











Knowledge Organiser Year 8



Ambition, Respect, Excellence

Your Knowledge Organiser

This is your home learning booklet, in your home learning booklet you will find a Knowledge Organiser for each subject that you are going to study. These are a summary of the most important pieces of information that you need to know. You will be expected to learn all this information and complete activities in your home learning exercise book.

Contents

Contents	2
Knowledge Organiser Timetable	3
How to Use your Knowledge Organiser	4
Knowledge Organiser Quiz	5
Look, Cover, Write, Check, Correct	6-7
Look, Cover, Mind Map, Check, Correct	8-9
Look, Cover, Transform, Check, Correct	10-11
English	12-14
Maths	15-18
Science	19-20
History	21-23
Geography	24-25
Ethics & Culture	26
French	27-28
PSHE	29
Music	30
Drama	31-32
Product Design	33
PE	34
ICT	35
Art	36
Catering	37
Graphics	38
Dance	39-40
Extra Challenge Tasks	41-43



Knowledge Organiser Timetable

We expect you to complete one full page in your workbook as a minimum. You should spend around 20 minutes on home learning for each subject. Your teachers will check your Knowledge Organiser home learning during lessons, so make sure that you bring your books to school everyday. Your writing needs to be neat with home learning, title and date underlined with a ruler at the top of the page. If your teacher feels that any of these elements are not up to standard, they will enter you for a home learning support session. You will be rewarded house points for completion of homework and additional points will be awarded for exceptional home learning pages.

	WEEKA	WEEK B
MONDAY	ENGLISH PE	ENGLISH MUSIC
TUESDAY	ART DESIGN & TECHNOLOGY	FRENCH DESIGN & TECHNOLOGY
WEDNESDAY	MATHS DRAMA	MATHS ONLINE PSHE
THURSDAY	GEOGRAPHY ICT	HISTORY ETHICS & CULTURE
FRIDAY	DANCE SCIENCE	SCIENCE



How To Use Your Knowledge Organiser For Homework

The Knowledge Organisers are designed to help you learn a wide range of knowledge which in turn will mean you are more prepared for your lessons as well as the new style GCSEs that you will sit in the future.

For homework you should use your knowledge organiser to complete one of our accepted strategies in your workbook you should either:

- Write

- Mind Map

- Transform

Do not just copy into your workbook!

The first 12 pages contain some tips on how you can use your workbook.

Your teacher will check your workbook each week.



Knowledge Organiser Quiz

Your teacher will quiz you on your Knowledge Organiser twice a term to check how well you are doing your homework. The 'Mark' box must be used to record your score from each quiz.

	ENGLISH	MATHS	SCIENCE	ART	HISTORY
QUIZ I					
QUIZ 2					
	FRENCH	ICT	PE	DANCE	GEOGRAPHY
QUIZ I					
QUIZ 2					
	PHSE	E&C	MUSIC	DESIGN & TE	CHNOLOGY
QUIZ I					
QUIZ 2					



Look, Cover, Write, Check, Correct

LOOK through and read the information on a section of your Knowledge Organiser.





Then **COVEr** the section so you can no longer see the information.

Write everything you can remember, including any diagrams/drawings or tables





Check and correct your work using green pen.

Repeat until you have got everything correct.





Look, Cover, Write, Check, Correct

Examples:

Write down as much information as you can remember from your Knowledge Organiser subject page. Mark all the information you got right and correct any mistakes/add in detail where you missed it.

Rembering Key information

Replex arc means a quick respons Replex arc mean an involuntry no response.

prevent the microogams but doe

help any viruses V A placeleb keips the clotting and into a scab making a Clot) scab.

cholestrol is a fatty substant is 1980 and for your body to u probably definity needed.

A ligament is a that joins a

bone?

purple pen improvent I used the Look, cover, write, check, correct.

The nervour system is inside your body and is in most parts of your body but your &

Homework Support

Science!

Drugs are Chemical substances that affect the wo

you work.

They are additional recreactional. X medicinal. They can be painkillers, stimulants, halluciongers

and depressants.

Receptors are found in sense organs. V Effectors are muscles or glands and carry out

a response.

Blood is made up of plasma Chiquid, Red blood Cells and white blood cells (carry oxegen)

(fight infection).

and platelets.

There are 3 main types of patheogen fungi,

Viruses and bacteria.

There are Several lines of defence against patheogens - primary defences: skin, stomach

acidinasai hairs innucus and secondary

defences: the immune system.

Vein- carrier broad to the heart at 1000 pressure. They have thin walls and valves to

Stop * blood , * backflow of ~

high pressure. Have thick elastic walls.

Capillary - Link artiers and veins . Carry 61000

to tissue and remover waste.



Look, Cover, Mind Map, Check, Correct

LOOK through and read the information on a section of your Knowledge Organiser then **COVEr** it up.





Then come up with a **title** for the section and put a bubble or star around your word

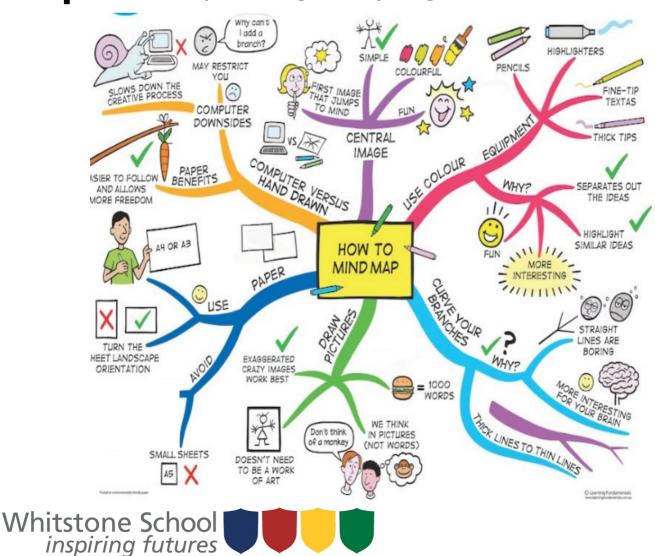
Write everything you can remember, including any diagrams/ drawings or tables.





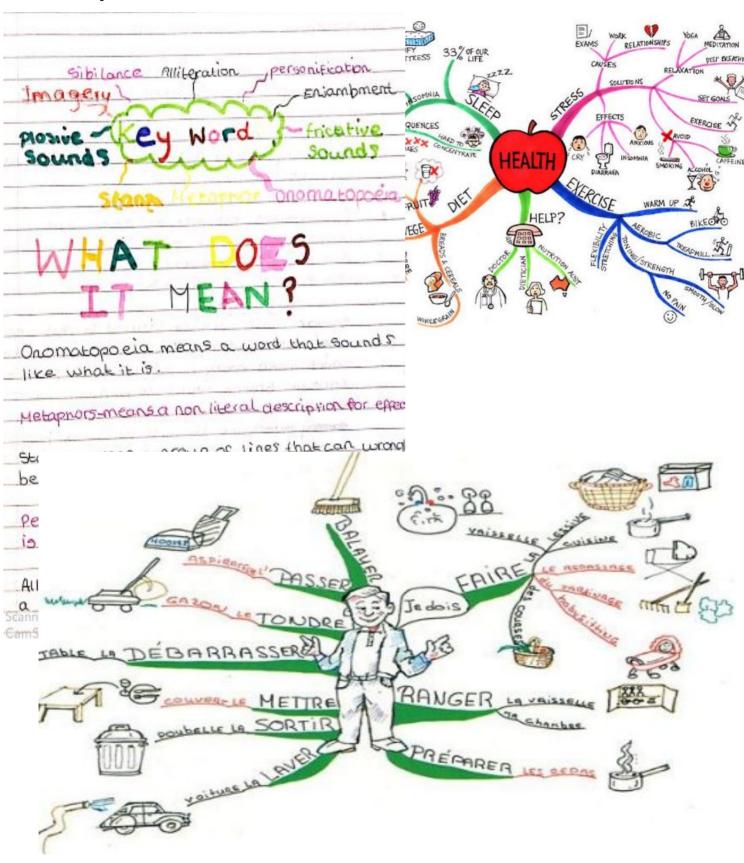
Check and correct your work using green pen.

Repeat until you have got everything correct.



Look, Cover, Mind Map, Check, Correct

Examples:





Look, Cover, Transform Check, Correct

LOOK through and read the information on a section of your



knowledge organiser then **COVE** it up

Then **transform** the section, you can transform the information into one of the below:

- A selection of keywords
- Spellings you have to learn
- Song/poem to help you remember
- Key facts from the sheet
- Transform the descriptions into pictures/comic strip
- Transform it into revision card boxes
- Piece of extended writing based on the information.



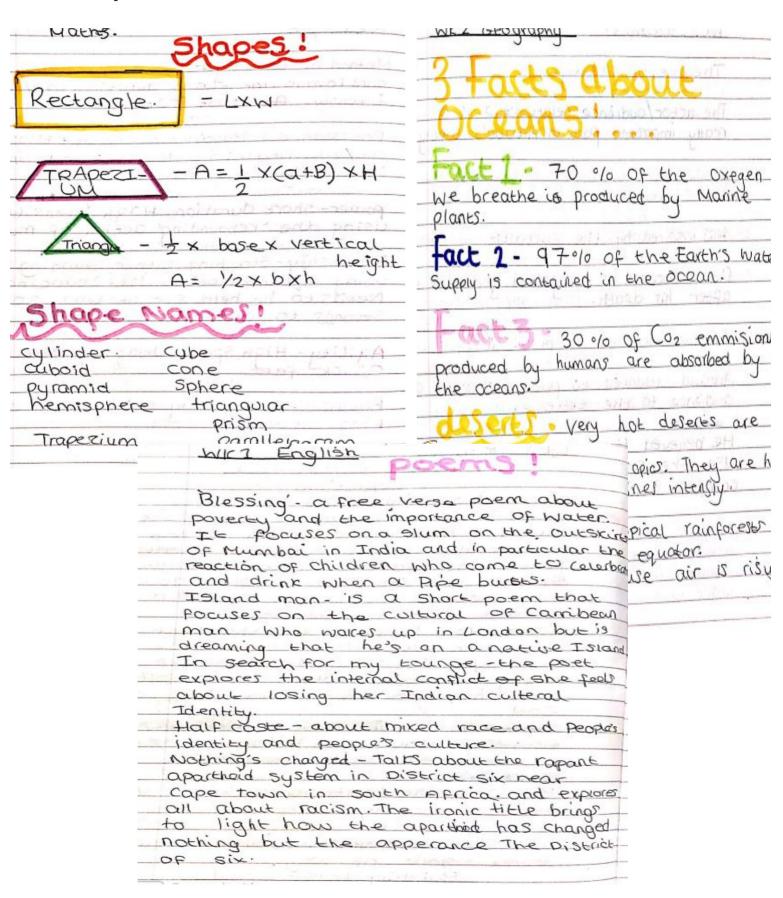
Check and correct your work using green pen.





Look, Cover, Transform, Check, Correct

Example:





Animal Farm

Tier 2 Vocabulary

Tyrant: a ruler who has unlimited power over other people, and uses it unfairly and cruelly. Noun. .

Treacherous: A person who is treacherous deceives someone who trusts them, or has no loyalty. If the ground or sea is treacherous, it is extremely dangerous, especially because of bad weather conditions. Adjective.

Benevolent: kind and helpful. Giving money or help to people or organisations that need it. Adjective.

Rebellion: violent action organised by a group of people who are trying to change the political system in their country. Action against those in authority, against the rules, or against normal and accepted ways of behaving. Noun.

Principle: A basic idea or rule that explains or controls how something happens or works. A moral rule or standard of good behaviour. Noun.

Cower: To lower your head or body in fear, often while moving backwards. Verb.

Hypocrisy: claiming to have higher morals than is the case.

Propaganda: Information, especially of a biased or misleading nature, used to promote or publicize a particular political cause or point of view.

Key Terms

Communism: The political ideology of equality. Centred on the group. Wealth, power, and rights are shared equally between all citizens.

Capitalism: The political ideology of profit. Centred on the individual (person, business, country). Each individual tries to gain as much as possible and give as little as possible.

The Russian Revolution: The Revolution saw the expulsion of the Tsar (king) but the rise of a new tyrannical leadership under the guise of equality.

Symbolism: An object which represents an abstract idea.

Allegory: A story that can be interpreted to reveal a hidden meaning, typically a moral or political one.

Animal Farm

Plot Summa	ary
Chapter I	The animals gather to listen to old Major. He gives them a vision of a life without man.
Chapter 2	The animals rebel and overthrow Jones. The commandments are written.
Chapter 3	The animals' first harvest is a success. The pigs keep the milk and apples to themselves.
Chapter 4	The Battle of the Cowshed: Jones attempts to reclaim the farm.
Chapter 5	Snowball and Napoleon debate the windmill. Napoleon uses dogs to chase Snowball from the farm. Napoleon makes himself leader.
Chapter 6	Work begins on the windmill. The pigs move into the farmhouse. Winds destroy the windmill.
Chapter 7	Work on the windmill starts again. Napoleon demands eggs from the hens. Napoleon slaughters animals at the show trials.
Chapter 8	Napoleon betrays Mr. Pilkington and sells timber to Mr. Frederick. Frederick pays with counterfeit money. Frederick attacks the farm. The animals suffer losses in the Battle of the Windmill. The windmill is destroyed.
Chapter 9	Boxer is sold to the knacker's yard.
Chapter 10	The pigs are leaders on the farm. They start walking on two legs and carrying whips. There is no difference between the pigs and the humans they sought to overthrow at the start of the novel.

Animal Farm

Key Characters

Mr Jones: Owner of Animal Farm.

Mr Pilkington: Owner of Foxwood. Sells land to Napoleon.

Snowball: Devoted to animalism and education of lesser

animals.

Squealer: Mouthpiece of Napoleon. Uses propaganda to

control animals.

Boxer: represents the workers. Devoted and strong but

naïve.

Clover: Maternal, loving and loyal.

Mollie: Shallow and childish. Craves ribbon and sugar.

Benjamin: Stubborn, cynical and apathetic.

Napoleon: Expels Snowball and executes animals. Establishes

himself as dictator.

Old Major: Wise old pig who inspires the rebellion.

Conventions of Dystopian Literature

- Society is deemed to be utopian and people follow the rules.
- Propaganda is used to control the population.
- Information, freedom of thought and personal independence are limited.
- A leader or concept is idolised by society.
- Citizens fear what is outside the community.
- There is the perception of constant surveillance.
- People are dehumanised.
- Nature and emotion are distrusted.

The Dystopian Protagonist:

- Often feels trapped.
- Begins to question the rules of the society and political systems.
- Somehow rebels against the society.

Online Maths Work

You can access your online maths support/homework through www.mymaths.co.uk

Maths homework is set on this once a fortnight. You can try the tasks more than once and should aim to continue until you get at least 'amber' in each set homework. Once complete, you need to record your score and your parents should sign to say they have seen the work.

The school login for mymaths is:

School Log-in: whitstonesecondary

Password: fraction280

Students will also be given their own unique login from their Maths teacher. This can be written here so you don't forget it:

Username: Password:

	Topic Practised	Score/ RAG	Signed by parent / carer
ı			
2			
3			
4			
5			
6			
7			
EXTRA			



Week A **Knowledge Organiser**

Week B My Maths **Teacher Set Task**

@whisto maths

Working in the Cartesian plane

What do I need to be able

By the end of this unit you should be able to:

- Label and identify lines parallel to the
- Recognise and use basic straight lines
- Identify positive and negative gradients
- Link linear graphs to sequences
- Plot y = mx + c graphs

Keywords

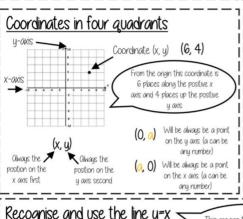
Quadrant: four quarters of the coordinate plane.

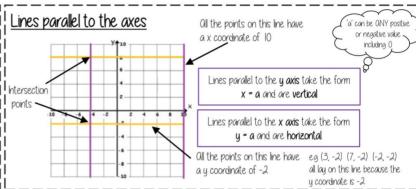
Coordinate: a set of values that show an exact position.

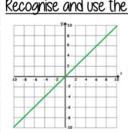
Horizontal: a straight line from left to right (parallel to the x axis) Vertical: a straight line from top to bottom (parallel to the u axis)

Origin: (0.0) on a graph. The point the two axes cross

Parallel: Lines that never meet Gradient: The steepness of a line I Intercept: Where lines cross



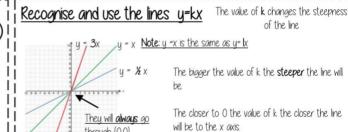




This means the x and the u coordinate have the same

Examples of coordinates on this line: (0, 0) (-3, -3) (8, 8)

The axes scale is important — if the scale is the same y = x will be a straight line at 45°

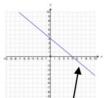


Direct Proportion using y=kx The line must be straight to be directly proportional — variables

increase at the same rate k

Direct proportion graphs always start at (0,0) as they are describing relationships between two variables

Lines with negative gradients



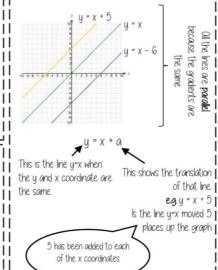
Ony straight-line graph with a negative x value has a negative gradient

Eg y = -2x $y = -x \quad y + x = 12$

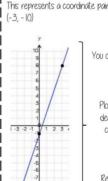
П

Direction of all negative gradients

Lines in the form y = x + a



Plotting y = mx + c graphs



You only need two points to form a straight line

 $3\,$ x the x coordinate then - $1\,$

Draw a table to display this

Plotting more points helps you decide if your calculations are correct (if they do make a straight line)

Remember to join the points to make a line

Week A Knowledge Organiser

Week B My Maths Teacher Set Task

Representing Data

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:

- Draw and interpret scatter graphs
- Describe correlation and relationships.
- Identify different types of non-linear relationships.
- Design and complete an ungrouped frequency table.
- Read and interpret grouped tables (discrete and continuous data)
- Represent data in two way tables.

Keuwords

Variable: a quantity that may change within the context of the problem.

Relationship: the link between two variables (items). Ea Between sunnu days and ice cream sales

Correlation: the mathematical definition for the type of relationship.

Oriain: where two axes meet on a graph.

Line of best fit: a straight line on a graph that represents the data on a scatter graph.

Outlier: a point that lies outside the trend of graph.

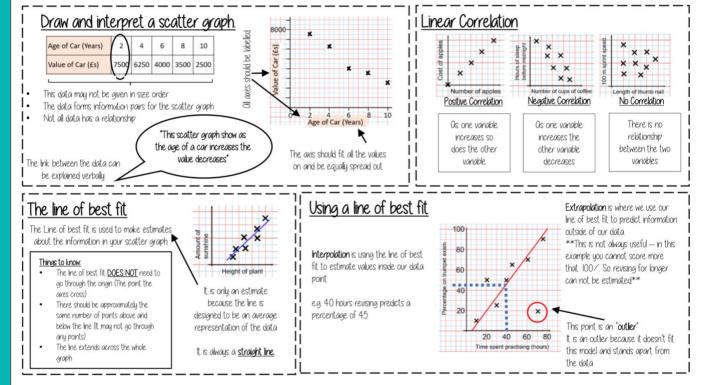
Quantitative: numerical data

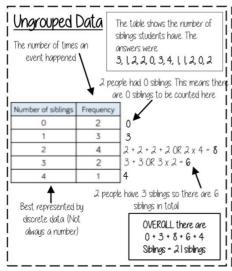
Qualitative: descriptive information, colours, genders, names, emotions etc.

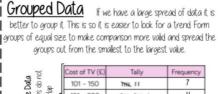
Continuous: quantitative data that has an infinite number of possible values within its range.

Discrete: quantitative or qualitative data that only takes certain values.

Frequency: the number of times a particular data value occurs.

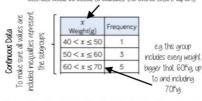






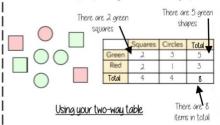
| Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Frequency | 101 - 150 | This | Tally | Tally | Frequency | 101 - 150 | This | Tally | Ta

We do not know the exact value of each item in a group — so an estimate would be bused to calculate the overall total (Midpoint)



Representing data in two-way tables

Two-way tables represent discrete information in a visual way that allows you to make conclusions, find probability or find totals of sub groups



To find a fraction

eg What fraction of the items are red? 3 red items

but 8 items in total = $\frac{3}{8}$

Interleaving: Use your fraction, decimal percentage equivalence knowledge

Week A Knowledge Organiser

Week B My Maths Teacher Set Task

Tables and Probability

@whisto maths

What do I need to be able to do?

By the end of this unit you should be able to:

- Construct a sample space diagram.
- Sustematically list outcomes.
- Find the probability from two-way tables.
- Find the probability from Venn diagrams.

Keywords

Outcomes: the result of an event that depends on probability.

Probability: the chance that something will happen.

Set: a collection of objects.

Chance: the likelihood of a particular outcome.

Event: the outcome of a probability — a set of possible outcomes.

Biased: a built in error that makes all values wrong by a certain amount.

Union: Notation 'U' meaning the set made by comparing the elements of two sets.

Construct sample space diagrams







Sample space diagrams provide a systematic way to display outcomes from events

The possible outcomes from rolling a dice

	1	2	3	4	5	6
Н	ļΗ	2,H	3,H	4,Н	5,H	6,H
T	ļΤ	2,T	3,T	4,T	5,T	6,T

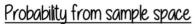
This is the set notation to list the outcomes S =

outcomes S =

In between the { } are a; the possible outcomes

S = { IH, 2H, 3H, 4H, 5H, 6H, IT, 2T, 3T, 4T, 5T, 6T}

There are three



The possible outcomes from rolling a dice

The possible outcomes from tossing a coin

3		1	2	3	4	5	6
9	Н	ľΉ	2,H	3,H	4,H	5,H	6,H
200	Т	ļΤ	(ZJ)	3,T	(4,J)	5,T	(6,T)
- LI							

What is the probability that an outcome has an even number and a tails?

This is the set notation that represents the question P (Even number and Tails)

In between the () is the event asked for

Tails) =

even numbers with tails

Tails

**Numerator: the event states a continuous continuou

Denominator: the total number There are twelve of outcomes

possible outcomes

Probability from two-way tables

	Car	Bus	Walk	Total
Boys	15	24	14	53
Girls	6	20	21	47
Total	21	44	35	(100)

P (Girl walk to school) = $\frac{21}{100}$ The event

The event

The total number of items

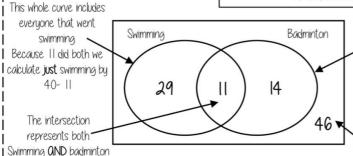
<u>Product Rule</u>

The number of items in event a

The number of items in event b

Probability from Venn diagrams

100 students were questioned if they played badminton or went to swimming club 40 went swimming, 25 went to badminton and 11 went to both



everyone that went to baidminton Because 11 did both we calculate **just** baidminton by 25 - 11

This whole curve includes

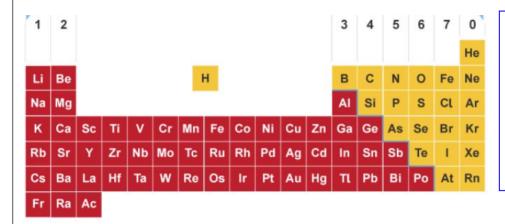
P (Just swimming) = $\frac{29}{100}$

The number outside represents those that did **neither** badminton or swimming

100 - 29 - 11 - 14

The Periodic Table

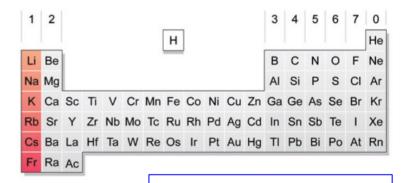
The periodic table which contains 92 naturally occurring **elements**, was developed by **Dimitri Mendeleev** in 1869 as a way of looking for patterns between the elements. The table he designed is shown below.

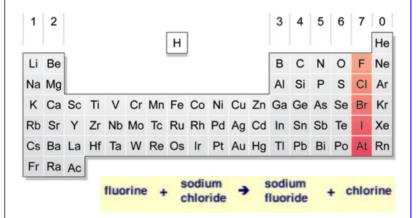


The table can be split into **metals** (left side) and **non-metals** (right side). Metals are good conductors, shiny, malleable, and ductile. Non-metals are poor conductors, dull, brittle, and not sonorous.

The vertical columns in the table are known as **groups** - there are 8 in the periodic table, and the horizontal rows are known as periods. Elements in a group have similar **properties**. There will also be patterns in the melting points, boiling points and the density of elements in the same group. There are no clear patterns for elements in the same period.

The elements in Group I are the alkali metals. They are very soft, shiny metals, and are also very reactive. Their reactivity increases as you move down the group, with Francium being very reactive in water. The alkali metals form metal hydroxides and hydrogen gas when they react with water. The boiling points decrease as you go down the group.





The elements in Group 7 are the halogens. They are liquids and gases at room temperature as they have very low boiling points. Their reactivity decreases as you move down the group, with Fluorine being the most reactive. The melting and boiling points increase as you go down the group. The halogens take part in displacement reactions, where a more reactive halogen will take the place of a less reactive halogen in a compound (as shown in the equation).

The Group 0 elements are called the **Noble gases**. They are very unreactive and have very low melting and boiling points which increase as you move down the group. The Noble gases have many uses. For example, neon is used in advertising signs. Argon is used as an insulator between panes of glass in double glazing, and helium is used in balloons.

Reactions

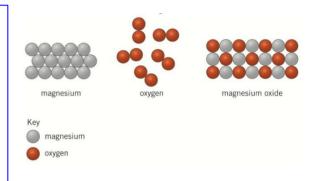
The diagrams below show how we know chemical reactions are taking place. Can you think of any other examples?



In every **chemical reaction**, the atoms are rearranged. The diagram shows how the atoms become rearranged to make magnesium oxide.

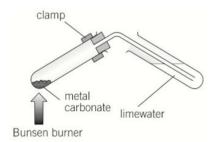
Magnesium + oxygen → magnesium oxide

The above is an example of a **word equation**. In this reaction, magnesium and oxygen are the reactants and magnesium oxide is the product.



A fuel is a material that burns to transfer energy by heating. Fuels include petrol, diesel, coal, methane and hydrogen. When fuels burn, this is known as **combustion**.

Methane, petrol and diesel are compounds that contain hydrogen and carbon. When these burn, they react with oxygen from the air. The products they form are carbon dioxide and water.



Some chemical reactions release heat to the surroundings during the process. These are known as **exothermic** reactions e.g. acid and metal reactions. Other chemical reactions take heat in from the surroundings to happen. These are **endothermic** reactions. Melting is an example of an endothermic reaction.

Thermal decomposition

In a thermal decomposition reaction a substance breaks down on heating into simpler compounds or elements. The equipment above can be used to carry this out.

Calcium carbonate → calcium oxide + carbon dioxide

To test that the gas produced is carbon dioxide we bubble the gas through limewater. If it turns milky then the gas is carbon dioxide.

Conservation of mass

In any chemical reaction, the total mass of the reactants is equal to the total mass of the products. This is called **conservation of mass**. Mass is also conserved in **physical changes** such as changes of state or dissolving.

Elizabeth I



Elizabeth was born in September 1533 and was the second child of Henry VIII. Her mother was Anne Boleyn, who Henry married after he divorced his first wife, Catherine of Aragon, because their marriage had not produced a son. After Henry had Anne executed for treason in May 1536, when Elizabeth was $2\frac{1}{2}$ years old, and her life changed forever.

Nevertheless, she became Queen of England in 1558, because her younger brother Edward VI (died 1553) and older brother Mary I (died 1558) had both died without leaving an heir. Elizabeth was the last and longest-reigning Tudor monarch, being queen for 45 years!

1558

Elizabeth becomes Queen of England

Elizabeth makes her Religious Settlement to please Catholics and Protestants

Mary, Queen of Scots arrives in England

The Ridolfi Plot aims to overthrow Elizabeth and put Mary, Queen of Scots on the throne

The Babington Plot aims to overthrow Elizabeth and put Mary, Queen of Scots on the throne

Mary, Queen of Scots is executed

The Spanish Armada tries to invade England

Elizabeth introduces the Poor Law to help those in need

Elizabeth dies,

What problems did she face?

When Elizabeth became Queen, England did not have much money, a good army or good relationships with her foreign neighbours. Many people were also unhappy with religion, as the country was split between people who believed in the Catholic Church in Rome and the Protestant Church of England, established by Elizabeth's father, Henry VIII. One of Elizabeth's most important jobs was to make sure her kingdom was happy, safe and secure.

During her time on the throne, Elizabeth faced plots to kick her off the throne and invasion from Spain. Can you add the dates to these famous events from her reign onto the timeline? Use the internet to help you.

How is she remembered?

These are different images and descriptions of Elizabeth from her reign (time on the throne as Queen of England). What do they make you think about her?



Elizabeth's coronation portrait (copy of the original from 1559)



Elizabeth in her prayer book, 1559.

"Although I may not be a lioness, I am a lion's cub, and inherit many of his qualities."

Talking about her father, Henry VIII.

"I know I have the body of a weak and feeble woman, but I have the heart and stomach of a King of England too and think foul scorn that Parma or Spain or any Prince of Europe should dare to invade the borders of my realm."

Part of her Tilbury Speech, 1588.



What next?

Elizabeth was a strong and powerful ruler in her own right, but throughout her life she refused to marry. As a result, she did not have any children and when she died on 24th March 1603 aged 69 years, she did not leave an heir. This meant that the Tudor dynasty began by her grandfather, Henry VII, was over.

The next ruler of England was James VI of Scotland, who became known as James I of England. He was a Protestant like Elizabeth, and was also related to Henry VII. He was also the son of Mary, Queen of Scots, who Elizabeth had executed in 1587!

You will learn more about him in our next topic; Witchcraft!

Next Steps: Finding out more about the Tudors

If you find yourself off-school unwell or isolating, or simply want to find out more about the Tudors, the below tasks are for you!

For these tasks you need to be able to access the British Museum's 'Teaching History with 100 objects' website;

http://teachinghistory100.org/browse/curriculum/10/date/3/

This page will help you explore what life was like in Tudor England by investigating objects from the time. These are known as artefacts and were discovered by archaeologists who excavated Tudor sites. Choose an artefact to investigate and then complete these tasks for it;

- I. What is the artefact, when does it date to and where was it found?
- 2. What does it look like and what is it made from? (You can describe in detail or draw and label it)
- 3. What was it for? Who do you think used it?
- 4. What does it tell you about life in Tudor England? Were people rich or poor? How did they spend their time, or what did they believe?

There are also helpful links on the page to help you with your artefact investigations. You may also find these links useful;

Artefact I: https://maryrose.org/meet-the-crew/

Artefact 2: https://www.bbc.co.uk/bitesize/guides/zrpcwmn/revision/l

Artefact 3: https://www.bbc.co.uk/bitesize/guides/zcn4jxs/revision/l

All of these tasks are designed to build upon what we are learning about in class, so if are away, you do not need to miss out!

If you need any help, please message your class teacher on ePraise.



HAVE FUN!

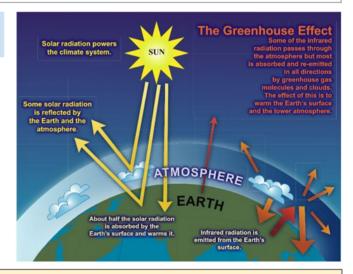
Climate Change

Key Terminology

Climate Change	A long term change in the Earth's climate due to an increase in average atmospheric temperature.
Greenhouse effect	Natural warming of the atmosphere as heat given off from the Earth is absorbed by liquids and gases (e.g. CO ₂).
Greenhouse gases	Gases that trap heat around the Earth. The main ones are carbon dioxide, methane, water vapour and nitrous oxide.
Ice core	A sample of ice, taken by drilling through a glacier or ice sheet.
Mitigate	To make (something) less severe or unpleasant.

Evidence for Climate Change

- The **decreasing** size of the Earth's glaciers, ice sheets, snow cover and permafrost.
- The world's oceans are heating up as they absorb most of the extra heat being added to the climate system.
- As the temperature of the land and sea increase, greater evaporation rates occur. This leads to an increase in the humidity of the atmosphere.



- Greenhouse gases make up only 1% of the atmosphere
- They act like a blanket around the Earth, or like the glass roof of a greenhouse they trap and heat and keep the planet warm.

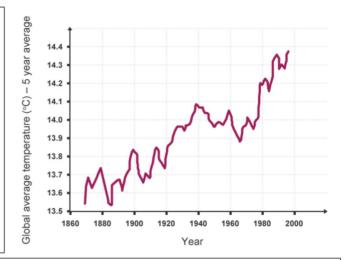


Causes of Climate Change

- Natural causes erupting volcanoes, soil and natural vegetation, swamps and bogs.
- Human causes burning fossil fuels by transport, industry, power stations and factories. A growing population means that more food is needed so particular livestock and rice paddy fields produce methane and nitrous oxide into the atmosphere.

Consequences of Climate Change- For our planet and the UK

- 50 million more people will be at risk of hunger due to climate change by 2050.
- Asia's growing share of global greenhouse gases, could rise to 48% by 2030.
- A recent report predicts that expected temperatures increase over the land area of Asia could reach as much as 6°C by 2100.







- Severe water shortages are expected as summers get drier by the 2050's
- Leading to more intense rainfall, bringing floods to places not currently in danger.
- The rise in world sea levels will mean an increase in sea level exceeding I metre and possibly as much as 2 metres on UK coasts.
- A warmer, wetter climate will bring benefits to British agriculture, allowing for all year round crop cover.

What can we do about climate change?

The Paris climate agreement, 2016. Key points of the agreement. Approved by 195 countries and to take effect from 2020.

- Developed countries must provide financial support to help developing countries.
- Aim for greenhouse gases emissions to peak as soon as possible.





How do Hindus understand God?

Hindus believe there is one supreme universal spirit, **Brahman**. Brahman is understood as the life giving force that is the 'origin of all that comes into being'. Brahman is often described as 'it' showing there is not gender as God is not a physical being. Brahman is invisible and formless, a power or spirit which is in all living beings but and also beyond the universe. Hindus believe there is a spark of Brahman (atman) in us all

Hinduism



KARMA

You may already know of some Hindu gods and goddesses like Ganesh, Hanuman and Lakshmi?

What is the Trimurti? Three of the most significant forms of Brahman are Brahma, Shiva and Vishnu. These three gods are key aspects of Brahman, the Ultimate Reality. The word 'trimurti' means 'three forms'. In the trimurti, Brahma is the creator, Vishnu is the preserver and Shiva is the destroyer.

In a Hindu temple, there are no images of Brahman. However, there are many images of gods and goddesses, which are aspects of the Divine One,

What do Hindus believe about the afterlife?

Hindus believe that after death the atman continues to exist and enters another body just 'as a man casts off old clothes and takes on other clothes'. This is because the atman is 'eternal' and 'indestructible'. This is known as **reincarnation**. Hindus believe that the **atman** (soul) passes through a cycle of successive lives (**samsara**) and its next incarnation is always dependent on how the previous life was lived (**karma**). **Moksha** is the end of the death and rebirth cycle and is classed as the ultimate goal.

How these beliefs affect a Hindu's life?

Karma literal meaning is 'action'. Hindus believe in a law that every action has an equal reaction either immediately or at some point in the future. Good or virtuous actions will have good reactions or responses, and bad actions will have the opposite effect. So Hindus try to conduct good actions in their lives.

les matières

l'anglais – English
le français –French
Le dessin – art
Les maths – maths
Les sciences – science
La musique – music
L'informatique – ICT
Le théâtre – drama
La technologie – DT
La géo(graphie) – Geography
L'histoire – history
Le sport / l'EPS – PE
L'éducation religieuse - RE

Ton opinion



Tu aimes....? – Do you like...?

J'aime... – I like

J'adore... – I love

Je n'aime pas... – I don't like

Je déteste... – I hate

Quelle est ta matière préférée? What is your favourite subject?

Ma matière préférée c'est.... My favourite subject is...



qu'est-ce que tu fais?

je fais – I do on fait – one does/ we do

Pourquoi?

parce que /car – because mais - but C'est... It is....

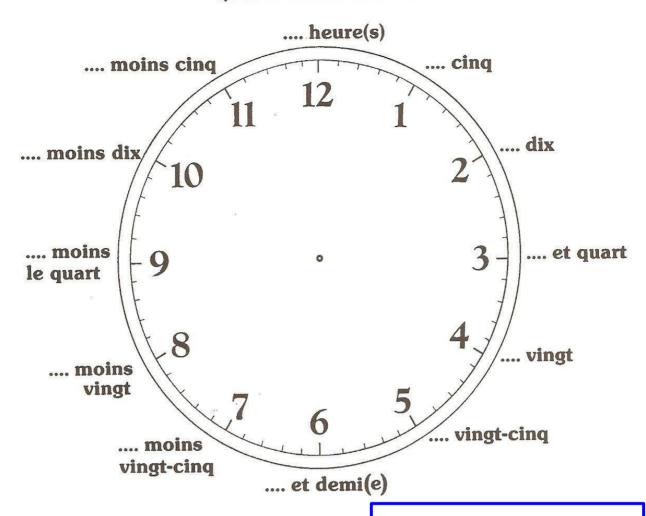
amusant – fun difficile – difficult facile – easy intéressant – interesting ennuyeux - boring nul – rubbish utile – useful bof! – blah! (indifferent)

je porte ... I wear on porte – one/we wear



une veste – a blazer un pull – a jumper un pantalon – trousers une cravate – a tie une jupe – a skirt un collant – tights une chemise – a shirt des chausettes – socks un chemisier – a blouse des chaussures - shoes

Quelle heure est-il?



le college commence à.. – school begins at... le college finit à... - school finishes at.. le recréation est à... - breaktime is at... le dejeuner est à... - lunch is at

> Le lundi – Monday Le mardi – Tuesday Le mercredi – Wednesday jeudi – Thursday vendredi – Friday

puis – then

après - after

le me reveille – I wake up Je me lève – I get up le me lave – I wash myself le me douche – I shower Je m'habille – I get dressed le me brosse les dents – I brush my teeth le prends le petit déjeuner – l have breakfast le vais au collège – I go to school Je dine – I have dinner le fais mes devoirs – I do my homework le lis – I read Je regarde la télé – I watch tv le me couche – I go to bed

Define: Contraception

Methods that are used to prevent pregnancy from occuring during sexual activity.

Define: **Natural methods.**

Contraceptive methods which do not use hormones or barriers, mostly focused on fertility awareness.

Define: **Hormonal methods**

Contraceptive methods with use hormones to prevent pregnancy, usually used by Women only.

Define: Hormonal methods

Contraceptive methods with use hormones to prevent pregnancy, usually used by Women only.

Consent

Legally a person under 16 cannot give consent.

Types of hormonal birth control

These do NOT protect against STIs and you will need a prescription:

- Monthly oral contraceptive pill, other oral contraceptives
- Patch, vaginal ring
- Injection, implant
- Hormonal IUC (coil)

Types of non - hormonal birth control

These do NOT protect STIs (except male condom) and for some you need a prescription:

- Spermicide
- Diaphragm, cervical cap
- Female condom, male condom
- Sterilisation vasectomy/hysterectomy

Define: **Sexually transmitted infections** (STIs)

Sexually Transmitted Infections are infections that are passed on mainly through sexual contact both vaginally, anally or orally.

Define: Combination methods

Contraceptive methods which use both hormonal and barrier methods to prevent pregnancy.

Define: **Sexual** consent

The giving of permission by a person to engage in any form of sexual activity including penetrative and oral sex. A person under 18 is a minor and legally a child. Consent is freely given and you can change your mind.

For additional homework work through material from Oak academy online PSHE resources https://classroom.thenational.academy/subjects-by-year/year-8/subjects/rshe-pshe

Where to get help and support - contraception advice, STI treatment or relationship support

- Parent or trusted family member.
- GP or practise nurse or school nursing team
- NHS online or other websites including www.brook.co.uk
- School staff/safeguarding team

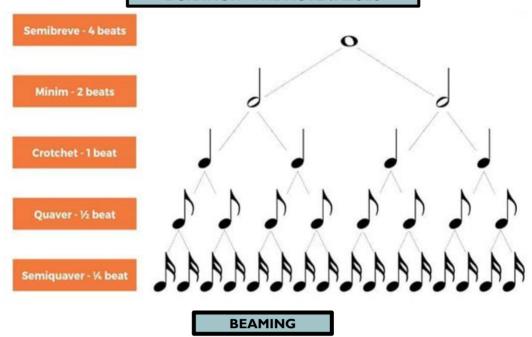
RHYTHM and PULSE

KEY TERMS

PULSE A regular **BEAT** that is felt throughout a piece of music.

RHYTHM A pattern of sounds or notes of different lengths that create a pattern. A rhythm usually fits with a regular pulse.

DURATION - THE NOTE VALUES

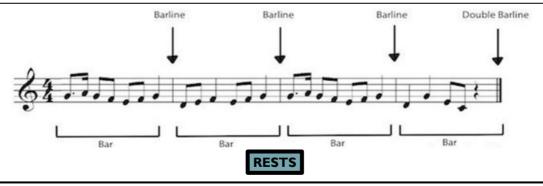


To make music easier to read, quavers and semiquavers are 'beamed' together in complete beats.



BARS and BARLINES

Music is divided into BARS. Bars are separated by BARLINES. A DOUBLE BARLINE is used at the end of a piece. The two numbers near the beginning of the piece are called the TIME SIGNATURE. These numbers tell us HOW MANY BEATS and THE TYPE OF BEATS in each bar. In the example below, the time signature is 4/4, meaning there are 4 crotchet beats in each bar.

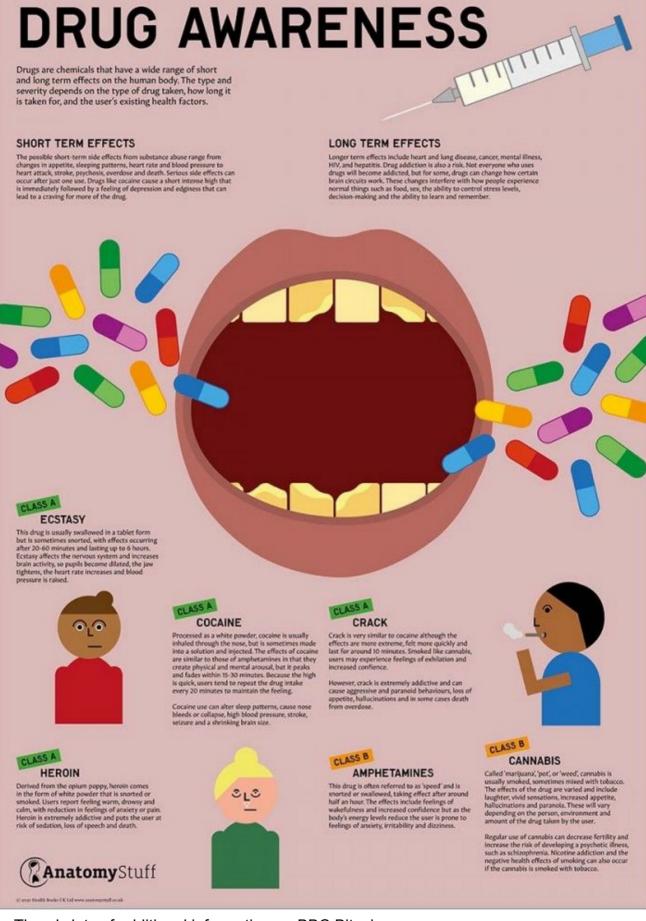


SILENCE in music is shown as symbols known as RESTS. In the example above, there is a CROTCHET rest just before the double bar line at the end of the piece. This tells the performer to rest for ONE. BEAT.



J
Z
P
Z
P

Acting Skills	
Facial Expressions	Showing emotion with your face
Body Language	Showing emotion with your body
Posture	The way in which you hold your body. Posture can be used to show age, emotion, and status of character
Focus	Where you are looking, who you use eye contact with, or refuse to use eye contact with can show a huge amount about your character's confidence and emotions
Weight Placement	Weight placement is about changing your centre of gravity to bring your weight onto specific parts of the body. For example if you lean forward the weight is brought onto the front of you feet, if you lean to the side =your weight placement goes down the leg on the side you are leaning. This can be used to show gender, age and even personality.
Gesture	Small movements that convey meaning. For example a nod of the head means 'Yes' or thumbs up to say you are feeling good.
Pitch	How high or low your voice is
Projection	How loud or quiet you are. Remember it is just as bad to be too loud in the drama room as it is to be too quiet in the hall.
Pace	How quickly you speak.
Intonation (tone)	The emotional tone of your voice.
Clarity	How clearly you speak
Articulation	The movement of the lips and tongue to help you speak clearly.



There's lots of additional information on BBC Bitesize. This link gives you information from a science background https://www.bbc.co.uk/bitesize/guides/zy2hpv4/revision/3

This link had some videos for POSHE on how drugs can have an impact on those around them

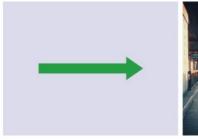
https://www.bbc.co.uk/bitesize/topics/z9982hv/resources/1

MOTIONS

Mechanical devices all have an input motion, which transforms into force to make an output motion. The four types of motion are:

- linear
- rotary
- reciprocating
- oscillating

Linear motion





Moves something in a straight line, eg a train moving down a track.

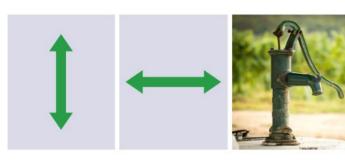
Rotary motion





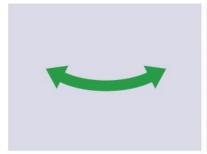
Is where something moves around an axis or pivot point, eg a wheel.

Reciprocating motion



Has a repeated up and down motion or back-and-forth motion, eg a piston or pump

Oscillating motion





Has a curved backwards and forwards movement that swings on an axis or pivot point, eg a swing or a clock pendulum

Health, fitness and well-being

Health, Fitness and Well-Being

Lifestyle choices – the decisions we make about how we live and behave that impact on health

Activity levels

Active lifestyle

Eating unhealthy

Eating healthy

Work/rest/sleep balance

nactive lifestyle

H

7

Reduces stress and Boosts self esteem

Increasesweight and Leads to deficiencies

1 7

Boosts energy levels Reduces the risk of developing serious healthconditions Help lose weight

% body fat

Improvesfitness

m

evels

with poor body shape

m

Causes depression

m

anxiety

tive lifestyle	09	Good balance	Poo	Poor balance
Increasesriskof	1	Improvesmood	1.	Increasestheriskof
disease	2	Increases	-	depression
Decreasesmuscle		productivity at work	7	Leads to weight gain
mass, strength and	က	Contributesto	က်	Increased blood
energy levels		quality of sleep		pressure

Recreational drugs - these are taken for pleasure and are legal to those over a

certain age.

Smoking

Well being – a combination of physical, emotional and social health.

Positives effects of training/exercise on:

Physical health

- Stronger bones (increased bone density)
- Lower cholesterol / reduced obesity
- Increase/development of components of fitness Increase life expectancy















Reduced risk of age-related diseases - dementia

Emotional health

Fun/enjoyment / reduced boredom

Relieve stress and tension



Balance, co-

ordination reactions

and

problems

of glycogen levels and Reduction

lactic acid removal slower

in urine and dehydration

cause

are affected

water levels Diureticincreased

Elderly

Sedentary lifestyle – a lifestyle with no or irregular physical activity. This includes

Health risks associated are:

Type 2 diabetes

Heart disease

Osteoporosis

Obesity

Depression

- Children



To meet new people/friends

Develop leadership skills

To develop teamwork skill

Social health





- Physical health overexertion leading to heart failure / overuse injuries
- Emotional health training can lead to injury and cause depression
- Social health-training long hours means less time spent with family.









Overweight – weighing more than the expected weight for height and gender / Overfat – high percentage of body fat Obese - weighing significantly more than expected. Impact of a sedentary lifestyle on weight

Target audience:

You need to know your target audience: Who are they? What kind of things do they do? What products do they use? How old are they? What are they interested in? The answers to these questions and many more will help you better understand the people you are designing for. Getting an understanding of these individuals helps you create with ease and make something you know will relate to them.

Purpose

Why are digital graphics used?

- To entertain
- To inform
- To advertise
- To promote
- To educate

Asset table

An asset table is a list of all of the assets, images and information you have collected for the project - listing where you got it from and describing any legal issues with using it.

Tools and Techniques

You need to show evidence of the tools and techniques you have used:

- Cropping / Cutout Studio
- Rotating
- Changing brightness / contrast / colour adjustment











ve tool Hand tool Ro

Rotate tool Zoom tool

Suitability

What can you change about an image to make it more suitable for different uses?

- Size in Pixels
- Resolution (Dots per inch)
- Quality
- Compression

Client Requirements

Your client is the person you will be working for. They will tell you what to plan, design or create for them. The Client will set out requirements that they want you to follow when you plan the project - eg: Purpose, Theme, Style, Genre, Content





Visualisation

A Visualisation is a sketch or diagram of what you think the final graphic might look like.

Export Options

Digital Graphics need to be saved in different formats for different purposes - the size and resolution will be different for:

Print use

Websites

Multimedia

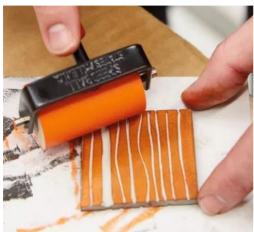
Check the client brief!

What type of file formats do digital graphics use?



You will need to find out the different uses and properties of these different file formats and be able to describe why different formats are suitable for different situations.





When you've decided which spots to hollow out, draw outlines a teeny bit outside of the shapes you're not going to cut. That way you don't accidentally cut into the edges.

Use a lino cutter to cut out your design. I'd recommend having a few practises with the cutter before you do the real thing. It's something that needs practise and involves a great level of skill.

Watch the angle you use the cutter at. Too steep and it tends to gouge out a mark too deeply, too shallow and you won't cut enough away.

Remember anything that is cut out will not have the ink applied

Use a plastic sheet to roll the ink out and cover the surface of the roller fully with the ink.

Printing ink is stickier than paint and benefits from being rolled back and forth a bit before you start using it.

Next roll the roller over your lino design. Do one continuous movement from top to bottom, then go back to your ink, and roll from top to bottom again. Continue this until the lino is covered.

Now for printing! Place your lino print on to paper. Press down and roll the entire surface of the lino with firm pressure - to ensure the ink transfers fully – be very careful not to move the paper in this stage. Lift off the paper and 'voilà' you have your finished print.

LINO PRINTING

Lino printing is an artistic technique where the design is cut into lino (rubbery linseed based material - usually grey in colour) to create patterns or images.

The lino is then inked, a piece of paper placed over it, and then pressure is applied by hand to transfer the ink to the paper. The result, a linocut print.

A few things to think about as you make your linocut design:

- Play with organic and geometric lines and shapes.
- Make sure lines and shapes reach the sides of the square—if you keep them contained in the box, they won't join to make new shapes.
- Remember your design will be a mix of solid and empty spaces, depending on the parts you decided to cut or leave.
- Keep it simple.



Lino Printing can make your design look graphic but feel like it's painted, Linocuts give your work a very organic look. There are little mistakes, and you learn to

embrace the happy accidents.

Functional Characteristics of Ingredients.

Selecting Ingredients.

Ingredients are chosen for a number of reasons, such as;

- To add favour, colour or texture.
- To provide a particular function (e.g. to thicken)
- To provide nutrients or change the nutritional profile of a fish (e.g. to increase fibre)
- To extend shelf life
- To impact the cost and availability.
- To satisfy a need to buy food with a certain provenance (e.g. Red Tractor).

Key Words:

- Mechanical
- Chemical
- Biological
- Browning
- Raising
- Setting
- Thickening

Raising Agents.

These can be:

- Mechanical. E.g. beating, creaming, rolling and folding, sieving and whisking.
- Chemical .E.g baking powder, bicarbonate of soda, self-raising flour.
- **Biological**. E.g. yeast.

Different foods may use one or more of these to achieve a desirable end result.

AGING AGNTS

Functional Characteristics of Ingredients.

Ingredients provide a variety of functions in recipes, such as:

- Browning; an example of this is flour in a bread roll (dextrinization)
- 2) **Raising;** an example of this is yeast in bread (aeration)
- 3) **Setting;** an example of this is scrambled egg (coagulation).
- 4) **Thickening**; an example of this is flour in a roux sauce (gelatinisation).

Economical Impact on Food Choice - Food Rationing.

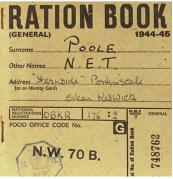
Food Rationing

In January 1940, the British Government introduced food rationing. The scheme was designed to ensure fair shares for all at a time of national shortage. Every man, woman and child was given a ration book with coupons. The government issued a number of 'points' to each person, even babies.

Fruit and vegetables were never rationed but were often in short supply, especially tomatoes, onions and fruit shipped from overseas.

Basic foods such as sugar, meat, fats, bacon and cheese were directly rationed by an allowance of coupons. A number of other items such as tinned goods, dried fruit, cereal and biscuits were rationed using a points system. Priority allowances of milk and eggs were given to those most in needs, including children and pregnant women.





Making a Zine

What is a zine? Generally, it's a handcrafted small scale magazine and normally draws on ideas and values not covered regularly by the mainstream media.

Zine-making a great way to both produce new and alternative works of art and design.



Getting started...

Decide what it's for

Ask yourself what you're aiming to achieve through your zine. What are the main visuals you want to share with others? The answer to this question will help you to determine how you're going to want it to look, in terms of themes and ideas, and what you want to include. Comic strips, artwork, reviews, facts?

Pick the right name

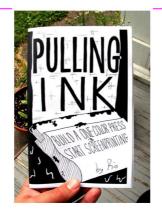
The name of your publication is important.. Once you've settled on this, it becomes an important reference point for making every page. The freedom that comes with zine-making means there are no restrictions in terms of title, so let your imagination run wild to get the perfect name.

Decide on your layout and order

The internal layout of a zine is one of its most appealing and important characteristics. It should also be one of the more time-consuming and thought-out production processes. There's a lot going on in the average zine. From magazine and newspaper cutouts to illustrations and poems. You need to consider how all these elements will come together.

Create a draft copy

The draft copy is the test piece you create before you start making the final publication. This stage is a great time to experiment with the format/layout and typography used, the type of paper you use, the materials you use and the ways in which you decide to fold and bind the pages. The final copy will often look different, as the examples demonstrate...









AROUND THE WORLD IN 80 DAYS



The aim of this term is to introduce to you a variety of dances from different cultures from around the world. You will need to produce and perform the variety of cultural dances in your assessment demonstrating a clear understanding of each cultural dance taught and explored through its context to the key features of the dance style.

BHARATHA NATYAM

World Map: New Zealand World Map: India

Key features of the dance style:

 The Haka is a type of ancient Māori war dance traditionally used on the battlefield.

HAKA

- The Haka is a fierce display of a tribe's pride, strength and unity.
- Actions include violent foot-stamping, tongue hanging out and rhythmic body slapping to accompany a loud chant.
- The words of a Haka often describe ancestors and events in the tribe's history.
- The Haka is used to challenge opponents on the sports field. You may have seen a Haka performed by New Zealand's All Blacks before a rugby match

Traditionally a solo dance form for women.

Key features of dance

- Works very closely with the music.
- Costume is important.

style:

- Footwork is percussive.
- This dance aims to tell a story through gestures.
- This style of dance uses lots of expressive skills.

RESEARCH TASK:

To develop your understanding even more type into YouTube the 4 dance styles above to watch them in action.Then take notes in your homework booklet

What is culture?

Culture has many different meanings to different people around the world, as there are hundreds of different cultural societies. The understanding and view of the word culture involves many different genres like, people's background, race, history, media, beliefs, religion, surrounding and language. Culture brings social groups of people together with the same interest. Within the groups of different cultures they all have their own set of rules, symbol's attached, with positives and negatives. Each of these dance styles above are infused with culture, tradition and history regarding the location of where the dance style has originated from.

CAPOEIRA

Word Map: Brazil

Key features of the dance style:

- Capoeira was first practiced by African slaves in Brazil, the style was founded to teach slaves how to fight and protect themselves.
- This style was disguised from a fight to a dance to avoid the risk of punishment and execution.
- The characteristic qualities of Capoeira, focuses on quick complex moves using power, agility, speed and leverage for high kicks, spins, elbow strikes and punches.
- The combinations of attacks and defences give the style precision and fluidity.
- The 'fighting theme' has evolved and is now primarily a style of martial arts. Its original performance setting was symbolised by a large circle known as the Roda; this involves two participants executing skills in combat formation; however today, the aim is to focus on the skill and technique involved in the movements.

BHANGRA

World Map: India

Key features of the dance style:

- Bhangra originated in the Punjab region of India. Traditionally a good harvest was celebrated by dancing and singing songs to the sound of the dhol drum.
- Bhangra is danced at weddings, parties and family celebrations. The dance rhythm is set by the dhols.
- There are many types of dance, some are especially for men or women.
- Bhangra is often danced in circles and uses a lot of arm and shoulder movement.
- Some dances use sticks and swords. Other dances use stunts such as a dancer sitting on someone's shoulders, while another person hangs from his torso by his legs.
- They move with passion and relaxed muscles and use lots of energy. Some of the steps mimic actions related to harvesting.

WATCHING

TASK: https://www.youtu be.com/watch?v=-zysw-O FVnA

CHOREOGRAPHY, PERFORMANCE & REHEARSAL/EVALUATION



Evaluating your dance work? Try these sentence starters to help you analyses and evaluate you going:



I would like to tell you about.....

I would like to explain about.....

I have choreographed.....
My dance was about.....

This term I have learnt..... I am pleased with my finished performance because....

The most enjoyable part of the work was.....

The area I found the most challenging was.....

I am now aware of.....

The equipment/resources I have used are.....

I would develop my work by..... I would like to use this (insert: technique, idea, development or method) in my future projects because..... The key focus this term was.....

Important things to remember are....

I have learnt how to.....

I have planned.....

The most enjoyable part of the work was.....

I am able to use.....

CHOREOGRAPHY

Choreographic Devices: Repetition – A very simple device where you repeat all or a part of one motif.

Contrast – Where you add something completely different to your dance.

Transitions – Links between movements, phrases and sections of your choreography.

Retrograde - Performing a motif backwards (like rewinding a video)

Beginning and End – It is important to have a catchy beginning and end to your dance.

Climax – This is the peak of your dance, like a big lift or jump which is the main visual point of the dance to the audience.

Highlights – This is moments that lead up to the main climax of the dance.

Form/Structure of sections: AB = Binary, ABA = Ternary, ABCDEFG = Narrative, ABACADA = Rondo, AAIA2A3A4A5 = Theme and Variation, ??? = Chance

PERFORMANCE

Movement Memory – remembering your dance

Accuracy—copying exactly the actions you see

Extension—stretching into the space **Fluency**—moving from one action to the next without pauses

Flexibility—range of movement in joint

Posture—how you hold your body when sitting/standing

Spatial Awareness—knowing where you are in the space

Strength—muscle power needed to perform movements

Focus—use of the eyes looking at other dancers, the audience or to a body part

Facial Expression—emotion shown through eyes, mouth and eyebrows
Sensitivity to others—in space, group formations, when in contact
Commitment—considering work as a performance piece

Physical Skills – skills you use to show the ascetic/technique Interpretive Skills – Skills that you

use to expressive the mood, atmosphere or meaning of the dance

INDEPENDENT REHEARSAL TIME

Warm up and stretch properly and correctly

Mentally and physically prepare yourself for the rehearsal/lesson ahead

Follow health and safety rules in dance and wear the correct attire

Work with different group variations—1, 2, 3, 4, 5
Aim to Input creative ideas

Listen to the ideas of others Communicate effectively and calmly with others

Take the lead in groups

Be a team player – Teamwork
Try to show and maintain

commitment to your work

Focus at all times
Repetition is key, repeating your

creative dance sequences will help remember your dance Identify yours and your groups strengths

Identify areas for improvement to make progress in your dance work

How do the challenge tasks work?

Each term, five subjects will set additional challenge tasks.

These tasks are optional so you can pick and choose which ones you do. For each task that you complete, you will be rewarded with 5 epraise points and be entered into a draw to win a prize.



Your class teacher will give you details of how and when you should hand in the task

SCIENCE

The elements of Group 3

The table opposite shows some **properties** of the Group 3 elements.

<u>Task</u>

Display the data on two **Bar Charts**. Then write a few sentences to describe the patterns in **properties**.

Element	Density (g/cm³)	Boiling Point (°C)
Boron	2.3	3930
Aluminium	2.7	2470
Gallium	5.9	2400
Indium	7.3	2000
Thallium	11.8	1460

<u>Tips</u>

- For both bar charts, write the names of the elements on the x-axis
- Each bar chart needs a different scale for the y-axis
- Make sure the y-axis scale is even

DRAMA

Research Task

Find out everything you can about Elizabethan Theatre (also known as Early Modern Drama and Jacobean Theatre).

What were the theatres like? What was it like to be an actor at the time? What was it like to go to the theatre at the time?

Presentation Options (pick one)

- I. Write a diary entry for a person who has gone to the theatre to watch a Shakespeare play for the first time. What was it like? What was the performance like? What happened?
- 2. Create three Google Slides about Elizabethan Theatre

Please hand in on Google Classroom and Epraise me to let me know the work is there so I can mark it and give epraise points.

PE

Exercise Challenge - Home Gym

This term for an additional challenge task we would like you to design and home gym programme of 10 activities and then complete your programme three times a week.

On a piece of paper write down the numbers I-10. Now use your knowledge and use the internet to find 10 exercises you enjoy that require no equipments or weights. Put them down on your piece of paper making sure you alternate activities from legs, arms and abdominal exercises.

Once you have 10 activities you should then aim to complete each activity for 45 seconds and then rest for a minute before doing the exercise.

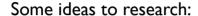
As you get fitter and stronger, you might like to complete your programme for another circuit or exercise for longer.

Good luck!

DESIGN TECHNOLOGY

Design Task

Research SMART Materials and design a new product using one of these materials as the main feature.



- Photochromic Ink
- Thermochromic Material
- Polymorph

Make sure you annotate/label your design to explain how it works.





MUSIC

The music below is written in 4/4 time signature, meaning there are 4 crotchet beats in each bar. This is one of the most common time signatures used in music but it is not the only one!

Your challenge is to find some examples of songs using unusual time signatures, tell me which time signature(s) are being used when and what you think of the songs. For example Golden Brown by The Stranglers uses 13/4 time for the opening and then 6/8 and 7/8 throughout.

