



The Academy
at Shotton Hall

YEAR 8 KNOWLEDGE ORGANISER

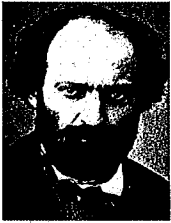
"KNOWLEDGE IS POWER"

Francis Bacon

Y8: STILL LIFE

Key Figures

Paul Cezanne



Paul Cézanne (1839-1906) was a French artist and Post-Impressionist painter. He was one of the most influential artists in the history of modern painting and has inspired generations of artists.

Kate Malone



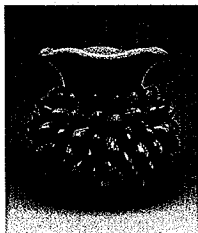
Kate Olivia Malone MBE (1959 -) is a British ceramic artist known for her large sculptural vessels and rich, bright glazes. Malone is a judge, along with Keith Brymer Jones, on BBC2's The Great Pottery Throw Down.

Still Life



A still life is a work of art depicting mostly inanimate subject matter, typically commonplace objects which are either natural or human-made.

Ceramics



Ceramic art is art made from ceramic materials, including clay. It may take varied forms, including artistic pottery, including tableware, tiles, figurines and other sculpture.

Key Terms

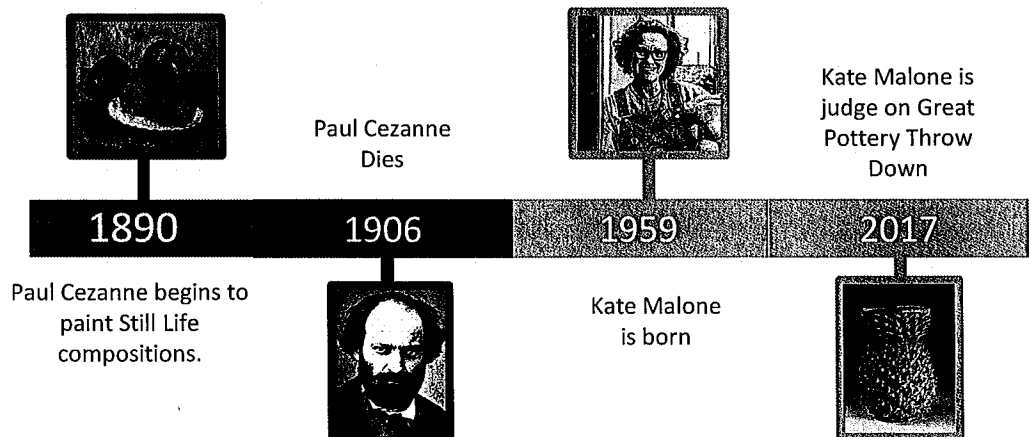
Background	The part of a picture, scene, or design that forms a setting for the main figures or objects, or appears furthest from the viewer.
Ceramic	The art or technology of making objects of clay and similar materials treated by firing.
Colour	What the eye sees when light is separated.
Complementary	Complementary colours are opposite each other in the colour wheel.
Composition	Composition is the way in which different elements of an artwork are combined or arranged.
Foreground	The part of a view that is nearest to the observer, especially in a picture or photograph.
Form	An element in art where an object appears to have three-dimensions.
Hyperrealism	Hyperrealism is a genre of painting and sculpture resembling a high-resolution photograph.
Line	A line is a mark made in art. A line has a width and a length. A line can be straight, curved, continuous, dashed or broken.
Primary Colour	Primary colours are Red, Yellow and Blue. Primary colours cannot be created by mixing other colours together.
Proportion	Proportion is a principle of art that describes the size, location or amount of one element to another (or to the whole) in a work.
Ratio	The relationship between the size, number, or amount of two or more things.
Score	Process used to roughen up clay surfaces before attaching together,
Slip	Clay mixed with water. Acts as a glue when attaching two pieces of clay together.
Secondary Colour	Secondary colours are Orange, Purple and Green. A secondary colour is made by mixing two primary colours together.
Shade	A shade is the mixture of a colour with black, which reduces lightness.
Still Life	The term "still life" describes a work of art that shows inanimate objects from the natural or man-made world, such as fruit, flowers etc.
Tertiary Colour	A tertiary colour is made by mixing a primary colour together with a secondary colour.
Three-Dimensional	A three-dimensional picture, image, or film looks as though it is deep or solid rather than flat.
Tone	A tone is produced either by the mixture of a colour with gray, or by both tinting and shading.



SMSC Creative thinkers, Cultural, Reflective learners

Timeline

Knowledge links:
History
Maths
English



UK ENG *Blood Brothers*

Mickey Johnstone	The working-class twin. He is honest, sincere and goodhearted. He marries and impregnates Linda, gets laid off, is arrested for Sammy's crime and ends up in prison and addicted to anti-depressants.	Foreshadowing	Foreshadowing is a warning or indication of a future event or possibility in a text.	Willy Russell	the writer of <i>Blood Brothers</i> , was brought up in a working-class family in Liverpool where his Dad had various jobs with one being a miner and was an alcoholic. Russell was interested in class as his mother aspired to be of a higher class. Russell feared he would end up like his father but felt saved by his in-laws who nurtured him, hence his interest of nature vs nurture.
Iward Lyons	Is also good-natured but the middle-class twin. His sheltered upbringing makes him innocent but because of class he gets good opportunities e.g. university and a good job.	Soliloquy	A speech in which a character speaks their thoughts aloud. This can be addressed to the audience or to themselves.	Housing	To improve standards of living in the 1960s and 70s, the government moved people away from the terraced houses into new council accommodation in the countryside.
Mrs Johnstone	Biological mother of the twins and a horde of other children. Left by her husband she gets a job as a cleaner. She is the moral centre of the play and is tortured by guilt and regret.	Monologue	Along speech by one character only. However, there are other characters present on the stage.	Education	The 11+ were exams which working-class children had to take to gain entry to a grammar school. Grammar schools were seen to provide the best education opportunities.
Mrs Lyons	Opposite of Mrs J, whom she employs as a cleaner. She adopts Edward as her own child. Is haunted by the original act of a mother giving up her child. The guilt turns into suspicion and paranoia.	Entrances & Exits	The act of entering or leaving the stage during a scene.	Class	Social class is the division of a society based on social and economic status. The Johnstones represent the struggling working class. The Lyons represent the thriving middle class.
Linda	Begins as a tomboyish young girl but both twins fancy her from an early stage. She only has eyes for Mickey as a teenager but later turns to Edward for comfort and support. Despite this, she loves both twins and is a sympathetic character.	Asides	An aside is a line or speech in which the character does not speak to other people on stage but instead speaks to themselves and/or the audience.	Margaret Thatcher	Margaret Thatcher, former Prime Minister from 1979-1990, was responsible for lots of working-class people losing their jobs. During her time in power, unemployment rates were raised higher than ever before.
Narrator	Omni-scient and always slightly menacing- takes many roles throughout the play. Narrator constantly reminds the audience of the terrible choice that began this chain of events. Blames class for what happens.	Chekhov's Gun	Anton Chekhov was a 20th century Russian playwright. His principle states that everything in a play must be necessary to the drama or have significance for the text and audience.	Single Mothers	They were looked down upon in this era. Society expected people to marry before they had children and thought badly of those who didn't. Women were expected to give up work and look after the children.
Sammy	When they are younger, Mickey just wants to be like Sammy. Quickly becomes a juvenile delinquent.	Motifs	A motif is a recurrent image, idea or a symbol that develops or explains a theme.	<div>KEY WORDS</div> <div> <div>Prologue</div> <div>An introduction to a literary, or dramatic text</div> <div>Lamentable</div> <div>very bad, unfortunate</div> <div>Inferior</div> <div>lower in rank, status or quality</div> <div>Superstition</div> <div>an irrational belief in something that is thought to bring good or bad luck</div> <div>Foreboding</div> <div>(noun) a feeling that something bad is going to happen (adjective) imply</div> <div>Manipulate</div> <div>to control, exploit or influence a person to one's advantage</div> <div>Duplicity</div> <div>deceitfulness</div> <div>Rebellious</div> <div>showing a desire to resist authority, control or convention</div> <div>Omniscient</div> <div>all-knowing</div> <div>Empathetic</div> <div>showing an ability to understand and share the feelings of someone else</div> </div>	
Mr Lyons	Married to Mrs Lyons. Believes Edward is biologically his. Grows increasingly concerned about his wife's mental health and wellbeing.	Chorus	A group of actors who describe and comment upon the main action of a play with song, dance, and speech.		
THEMES			Denouement		
FATE			Tableau		
NATURE VS NURTURE			Dramatic Irony		
SUPERSTITION			Mis-en-scene		
VIOLENCE					
EDUCATION					

Mr 8 English - Blood Brothers.

Language Subject Terminology

1. Word Classes

Noun	Identifies a person (girl), thing (wall), idea (luckiness) or state (anger).
Verb	Describes an action (jump), event (happen), situation (be) or change (evolve).
Adjective	Describes a noun (happy girl, grey wall).
Adverb	Gives information about a verb (jump quickly), adjective (very pretty) or adverb (very quickly).
Preposition	Describes the location of something, e.g. the pen was found under the table.

2. Sentence Structures

Simple	A sentence with one independent clause. "She went to the shop."
Compound	A sentence with multiple independent clauses. "She went to the shop and bought a banana"
Complex	A sentence with one independent clause and at least one dependent clause. "Sometimes, when she goes to the shop, she likes to buy a banana."

3. Language Techniques

Simile	Something is presented as like something else.
Metaphor	Something is presented as something else.
Imagery	When the writer provides mental "pictures".
Personification	Giving human traits to something non-human.
Alliteration	The occurrence of the same sound/letter at the beginning of words
Facts	Something proven to be true.
Opinion	A view/judgement on something.
Repetition	Repeating something to emphasises or reinforce.
Emotive Language	Words/phrases which appeal to the emotions.
Statistics	A piece of data (number) used to prove a point.
Three Rule	Three words/phrases grouped together for effect.
Rhetorical Q	A question which does not require an answer.
Imperatives	Command words; words which direct the reader.
Personal Pronoun	Words such as 'you', 'I'. Personalising to the reader.

4. Tier 2 Vocab

Stereotype	A widely held view
Credibility	Being trusted
Integrity	Being honest
Expectation	A belief something will happen
Discontent	Feeling unhappy
Despair	To lose hope
Ethics	Moral principles
Morality	What is right and wrong
Responsibility	Having a duty to do something
Chauvinism	Excessive support for one's own group
Logos	logic
Ethos	ethics
Pathos	Emotional
Rhetoric	Using language to persuade

5. Sentence Starters

Simile starter	With great hostility, people feel..
2 Adjective starter	Tired and disillusioned, young people believe...
Subordinate clause starter	Although it can be intimidating, we must embrace the new
Verb starter	Arguing this point...
Adverb starter	Surely, we can overcome...
Anaphora	Life is to be enjoyed. Life is to be lived.

Other Writing Skills

6. How to structure NF Writing

1	Introduction
2	Logos paragraph
3	Pathos paragraph
4	Counter-argument
5	Ethos paragraph
6	Conclusion

7. Things to consider

Audience	Consider who have you been asked to write for and how can your language choices reflect this.
Format	In what style have you been asked to write?
Register	How formal or informal should your response be?
Clear View-point	Have a backbone argument that you are continually referring to throughout.

8. Sophisticated Punctuation

Brackets ()	To contain extra information
Semi-colon ;	To link two main clauses which link in some way e.g. it was raining; I grabbed my coat.
Comma ,	To separate a main clause and subordinate clause
Colon :	To introduce a list or an idea. The worst thing about school: the homework.
Dash —	To add further information in a sentence.

Year 8 - English - Term 1

Year 8, Term 1

Blue Music

Blues Music – Knowledge Organiser

Name

Class

Historical Context:

The blues is the name given to a style of music created by **African-Americans** at the end of the **19th century**. Until the end of the 19th century, America was largely a rural community. In the early 20th century, large numbers of people started to move to industrial cities. After the Civil War and the emancipation of slaves, the blues spread, together with the people who sang and played it. Many former slaves moved from the cotton fields of the southern states to northern cities such as **Chicago** and **Detroit**, where the blues became highly popular. Blues lyrics often reflect the hardship and reality of everyday life and often follow an **AAB structure**. African influences such as **call & response** are also frequently heard in blues music.

Keywords

Chord 3 or more notes

together

Primary chords Chords: I, IV and V

12-bar Blues A chord structure of 12 bars using the primary chords.

Walking bass A bassline that moves by step ascending and descending the scale

Blues scale A scale with a flattened 3rd, 5th and 7th.

Improvisation Making something up on the spot

Seventh chord A 4-note chord using notes 1, 3, 4 and 7.

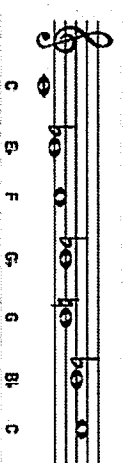
Swing rhythm A rhythm with a triplet feel, with the middle note removed.

Syncopation Stressing the weaker beats

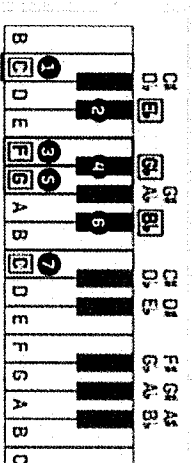
Vamp A repeated, improvised accompaniment based around the chords

C Blues Scale:

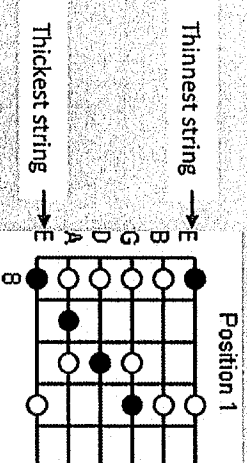
Notation:



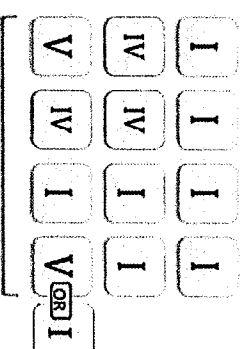
Keyboard:



Guitar:

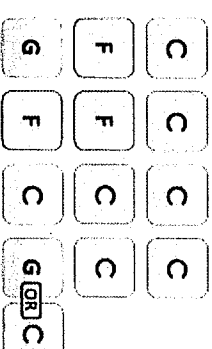


12-bar Blues Chord Progression:

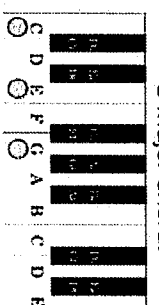


The Turnaround

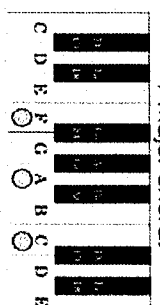
☐ Tonic ☐ Subdominant ☐ Dominant



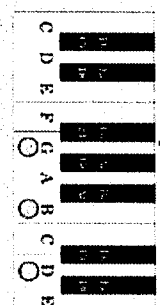
C major chord:



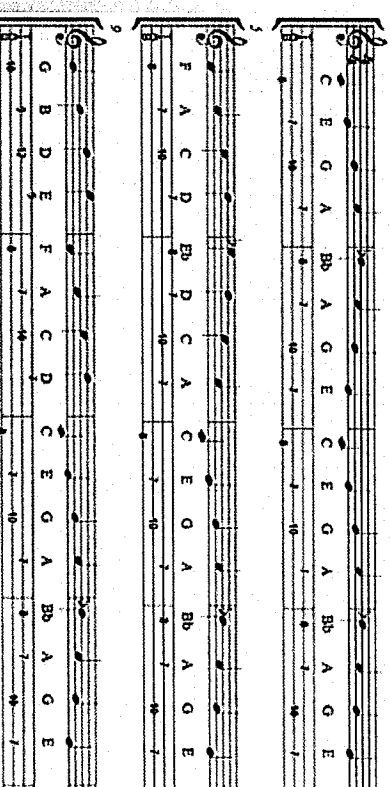
F major chord:



G major chord:



Walking Bassline:



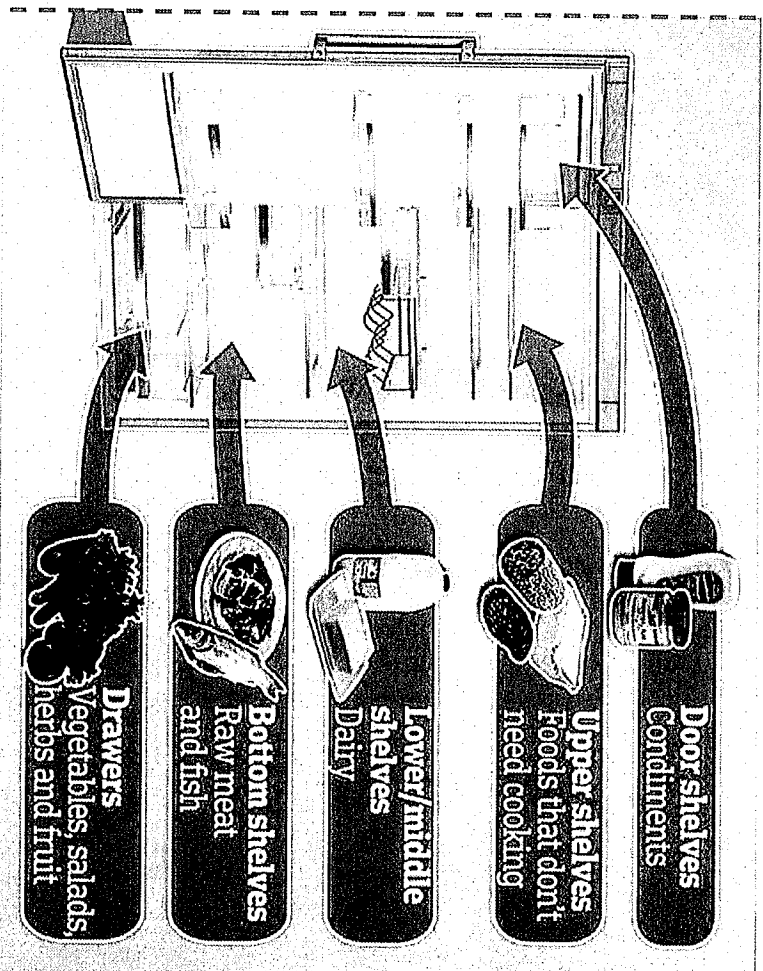


Binary Fission- the process that bacteria use to carry out cell division.

Student Knowledge Organiser

Enzymes: proteins that act as biological catalysts; they accelerate chemical reactions; e.g. cause fruit to ripen > spoil.

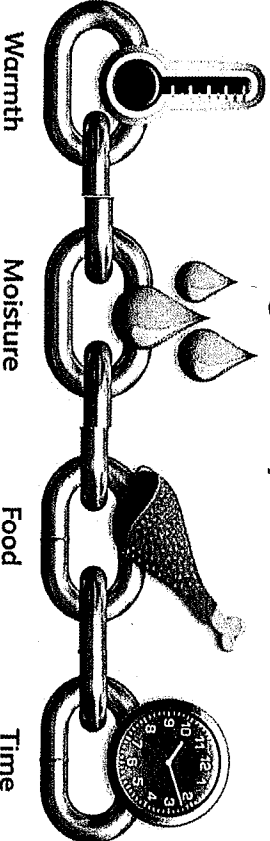
Enzymic browning is an oxidation reaction that takes place in fruit and vegetables, causing it to turn brown. It can be slowed down/prevented by adding acid or blanching.



Operating temperatures and monitoring

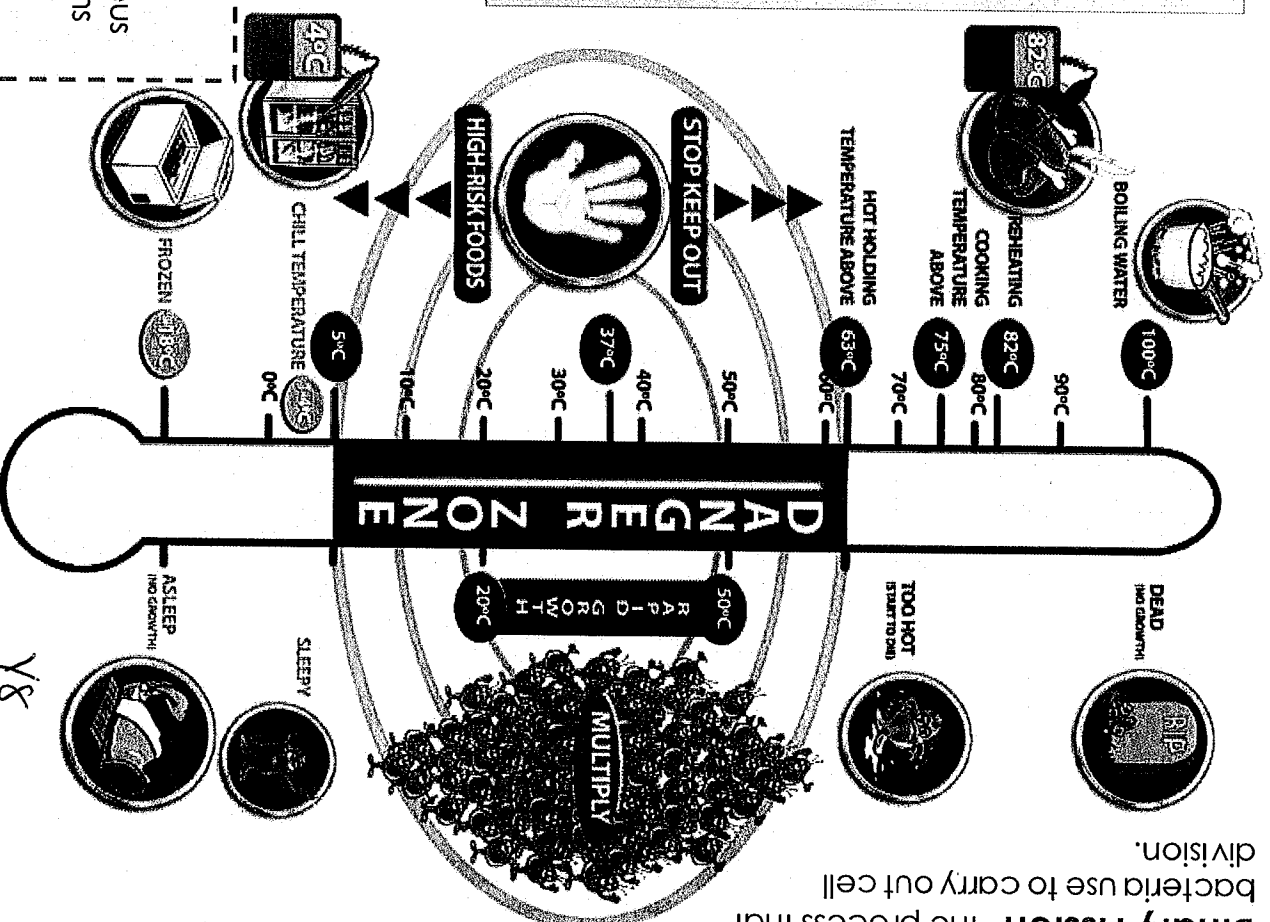
Refrigerators usually operate between 1°C to 4°C. Temporary rises in display temperatures will occur if doors are left open or a large quantity of food/drink at room temperature is loaded into the fridge, for example, bottles of soft drinks.

For bacteria to grow they need:



Types of bacteria

- ★ Salmonella
- ★ Staphylococcus Aureus
- ★ Clostridium perfringens
- ★ E. coli
- ★ Listeria
- ★ Campylobacter
- ★ Bacillus Cereus



Food Safety & Hygiene

Y8

Student Knowledge Organiser

FOOD RELATED CAUSES OF ILL HEALTH

Bacteria is found in:

- ★ Soil and Water
- ★ Plant and Plant Products
- ★ Air and Dust

Bacteria can be controlled by **pasteurisation** and **vaccination**, but also **chlorination** (USA)

Microbes:

Tiny fungi which grow from spores found in the air:

- ★ Settle on food products and multiply.
- ★ When visible, food is described as 'mouldy'.
- ★ Causes food spoilage.

Desirable microorganisms

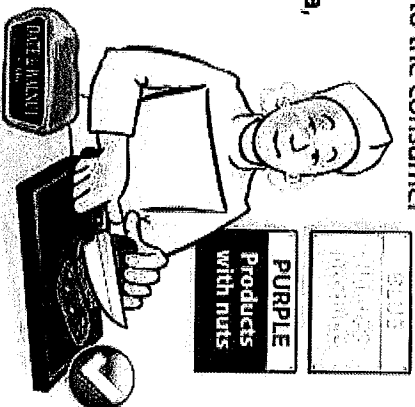
moulds > cheese Yeast > bread bacteria > yoghurt

Chemicals:

- ★ Some of the chemicals used in farming may remain on or in the food we eat. These may cause us harm.

A **hazard** is the potential to cause harm to the consumer and the main hazards are:

- ⊛ (Micro)biological, such as bacteria, viruses, moulds and parasites, e.g. tapeworms
- ⊛ Physical, such as glass, screws, stones and hair
- ⊛ Chemical, such as pesticides and cleaning chemicals
- ⊛ Allergenic, such as peanuts, tree nuts, sesame seeds, eggs and milk



ALLERGENIC HAZARDS

ALLERGIES: Some people may develop an allergy to peanuts or to the gluten in wheat. If they eat foods containing these, they may become very ill, and possibly die. **Intolerances:** Not life threatening but symptoms and restricted diet can lead to ill health.

Symptoms

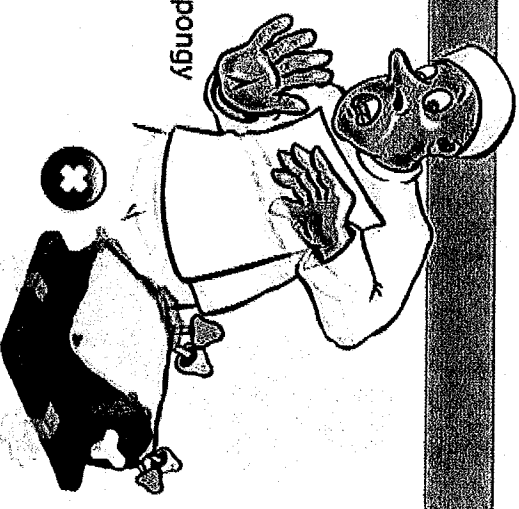
- ★ **Visible and Non-Visible symptoms:** abdominal pain, diarrhea, vomiting, fever, nausea, tiredness/fatigue, headache, **death**.
- ★ **Length of time until symptoms appear:** Onset period
- ★ **Duration of symptoms:** Can vary between bacteria types and person contaminated.

Symptoms can occur anywhere from a few minutes after exposure to a few hours later, and they may include some of the following:

- ★ Swelling of the tongue, mouth or face
- ★ Difficulty breathing
- ★ Low blood pressure
- ★ Vomiting
- ★ Diarrhea
- ★ Hives
- ★ Itchy rash

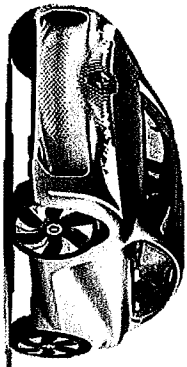
Signs of SPOILAGE include:

- ⊛ Off-odours
- ⊛ Discolouration
- ⊛ Slime/stickiness
- ⊛ Mould growth
- ⊛ Changes in texture, e.g. dry or spongy
- ⊛ Unusual taste, e.g. sour
- ⊛ The production of gas
- ⊛ Blown cans or leaking packs



STUDENT KNOWLEDGE ORGANISER

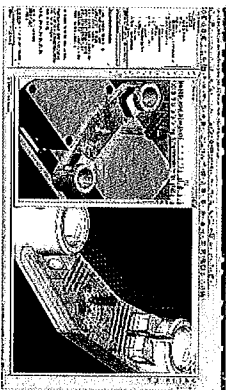
Concepts/Prototypes



Concepts are ideas or plans and inventions that a company often come up with. This might be for a new product that they want to sell. Sometimes they will develop these into prototype to find out what others think, to test if it works or to try different colours and textures out. This allows them to make decisions and possibly put it into production to sell.

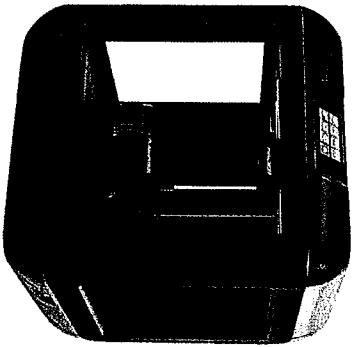
CAD

CAD is the shortened term for Computer Aided Design. Computer programmes are used to make complex models in 2D or 3D and these can be run through simulators or spun about 360deg to see what the design looks like.



CAM

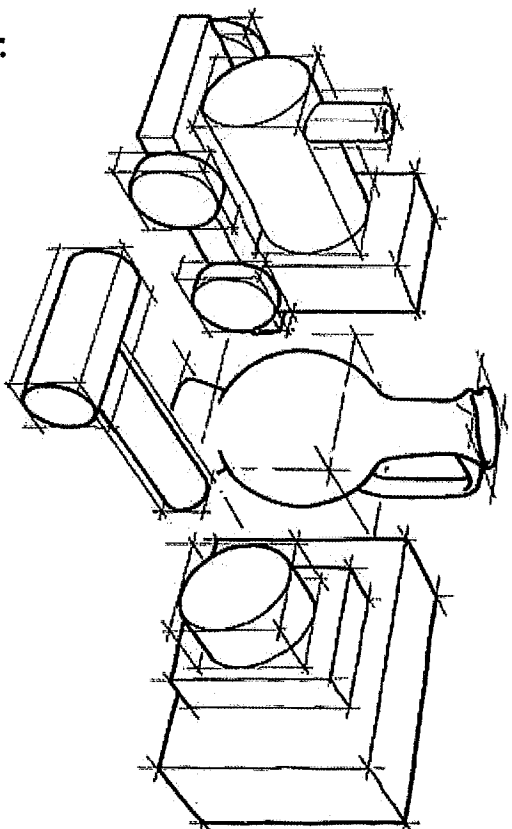
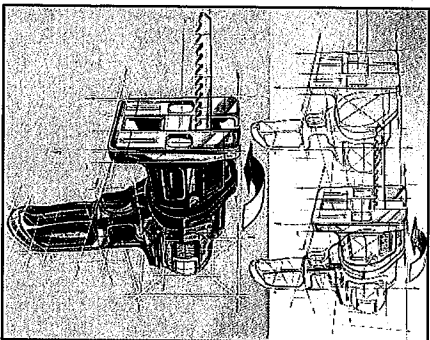
CAM is the shortened term for Computer Aided Manufacture. Machines such as laser cutters and 3D printers follow instructions from a 3D model drawn in CAD and make the item. A 3D printer prints with softened plastic, building up layers. A laser cutter cuts material such as boards of plywood.



Rendering & Perspective

Rendering is a technique whereby colour or texture is added to a drawing or sketch to make it look more realistic. This might be used to show the colour or small details on the design. It helps the designer communicate materials such as metal or plastic.

Perspective can come as 1 point or 2 point or even 3 point. This is a technique used to help designers to draw things in 3D so they look realistic. As parts of the drawing go further in the distance, they get smaller but they must remain in proportion. This technique helps to get this right. Construction lines are often used which go to vanishing points. A



Croting

Croting is a technique used to build more complex sketches. Simple shapes are drawn in 3D isometric such as cubes, cuboids and cylinders and the detail is added within them.

Tone

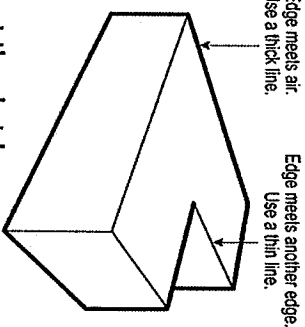
This is variation in colour or brightness of a colour. We can vary this depending on how much light is hitting off the shape.

Enhancement – Line weight

Enhancements such as line weight finish a drawing off. Line weight defines outer edges of objects and helps them to stand out.

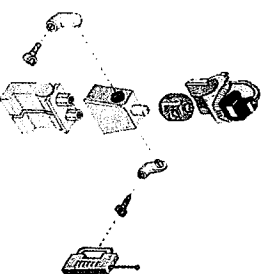
Shadows/Hatched lines

Shadows or hatched lines help those looking at the sketch understand where the light is coming from. It also makes the sketch look more 3D and realistic.



Exploded Diagrams

Sometimes a drawing needs to look more than just exciting. It needs to tell us how things go together. How they fit and how they work. An exploded drawing/diagram can be used to do that. These often have notes or arrows to indicate the function.



Y8 ISLAM – P4L

6 Articles of Faith

Belief in Allah as the one and only God

Belief in angels

Belief in the holy books

Belief in the Prophets

Belief in the Day of Judgement

Belief in Predestination (Qadr)

Why are the 6 Articles important?

- It underpins religious life for Muslims, influences all aspects of life.
- If Muslims believe in the absolute power of Allah then they will live their lives according to His will.
- The angels are always writing down deeds so Muslims have to think about how they approach life and the people around them. They will have to justify their actions.
- Life here is a test for the afterlife.
- Place in paradise has to be earned.
- Muslims have teachings of the prophets and the Quran to help guide them

Allah

Allah is the creator of life. He is beyond any human limitations like age or death. He has no partners or children. He is unique.

Muslims believe that Allah helps and guides them in their daily lives. By following His guidance and obeying Him, they believe that they will become better people and will develop qualities and good characteristics. Muslims strive to have qualities such as patience, humility, generosity, truthfulness, justice, sincerity, mercy, kindness, forgiveness and trust.

The 5 pillars of Islam

- Shahadah - Sincerely reciting the declaration of faith "There is no God but Allah and Muhammad is his Prophet".
- Salah - Performing set prayers five times a day at specific times.
- Zakah - Giving 2.5% of one's income to help the poor.
- Sawm - Fasting during the month of Ramadan.
- Hajj - The annual pilgrimage to Mecca.

Why are the 5 pillars important?

SHAHADAH - reminds Muslims that Allah is central to Islam
HAJJ - all are equal before God and reminds Muslims of their key belief in the equality of all humankind before Allah, because each person takes part on exactly the same basis.
ZAKAT - this creates a bond between the rich and poor and helps Muslims to purify their wealth and keep away from greed.
SALAT – purpose is to worship Allah and brings you closer to God.
SAWM – allows Muslims to gather control over their human needs. Without these distractions, Muslims can instead nurture good conduct and their connection to Allah

Quran and Muhammad

- Muslim holy book written in Arabic
- God has sent many messengers to guide Muslims how to follow the one true God – Allah. Muhammad was the final Prophet.
- He was a spiritual man who lived in Mecca.
- One night he was meditating in a cave when he was visited by the angel Jibril who revealed messages from Allah
- THE Quran was revealed to Muhammad. The words were remembered and recorded in the Quran. These are the words of God
- Muslims learn lessons from the Quran and implement them in their lives
- You must be clean to handle the Quran and out of respect never leave it on the floor

Akhirah

It is Allah who decides when a person dies and most Muslims believe that when they die, they will stay in their graves until Yawm al-din, the Day of Judgement. On that day, they will be raised from their graves and brought before Allah and judged on how they lived their earthly lives. This belief is known as the resurrection of the body.

Those who have performed more good deeds than bad will enter **Jannah**, or Paradise.

Those who have performed more bad deeds than good will enter **Jahannam** or Hell

Muslims believe that Allah is forgiving, merciful and compassionate, so not all bad actions will be punished. Allah will forgive those who have repented for their sins and those who have done some good in their lives.

Muslims can be targeted because of their beliefs, and because of terrorist attacks that people blame them for. Islam is a religion of peace, it is not the face of terrorism.

Muslims are targeted for being sexist. However the Quran states women and men are equal. Muslims are targeted for their dress. This can be seen as discriminatory.

Akhirah – the belief in everlasting life after death

Allah – Muslim God

Five pillars - the obligations that Muslims must satisfy to live a good and responsible life and to bring them closer to God

Islam – submission to the will of God

Islamophobia - Muslims are the victims of attacks just because of their religion

Mosque – place of prayer for Muslims

Muslim – followers of Islam

Tawhid – oneness of God

Quran – Muslim holy book

Work and Money – Y8 - P4L

Types of job:

We all have dreams and goals of the kinds of career we'd like to have.

- There are many things that can influence the careers available for us to follow:
- These can include **INTERNAL FACTORS**, like our qualifications, abilities and talents.
- They can also include **EXTERNAL FACTORS** like the economy, the jobs available, and the area in which you want to live and work.

It's important to think about the kind of job you would like to do and the career you'd like to have. This will help you decide which subjects you'd like to study at school and beyond!

Skills and qualities:

There are two key things which will help you get a job:

- Your skills.
- Your qualities.

Skills – having learnt knowledge, abilities or attitudes that will help you be successful in a particular job role. *For example, a teacher might need knowledge of their subject, the ability to plan lessons and mark books and the attitude of being determined not to give up on the young people they're teaching.*

Qualities – personality traits and things about you. *For example, being trustworthy, hard working and working well with others are traits that will benefit you in any job!*

KEY WORDS:

Career	The jobs you work in over the course of your life.
Employment	Being paid by someone to do work for them, or running a business of your own.
Skills	Things you have learnt which help you do a job well.
Qualities	Aspects of your personality and who you are.
Employer	Someone who hires other people to work for them.
Employee	Someone who earns their money by working for another person.
Interview	A meeting between you and an employer to find out if you are suitable for the job.
Savings	A portion of your earnings that you set aside.
Mortgage	A loan used to buy a house.
Pension	The money you'll use to live on when you retire.

Changes to work:

Over the next few decades there will be many changes to the kind of jobs which are available. This is due to:

Technological changes e.g. internet, social media, email
 Gender roles breaking down – women workforce
 Less offices – working from home, remote learning
 New skills needed – resilience, problem solving, communication
 Alternative working patterns – part time, flexitime

Interviews:

An interview is a meeting between you and an employer (person who can give other people jobs) to find out whether you are suitable for that job.

Employers interview potential employees because they want to get a sense of someone's personality and how they will interest with other people face-to-face, as well as to ask them any questions they may have.

In an interview, you should:

- Be confident, focus on the positives about yourself and your experiences, be polite and respectful, tell the truth and dress smartly

In an interview you should not:

- Be rude or arrogant, dress casually, be on your phone, fidget or be late.

Why is saving important?

- It gives you a better future
- It gives you financial security
- You avoid debt

Wages and salaries:

are two different ways of paying workers to carry out a job. In general, wages refer to hourly pay and salaries refer to annual pay. Wages are paid based on the amount of hours worked and then multiplied by an hourly rate of pay. Salaries are based on an annual amount that is then paid monthly. Most workers are also entitled to holiday pay

Applying for jobs:

You need to show why you're interested in the role and demonstrate your skills, work experience and knowledge.

For example if you were applying for a teacher role:

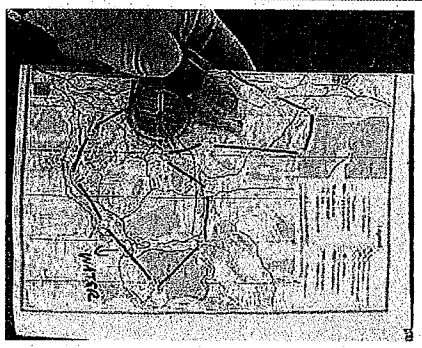
I want to apply for this role as I would love to make a difference to the lives of students. I believe I am a caring individual who would help and support students.

I worked part-time at Greggs. Whilst working here I gained many skills such as good communication and patience. I had to speak to customers, deal with complaints and ensure all customers were pleased with the service and food.

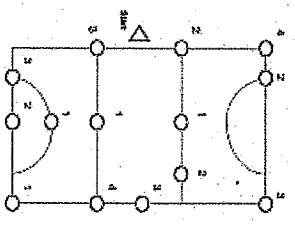
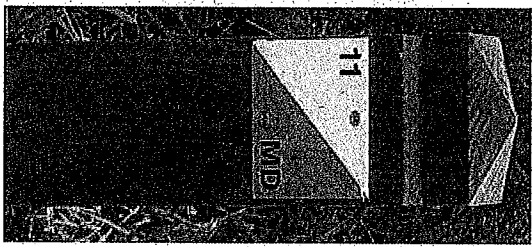
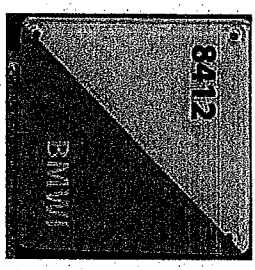
Orienteering- Orienteate, observe, navigate, team work, communication

Key Skills:

- 1. The first thing you must do when map reading is to orientate your map (move it around) so it is the correct way around to where you are facing.
- 2. You then need to observe the surroundings before looking for the markings on the map. Once you have identified where you are standing you then find your starting point
- 3. You need to double check you are at the correct marker before starting because the only way you will successfully complete the course is by getting all answers correct.
- 4. Team work is key when completing an orienteering course as you will be working in pairs. You must communicate and discuss every decision before moving and navigating to the next cone. Mistakes can easily be made through poor communication.
- 5. As orienteering involves running, cardiovascular fitness is key as you will be running for a long period of time. To train for this, continuous training is useful as well as fartlek training (over different terrains at different speeds)



	M16	4.1 km	120 m
1	40	3	11
2	53	2	1
3	46	1	1
4	57	1	1
5	32	1	1
6	58	1	1
7	47	1	1
8	48	1	1
9	49	1	1
10	100	1	1



Example Courses
Set up as shown.
ANSWERS
Course 1 = 14
Course 2 = 15
Course 3 = 11
Course 4 = 12
Course 5 = 13
Course 6 = 10

Rules and tactics:

Orienteering requires physical fitness, skill in map reading, mental alertness and decisiveness. Orienteering teaches you to assess, understand and "read" the school site you are working in

The main aim of orienteering is to complete the course(s) correctly in the shortest amount of time, although it is based on map reading it is also a test of your physical fitness. You must find all the points that are placed on the map and record them on your sheet. Consider the ground you are moving over ensuring your safety at all times.

A major tactic is to use is your pace. As you are competing with the other people in your group. You must make sure you don't sprint off too quickly so that you are too tired to keep the pace up. If you take it steady the whole way- a jog and not walk- this tactic will help you to be successful

Always remember: The main aim of orienteering is to complete the course in the shortest amount of time, however good team work and planning of you route is vital to success.

Progress Vocabulary: Identify, Define, describe, explain, compare and

contrast, sporting links, analyse, evaluate

Key Words: Navigation; decision making; communication; cardiovascular fitness;

speed; co-operation, orientation; map reading; observation; pace judgement; team work; safety and mental alertness

Subject Knowledge Organiser

HRF - Health, Fitness and Exercise, Consequences of a SL Lifestyle choices & CofE

Health, Fitness and Exercise

Health can be defined as 'complete physical, mental and social wellbeing and not only the absence of illness or infirmity'. Fitness can be defined as 'the ability to meet the demands of the environment'. Exercise can be defined as 'a form of physical exercise done to improve health or fitness or both'. Adults - five sessions of thirty minutes activity per week. The activity should be physical enough to cause the adult to breathe more deeply and to begin to sweat. Children and young people - seven sessions of sixty minutes per week. At least two of these sessions should be of high intensity exercise such as running, jumping or cardiovascular based sports.

Consequences of a sedentary lifestyle

If a person does not take part in regular physical activity, exercise or sport then they are at risk of a number of illnesses and negative effects such as weight gain or obesity; heart disease; hypertension (high blood pressure); diabetes; depression; increased risk of osteoporosis and loss of muscle tone.

Lifestyle choices

Other lifestyle choices can affect a person's health in either a positive or negative way. For example, eating a balanced diet means a person is less likely to become ill or put on excess body fat; getting enough sleep is important for the body to rest and brain to function optimally; not smoking as this causes illnesses such as bronchitis and lung cancer and not taking recreational drugs such as alcohol as in the short term it can lead to disorientation and poor decision-making and in the long term can lead to disease.

Component of Fitness		Definition	Example
Body composition		The percentage of body weight which is fat, muscle and bone	The gymnast has a lean body composition so allow them to propel themselves through the air when performing on the asymmetrical bars
Cardiovascular fitness		The ability of the heart, lungs and blood to transport oxygen	Completing a half marathon with consistent split times across all parts of the run
Flexibility		The range of motion (ROM) at a joint	A gymnast training to increase hip mobility to improve the quality of their split leap on the beam
Muscular endurance		The ability to use voluntary muscles repeatedly without tiring	A rower repeatedly pulling their oar against the water to propel the boat towards the line
Strength		The amount of force a muscle can exert against a resistance	Pushing with all one's force in a rugby scrum against the resistance of the opposition pack
Agility		The ability to change the position of the body quickly and control the movement	A basketball player moving around the court from back to front and side to side at high speed and efficiency
Balance		The ability to maintain the body's centre of mass above the base of support	A sprinter holds a perfectly still sprint start position and is ready to go into action as soon as the gun sounds
Coordination		The ability to use two or more body parts together	A trampolinist timing their arm and leg movements to perform the perfect tuck somersault
Power		The ability to perform strength performances quickly	A javelin thrower applies great force to the spear while moving their arm rapidly forward
Reaction time		The time taken to respond to a stimulus	A boxer perceives a punch from their left and rapidly moves their head to avoid being struck
Speed		The ability to put body parts into motion quickly	A tennis player moving forward from the baseline quickly to reach a drop shot close to the net

Key Words Knowledge Organiser - Year 8 - Energy Changes and Systems

Work: The transfer of energy when a force moves an object, in joules.
Lever: A type of machine which is a rigid bar that pivots about a point.

Input force: The force you apply to a machine.

Output force: The force that is applied to the object moved by the machine.

Displacement: The distance an object moves from its original position.

Deformation: When an elastic object is stretched or squashed, which requires work.

Thermal conductor: Material that allows heat to move quickly through it.

Thermal insulator: Material that only allows heat to travel slowly through it.

Temperature: A measure of the motion and energy of the particles.

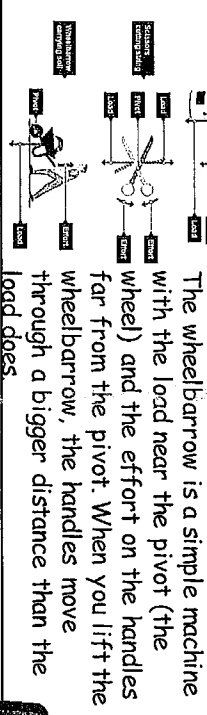
Thermal energy: The quantity of energy stored in a substance due to the vibration of its particles.

Conduction: Transfer of thermal energy by the vibration of particles.

Convection: Transfer of thermal energy when particles in a heated fluid rise.

Radiation: Transfer of thermal energy as a wave.

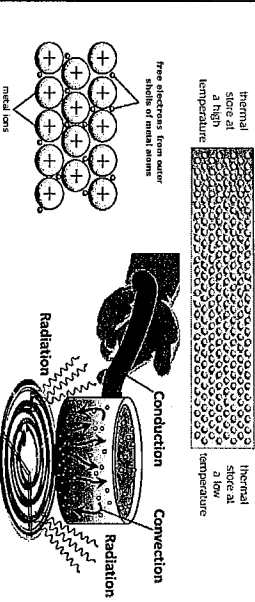
3 Simple Machines



Simple machines give a bigger force but with a smaller movement
 The wheelbarrow is a simple machine with the load near the pivot (the wheel) and the effort on the handles far from the pivot. When you lift the wheelbarrow, the handles move through a bigger distance than the load does.

5 Conduction

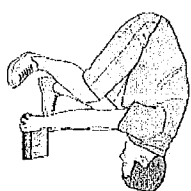
Heat energy can move through a substance by **conduction**. Metals are good conductors of heat but non-metals and gases are usually poor conductors of heat. Poor conductors of heat are called insulators. Heat energy is conducted from the hot end of an object to the cold end.



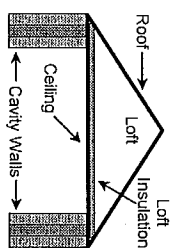
Metals are made of atoms which have free electrons, free electrons can move throughout the whole metal. If they are heated the free electrons move quickly transferring the heat energy quickly through the metal.

2 Work done

When a force causes a body to move, work is being done on the object by the force. Work is the measure of energy transfer when a force (F) moves an object through a distance (d). It can be calculated using the following formula:
Work done (J) = force (N) x distance moved (m)
 So when work is done, energy has been transferred from one energy store to another, and so:
 energy transferred = work done



Insulators are materials that do not allow thermal energy to be easily passed through. They are inefficient at transferring heat energy. These are typically non-metals. The particles vibrate more when they are heated. They bump into the particle next to them passing on the kinetic energy. This is done slowly.

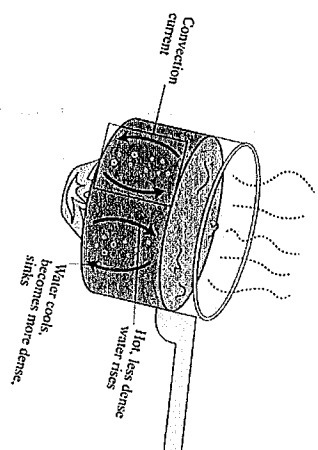


Houses can be adapted to include insulation features which reduces energy wastage and therefore cost.

4. Insulation

6. Convection

When you heat soup in a pan it all heats up, not just the layer in contact with the bottom of the saucepan.
 • Soup at the bottom gets hotter so particles move faster.
 • Hotter particles move further apart, becoming less dense.
 • Hotter soup rises and cooler, denser soup sinks.



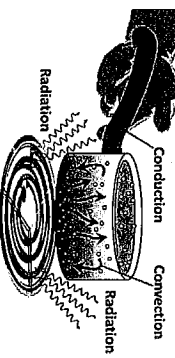
8 Further Reading

Energy	
Energy stores/transfers	https://www.bbc.co.uk/bitesize/clips/z18fqk7
Energy stores/transfers	https://www.bbc.co.uk/bitesize/guides/z99jg6f/revision/6
Energy transfers	https://www.bbc.co.uk/programmes/p04xk1hw
Work done	https://www.bbc.co.uk/bitesize/guides/z8pk3k7/revision/1



7. Radiation

Heat can be transferred by **infrared radiation**. Unlike **conduction** and **convection** - which need particles - infrared radiation is a type of electromagnetic radiation that involves waves.



Surface

Dull, matt or rough, dark coloured
 Shiny, light coloured

Absorption

Good
 Poor

Emission

Good
 Poor

1 Key Words Knowledge Organiser - Year 8 - Energy changes and systems

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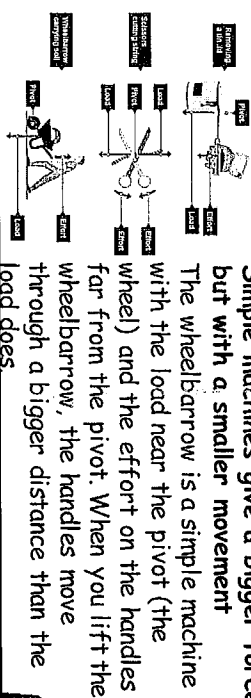
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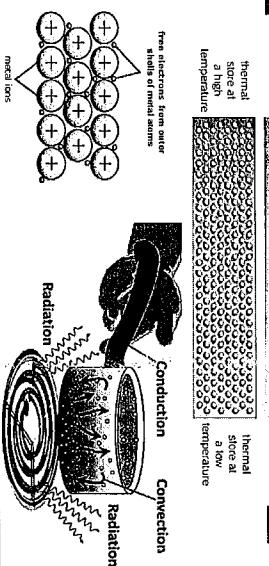
If you multiply the force by the distance travelled, you get the same value for the effort and for the load.

Metals are good

conductors of heat.

Poor conductors of heat are called insulators. Heat energy is conducted from the

end of an object to the cold end.



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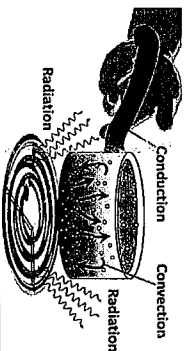
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Shiny, light coloured

Absorption

Good

Poor

Emission

Good

Poor

Because no particles are involved, radiation can even work through the vacuum of space. This is why we can still feel the heat of the Sun even though it is 150 million kilometres from the Earth.

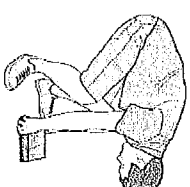
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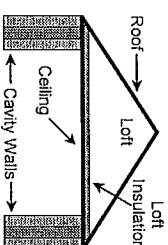
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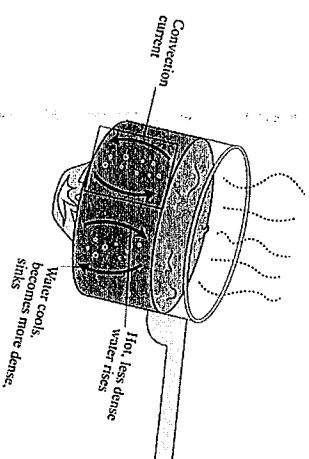
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8 Further Reading

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Energy stores/ transfers	https://www.bbc.co.uk/bitesize/guides/z99jq6f/revision/6
Energy transfers	https://www.bbc.co.uk/programmes/p04xkl1w
Work done	https://www.bbc.co.uk/bitesize/guides/z8pk3k7/revision/1



Breathing (ventilation): The movement of air in (inhaling) and out (exhaling) of the lungs.

Trachea (windpipe): Carries air from the mouth and nose to the lungs.

Bronchi: Two tubes which carry air to the lungs.

Bronchioles: Small tubes in the lung.

Alveoli: Small air sacs found at the end of each bronchiole.

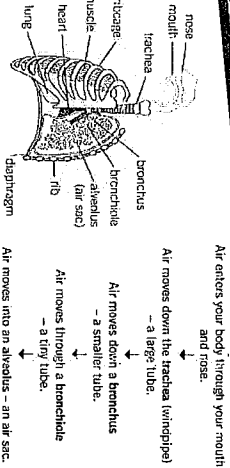
Ribs: Bones which surround the lungs to form the ribcage.

Diaphragm: A sheet of muscle found underneath the lungs.

Lung volume: Measure of the amount of air breathed in or out

Respiration: A chemical reaction which occurs inside all cells to release ENERGY from food substances such as GLUCOSE.

3 Respiratory System



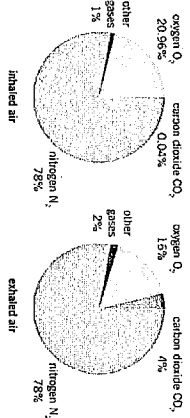
Air enters your body through your mouth and nose.
Air moves down the trachea (windpipe) - a large tube.

Air moves down a bronchus - a smaller tube.

Air moves through a bronchiole - a tiny tube.

Air moves into an alveolus - an air sac.

Oxygen then diffuses into the blood.

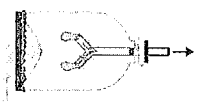
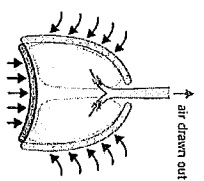
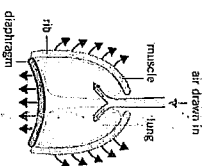
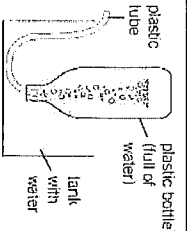


When we breathe in we inhale to take in oxygen. The oxygen is used in respiration to transfer energy. When we breathe out we exhale carbon dioxide and water, the waste products of respiration.

5 Breathing

Breathing and respiration are NOT the same! Breathing is a MECHANICAL process while respiration is CHEMICAL.

	Inhaling	Exhaling
Diaphragm	Contracts and moves downwards	Relaxes and moves upwards
Intercostal muscles	Contract, moving the ribs upwards and outwards	Relax, letting the ribs move downwards and inwards
Volume of ribcage	Increases	Decreases
Pressure inside the chest	Decreases below atmospheric pressure	Increases above atmospheric pressure
Movement of air	Moves into the lungs	Moves out of the lungs



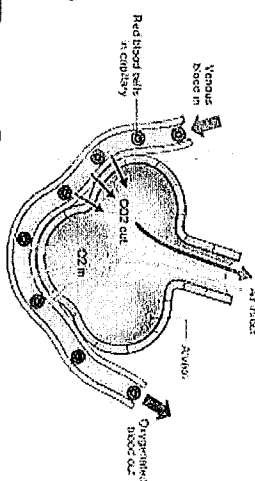
Lung Volume can be measured by blowing into an inverted measuring cylinder/bottle.

2 Gas Exchange

During gas exchange oxygen passes into the blood from the alveoli and carbon dioxide (a waste product of respiration) passes from the blood into the alveoli to be exhaled. Gas exchange occurs by the process of diffusion.

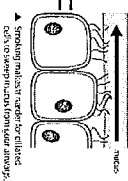
To maximise the efficiency of gas exchange, the alveoli have several adaptations.

1. Large surface area.
2. The membranes of the alveolus and capillaries are only one cell thick (shorter diffusion distance, gases diffuse quicker)
3. They are moist, encouraging gas molecules to easily dissolve.
4. Good blood supply (maintains concentration gradient)



4 Factors that affect gas exchange

- Smoking
- Causes cancer
- Damages the cilia so they can't remove mucus properly, (increased infections)
- Chemicals break down and reduce the number of alveoli (reduces surface area - emphysema)



Asthma

- narrows the small airways (bronchioles) that carry air in and out of the lungs.
- airways can become inflamed, swollen and constricted (or narrowed) and excess mucus is produced

6 Respiration

Respiration is not breathing. That is called Respiration is a chemical reaction which occurs in every one of the cells in the human body. It releases energy stored in glucose and without it, these cells would die.

Glucose and oxygen are taken in and converted to carbon dioxide, water and energy. This energy is important for growth, movement and keeping warm.



6 Circulatory System

Your circulatory system is made up of three parts: the heart, blood vessels and the blood itself.

Your heart keeps all the blood in your circulatory system flowing. The blood travels through a network of blood vessels to everywhere in your body. It carries useful materials like oxygen, water and nutrients and removes waste products like carbon dioxide.

Breathing	https://www.youtube.com/watch?v=NwZ4Eo05H2Y	<p>Further Reading</p>
Respiratory System	https://www.youtube.com/watch?v=UTR1Sx55cd&t=187s	
Gas exchange	https://www.youtube.com/watch?v=mZvz18KH6I	
BBC Bitesize	https://www.bbc.co.uk/bitesize/subjects/z4882hy	
kerhoandle	www.kerhoandle.com	

1. Key Words

Cartilage: Smooth tissue found at the end of bones, which reduces friction between them.

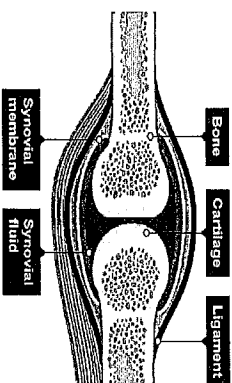
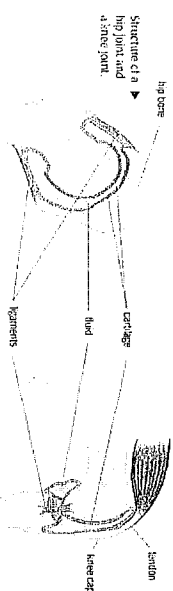
Musculoskeletal System: The muscles and skeleton of the body working together to bring about movement.

Reproductive system: Produces sperm and eggs, and is where the foetus develops.

Circulatory system: Transports substances around the body.

Respiratory system: Replaces oxygen and removes carbon dioxide from blood.

Bones are linked together by joints. Most joints allow different parts of the skeleton to move. The human skeleton has joints called **synovial joints**.



Ball and Socket Joints (Hip) Gliding Joints (Fingers)

Fixed Joint (Skull)

Balanced Diet

Nutrient	Function	Sources
Carbohydrate	Main source of energy. There are two types: simple (sugars) and complex (starch).	Pasta, bread, rice, cereal and sugar
Protein	Growth and repair	Fish, meat and eggs
Lipids (fats and oils)	A source of energy and insulation	Butter, cooking oil, cream and nuts
Fibre	Parts of plants that cannot be digested, which helps the body eliminate waste, keeps intestines healthy.	Fruit, vegetables, wholegrain cereals
Vitamins and Minerals	General health	Fruit, vegetables, milk and fish
Water	Needed in all cells and body fluids	water, fruit, vegetables, milk

They are joined together to form a framework. The average adult human skeleton consists of 206 bones. Your skeleton is part of your

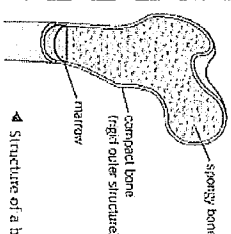
A diagram of a human skeleton with labels for the following bones:

- Skull
- Jaw bone
- Collar bone
- Sternum
- Humerus
- Vertebral column (backbone)
- Pelvis
- Femur
- Tibia
- Fibula
- Radius
- Ulna
- Forearm
- Wrist

▶ The main bones of the human body.

▲ The main bones of the human body.

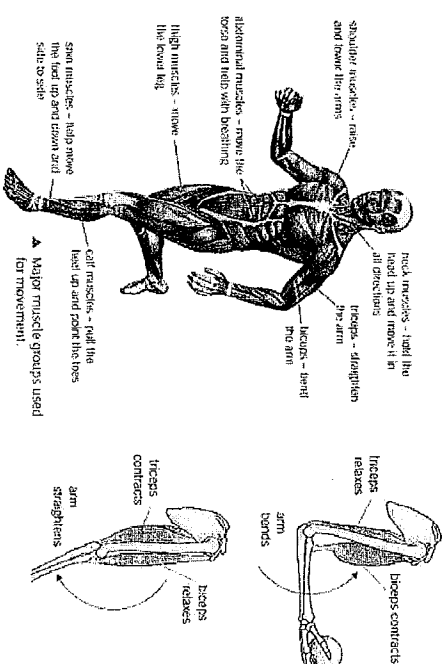
- The skeleton has four main functions:
- to support the body
- to protect some of the vital organs of the body
- to help the body move
- to make blood cells



Structure of a bond

4. Muscles

For example the biceps on the front of the upper arm and the triceps on the back of the upper arm:



- to raise the forearm, the biceps contracts and the triceps relaxes
- to lower the forearm again, the triceps contracts and the biceps relaxes

Muscles work by getting shorter. We say that they **contract**, and the process is called **contraction**. Muscles are attached to bones by strong **tendons**. When a muscle contracts, it pulls on the bone, and the bone can move if it is part of a joint.

A balanced diet is one that contains the right amount of each of the nutrient groups and the right amount of energy

6. Further reading

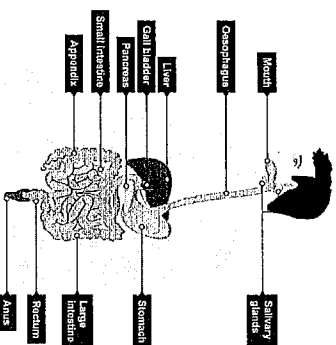
Organisms

Organism	Organism
Organs	https://www.bbc.co.uk/bitesize/articles/zbpdqhw
Chicken leg dissection	https://www.bbc.co.uk/bitesize/articles/zbpdqhw
Muscles	https://www.bbc.co.uk/bitesize/guides/zpdk7v/revision/3
Organisation	https://www.bbc.co.uk/bitesize/articles/zbpdqhw



7 Key Words!

- Enzymes:** Substances that speed up the chemical reactions of digestion.
- Dietary fibre:** Parts of plants that cannot be digested, which helps the body eliminate waste.
- Carbohydrates:** The body's main source of energy. There are two types: simple (sugars) and complex (starch).
- Lipids (fats and oils):** A source of energy. Found in butter, milk, eggs, nuts.
- Protein:** Nutrient your body uses to build new tissue for growth and repair. Sources are meat, fish, eggs, dairy products, beans, nuts and seeds.
- Stomach:** A sac where food is mixed with acidic juices to start the digestion of protein and kill microorganisms.
- Small intestine:** Upper part of the intestine where digestion is completed and nutrients are absorbed by the blood.
- Large intestine:** Lower part of the intestine from which water is absorbed and where faeces are formed.
- Gut bacteria:** Microorganisms that naturally live in the intestine and help food break down.



10 Digestive System

The food we eat has to be broken down into other substances that our bodies can use. This is called **digestion**. Without digestion, we could not absorb food into our bodies and use it.

Digestion happens in the **digestive system**, which begins at the mouth and ends at the anus.

Drugs are chemical substances that affect the way your body works.

Medicinal: Cure illness or relieve symptoms (paracetamol, antibiotics).	Recreational (legal): Drugs that are taken for pleasure (caffeine, alcohol, tobacco.)	Recreational (illegal): Drugs that can cause long term damage tend to be addictive.
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Tar	contains chemicals which cause cancer.
Nicotine	Stimulant drug which makes the heart beat faster, also addictive.
Carbon Monoxide	reduces the amount of oxygen the red blood cells can carry

Chemicals in cigarettes

Alcohol is a depressant. It is found in beer, wines and spirits such as vodka.

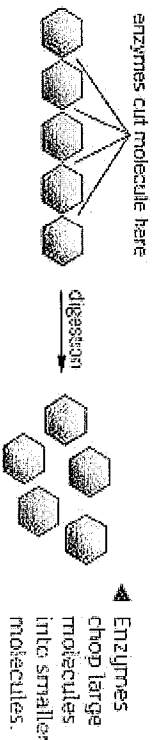
8 Unbalanced Diet

Malnourished is used to describe people who do not have a balanced diet: they don't consume the right amount of nutrients. This can be **TOO MUCH** (obesity) or **TOO LITTLE** (starvation). It could lead to a deficiency disease.

- Iron deficiency causes **anaemia**. This leads to tiredness and shortness of breath.
- Vitamin A deficiency can result in **blindness**.
- Vitamin C deficiency causes **scurvy**, with bleeding gums, bulging eyes and scaly skin.
- Protein deficiency can affect many body functions, often resulting in swollen, puffy skin and muscle wasting.

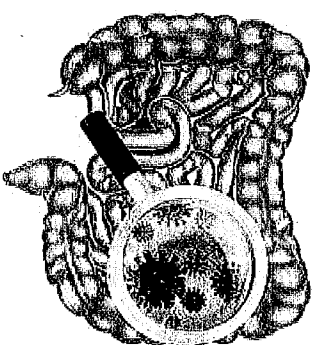
9 Bacteria and enzymes

Enzymes are special proteins that can break down large insoluble food molecules into smaller soluble molecules.



The digestive system contains many bacteria and about half of the dry weight of faeces consists of bacteria. Bacteria in the digestive system are important.

They can digest some substances that humans cannot digest, such as certain carbohydrates. They reduce the chance of harmful bacteria multiplying and causing disease. They produce some vitamins that humans need, such as vitamins B and K



Further Reading

Nutrition	https://www.bbc.co.uk/bitesize/clips/z84pvcw
Digestive enzymes	https://www.bbc.co.uk/bitesize/clips/zwksb9g
BBC Bitesize	https://www.bbc.co.uk/bitesize/subjects/z4882hw



Periodic table: Shows all the elements arranged in rows and columns.

Physical properties: Features of a substance that can be observed without changing the substance itself.

Chemical properties: Features of the way a substance reacts with other substances.

Groups: Columns of the periodic table.

Periods: Rows of the periodic table.

Elements: What all substances are made of, and which contain only one type of atom.

Atom: The smallest particle of an element that can exist.

Molecules: Two to thousands of atoms joined.

Compound: Pure substances made up of two or more elements strongly joined.

Chemical formula: Shows the elements present in a compound and their relative proportions.

Polymer: A molecule made of thousands of smaller molecules in a repeating pattern.

What are polymers?

Polymers are very large molecules made when hundreds of small molecules join together to form long chains.

The word 'polymer' comes from the Greek words 'poly' meaning many and 'mer' meaning part.

Polymers are synthetic polymers that can be recycled.

Polymers are used in many different ways.

Natural polymers like wool and cotton are made by plants and animals. Polymers do not occur naturally. They are formed during chemical reactions.

4 Metals and non-metals

Metal = left Non-metal = right

Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	H																	
2	Li	Be											B	C	N	O	F	Ne
3	Na	Mg											Al	Si	P	S	Cl	Ar
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
6	Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
7	Fr	Ra	Ac															

Metals: Shiny, good conductors of electricity and heat, malleable and ductile, and usually solid at room temperature.

Non-metals: Dull, poor conductors of electricity and heat, brittle and usually solid or gaseous at room temperature.

Iron, nickel and cobalt are magnetic elements.

Mercury is the only metal that is liquid at room temperature. Bromine is the only non-metal that is liquid at room temperature.

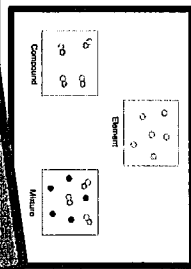
Properties of a typical metal (when solid)	Properties of a typical non-metal (when solid)
good conductor of electricity	poor conductor of electricity
good conductor of heat	poor conductor of heat
shiny	dull
high density (heavy for its size)	low density (light for its size)
malleable (you can hammer it into different shapes)	brittle (breaks easily)
and ductile	
type of substance	State at 20°C
metal oxide	most are solid
	most are gases
	most are acids
	most are bases

6 Elements, mixtures and compounds

The atoms of some elements do not join together, but instead they stay as separate atoms. Helium is like this. The atoms of other elements, such as hydrogen and oxygen, join together to make molecules.

A compound is a substance that contains atoms of two or more different elements chemically joined together. For example, water is a compound of hydrogen and oxygen.

This is a common examination question. You must be able to recognise diagrams of an element, mixture and compound.



4 The halogens

These are group 7 elements. They all have 7 electrons in the outer shell. A more reactive halogen will displace a less reactive halogen.

8 Further Reading

Atomic Structure

Atomic Model Development

Bonding

Group 0 Elements

Group 7 Elements



Periodic Table Song

<https://www.youtube.com/watch?v=cpBb2hgFO6I>

<https://www.youtube.com/watch?v=xazQRcSCrAY>

<https://www.youtube.com/watch?v=NgDyH5J29I>

<https://www.youtube.com/watch?v=qNaBmVXJd4>

https://www.youtube.com/watch?v=yvW_C10CEZMK

<https://www.youtube.com/watch?v=VgVOKCcfwU>

Reactivity series

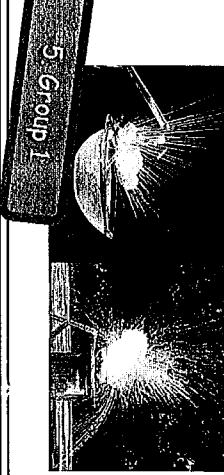
reactive	potassium	sodium	lithium	calcium	magnesium	aluminium	zinc	iron	lead	copper	silver	gold	unreactive
IRON	POTASSIUM	POTASSIUM	IRON	MAGNESIUM	SULPHATE	ZINC	MAGNESIUM	SULPHATE	ZINC				

Iron is displaced because potassium is more reactive than iron.

Magnesium is not displaced because zinc is less reactive than magnesium.

Chemical properties: When added to water all group 1 metals produce hydrogen gas. The reactions also produce an alkaline solution so universal indicator turns purple.

As you move down the group the reactions become more vigorous.



Physical properties: The melting points decrease as you move down the group. They all have one electron in their outer shell. They are shiny but react quickly with oxygen in the air to tarnish. They are soft metals and can be easily cut with a knife.

Chemical formula: Chemical symbols and formulae are used to represent elements and compounds. Some simple chemical formula that you need to know:

Carbon dioxide
CO₂

Sulphate
SO₄

Water
H₂O

Sodium chloride
NaCl

Nitrate
NO₃

7. Chemical Formula

Knowledge Organiser Forces - Forces and Pressure

2 Forces

Equilibrium: State of an object when opposing forces are balanced.

Deformation: Changing shape due to a force.

Linear relationship: When two variables are graphed and show a straight line which goes through the origin, and they can be called directly proportional.

Newton: Unit for measuring forces (N).

Resultant force: Single force which can replace all the forces acting on an object and have the same effect.

Friction: Force opposing motion which is caused by the interaction of surfaces moving over one another. It is called 'drag' if one is a fluid.

Tension: Force extending or pulling apart.

Compression: Force squashing or pushing together.

Contact force: One that acts by direct contact

Fluid: A substance with no fixed shape, a gas or a liquid.

Pressure: The ratio of force to surface area, in N/m^2 , and how it causes stresses in solids.

Upthrust: The upward force that a liquid or gas exerts on a body floating in it.

Atmospheric pressure: The pressure caused by the weight of the air above a surface.

3 Friction



5 Pressure and stress on a surface

Example: A force of 20 N acts over an area of 4 m^2 . Calculate the pressure. $20 N \div 4 m^2 = 5 N/m^2$

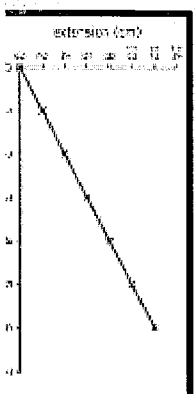
Notice that the unit of pressure here is N/m^2 (newtons per square metre). Sometimes you will see another unit being used. This is called the pascal and it has the symbol Pa.

If you walk through snow, you usually sink into it. This is because your shoes have a small surface area. Your weight is only spread out over a small area, so the pressure on the snow is high. However, you will not sink so far into the snow if you are on skis. This is because your weight is spread out over a greater surface area, so the pressure on the snow is low.

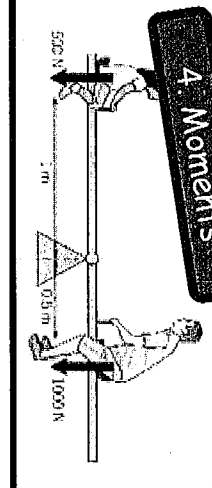


7. Hooke's Law

An object obeys Hooke's law when the force and extension are directly proportional - this means when one doubles the other doubles



4. Moments



6 Pressure in liquids and gases



A fluid is a substance with no fixed shape - a gas or a liquid.

Liquid pressure acts in all directions - liquids are **incompressible**.

Upthrust acts on objects that are floating or submerged. If the force hitting the bottom of an object in water is more than the air above the object, then it will float due to the resultant force.

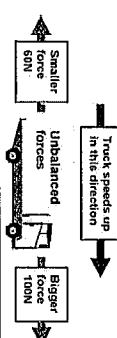
You increase the pressure of a gas by **reducing the area** it is in, therefore squashing the particles closer together. **Heating** a gas will also increase the pressure.

Atmospheric pressure is pushing down on you all the time, but your body is pushing gases and liquids out which balances it and therefore you don't feel it.

Atmospheric pressure decreases with height, and liquid pressure increases with depth.

When two or more forces act on an object, the resultant force can be found by adding up the individual forces in opposite direction.

In the example below there is 60N left and 100N right.
We calculate the resultant force by $100 - 60 = 40$ to the right.



The turning effect of a force is called a **moment**

Force x distance on the right ($1000N \times 0.5m = 500Nm$)

Force x distance on the left ($500N \times 1m = 500Nm$)

The forces are equal, so the see-saw is balanced

Further Reading



Friction	https://www.youtube.com/watch?v=n2gQs1mcZHA
Moments	https://www.youtube.com/watch?v=22VGQM1Jcn8
Pressure, Liquids and Gases	https://www.youtube.com/watch?v=yP9usmMPQeQ

Year 8 Geology and Tectonics



Make sure you know the 'bare bones' of this unit.

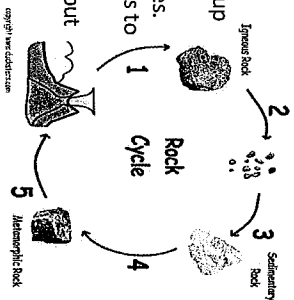


Keywords:

- 1. Rock cycle**- The cycle of how rocks change in the Earth's crust.
- 2. Pangaea:** Name for when all the Earth's land formed one 'supercontinent' 200 million years ago.
- 3. Tectonic hazards** – e.g., earthquakes / volcanoes.
- 4. Plate margin** – where two of the Earth's plates meet, tectonic hazards happen here.
- 5. Destructive plate margin**- where the Earth's crust is destroyed.
- 6. Constructive plate margin**- where new crust is created.
- 7. Volcanic eruption** – hot magma erupts from the ground
- 8. Short term responses** (immediate) – helping straight away.
- 9. Long term responses** – later responses to help in the future.
- 10. Super Volcanoes** – a volcanic eruption which releases more than 1,000 cubic kilometers of material

The Rock Cycle

1. Magma erupts, cools and creates **igneous rock**.
2. **Weathering** (rain and cold temperatures break up rocks) / **erosion** (water from rivers and seas breaking up rocks) break the rock into tiny pieces.
3. The broken-down rocks are squashed into layers to make **sedimentary rocks**.
4. These rocks are buried deep in the ground and put under high pressure and heat to create **metamorphic rocks**.



Geological Time

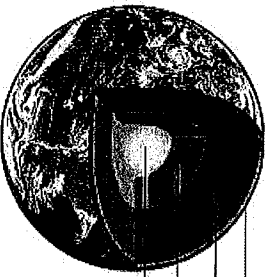
Earth was created 4.5 billion years ago.

Over the past 4.5 billion years, geologists (people who study the earth) have identified a series of time periods which describe and show a major event from that time.

Period – These are smaller periods of time (BUT they still show millions of years!)

Era – This groups together a set of periods of time. They usually end with a major event

Structure of the Earth and Convection Currents



- Earth has four different layers:
- Inner core- solid
 - Outer core-liquid
 - Mantle- hot liquid magma
 - Crust- solid rock layer

Plate Margins



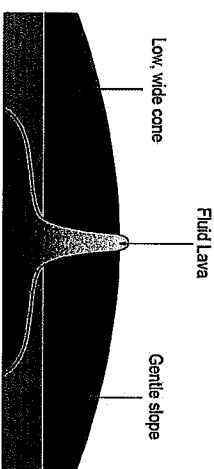
Constructive margin – two plates move apart and cracks form in the crust. Magma rises, erupts and cools which creates new land.



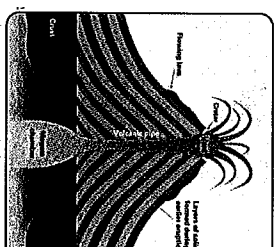
Destructive margin – oceanic and continental plates towards each other, the heavier oceanic plate sinks in the mantle. This movement creates earthquakes. Because of the heat in the mantle the crust melts to make magma which will erupt from a volcano.

Types of Volcanoes

Shield Volcano – forms at a constructive plate margin. Low gentle rounded shape.



Composite Volcano – forms at a constructive plate margin. Cone shaped.



HIC Volcanic Eruption - Iceland 2010

Primary Effects – Homes/roads were damaged, the ash cloud spread around Europe causing 100,000 flights to be cancelled.

Secondary Effects – flooding happened when a glacier melted, fresh fruit and vegetables were wasted as they could not be transported

Short term response – 700 locals evacuated, the Red Cross provided food for locals where their farms were destroyed

Long term response - rebuilt riverbanks even higher than before to reduce flooding, they have improved monitoring systems

LIC Volcanic Eruption – Tonga Eruption 2022

Primary Effects – 3 people died, homes destroyed, ash destroyed crops.

Secondary Effects – A tsunami followed and caused an oil spill into the sea harming wildlife

Short term response – tsunami warnings issued to many countries where 230,000 people were evacuated, ash cleared from the runway so flight could bring in food and water.

Long term response – the internet cable connecting Tonga to the rest of the world was repaired.

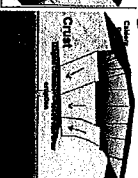
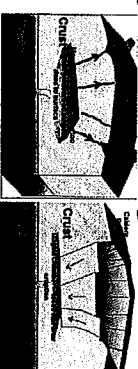
Super Volcanoes

A. A magma chamber fills due to magma building from the hotspot.

B. The magma pushes up the land to create a dome.

C. Gas and ash erupt through cracks in the crust.

D. The land collapses into the empty magma chamber to create a caldera.



Haka Y3D

Key Vocabulary

Call and Response

Facial Expression

Formation

Strength

Unison

Culture

Historical Context

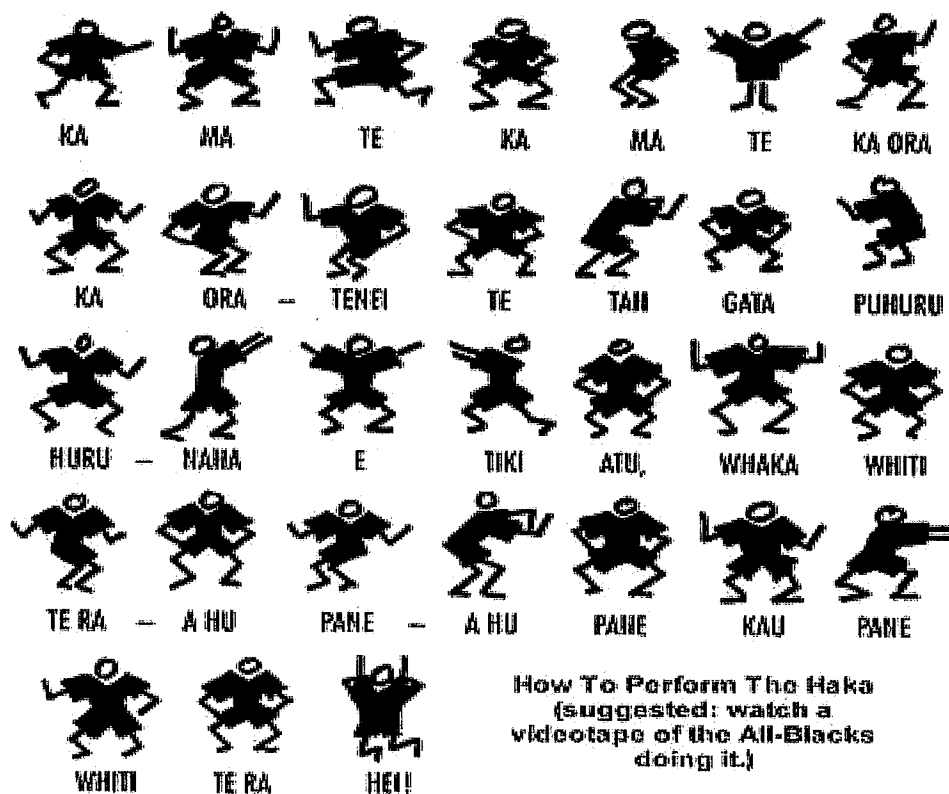
The haka is a traditional war cry, dance, or challenge from the Māori people of New Zealand. It is a posture dance performed by a group, with vigorous movements and stamping of the feet with rhythmically shouted accompaniment. The words of a haka often poetically describe ancestors and events in the tribe's history.

War haka were originally performed by warriors before a battle, proclaiming their strength and prowess in order to intimidate the opposition, but haka are also performed for various reasons: for welcoming distinguished guests, or to acknowledge great achievements, occasions or funerals.

The New Zealand sports teams' practice of performing a haka before their international matches has made the haka more widely known around the world. This tradition began with the 1888–89 New Zealand Native football team tour and has been carried on by the New Zealand rugby team since 1905.

Other countries have adopted their own version of the haka which they perform before matches. Can you find some of these?

Technical Skills



Actions include violent foot-stamping, tongue protrusions and rhythmic body slapping to accompany a loud chant.

A variety of shapes are used.

There are many videos of the Haka available to watch online



Lesson Overview

1. Key features of Cultural Dance and basic history
2. Copy and repeat Haka 1
3. Copy and repeat Haka 2
4. Create own version of the Haka
5. Performance of the 3 dances for assessment
6. Evaluation of Performances

Year 8, Term 1

Developing Stage Craft

Name

Class

Keywords

Marking the Moment

This is an explorative strategy used in drama to highlight a key moment in the storyline. In a performance you can 'mark a moment' by using slow motion or a flashback/flashforward.

Flashback

A flashback is when the performance shows a moment from the past. This can be done to show how an event happened, show it from different perspectives, to remind the audience of an event. It can give the audience extra information about characters to assist in the storytelling.

Slow Motion

This is when the action is slowed down so that the audience can see in detail what is happening. It can be used to mark an important moment in a drama piece.

Prologue

This is an opening of a story or play that establishes the context and gives background details, often some earlier story that ties into the main one.

Physical Theatre

This is a form of theatre which emphasizes the use of physical movement, as in dance and mime, for expression.

Theatre in Education

Where a drama piece is created to educate children or young people about real life situations or scenarios. This is used to help them think about their actions and decisions.

Cross Cutting

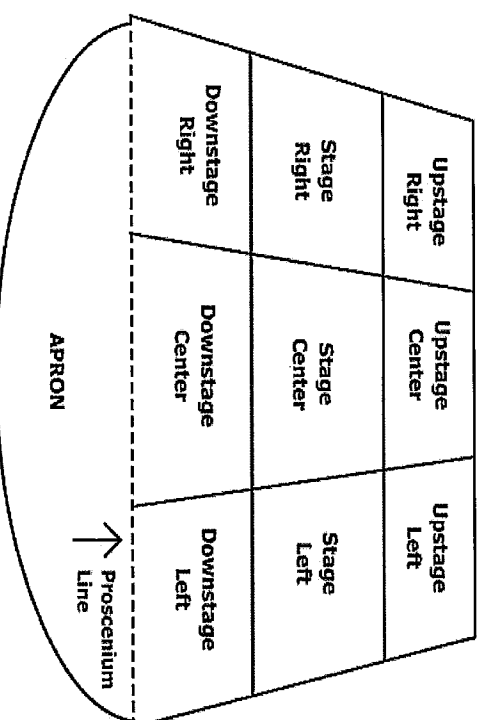
This is a dramatic device which set two or more different scenes on stage at the time. The action then, cross-cuts from one scene to the other.

Pantomime

A form of entertainment which is popular in the UK and is usually performed around the Christmas period.

Stage Positions

Here are the names of the areas of the stage that we use in drama.



Drama Skills

Vocal Skills

Pitch – How high or low the voice sounds

Pace – How quickly you deliver your lines.

Pause – A pause (or beat) is a short break in speech for dramatic effect.

Tone - this suggest your mood or emotion. A sad tone or an angry tone.

Physical Skills

Facial Expression – Using your face to communicate how the character is feeling.

Posture – How an actor stands or sits to show their characters personality.

Mime – Actors communicate what they are doing with little or no speech.

Stock Characters in Pantomime

Hero – The character who saves the day.

Villain – An evil character in the story.

Dame – A female character played by a man in drag.

Damsel – A lady in need of rescuing.

Sidekick – A best friend to the damsel OR the villain.

Intermediate Computer Systems Knowledge Organiser

Key Words

Denary	The number system humans use, based on tens probably because we have 10 digits.
Binary	The number system computer use to Computers count, communicate and share data. It is known as base 2 as it only use two numbers, 1s and 0's.
Bit	Knowns as a binary digit, is a single binary number.
Byte	8 bits together are known as a byte. Another term you need to know is that 4 bits equal a nibble. Get it?
Overflow	When adding binary numbers together, an overflow happens when an additional bit is required.
Or Gate	The OR gate has two inputs. One or both inputs must be 1 to output 1, otherwise it outputs 0.
And Gate	An AND gate can be used on a gate with two inputs. AND tells us that both inputs have to be 1 in order for the output to be 1.
Not Gate	A NOT gate has just one input. The output will be the opposite of the input. If 0 is input, then the output is 1. If 1 is input, then 0 is output.

Binary Denary

Binary 11001100 = Denary ?

1. Draw the 8 bit grid and insert the numbers as below

128	64	32	16	8	4	2	1

2. Add the binary digits exactly as they are into the grid (in the same order right to left)

128	64	32	16	8	4	2	1
1	1	0	0	1	1	0	0

3. Add up all heading numbers where there is a one underneath: $128 + 64 + 8 + 4 = 204$

Binary Addition Rules:

1. $0 + 0 = 0$
2. $0 + 1$ or $1 + 0 = 1$
3. $1 + 1 = 0$ But carry the 1
4. $1 + 1 + 1 = 1$
Remember to carry the 1, but remember you have a carried over 1!

Don't worry it can be confusing changing numbers systems.

Binary

0 1



128	64	32	16	8	4	2	1

Denary Binary

Denary 138 = Binary ?

1. Draw the 8 bit grid and insert the numbers as below

128	64	32	16	8	4	2	1

2. Start on the left
3. Ask: Is 138 bigger than 128?
4. If yes add a 1 in the column, then:

* Take 128 away from the denary number so:
* $138 - 128 = 10$

128	64	32	16	8	4	2	1
1							

5. If no add a 0 in the column
6. Move to the next number from the left and repeat steps 3 - 5 for the remaining amount (in this case 10)

128	64	32	16	8	4	2	1

Logic Gates



OR

AND

NOT

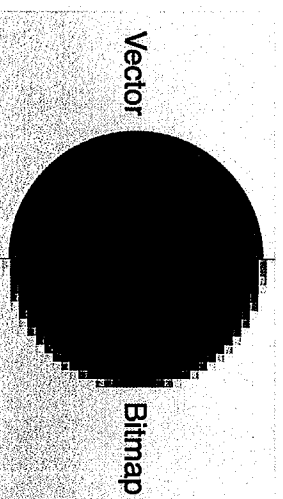
Intermediate Computer Systems Knowledge Organiser

Data Representation - Text

ASCII Table

Dec	Char	Dec	Char	Dec	Char
32	[space]	64	@	96	a
33	!	65	A	97	b
34	"	66	B	98	c
35	#	67	C	99	d
36	\$	68	D	100	e
37	%	69	E	101	f
38	&	70	F	102	g
39	'	71	G	103	h
40	(72	H	104	i
41)	73	I	105	j
42	*	74	J	106	k
43	+	75	K	107	l
44	,	76	L	108	m
45	-	77	M	109	n
46	.	78	N	110	o
47	/	79	O	111	p
48	0	80	P	112	q
49	1	81	Q	113	r
50	2	82	R	114	s
51	3	83	S	115	t
52	4	84	T	116	u
53	5	85	U	117	v
54	6	86	V	118	w
55	7	87	W	119	x
56	8	88	X	120	y
57	9	89	Y	121	z
58	:	90	Z	122	[
59	;	91	{	123	\
60	<	92	}	124]
61	=	93	~	125	^
62	>	94	_	126	`
63	?`	95	~	127	{

Data Representation - Images









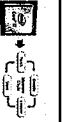
Data Representation - Sound



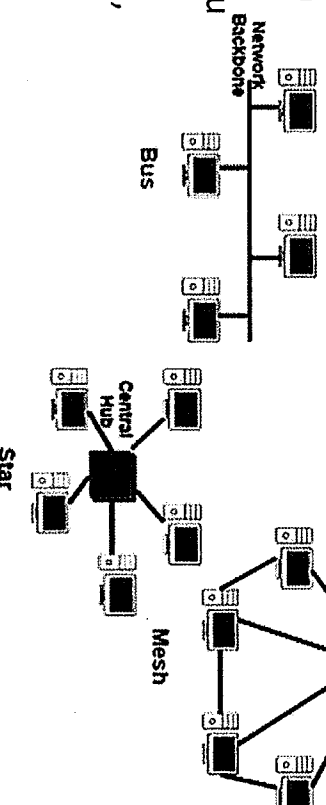
Sample Frequency (how many times you sample the sound)

Bit Depth (how much data you have available to record the sound, the larger the bit depth, the more variety and detail sounds can be sampled)

Key Words

	Key Words	
Bitmap Image		Bitmap images are organised as a grid of coloured squares called pixels. When zooming in or enlarging a bitmap image, the pixels are stretched. This is why bitmap images appear as poor quality when enlarged too much.
Vector Image		A vector image uses scalable shapes such as straight lines and curves, using coordinates and geometry to precisely define the parts of the image.
Topology		Network topology is the layout of the connections of a computer network.
Star Network		In a star network, every host is connected to a central hub.
Mesh Network		A mesh network is a local network topology in which the infrastructure connects directly, to as many other devices as.
Bus Network		A bus network is a local area network (LAN) in which each device is connected to a main cable.
ASCII		American Standard Code for Information Interchange, is a character encoding standard for electronic communication.
Network		A network is two or more devices connected together so that they can share resources.
LAN		A LAN is a network where the devices connected together are located near to one another. They will be within a small geographical area
WAN		A WAN is a network connected over a large geographical area.
Fetch-Decode-Execute Cycle		The stages of processing the computer's CPU go through when completing tasks.

Network Topologies



Year 8 Topic 1 Number and Calculations Student Knowledge Organiser

Key words and definitions

Odd numbers – a number ending in 1, 3, 5, 7 or 9, can not be divided by 2

Even numbers – a number ending in 2, 4, 6, 8 or 0, can be divided by 2

Factors – numbers which divide into another number with no remainder

Multiples – answers to multiplications of the number

Prime numbers – a number that has exactly 2 factors: 1 and itself

Square numbers – multiply by itself, e.g. $2 \times 2 = 4$ written as 2^2

Cube numbers – multiply by itself 3 times e.g. $2 \times 2 \times 2 = 8$ written as 2^3

Multiplication and division

$\begin{array}{r} 12 \\ 124 \\ \times 26 \\ \hline 744 \\ 2480 \\ \hline 3128 \end{array}$	$\begin{array}{r} 154 \\ 432 \cdot 0 \\ \times 30 \downarrow \\ \hline 132 \\ 120 \\ \hline 4596 \end{array}$
--	---

$$\text{So } 1.24 \times 0.26 = 0.3224$$

$\begin{array}{r} 28.8 \\ 432 \cdot 0 \\ \times 154 \\ \hline 1152 \\ 1152 \\ \hline 44448 \end{array}$	$\begin{array}{r} 120 \\ 120 \\ \times 120 \\ \hline 2400 \\ 2400 \\ \hline 14400 \end{array}$
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Answer: 28.8

Addition and subtraction

Line up the decimal points

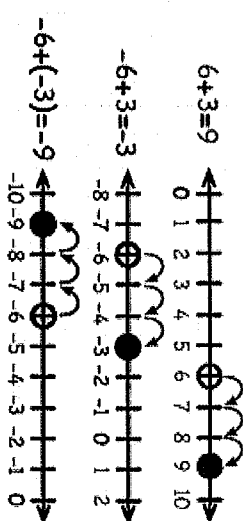
$$\begin{array}{r} 1.234 \\ + 4.1 \\ \hline \end{array}$$

$$\begin{array}{r} 5.334 \\ \hline \end{array}$$

$$\begin{array}{r} 21.40 \\ - 27.59 \\ \hline 3.81 \end{array} \quad \text{Borrow as usual}$$

Line up the decimal points

Negative numbers - directed



Adding/Subtracting

$$\begin{array}{l} 5 + -7 = 5 - 7 = -2 \\ -5 - 8 = -13 \\ 5 - -2 = 5 + 2 = 7 \end{array}$$

Multiplying

$$\begin{array}{l} 5 \times -2 = -10 \\ -3 \times 7 = -21 \\ -6 \times -2 = 12 \end{array}$$

Dividing

$$\begin{array}{l} -30 \div 2 = -15 \\ 20 \div -2 = -10 \\ -6 \div -2 = 2 \end{array}$$

Hegarty Maths Skills Links

Addition and Subtraction	9, 18, 19, 20, 40, 41, 47
Multiplication and division	6, 10, 11, 21, 22, 23, 48, 49, 50, 144, 145
Order of operations	24, 44, 120, 150
Negative numbers	37, 38, 39, 40, 41, 42, 43, 44

Key words and definitions

Area – the area of a 2D shapes is the amount of space inside it

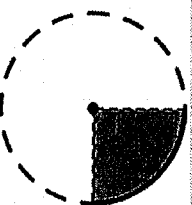
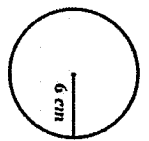
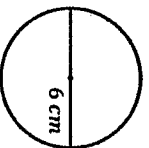
Perimeter – the perimeter is the total distance around the outside of a shape

Circumference – the distance around the outside of a circle

Surface area – sum of the areas of all the faces in a 3D shape

Volume – the amount of 3D space occupied by an object

Area and Circumference



$$C = \pi d$$

$$= 3.142 \times 6 \text{ cm}$$

$$= 18.85 \text{ cm}$$

$$A = \pi r^2$$

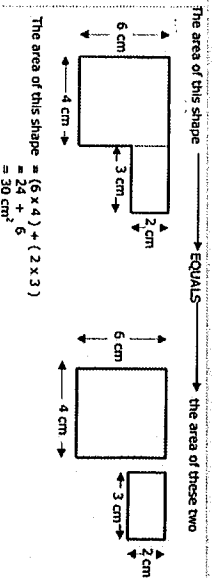
$$= 3.142 \times 6^2$$

$$= 3.142 \times 36$$

$$= 113.11 \text{ cm}^2$$

$$\text{Area} = \frac{90}{360} \pi r^2 = \frac{1}{4} \pi r^2$$

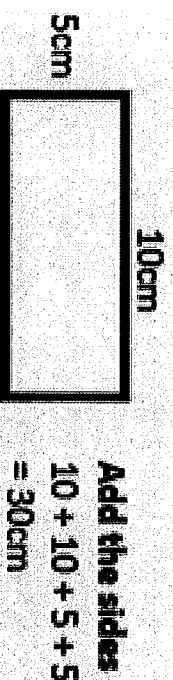
Compound area



Area

SQUARE $A = \text{length}^2$	
RECTANGLE $A = \text{length} \times \text{width}$	
TRIANGLE $A = \frac{1}{2} \text{Base} \times \text{height}^*$	
TRAPEZIUM $A = \frac{1}{2} (a + b) \times \text{height}^*$	
PARALLELOGRAM $A = \text{Base} \times \text{height}^*$	

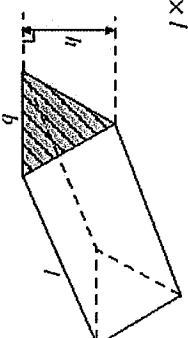
Perimeter



Volume of a prism

Volume of triangular prism = area of cross-section \times length

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



Surface area of a triangular prism



The "Total Surface Area" =

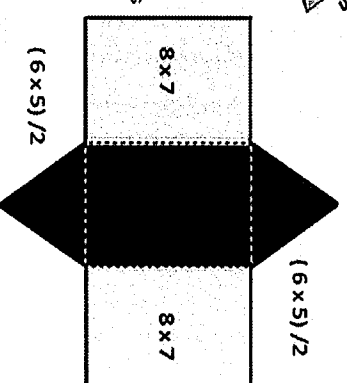
$$2 \times (6 \times 5) / 2 : \text{Two Reds}$$

$$+ 2 \times (8 \times 7) : \text{Two Yellows}$$

$$+ 1 \times (8 \times 6) : \text{One Green}$$

$$= 2 \times 15 + 2 \times 56 + 1 \times 48$$

$$= 190 \text{ mm}^2 \checkmark$$



Hegarty Maths Links

Area	553, 554, 555, 556, 557, 558
Perimeter	548, 549, 550, 551, 552
Circles	534, 535, 536, 537, 538, 539, 540, 541, 542, 543
Volume	567, 568
Surface area	584, 590

Key words and definitions

Expression – numbers, symbols and operators grouped together

Term – number or variable or numbers and variables multiplied together

Equation – a mathematical statement that shows two things are equal

Expand – multiply to remove brackets

Factorise – the reverse of expanding, taking out a common factors

Substitution – putting numbers in place of letters

Simplify – collect like terms

Simplifying expressions

$$t + t + t = 3t$$

add powers
 $a^1 \times a^1 = a^2$

subtract powers

$$t \times t \times t = t^3$$

$$a^{10} \div a^3 = a^7$$

Simplifying

$$3e + 6f - e + 5t$$

$$2e + 11t$$

If there is no sign in front of the term, it is POSITIVE



Substitution

Evaluate $3a - 2b$, for $a = 10$ and $b = 4$

$$3a - 2b \quad (a = 10 \quad b = 4)$$

$$= 3(10) - 2(4)$$

$$= 30 - 8$$

$$= 22 \checkmark$$

Expand a single bracket

Expanding single brackets

$$3(x + 2)$$

$$3x + 6$$

Expand a double bracket

Expanding double brackets

$$(x + 3)(x + 4)$$

$$x^2 + 4x + 3x + 12$$

$$x^2 + 7x + 12$$

Factorising

$$4x + 16$$

4 is a factor of both 4 and 16.

$$4(x + 4)$$

Factorising a quadratic

$$x^2 + 5x + 4$$

- Find factors of 4 which sum (add) to 5
- They are $4 \times 1 = 4$ and $4 + 1 = 5$
- Result is: $(x + 4)(x + 1)$

Writing expressions

- 5 less than a number k $k - 5$
- a number x divided by 11 $\frac{x}{11}$
- 4 times the sum of n and 5 $4(n + 5)$

Hegarty Maths Links

- Simplifying - 156, 157, 158, 159
- Substitution - 780, 781, 782, 783, 784, 785
- Expanding - 160, 161, 162, 163, 164, 165
- Factorising - 168, 169, 223, 224

Key words and definitions

Fraction – represents part(s) of a whole

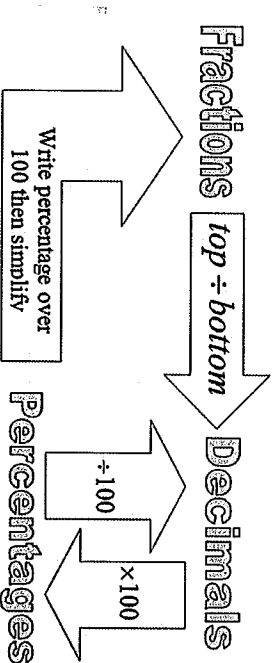
Percentage – how many parts per hundred

Equivalent – equal in value

Improper – a fraction where the numerator (top number) is larger than the denominator (bottom number)

Fraction, decimal and percentage equivalence

Fractions	Decimals	Percentages
$\frac{1}{5}$	0.2	20%
$\frac{3}{4}$	0.75	75%
$\frac{1}{8}$	0.125	12.5%
$\frac{1}{2}$	0.5	50%



Calculations with fractions

Add

$$\frac{1}{2} + \frac{1}{3} = \frac{1 \times 3}{2 \times 3} + \frac{1 \times 2}{3 \times 2} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$$

Subtract

$$\frac{7}{8} - \frac{1}{3} = \frac{7 \times 3}{8 \times 3} - \frac{1 \times 8}{3 \times 8} = \frac{21}{24} - \frac{8}{24} = \frac{13}{24}$$

Multiply

$$\frac{3}{4} \times \frac{1}{3} = \frac{3}{12} = \frac{1}{4}$$

Divide

(KFC)

$$\frac{1}{2} \div \frac{1}{3} = \frac{1}{2} \times \frac{3}{1} = \frac{3}{2} = 1\frac{1}{2}$$

$\frac{14}{3}$ How many 'whole' 3's fit into 14? $4\frac{2}{3}$

$7\frac{2}{5}$ $(5 \times 7) + 2 = \frac{37}{5}$

Finding a fraction of an amount

multiply by the numerator
and
divide by the denominator

For example,

$$\frac{2}{3} \text{ of } 18 \text{ litres} = 18 \text{ litres} \div 3 \times 2$$

$$= 6 \text{ litres} \times 2$$

$$= 12 \text{ litres}$$

Finding a percentages

% of an amount

15% of £200

10% = 20

5% = 10

Answer: £30

Increase by a %

Increase £200 by 15%

15% of 200 = 30

Add it on or use the multiplier (1.2)

(200 x 1.2)

Answer: £230

Decrease by a %

Decrease £200 by 15%

15% of 200 = 30

Subtract it or use the multiplier (0.85)

(200 x 0.85)

Answer: £170

Standard Form

1) 4733 4) 0.00000081

4.733 x 10³ 8.1 x 10⁻⁷

1) 0.00765 5) 7277.66

7.65 x 10⁻³ 7.27766 x 10³

Hegarty Maths Skills Links

Fraction, decimal, percentages	73, 74, 75, 76
Equivalent fractions	59, 60, 61, 62
4 operations with fractions	65, 66, 67, 68, 69, 70, 71, 72
Fraction of an amount	77, 78
Improper fractions/mixed numbers	63, 64
Percentage of an amount	84, 85, 86, 87, 88, 89

Key words and definitions

Probability – the likelihood of an event happening

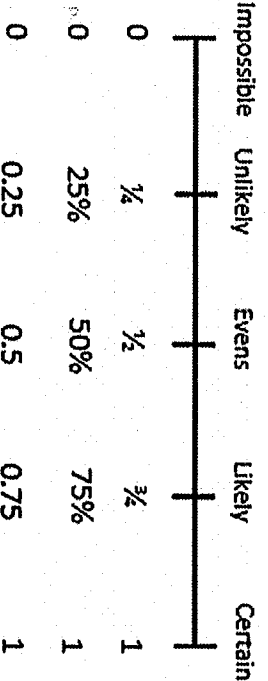
Mutually exclusive events – events which may not occur at the same time.

Exhaustive - Events are exhaustive if they include all possible outcomes

Sample space diagram - shows all the possible outcomes. It is used to find theoretical probability.

Outcome – A possible result of an experiment or trial.

Probability Scale



$$\text{Probability} = \frac{\text{number of successful outcomes}}{\text{total number of possible outcomes}}$$



Probability of an event not happening

$$P(\text{not } A) = 1 - P(A)$$

Ex: The probability of NOT tossing a  of a die.

$$P(A) = \frac{1}{6} \text{ (Probability of Event A)} \\ \text{therefore } P(\text{not } A) = 1 - P(A) = 1 - \frac{1}{6} = \frac{5}{6}$$

Sample space diagrams

Represent the results from adding two 6-sided dice in a sample space diagram.

- The probability of getting a total of 7? $\frac{6}{36}$
- The probability of getting a total of a 1? $\frac{0}{36}$
- The probability of getting a total of a 10? $\frac{30}{36}$

		First die					
Second die	1	2	3	4	5	6	
	1	2	3	4	5	6	7
	2	3	4	5	6	7	8
	3	4	5	6	7	8	9
	4	5	6	7	8	9	10
	5	6	7	8	9	10	11
	6	7	8	9	10	11	12

Relative Frequency

$$\text{Relative Frequency} = \frac{\text{number of 'successful' trials}}{\text{total number of trials}}$$

Item	Frequency	Relative frequency
1	4	4/20 (or 20%)
2	5	5/20 (or 25%)
3	5	5/20 (or 25%)
4	2	2/20 (or 10%)
5	4	4/20 (or 20%)
Total	20	

Experimental Probability

$$\text{Estimated/Experimental Probability} = \frac{\text{frequency of event}}{\text{total frequency}}$$

Predicted number of outcomes = probability x number of trials

Hegarty Maths Links

Probability scale - 349

Theoretical probability – 350, 351. 352

Probability of an event not happening - 353

Relative frequency - 357

Experimental probability – 355, 356

Sample space diagrams – 358, 359

Year 8 French Sentence Builder 1 Sports, hobbies and frequency

<p>Je joue [I play]</p> <p>il joue [he plays]</p> <p>Elle joue [she plays]</p> <p>Nous jouons [we play]</p>	<p>souvent [often]</p> <p>tout le temps [all the time]</p> <p>rarement [rarely]</p> <p>toujours [always]</p>	<p>au basket [basketball]</p> <p>au foot [football]</p> <p>au rugby [rugby]</p> <p>au tennis de table [table tennis]</p> <p>aux jeux vidéo [video games]</p>
<p>Je fais [I do]</p> <p>il fait [he does]</p> <p>Elle fait [she does]</p> <p>Nous faisons [we do]</p>	<p>tous les jours [every day]</p> <p>régulièrement [regularly]</p> <p>de temps en temps [from time to time]</p>	<p>du patin à glace [ice skating]</p> <p>du vélo [cycling]</p> <p>de l'équitation [horse riding]</p> <p>de la musculation [weightlifting]</p> <p>de la natation [swimming]</p> <p>des promenades [walking]</p>

<p>j'adore [I love]</p> <p>j'aime beaucoup [I like ... a lot]</p> <p>je n'aime pas [I don't like]</p> <p>je préfère [I prefer]</p> <p>je déteste [I hate]</p>	<div> Year 8 French Sentence Builder 2 Sports, hobbies and verb + infinitive </div> <p>au basket [basketball]</p> <p>au foot [football]</p> <p>au rugby [rugby]</p> <p>aux jeux vidéo [video games]</p>	
<p>je vais [I am going]</p> <p>il va [he is going]</p> <p>elle va [she is going]</p> <p>nous allons [we are going]</p>	<p>jouer [to play]</p> <p>faire [to do] [to 'go']</p> <p>du vélo [cycling]</p> <p>de l'équitation [horse riding]</p> <p>de la musculation [weightlifting]</p> <p>de la natation [swimming]</p> <p>des promenades [walking]</p>	<p>écouter de la musique [to listen to music]</p> <p>regarder un film [to watch a film]</p> <p>lire un livre [to read]</p> <p>promener le chien [to walk the dog]</p>

Key Vocabulary

Definitions

Divine Right of Kings	The belief that the King had been appointed by God to rule. Nobody, including Parliament, could tell him what to do.
Puritan	Extreme Protestants - they want to 'purify' the Protestant faith.
Dissolving Parliament also known as Personal Rule	Charles called an end to the Parliament session and didn't allow them back for eleven years
Royalists also known as Cavaliers	Supporters of the King
Parliamentarians also known as Roundheads	Supporters of Parliament
Civil War	A war between the people of one country - in this case King vs Parliament
New Model Army	A disciplined army created by Parliament and lead by Cromwell
Impeachment	The process of putting a leader/king on trial
Republic	A country that is ruled by the people
Commonwealth also known as the Protectorate	The way Britain was ruled after Charles I was executed
Lord Protector	The title given to Cromwell after Charles' execution

Year 8: The English Civil War

Charles I (1600-1649)

Charles I was crowned King when his father, James I, died. He was not a popular king for several reasons. He married a Catholic French princess, which worried Parliament that Charles would allow Catholic practices back into England. His belief in the Divine Right led to Charles ruling on his own, without Parliament, for eleven years. During that time, he tried to force everyone in England to pay Ship Tax (1634) and introduced the English Prayer Book into Scotland without asking (1637). When he tried to arrest five MPs in the Houses of Parliament, tensions reached their peak. On 22 August, Charles declared war on his enemies in Parliament. The English Civil War began.

Cavaliers

The King's supporters earned this nickname as they were usually on horseback. 'Chevalier' is French for horse. Cavaliers usually wore fancy clothes and had long hair. They drew with the Roundheads at Edgehill, beat them at Roundaway Down and lost at Marston Moor and Naseby.

The trial and execution of Charles I

135 Commissioners were selected to sit in Charles' trial, but only 50 took part. The trial began on 20 January 1649 at Westminster Hall. Charles refused to plead innocent or guilty to committing war crimes and was barred from attending his own trial. He was allowed back for his verdict - execution - on 27 January.

On 30 January, Charles wore two thick shirts to avoid shivering and appearing afraid of his execution. He spoke to the crowd, before the masked executioner beheaded him. His head was held up and a large groan was echoed from the crowd. Some dipped their handkerchiefs in his blood.

The Restoration (1660)

Cromwell's son refused to lead the Republic after his father died. Charles I's son Charles II was asked to return to England and become king. This is known as the Restoration. He punished those he signed his father's death warrant.

Oliver Cromwell (1599-1658)

A Puritan landowner from Cambridgeshire who became an MP in 1640. He supported the MPs who opposed Charles and joined Parliament's side when the Civil War began. He was a good commander and helped defeat the Royalist army at the Battle of Marston Moor by attacking them at tea-time. He became increasingly angry with Parliamentary leaders as he accused them of not trying hard enough to defeat Charles.



Roundheads

Parliament's supporters who earned their nickname as they usually cut their hair short (which emphasized their 'round heads') and wore plain, simple clothing. They drew with the Cavaliers at Edgehill, lost to them at Roundaway Down but defeated them at Marston Moor and Naseby.

New Model Army

The New Model Army were created in February 1645 by the Parliamentarians. They were paid and well trained. This discipline helped the Parliamentarians defeat the Cavaliers as they selected men for their fighting ability, rather than their social ranking.

The Commonwealth (1649-1660)

After Charles' execution, the New Model Army declared Cromwell 'Lord Protector'. This title suggests that Cromwell was not King, but he did end up ruling like one. Cromwell dismissed Parliament, instead using his major-generals to rule the country. Under Cromwell, England became a republic called the Commonwealth. He introduced 'moral' laws to 'improve' people's behaviour. As a result, theatres and bear-baiting were banned, and he also stopped people celebrating Christmas.