 'raised his standard'. This was the sign that war had begun.

Year 7 French Cycle 2- Ma vie scolaire

	Spanish	English	Literal English
Week 1	**Je vais au collège qui s'appelle Isca.** C'est très moderne et il y a une biblithèque.	**I go to the school which is called Isca.** It is very modern and there is a library.	***I go to the school which itself calls Isca****. It is very modern and it there has a library.*
Week 2	**J'étudie beaucoup de matières et** tous les jours nous étudions l'anglais.	**I study a lot of subjects and** everyday we study English.	***I study lots of subjects and*** *all the days we study English.*
Week 3	J'aime l'EPS mais je n'aime pas de tout la géographie**. Je la trouve très ennuyeuse.**	I like PE but I really don't like geography**. I find it very boring.**	*I likes the EPS but I don't like not at all the geography.* ***I it find very boring.***
Week 4	**En Angleterre il faut porter un uniforme.** Je porte un pantalon gris et une chemise blanche.	**In England you have to wear a uniform.** I wear grey trousers and a white shirt.	**In England it must wear a uniform.** I wear a trouser grey and a shirt white.
Week 5	**J'aimerais porter un jean avec un t-shirt.**	**I would like to wear jeans and a t-shirt.**	**I would like to wear a jean with a t-shirt.**
Week 6	Dans mon sac j'ai un crayon et des stylos	In my bagI have a pencil and some pens.	In my bag I have a pencil and some pens.
Week 7	**Je dirais que** mon prof d'histoire est plus patient que mon prof de dessin.	**I would say that** my history teacher is more patient than my art teacher.	**I would say that** my teacher of history is more patient than my teacher of art.
Week 8	**En ce qui concerne les règles,** on doit faire les devoirs et il est interdit de manger le chewing gum	**With regards to the rules,** we must do homework and you're not allowed to chew gum.	**In that which concerns the rules,** one has to do the homework and it is forbidden to eat the chewing gum.
Week 9	Mon école primaire était très ancienne.	My primary school was very old.	My school primary was very ancient.
Week 10	**Cétait d'une autre époque!**	**It was from another era!**	**It was of another era!**

15 MFL

Week 1- My school	
le collège	the school
être	to be
je suis	I am
tu es	you are
il / elle est	he/she/it is
grand(e)	big
petit(e)	small
moderne	modern
ancien(ne)	old
joli	pretty
moche	ugly
il y a/il n'y a pas	there is/isn't
une cantine	a dining hall
un cours	a playground
des salles de classe	some classrooms
des labos	some labs
une bibliothèque	a library
une piscine	a swimming pool
un gymnase	a sportshall
un terrain de foot	a football pitch

Week 2- My subjects	
étudier	to study
j'étudie	I study
tu étudies	you study
il/elle étudie	he/she studies
le franç ais	French
l'espagnol	Spanish
l'anglais	English
le théâtre	drama
le dessin	art
le sport	sport
les sciences	science
les maths	maths
l'informatique	computing
la musique	music
la géographie	geography
l'historie	history
l'EPS	PE
la réligion	RE
la technologie	technology

Week 3- My opinions	
j'aime	I like
j'adore	I love
je préfère	I prefer
je n'aime pas	I don't like
je déteste	I hate
Ma matière préférée est…	my favourite subject is…
porque	because
c'est	it is
ils sont	they are
intéressant	interesting
relaxant	relaxing
ennuyeux	boring
facile	easy
difficile	difficult
important	important
amusant	fun

Week 8- The rules!	
Il faut	you have to
Il est interdit de	you're not allowed to
On (ne) doit (pas)	you must (not)
faire les devoirs	do homework
faire ton mieux	do your best
courir dans les couloirs	run in the corridors
écouter	listen
boire en classe	drink in class
manger en classe	eat in class
manger le chewing gum	eat gum
parler	talk
porter l'uniforme	wear uniform

Week 7- My teachers	
être	to be
je suis	I am
tu es	you are
il / elle est	he/she/it is
mon prof est	my teacher is
plus…que…	more…than…
moins…que…	less…than…
et	and
aussi	also
mais	but
désagréable	unpleasant
bien	good
sympa	nice
sévère	strict
patient(e)	patient
juste	fair
bavard(e)	chatty
timide	shy
un peu	a bit
assez	quite
très	very

Weeks 4 & 5- My uniform	
porter	to wear
je porte	I wear
tu portes	you wear
il / elle porte	he/she wears
un pantalon	trousers
une jupe	a skirt
une cravate	a tie
vne veste	a blazer
un pull	a jumper
des chaussures	some shoes
des chaussettes	some socks
un jean	jeans
une chemise	a shirt
un t-shirt	a t-shirt
bleu	blue
jaune	yellow
vert	green
rouge	red
rose	pink
noir	black
marron	brown
blanche	white
violet	purple
gris	grey
c'est	it is
ce n'est pas	it isn't
confortable	comfortable
elegant	smart
cher	expensive

Week 6- My equipment	
il y a/il n'y a pas	there is/isn't
J'ai besoi de	I need
J'ai / je n'ai pas	I (don't) have
un stylo	a pen
un crayon	a pencil
un cahier	exercise book
un livre	a book
une trousse	a pencil case
un portable	a mobile
un sac (à dos)	bag/ruck sack
un porte-monnaie	a purse/wallet
un dictionaire	a dictionary
un taille-crayon	a pencil sharpener
un carnet de textes	a a notebook
una calculatrice	a calculator
une gomme	a rubber
una règle	a ruler

Week 9- My primary school	
c'était	it was
tenía	it had
mon école primaire	my primary school

Week 10- All vocabulary

BUDDHISM (The religion taught by the Buddha)

Siddhartha Gautama (The

- Born 563 BCE in
- Could walk and talk at birth.
- Mum (The Queen) died so he was brought up by his aunt.
- He was predicted to be a great holy man.
- Brought up by the King in a palace. All his needs were met.
- He left the palace to live a strict 'ascetic' life
- Saw 4 sights that made him sad…
  - Old age
  - Disease
  - Death
  - A holy
- He eventually became 'enlightened' (knew the truth)

16 RE

Buddhists believe in reincarnation, that when you die you are reincarnated as another person or creature. It is said that the Buddha had lived through several thousand other lifetimes- both animal and human- before he was born! When he was Prince Siddhartha, his father the King made sure that his servants were never too ill or old to be seen by his son. But when Siddhartha saw the '4 sights', he decided to leave the palace and go in search of the answer to why people suffer. After becoming enlightened the Buddha taught that suffering is the result of selfishness and that we should aim to be selfless and so produce good karma.

Key Words: Karma (Buddhists want to produce good karma); reincarnation; 4 sights; ascetic; enlightenment; Siddhartha (the name means fulfilment).

Key Questions:

1. Why did Siddhartha leave the palace?
2. Would you have given up being a royal person?
3. What do you think is the main aim of life?

Buddhist Beliefs

8 Fold Path

Right:

- Actions
- Speech
- Job
- Effort
- Mindfulness
- Concentration
- Understanding
- Emotion

2 Types of Buddhism (Theravada/ Mahayana)

3 Refuges (safe places)

- The Buddha
- The Sangha (community)
- Dharma (Teachings)

4 Noble Truths

- We suffer…
- Due to selfishness
- There is hope
- We must take action by following the 8 Fold Path.

5 Moral Precepts

Do not:

- Harm life
- Steal
- Lie
- Do drugs
- Misuse sex

6 Perfections

- Generosity
- Morality
- Patience
- Energy
- Meditation
- Wisdom

The word 'Buddha' means the Enlightened One or Awakened One. The Buddha's main teaching is that humans need to give up their selfish desires in order to be free from suffering. They need to produce good karma so that they will have a good reincarnation and so that one day they can actually leave the wheel of life and be in Nirvana, a place of pure peace.

Key Words:
Theravada; Mahayana; Sangha; Precepts; 8 Fold Path; Nirvana.

Key Questions:

1. In Buddhism what do the 2,3,4,5,6 and 8 stand for?
2. Is it possible to give up selfishness?
3. Make up your own rules for life!

Buddhist Practices

- Meditation (Thinking deeply)
- Devotion to Buddhist teaching.
- Focus before a shrine for example: a statue of the Buddha (Buddha
- The use of mala beads to help meditation. Chanting key beliefs
- Attending a Buddhist temple to pray and
- Monks and nuns living in a monastery
- Buddhists do not believe in God.

The Dalai Lama (above picture) is a Buddhist spiritual leader and well respected around the world. The aim of all Buddhist practices is to became like the Buddha, give up attachments to things like money, over eating, gadgets like mobile phones, and to live a simple, selfless, self-disciplined life of doing kind acts so producing good karma for the next life.

Key Words:

Meditation; devotion; shrine; rupa; mala; mantras; vihara; monastery; Dalai Lama.

Key Questions:

1. Name 5 Buddhist practices.
2. What is the aim of Buddhist practices?
3. Who are you devoted to? Why?

17 RE

Prophet Muhammad (pbuh)

Facts

- Born in Makkah (569 CE)
- Brought up by his Uncle (Abu Talib)
- Aged 40 had a vision of Angel Jibril in a cave.
- Was told that Allah (God) had chosen him to be his final messenger.
- After his death all the revelations from Allah were written down as the Qur'an (the holy book of Islam)

Key questions

1. Who was the prophet Muhammad?
2. What do you now know about Islam?

Key words

Islam; Muhammad; Makkah (now in Saudi Arabia);Jibril; Allah; Qur'an

Allah (God)

Facts

- Muslims believe there is no other God except him.
- Blasphemy means acting or speaking disrespectfully about God. (Shirk)
- The whole universe is Allah's creation.
- Muslims see Allah as the great guiding light in their lives. (see symbol above)
- Names for Allah include; merciful, pure, judge.

Key questions

1. What do Muslims believe about Allah?
2. How might this affect the way they live their life?

Key words

Blasphemy; shirk; star and crescent moon

Worship

Facts

The five duties/pillars

- Shahadah- the declaration of faith in Allah.
- Salah- prayer x5 a day
- Zakah- Money to the poor
- Sawn – fasting during Ramadan
- Hajj- Pilgrimage at least once in a life time to Makkah.

Main prayers take place in a mosque led by an imam.

Key questions

1. What are the 5 duties of a Muslim?
2. Which of the 5 duties do you think is the most important? Why?
3. What are the 5 most important things you do?

Key words

Pillars; shahadah; salah; zakah; sawn; hajj; mosque; imam; Ramadan (the

Muslim Lifestyle

Facts

Birth - Babies are a blessing from Allah. The Adhan (call to prayer) is whispered in the baby's ear. Circumcision is practiced where the foreskin of a child's penis is cut off for the sake of inclusion and purity.

Marriage – Muslims believe they should marry fellow Muslims. Marriage is seen as a duty and parents can be involved in choosing a partner.

Key questions

1. Should Muslim babies be circumcised? (penis foreskin cut off)
2. Should parents help offspring choose a marriage partner?
3. Find out about Muhammad Ali- a famous Muslim boxer.

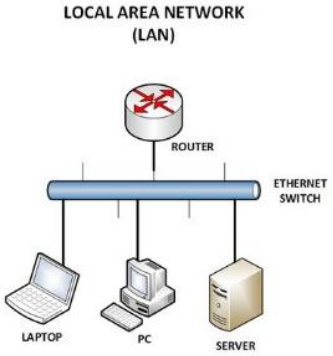
Key words

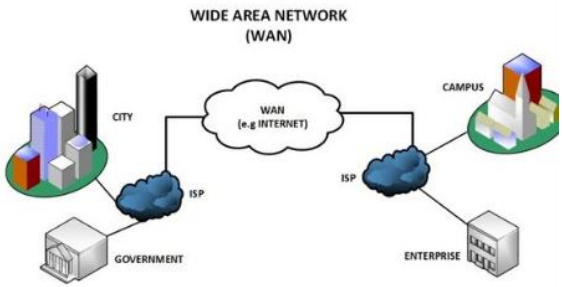
Adhan; Khitan (circumcision- cutting off the foreskin of the penis)

Networks

WAN – Means a wide area network. Networks such as mobile phone networks and the internet are both examples of WANs

LAN – Means a local area network. Networks such as the one in school, or the one in your house are both types of LANs.





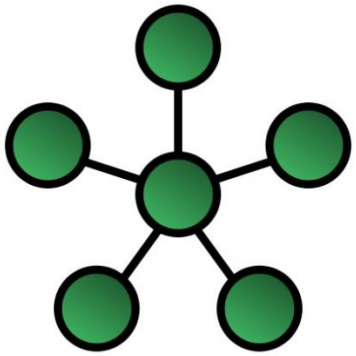
18 COMPUTING

Keywords

Network: Multiple computer devices connected together so they can communicate.
Stand-alone machine: A computer system which is not connected to any network.
Client: A compute system on a network which does not server.
Server: A networked computer which is used to control the network traffic and data.
IP address: An address given to a computer on a network.
MAC Address: A unique address on every internet enabled device.

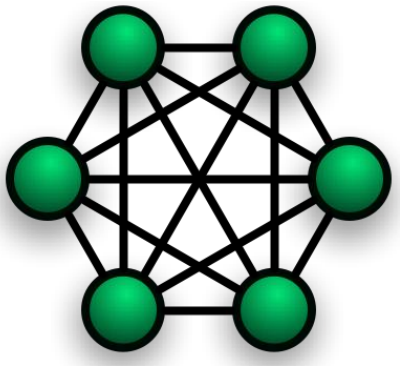
IP Addresses: Are used to identify the location of a computer system and servers on a network.

MAC Addresses: Are used to identify every piece of hardware individually on the planet!



Star Networks – Is a way of setting up a network with a single server in the centre.
Advantages: Easy to manage, data stored and controlled centrally.
Disadvantage: If the central node goes down

Mesh Networks- Is a way of setting up a network where multiple devices are connected to multiple devices.
Advantages: Very robust network – i.e. not easy to break, if one node crashes the others are not affected.
Disadvantages: Lots of cable, expensive to set up and maintain.

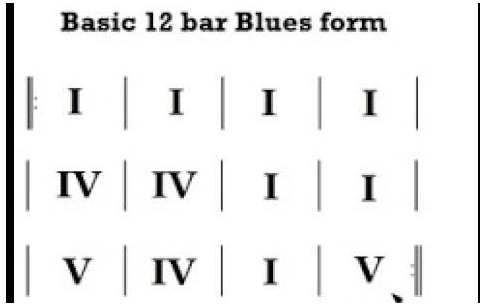


Year 7 MUSIC Knowledge Organiser

19 MUSIC

The 12 Bar Blues

The way in which blues Music is structured using the following chord sequences:



In our case that is:

A Canon in Music:

Ground bass keeps the whole piece together by repeating underneath a series of melodies that are passed though players.

Person 1	Person 2	Person 3
G.B		
G.B	1	
G.B	2	1
G.B	3	2
G.B	4	3

The Musical Elements:

Pitch – How high or low a note is.

Rhythm – The pattern of the notes.

Tempo – How fast or slow music is.

Texture – How many layers the music has (thick or thin?)

Silence – Pauses in music.

Instrumentation / Timbre – What instruments or sounds are used.

Structure – How the music is made up (e.g song structure).

Brass Key Words

Cornet/Trumpet/Trombone/Tuba – Brass instruments.

Diaphragm – the muscle under the ribcage that assists breathing.

Embouchure – the mouth position needed to play the instrument

Valves/Bell/Mouthpiece – parts of the instrument.

Canon Key Words

Ground Bass – A repeating set of notes that the piece is based upon.

Melody – a tune.

Introduction – the start of a piece of music.

Cello – a large string instrument with a lower sound.

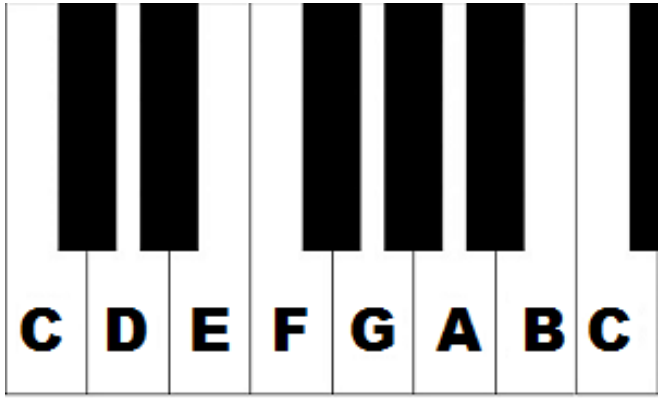
Blues Key Words

Chord – more than one note played at the same time.

Walking bassline – specific to the blues, a bassline that goes up and down.

Improvisation – to make something up on the spot.

Guitar / Ukulele – string instruments.



Year 7

20 DRAMA

Mime

Acting without objects whilst pretending they are there.
Accuracy: making sure you put enough detail into your movement to allow your audience to imagine the object
Clarity: Making sure you share your mime with your audience.
Consistency: Making sure your objects say the same size and shape and don't disappear and reappear again.
React: Use your facial expression and body language to show how your character feels about the imaginary objects.
Gestures: Using your body (usually your arms and hands) to help you communicate.

Clowning

Exaggerated movement: developing an over the top walk.
Exaggerated Facial expressions: Make your facial expressions big so your character's emotion is clear but so ridiculous it is funny
Clocking the audience: Whenever your clown character changes emotion look directly at the audience.
Rule of three: Do something, do it again on the third time make something unexpected happens
Build up, Action, Reaction: When you're making a clown routine make sure everything that happens has a 'build up' and a 'reaction' so your audience understands what's happening.
Mirroring:
Copying exactly what your partner does at the same time as them.

Story Telling Theatre

Narrator: Someone who tells the story to the audience.
Character: Someone who is in the story.
Narration: Any lines that are spoken to the audience.
Dialogue: When the characters are speaking to each other.
Freeze Frames: using performers to create a picture for your audiences.
Multi-role: When you play more than one role. Maybe you switch between being a narrator and a character in the story or play multiple character.
Marking the moment: When you use slow motion to show that a certain moment is really important to the story.
Vocal Skills: Pace, Pause, Pitch, Tone, Accent Rhythm and Volume .
Use these skills to engage your audience, build tension and make sure the audience hear your story.

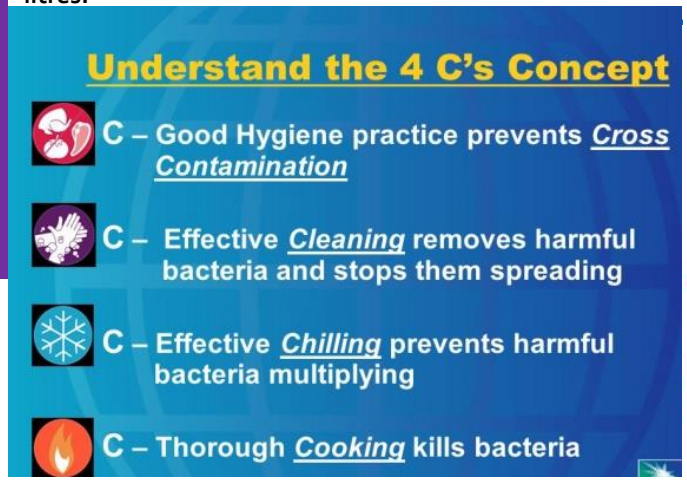
21 FOOD

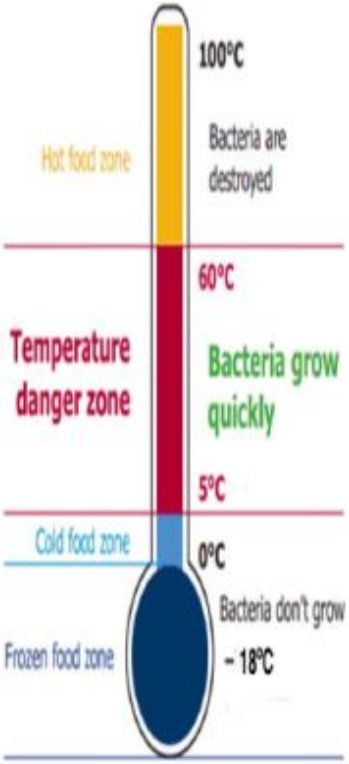
Cooking and Nutrition

Basic Skills

Cooking Skills/key words: Bridge, claw, hygiene, cross contamination, rubbing in, mix, whisk, grate, boil, simmer, grill
Equipment: whisk, cooks knife, paring knife, peeler, mixing spoon, sieve, chopping board, saucepan, frying pan, baking tray

Weighing and Measuring
For good results in most recipes, **accurate** weighing and measuring is essential. When you are baking with flour, sugar and liquids, you must measure accurately or your cooking will be spoiled. If you weigh out too much sugar or too little raising agent, your cakes would not rise or you could spoil the taste and/or texture.
Food can be weighed in **Grams (g)** and there are **1000g** in a **Kilogram (kg)**. Liquid is measured in **Millilitres (ml)** or **litres.**



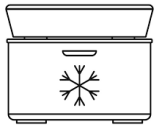


8 tips for healthy eating
1)Base your meals on starchy foods
2)Eat lots of fruit and vegetables
3)Eat more fish
4)Cut down on saturated fat and sugar
5)Eat less salt
6)Get active and be a healthy weight
7)Drink plenty of water
8)Don't skip breakfast

Centre of food cooked to above 63°c, if high risk (chicken) above 75°c. Use a probe

Store perishable food in the fridge 0-5°c

Freeze food below 18°c



Nutrition key words:
Nutrient- building blocks that make up food and have specific and important roles to play in the body. Some nutrients provide energy while others are essential for growth and maintenance of the body.

Macro Nutrient large amounts	Role in the body	Food Example
Carboh-ydrate	The main source of energy for the body.	Bread, rice, pasta, potatoes
Protein	Provides the body with growth and repair.	Meat, poultry, beans, eggs, lentils, tofu, fish
Fat	Provides the body with insulation and a small amount protects vital organs. Provides essential fatty acids for the body.	Butter, oil, cheese, cream, nuts, oily fish, crisps

Micro nutrients Small amounts	Role in the body	Food example
Vitamins and minerals	Help to keep our immune system up and help our bodies to stay healthy.	
c	Help with skin healing and healthy skin. Help with the absorption of Iron.	Fresh fruit, broccoli, tomatoes
Calcium	Strong teeth and bones.	Dairy foods – milk, butter, cheese, soya, dark green vegetables

PLASTICS

22 TECHNOLOGY

Thermosetting
Thermoplastics
Acrylic
Nylon
Formaldehyde
Recycling
Polyester
Polymer
Injection
Rotational
Microplastics

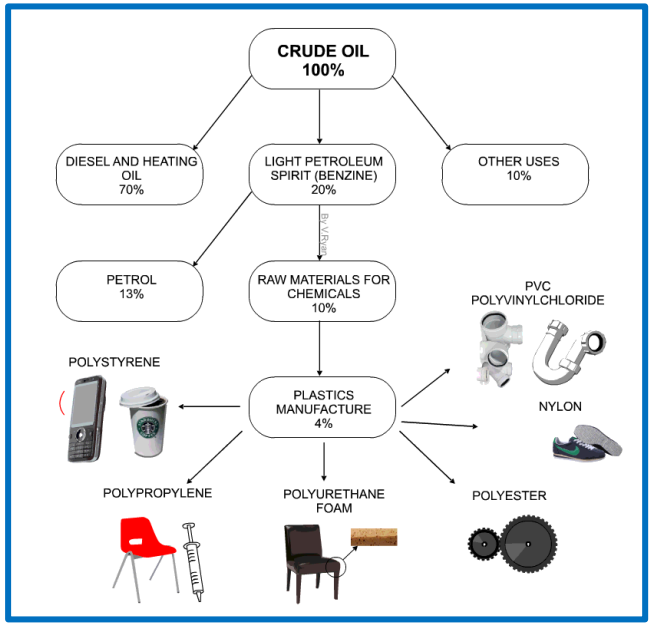
(Look up the meanings of these words).

WHAT ARE THERMOPLASTICS ?

These plastics can be re-heated and re-shaped in various ways. They become mouldable after reheating as they do not undergo significant chemical change. Reheating and shaping can be repeated. The bond between the molecules is weak and becomes weaker when reheated, allowing reshaping. These types of plastics **can be recycled**.

WHAT ARE THERMOSETTING PLASTICS ?

Once heated and moulded, these plastics cannot be reheated and remoulded. The molecules of these plastics are cross linked in three dimensions and this is why they **cannot be reshaped or recycled**. The bond between the molecules is very strong.



PLASTIC MANUFACTURING PROCESSES.

- Injection moulding
- Vacuum forming
- Blow moulding
- Compression moulding
- Calendering
- Rotational Moulding

ADVANTAGES OF PLASTICS

- Any colour available
- Cheap to manufacture
- Strong
- Malleable
- Good insulator
- Versatile
- Water & Chemical resistant

40% of all plastic is manufactured for packaging – used just once, then thrown away.

1 million plastic drink bottles are bought around the world every minute.

Half of all plastic that has ever existed was made in the past 13 years.

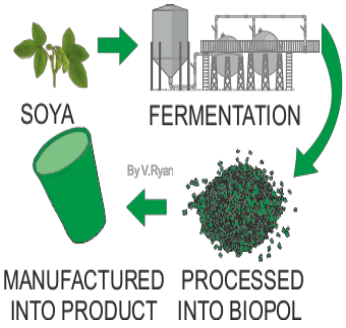
Microplastics exist in more than 90% of bottled water.

It is estimated that by 2050 there will be more plastic mass in the ocean than fish.

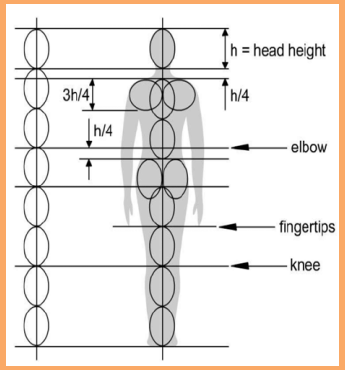
91% of plastic is never recycled.

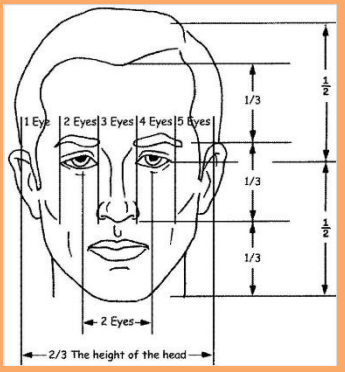
BIOPOL BIODEGRADABLE PLASTIC

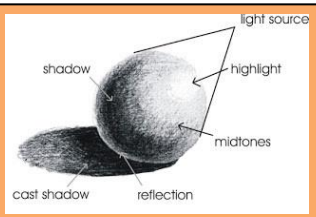
Biopol is the brand name for Polyhydroxybutyrate. It is an environmentally friendly polymer. It is processed through the fermentation of corn and soya.

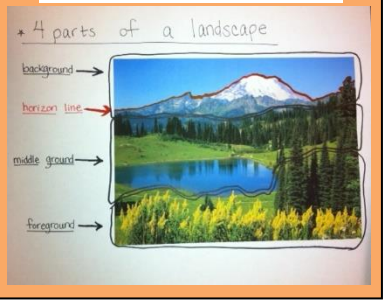


23 ART









Year 7 **Art and Design**.

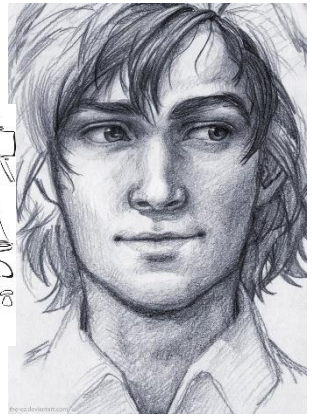
Me and My World

I see what is in front of me and am aware of how I can draw this to represent me in my world. I understand the artist and how they see the world.

Stretch and Challenge: The more you do something, the better you get at it!

1. Take photos of views, places and environments that your find interesting Print them out and draw from them.
2. Complete the tasks written in green

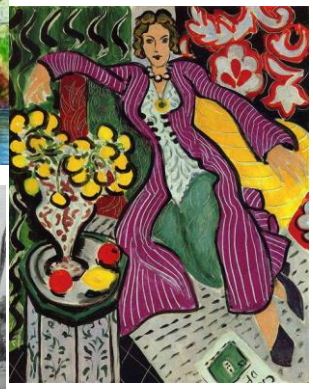
Who am I? It's exciting to use art to express who we are. You will be creating a fantastic title page full of drawings. What images/symbols can you think of and imagine that represent who you are? Get a piece of paper and start playing!



Drawing faces! Drawing faces – hard right? You will be amazed at just how good you get at drawing faces during this project. You will learn about the scale, measurement and proportions of the head as well as how to use mark-making and tone to make it look realistic! Wow! Look in a mirror or take a selfie and have a go at drawing your own self-portrait. Have fun!

My world – my environment. Skilfully drawing views, places and environments! You will learn how to do just that during this project. Choose a view that you find beautiful and have a go at drawing what you see. Enjoy!

Other people inspired by our world: Geography, History, RE, Engineering, Maths, science,



Discovering artists! It is fascinating to see the work of other artists (yes, you too are an artist!) and learn about their inspirations, styles and techniques. You will be inspired by how your own style, skill and ideas transform whilst you explore the artist. Find an artwork that includes a figure and landscape and research about it and the artist. Then have a go at doing your

Key vocabulary

Symbol, image, drawing, identity, introduce. Customise, visual vs written, Visual field, background / Foreground, close by / far away, Landscape, view, space, outdoor, place, point of view, perspective, distance, back, middle, foreground. Horizon, line. Shape. Tone. Texture, detail, Light/Shade. Intensity. Size, Proportion. Division, time, Beauty, Weather, Season, realistic vs imaginative. Context, information, self-portrait, Paris, France, Europe, tax collection, exotic, naive, jungle, scale, proportion, wet-on-wet, wet-on-dry, watercolour, brush, bristles, colour wash, layout, presentation.

New techniques and processes: Pencil drawing, watercolour painting, mark-making, measuring, comparing, contrasting, looking
Tools: Pencil, brush, eyes, camera, computer,

All images in this document have been sourced from

Components of Fitness

Every sport requires different components of fitness depending on the demands of that event. Remember, many sports require a combination of many components of fitness.

	Component of Fitness	Definition	Description
1.	Agility	The ability to change direction, at speed, while maintaining control	Athletes with good **Agility** keep their entire body under control. Agility is especially important in sports that require a sharp movements or turns lie side-stepping an opponent in rugby or dribbling a ball in basketball
2.	Balance	The ability of the performer to maintain their centre of mass over their base of support whilst static (still) or dynamic (whilst moving)	**Balance** can be static (i.e. handstand) or dynamic (i.e. keeping your balance on a skateboard or while surfing)
3.	Cardiovascular Fitness	The ability of the heart and lungs to supply oxygen to the working muscles	When we exercise, the body needs more oxygen to use as fuel. The better your cardiovascular fitness, the longer you can perform a sport at a high standard
4.	Coordination	The ability to use two or more different parts of the body together, smoothly and efficiently	In sport **hand eye coordination** and **foot eye coordination** are used a lot to perform different skills
5.	Flexibility	The range of movement possible at a joint	Flexibility is important as it helps prevent injury. It is also essential for performing certain skills in sports like gymnastics, dance and trampolining
6.	Muscular Endurance	The ability of a muscle or muscle group to undergo repeated contractions, avoiding fatigue	Muscles are used a lot in sport. If you train regularly, your muscles get stronger and can last longer giving you an advantage.
7.	Power	Is a product of speed and strength. Power = Speed x Strength	**Power** is important in explosive events like throwing and sprinting. **Power** is vital to getting a good start in short races.
8.	Reaction Time	The time taken to initiate a response to a stimulus	A stimulus could be anything from a starting gun in 100m to a sudden side-step by an opponent. The faster you react the better.
9.	Strength	Is the ability to overcome a resistance	Strength is important for many sports. Being stronger can give you a big advantage in sports like gymnastics, rugby and weightlifting
10.	Speed	The maximum rate at which an individual is able to perform a movement or cover a distance in a period of time, putting the body parts into action as quickly as possible	Speed is vital to outwit opponents in many sports. It also helps gain momentum in events like long jump

Which Components of Fitness are required for these sports?

24 PE

We would always encourage you to speak to the people you live with or someone in school if you have a worry or a problem. If you can't, or you want to read more about an issue affecting you or someone you know, here are some useful websites and phone numbers. They offer free, confidential advice and support.

General

Childline—www.childline.org

0800 1111

Offers information and advice, 1-2-1 confidential chat (text, email, phone) and support from message boards on a wide range of issues.

This website is one of the most useful you will find and can direct you to help or information about all the other topics mentioned here, and

Safety, bullying and abuse

Child Exploitation and Online Protection (CEOP) - www.ceop.police.uk

Report inappropriate online contact, any unlawful misuse of social media, or a child protection concern to a trained police officer. You can also click this button on your platform:

CLICK CEOP Internet Safety

NSPCC—www.nspcc.org.uk 0800 1111

Information and help about on- and offline abuse

National Bullying Helpline—www.nationalbullyinghelpline.co.uk 0845 22 55 787

Health

School nurse—07520 631722

Text only for confidential advice

National Health Service—www.nhs.uk

Research and useful information on health issues

Walk-In Centre, RD&E Hospital—01392 411611

Non-urgent and sexual health needs

Walk-In Centre, 31 Sidwell Street—01392 276892

Healthy relationships

Thinkuknow—www.thinkuknow.co.uk

Age-related help and advice about on– and offline relationships and consent.

Drugs and alcohol

YSmart—ysmart.org.uk 01271 388162

Information about substance misuse, advice, recovery and treatment

Homeless, skills, advice, getting your voice heard

Young Devon—www.youngdevon.org 01392 331 666

Mental Health and well-being

amaritans—www.samaritans.org

Call 116 123 for emergency help

Email jo@samaritans.org (response within 24 hours)

Papyrus—papyrus-uk.org 0800 068 41 41

Urgent help for you or someone you know

YoungMinds—youngminds.org.uk

Text YM to 85258 for urgent help

Happy Maps—www.happymaps.co.uk

Advice on everything from sleep problems to anxiety, bullying, self-harm, coping with divorce, autism, ADHD, gender dysphoria and more

LGBT

X-PLORE—www.lgbtqyouthdevon.org.uk

Local support and groups for LGBTQ young people

If someone's life is at risk, you should always dial

999