

KNOWLEDGE ORGANISER

"KNOWLEDGE IS POWER"

Francis Bacon



Knowledge Organiser Year 7 ı Working Scientifically

Line of Best Fit: A line which goes through as many points as possible on a graph. Accuracy: Data that is close to the true value

Evidence: Data which is used to back up a statement. Anomalies (Outlier): Results which do not fit the pattern

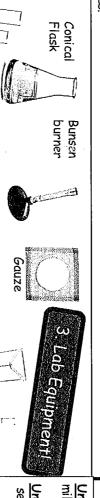
Fair Test: You only change one factor at a time to make something a fair test Categoric: When there are limited number of possible values.

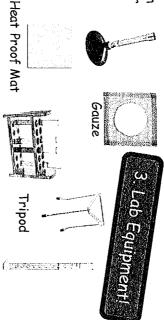
Health hazard

Continuous: When there are infinite number of possible values

Observational Enquiry: Questions that can be investigated using observations

Pattern Seeking Enquiry: Questions that can be investigated by collecting data from variables





Beaker

Test tube Round Bottomed Flask (Without looking in your book!) Can you remember all 9 parts of the microscope? light source objective lens stage

Boiling Tube

small specimens. A microscope is used to examine very

Test Tube Rack

Measuring Cylinder

Place the slide on the stage.

Look through the eyepiece too see the A light is shone from the light source specimen.

see the image. through the specimen allowing you to

bring the sample into focus. wheels are used to

The adjustment

Prediction What you think you will find during the investigation

Aim What is the purpose of your investigation?

Grams (g), kilograms (kg) millimetres (mm), centimetres (cm), meters (m), kilometres (km) Units of volume: cm Units of mass Units of time: Units of length: seconds (s), minutes (mins), hours (h) Carrosive bottles of chemicals in the | laboratory. They will tell you working with. They are there to You will find hazard sym chemical in the bottle you are about any hazards of the keep us safe in the lab

Units of temperature: Celsius (°C) Fahrenheit (°F) 5. Graphs and Indoles!

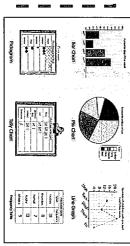
different types of graph to represent your data. Depending on your data you will have to use

.

A bar chart is used when the data fits into distinct categories.

between two different variables A scatter graph is used to show the link

variable changes over a period of time. A line graph is used to show how one



Typothesis A scientific explanation of why you think this will happer

Equipment List detailed

Independent / Dependent / Control

Method Written in future tense. Step by step instructions It must tell you to repeat your readings 3 times Hazard Symbols

Evaluation How you would improve your investigation if you were to do it again Risk Assessment onclusion What you discovered during the investigation

> 8 Further Reading Bunsen Burners ab Rules Song Tables Graphs

> > Working Scientifically

Variables Song

Accuracy, Reliability and Precision https://www.youtube.com/watch?v=MRX2laaTZHY https://www.youtube.com/watch?v=QjDUVMWacEC https://www.youtube.com/watch?v=WQyObsamnMw <u>https://www.youtube.com/watch?v=Fpe0HYELH74</u> https://www.youtube.com/watch?v=I2BwzZlgaj8 https://www.youtube.com/watch?v=BRD.ApYqvDqQ <u>https://www.youtube.com/watch?v=hwU3YL_SD70</u>

Knowledge <u> Organiser – Year 7</u> Energy and Fuels

Power: How quickly energy is transferred by a device (watts)

Non-renewable: An energy resource that cannot be replaced and will be used up Energy resource: Something with stored energy that can be released in a useful way

Renewable: An energy resource that can be replaced and will not run out

Fossil fuels: Non-renewable energy resources formed from the remains of ancient plants

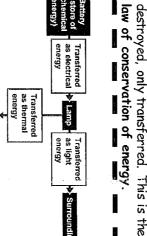
Thermal energy store: Filled when an object is warmed up

the surroundings. Chemical energy store: Emptied during chemical reactions when energy is transferred

store: Filled when an object is raised. Kinetic energy store: Filled when an object speeds up. Gravitational potential energy

Elastic energy store: Filled when a material is stretched or compressed Dissipated: Become spread out wastefully.

destroyed, only transferred. This is the cannot end up with more than you had at Energy cannot just disappear, and you the start. Energy cannot be created or



- Electrically
- By waves
- transfers as a flow diagram.

wasted, typically by increasing the We can see that not all the energy temperature of the surroundings. transferred is useful, and some is

are made by burning fossil fuels to create energy cars, trains and planes use non-renewable energy. They Non-renewable energy includes coal, gas and oil. Most

wind turbine. This movement creates wind energy which is Renewable energy includes solar, hydro and wind energy. Wind energy is made when the wind moves the blades on a

converted into electrical energy



Energy transfers

Energy can transfer from one store to another in different ways:

By heating

chips

peas

chocolate

ccoked beef

banana

- Mechanically
- By radiation
- ← We can represent energy

costs to use. Most appliances in your house will have a power rating The higher the power rating – the more the appliance 3 Power

OMO unit. This is the kilowatt hour, the right has a much lower power rating. calculate the cost of energy using shown as kW hour or kWh. You car Energy suppliers use a different

Sing aromanau und σ Renewable

the following equations



different forms of energy stores, including: tnergy is measured in J and kJ. There are



vs	Energy to do with	Type of energy store
	food, fuels, batteries	chemical energy store
o'	hot objects	thermal energy store
	moving objects	kinetic energy store
	position in a gravitational field	gravitational potential energy store
	changing shape, stretching, or squashing elastic energy store	elastic energy store

How much energy?

much energy is in the store associated with food Different foods are stores of different amounts of energy. Food labels tell you how

You need different amounts of energy depending on what you what you do each day.

1500	1000	250	340	200	Energy (kJ) per 100 g
	, ,	The Salver		7	B

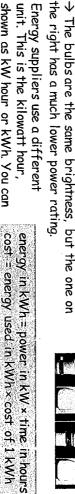














Further Reading	
	Energy
ergy stores/transfers	ergy stores/transfers.https://www.bbc.co.uk/bitesize/guides/z99.jg6f/revision/1
uels and resources	https://www.bbc.co.uk/bitesize/guides/zggk87h/revision/1
Energy in the home	https://www.bbc.co.uk/bitesize/guides/zyfgr82/revision/1
Domestic energy	https://www.bbc.co.uk/bitesize/articles/zfm48mn

Cell: The unit of a living organism, contains parts to carry out life processes Uni-cellular: Living things made up of one cell

Multi-cellular: Living things made up of many types of cell

Tissue: Group of cells of one type.

Organ: Group of different tissues working together to carry out a job

Diffusion: One way for substances to move into and out of cells.

Cell membrane: Surrounds the cell and controls movement of substances in and out Structural adaptations: Special features to help a cell carry out its functions

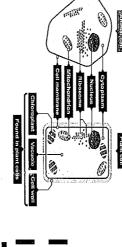
Vacuole: Area in a cell that contains liquid, and can be used by plants to keep the cel Nucleus: Contains genetic material (DNA) which controls the cell's activities.

rigid and store substances.

Cell wall: Strengthens the cell. In plant cells it is made of cellulose Mitochondria: Part of the cell where energy is released from food molecules

Chloroplast: Absorbs light energy so the plant can make food

Cytoplasm: Jelly-like substance where most chemical processes happen



S Plan aide Animal Gelis

regular shape. Cells are made up of shape, and plant cells usually have a Animal cells usually have an irregular different parts.

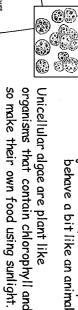
Cytoplasm Nucleus Cell membrane	Chemical reactions happen here Contains genetic material Controls the movement of substances in and out of the cell	Organisms found in Animal and Plant Animal and Plant Animal and Plant Animal and Plant
Cell membrane	Controls the movement of substances in and out of the cell	Animal and Plant
Mitochondria	Where most energy is released in respiration	Animal and Plant
Chloroplasts	Absorb light: energy for photosynthesis	Plant Only
Cell Wall	Strengthens the cell and supports the plant	Plant Only
Vacuole	Filled with cell sap to help keep the cell tungid	Plant Only

processes needed to stay alive. together to perform all the of several organ systems working A multi-cellular organism is made up The fifth level of organisation is a multi-cellular organism.

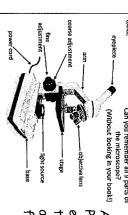
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behave a bit like an animal just one cell, it has adaptations that let it live in water or damp places. Although it is An amoeba is a single celled organism that



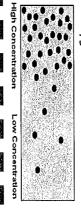
Yeast can reproduce by producing a bud. The bud grows until it than being able to make their own food by photosynthesis. means they have to absorb sugars for their nutrition, rather Yeast have a cell wall, like plant cells, but no chloroplasts. This

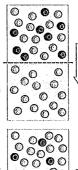


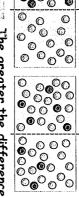
adjustment wheels are used to bring the sample into eyepiece. A light from the light source shines through Place the slide on the stage.. Look through the A microscope is used to examine very small specimens the specimen allowing you to see the image. The



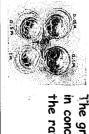
plants, carbon dioxide diffuses in and oxygen diffuses out. carbon dioxide diffuses out. In



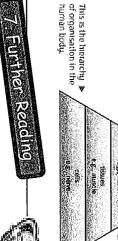




in concentration, the quicker the rate of diffusion The greater the difference



common. Many cells are their function. specialised and are adapted for cells have certain structures in work together. Animal and plant different types of cell that Plants and animals consist of







/	
	Organisms
Plant and Animal Cells	https://www.youtube.com/watch?v=IH3kVOch9nU
What are cells?	https://www.bbc.com/bitesize/articles/zr69dxs
Using a Microscope	https://www.youtube.com/watch?v=xzjowD1KN20
Cells to Systems	https://www.bbc.com/bitesize/guides/z9hyvcw/revision/3
Diffusion	https://www.bbc.com/bitesize/articles/znqbcj6
Uni-cellular Organisms	https://www.bbc.com/bitesize/guides/z9hyvcw/revision/5

article: A very

Knowledge Organiser Year 7 Matter

Diffusion: Random movement of particles (liquid or gas) from a region of high to low Particle model: A way to think about how substances behave in terms of small, moving particles. tiny object such as an atom or molecule, too small to be seen with a microscope. Everything is made up

Gas pressure: Caused by collisions of particles with the walls of a container Density: How much matter there is in a particular volume, or how close the particles are concentration

Melt: Change from solid to liquid when the temperature rises to the melting point Boil: Change from liquid to a gas of all the liquid when the temperature reaches boiling point. Evaporate: Change from liquid to gas at the surface of a liquid, at any temperature **Condense**: Change of state from gas to liquid when the temperature drops to the boiling point

Sublime: Change from a solid directly into a gas Freeze: Change from liquid to a solid when the temperature drops to the me

the tem<u>perature and the particles will</u>

arrangement. They vibrate

as they slide over each contact with each other

The particles are in

spaced and move randomly

The particles are widely

container. Gases have the lowest density; they can

through the whole

easily be compressed.

They also flow.

Liquids

neighbours in a **regular**

The particles touch their

on the spot. Solids cannot

be compressed and they

do not flow. Solids have

solids. Liquids are able to not as closely packed as in other randomly. They are

flow and change shape.

the highest density.

Diffusion is the net movement of particles from

concentration. Three things affect the rate of an area of high concentration to an area of low

diffusion:

The state

particles

Temperature

particles of the

Higher temperature = faster diffusion

Betore

After

of the The size

Most substances can exist in all three states. The state depends on

act differently in each.

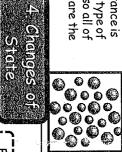
particles. of tiny

depend on what its particles are like, how they move and The properties of a substance how they are arranged.

but their arrangement and movement change when the state changes. The particles in a substance stay the same



material and so all of made of only type of the particles are the A pure substance is



Losing energy

Condensing

there is more than one more than one type of A mixture is made of material. This means type of particle.

baining energy

Melting i Evaporation

Boiling

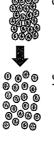
gain more energy and begin to move around more. Melting happens at the melting point As temperature increases the particles and boiling at the boiling point.

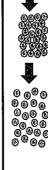


Freezing

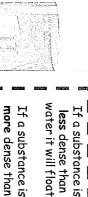
The particles will move closer together and Condensing happens at the boiling point. surroundings and begin to slow down As the temperature decreases the particles transfer energy to the freeze at the melting point.





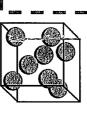




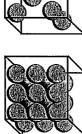


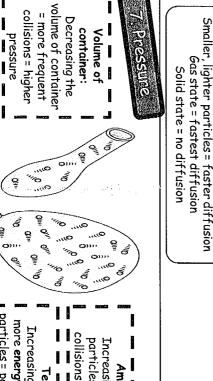
given volume of a substance, or how heavy it is for its Density is a measure of how much matter there is in a

If a substance is The more dense a substance is, the heavier it feels



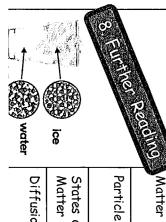
water it will sink





collisions=higher pressure particles = more trequent Increasing the number of Amount of gas:

particles = particles move faster = more collisions = higher pressure more energy transferred to the Increasing the temperature = Temperature:



Diffusion Particle Model 9 https://www.youtube.com/watch?v=npv74 D2M06Q https://www.youtube.com/watch?v=c_IYK https://www.youtube.com/watch?v=C33W https://www.bbc.com/bitesize/topics/z9r

Knowledge Organiser 1 Year 7 Pure and Impure Substances The melting point of a substance is

Soluble (insoluble): Property of a substance that will (will not) dissolve in a liquid Solution: Mixture formed when a solvent dissolves a solute. Dissolve: When a solute mixes completely with a solvent Solute: A substance that can dissolve in a liquid. Solvent: A substance, normally a liquid, that dissolves another substance

Filtration: Separating substances using a filter to produce a filtrate (solution) and residue Pure substance: Single type of material with nothing mixed in

Chromatography: Used to separate different coloured substances

Distillation: Separating substances by boiling and condensing liquids. **Evaporation**: A way to separate a solid dissolved in a liquid by the liquid to Solubility: Maximum mass of solute that dissolves in a certain volume of solvent solvent and salt surround each dissolve salt in water you get is the solute. salt particle Water is the salt solution. The water When you particles If no more of a substance can be dissolved Increasing the temperate usually increases the the solution is saturated Solutions 3 딿 300 350 substances have a range which appears boiling or melting point, whereas impure as a diagonal line on a graph temperature at which it turns from a liquid to a gas or a gas to a liquid residue (sand) Pure substances have a fixed (sharp)

a solid to a liquid, or a liquid to a solid the temperature at which it turns from The boiling point of a substance is the temperature (°C) time (min) temperature (°C) 8888888888 Impure substance (not fixed boiling point) 2 time (min)

—filter paper - clamp Pure substance (fixed boiling point)

holes in the filter paper and are collected as the filtrate. The liquid particles are small enough to pass through the The mixture is poured into the filter funnel

insoluble solid Separates an

filtrate (water)

conical flask

The solid particles are too big to pass through and instead are trapped by the filter paper. This is the residue.

from a liquid

Φ

can move free

Separating a soluble solid from a liquid to collect the solid.

You can investigate this and plot a solubility curve.

solubility of a substance

The particles

colling water out Water has a lower boiling point than the salt in the solution. When heated the water boils,

torming steam.

elitos posigeis

The steam moves into the condenser where it cools.

The cooled steam condenses to form liquid water.

Water

Pure water The liquid water drips into a beaker while the salt remains in the distillation

Gently heating with a Bunsen

burner removes the excess

and crystals start to The volume decreases

evaporate until all of the The solution is left to

liquid is gone.

rorm.

water

A dye that is more strongly attracted to the solvent than the For the chromatography to work all of the dyes must be soluble in the chosen solvent

The separated dyes make a chromatogram

chromatography paper will travel further than a dye that is

more attracted to the paper.

chromatogram. A mixture would have more than one coloured A pure substance will produce only one coloured dot on the dot in different positions.

green spat mude



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			Î	
Distillation and filtration	Chromatography	Atoms, element & compounds	Separating techniques	
https://www.youtube.com/watch?v=tUabxsvfuPk	https://www.youtube.com/watch?v=kxrjvLvbY28	https://www.bbc.co.uk/bitesize/guides/zt2hpv4/revision/1	https://www.bbc.co.uk/bitesize/guides/zgvc4wx/revision/1	

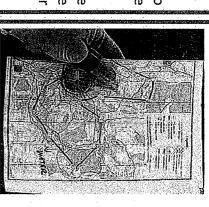
Orienteering- Orientate, observe, navigate, team work, communication Subject Knowledge Organiser

Key Skills

- correct way around to where you are facing. orientate your map (move it around) so it is the 1. The first thing you must do when map reading is to
- starting point 2. You then need to observe the surroundings before identified where you are standing you then find your looking for the markings on the map. Once you have
- answers correct. successfully complete the course is by getting all marker before starting because the only way you will You need to double check you are at the correct
- communicate and discuss every decision before easily be made through poor communication. moving and navigating to the next cone. Mistakes can course as you will be working in pairs. You must 4. Team work is key when completing an orienteering

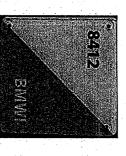
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different speeds) as well as fartlek training (over different terrains at of time. To train for this, continuous training is useful fitness is key as you will be running for a long period As orienteering involves running, cardiovascular



3 46

47





Course on 10	6
>	•
Course 5 = 13	
Course 4 = 12	
Course 3 = 11	0-
Course 2 = 15	C
Course 1 = 14)
ANSWERS	<u> </u>
Set up as show	
Example Cours	-0

Rules and tactics:

M16

4,1 km

120 m

40 ដ

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

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

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

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

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

speed; co-operation, orientation; map reading; observation; pace judgement; tean Key Words: Navigation; decision making; communication; cardiovascular fitness, work; safety and mental alertness

contrast, sporting links, analyse, evaluate

HRF— Hadifily Filingss and Stardsey Consequences of a Styllficatiol about 18 Colf

Health, Fitness and Exercise

exercise done to improve health enwironment. Exercise can be wellbeing and not only the abser intensity exercise such as running minutes per week. At least two of begin to sweat. Children and youn physical enough to cause the adu sessions of thirty minutes activity can be defined as 'the ability Health can be defined as "comp

Consequences of a sedentary lifes

sport then they are at risk of a I If a person does not take part in re osteoporosis and loss of muscle to effects such as weight gain or obe (high blood pressure); diabetes

Lifestyle choices

poor decision-making and in the ic as alcohol as in the short term i to function optimally; not smokin fat; getting enough sleep is import bronchitis and lung cancer and n means a person is less likely to t positive or negative way. For e Other lifestyle choices can affer

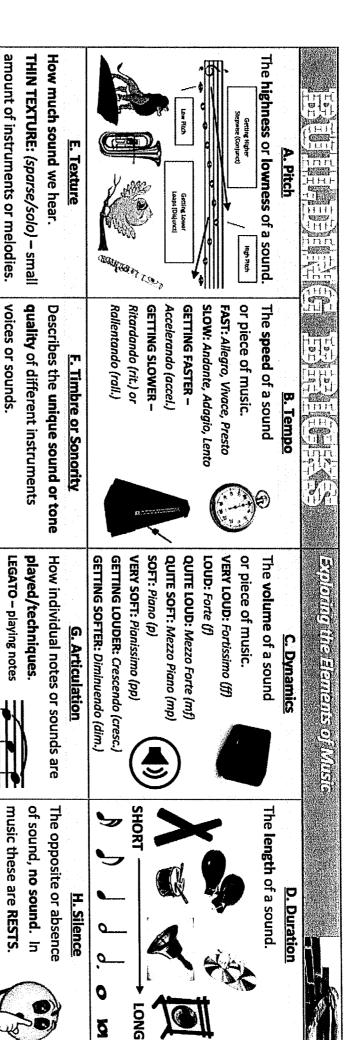
Companent of Fitness

		Detinition	Example
plete physical, mental and social nce of illness or infirmity'. Fitness to meet the demands of the	Body	The percentage of body weight which is fet, mustle and bane	The gymnast has a tean body composition to allow them to grapel themself through the air when performing on the asymmetrical bars
defined as 'a form of physical or fitness or both'. Adults - five y per week. The activity should be	Cardiovascular fitness	The ability of the heart, lungs and blood to transport oxygen	Completing a half morothon with consistent split times across all parts of the run
ult to breathe more deeply and to ng people - seven sessions of sixty	Plexibility	The range of motion (RDM) at a joint	A gymnost training to increase hip mobility to improve the quality of their split leap on the beam
if these sessions should be of high g, jumping or cardiovascular based	Muscular	The chility to use volunitary muscles repeatedly without tiring	A rower repeatedly pulling their oar against the water to propel the boat towards the line
style	Strength	The amount of force o muscle can exert against a resistance	Pushing with all ane's force in a rugby scrum against the resistance of the apposition pack
number of illnesses and negative pesity, heart disease; hypertension	Killöv	The ability to change the position of the body quickly and control the movement	sition A badminton player moving around the court tral from back to front and side to side at high speed and efficiency
מטפי מטפי	Balance	The ability to maintain the body's centre of mass above the base of support	body's A sprinter helds a perfectly still sprint start ase of position and is ready to go into action as soon as the gun sounds
ict a person's hezith in either a	Coordination	The ability to use two or more body parts together	A trampolinist timing their arm and leg mavements to perform the perfect tuck somerscult
example, eating a balanced diet become ill or put on excess body	Power	The ability to perform strength performances quickly	igth A javelin thrower applies great force to the spear while moving their arm rapidly forward
rtant for the body to rest and oraining as this causes illnesses such as	Reaction	The time taken to respond to a stimulus	to a A boxer perceives a punch from their left and rapidly mayes their head to avoid being struck
not taking recreational drugs such it can lead to disorientation and long term can lead to disease.	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

Year 7, Term 1 Musical Elements

Name

Class



How music is written down.

THICK TEXTURE: (dense/layered) – lots of instruments or melodies.

Velvety, Screechy, Throaty, Rattling, Mellow, Chirpy, Brassy, Sharp, Heavy, Buzzing, Crisp,

short, detached, spiky way shown

STACCATO - playing notes in a

shown by a SLUR.

in a long, smooth way

by a DOT

Metallic, Wooden etc.

I. Notation

STAFF NOTATION — music written on a STAVE (5 lines and spaces)



GRAPHIC NOTATION/SCORE – music written down using shapes and symbols to represent sounds

Key Vocabulary	
Posture	The way you are standing.
Step	Any movement made with your feet.
Timing	The speed of the music.
Unison	At the same time as one another.

Historical Context

Line dancing is exactly what its name implies: people dancing in lines to music.

Line dances are choreographed dances with a repeating series of steps that are performed in unison by a group of people in lines or rows. All of the dancers performing a line dance face the same direction and perform the steps at the same time. Although there are usually severallines of dancers, small groups may only form one line. Line dancers rarely interact with each other during a dance.

Line dancing is believed to have originated from folk dancing, which has many similarities. The movements of a line dance are marked as "counts." Generally, one count equals one musical beat, with a particular movement or step taking place at each beat. A line dance will have a certain number of counts. Eg, a 64-count dance would contain 64 beats. The number of beats does not necessarily equal the number of steps, however, as steps can be performed between two beats or over more than one beat.

One of the most popular line dances performed today is the Cha-Cha Slide

Single beat steps:

Technical Skills

place foot on floor and take weight onto it Step

Vine step right foot to side, step left foot behind right, step right foot to side.

Touch

Pivot

vou

/Tap touch toe or heel to ground but don't put any weight on it

Brush brush foot forward and upwards past the foot you are standing on

Hop spring into the air taking off and landing with same foot

Jump jump forward or backward taking off and landing with both feet at the same time

Hitch to lift the knee

Rock to transfer weight from one foot to the other

Slide to draw one foot next to the supporting foot

Strut place heel forward on floor then toe onto floor taking weight onto foot

step forward on right foot, keeping weight on ball of left foot make a ½ turn over your left shoulder so that you end up with your weight on your left foot and facing the wall that was behind

Jazz Box step right foot across in front of left, step left foot back, step right foot to right side, step left foot next to right. Also done leading with left foot i.e. start by crossing left in front of right

Lesson Overview

- 1. Key features of Line Dance and basic history
- 3. Copy and repeat Line Dance 2
- 5. Performance of the 3 dances for assessment
- 2. Copy and repeat Line Dance 1
- 4. Copy and repeat Line Dance 3
- 6. Evaluation of Performances





Student knowledge organiser - Moesign -47

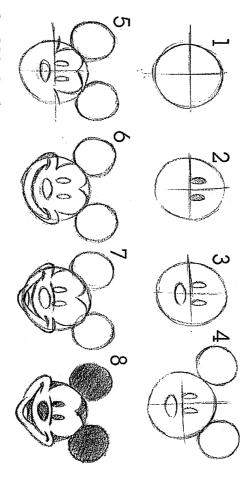
2D Drawing Techniques

3D Drawing Techniques

Construction Lines

light as they will not form part of your final drawings. They help you plan the size of each part to keep drawings in the correct scale/ratio. Ensure construction lines are Use construction lines to plan out your drawing. Construction lines help divide your drawings into smaller chunks.

Below is an example of a drawing being built up using construction lines



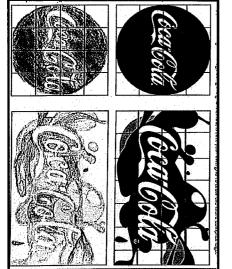
Grid Method

grid around an existing image you wish to The grid method can be used by drawing a

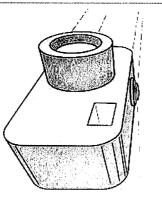
The grid would be duplicated exactly on a divided into equal sections forming a grid. Usually, the existing image would be

Using the existing image with the grid, copy each smaller section into the new grid.

ensuring the duplication is identical with each part of the image in the exact place This method helps break the image down



Two Point Perspective



quickest and easiest 3D drawing technique. Cabinet Oblique: Design is drawn from the front in 2D. 45° lines are drawn to show the depth of the product. This is the

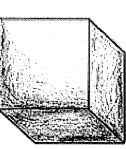
can be a quick drawing technique if practiced. vertical lines. Much more detailed than Cabinet Oblique and width and depth of a product. The height is drawn with Isometric Projection: Uses 30° lines (parallel) to show the

perspective is the most time consuming technique but also Depth are drawn towards the vanishing points. 2 point 2 Point Perspective: Uses Vanishing Points. The Width and the most accurate as it emulates how the human eye would

Tone

a colour which can be press on a pencil. achieved by how heavy we Tone is the various shades of

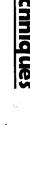
We use tone to show how 3D qualities of our drawings This helps demonstrate the light projects onto an object



Texture

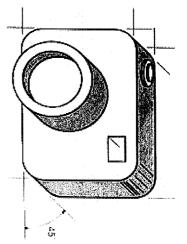
texture and materials on our designs/drawings. can help demonstrate the Adding colour in certain ways

as 'rendering'. Rendering is used to bring drawings to life and make them look as realistic as This, paired with tone, is known



Isometric Projection

Cabinet Oblique







themselves as Christian. Christianity is based on the life and teachings of Jesus Christ, who Christians believe was the Son of God. Christians rely on the Bible for many of their Christianity: Christianity is the largest religion in the world with over 2 billion followers (almost 1/3 of everyone alive on the planet). In the UK, 42 million people describe

Y7 – P4L

beliefs about the world and how to live in it. There are thousands of different Christian denominations

God

Christians are **monotheists** (they believe in one God). They believe He is **omnipotent** (all powerful), **omniscient** (all knowing), and **omnibenevolent** (all loving). Most Christians believe in the **Holy Trinity**, the three persons of God in one. These are the **Father**, **Son** (Jesus) and **Holy Spirit**.

Jesus Christ

<u>The Incarnation</u> – The Christian belief that God took human form by becoming Jesus. Through the incarnation of Jesus, humans were able to start repairing their damaged relationship with God. The relationship has been imperfect since Adam and Eve disobeyed God.

<u>The Crucifixion</u> – Jesus was crucified, a slow painful death on a Friday alongside two robbers. Christians believe that Jesus' crucifixion was a crucial moment in his life as this act brought human salvation (the healing of a broken relationship between humans and God) from sin. Jesus can understand human suffering because he suffered during the crucifixion.

<u>The resurrection</u> — After the crucifixion Jesus' bod was buried in a tomb guarded by Roman soldiers. Early on the Sunday morning, 3 days after his crucifixion, some of Jesus' female followers went to anoint the body with spices however the tomb was empty. His rising from the dead demonstrates Jesus' power over death itself.

<u>Ascension</u> — This reminds Christians that Jesus has gone to heaven to prepare a place for them, so they do not need to fear death. As Jesus is no longer restricted by time, he is always with them.

Teachings of Jesus

10 Commandments

Love your neighbour as yourself, forgive others who have wronged you, love your enemies, treat others as you want to be treated, forgive everyone, don't judge others.

Parables

Parables are short stories that teach a moral or spiritual lesson by comparing something from everyday life.

Parable of the Good Samaritan – A traveller is beaten up and robbed and left for dead along the road. A priest comes by, but deliberately avoids him. A lawyer also comes by, but he too avoids him. Finally, a Samaritan comes by ad he helped the injured man, in an act of mercy and compassion.

Evil and suffering

<u>Moral evil</u> - Evil that is caused by humans misusing their free will e.g. murder. <u>Natural evil</u> - This is suffering that has not been caused by humans e.g. earthquakes

GOOD AND EVIL

Christians believe that God is completely good and is the source of all goodness. Everything that God created was good, until humans chose to use their free will to disobey God.

THE FALL, ORIGINAL SIN AND REDEMPTION

Eve picked and ate the fruit from the Tree of Good and Evil when it had been forbidden by God. She then tempted Adam and he also ate it. As a punishment, God expelled Adam and Eve from the Garden of Eden and condemned them to lives of suffering and death. This is called 'The Fall'.

Forgiveness

'Forgive and you will be forgiven.'

Parable of the Prodigal Son – we are lost, but when you decide to change your life, if you go back to the Father and ask for forgiveness of what you did wrong, God is always happy to forgive.

Parable of the Unforgiving Servant – God wants us to keep on forgiving and to have mercy on others.

Miracles

If a miracle has really happened, it means that God has acted on earth. A miracle is an event that seems to break all the laws of science, and so the only explanation of what has happened is that God has caused it to happen.

Why do people believe in miracles?

- Shows that God is active in the world and he responds to prayers
- Proof God is loving and caring
- Why do people not believe in miracles?

Impossible in modern day

No scientific proof

Life After Death

Judgement – Many Christians believe that after death, they will be taken into the presence of God and they will be judged for the deeds they have done or failed to do during their lifetime. The good will go to heaven and the bad will go to hell.

<u>Heaven</u> – Christians believe heaven means being in the eternal presence of God. The bible describes heaven using many images – blinding light, singing and beauty, a rainbow.

<u>Hell</u> — A place of indescribable, eternal torture for non-believers. Roman Catholics believe in purgatory which is the intermediate state where the soul are cleansed in order to enter heaven.

Religious Authority

<u>The Bible</u> – inspired by God. It contains Jesus' teachings, parables and teachings of leaders.

<u>The Church</u> – the body of Christ. God speaks through

Conscience – the voice of God telling us to do right.
Situation Ethics – the most loving thing to do.

the Church.

Rights and Responsibilities in Modern Britain - Y7 - P4L

Rules and Laws:

Rules: provide a stable environment. They ensure people are happy and safe.

Laws protect our general safety, and ensure our rights as citizens against any abuses.

Rights and Responsibilities

We have rights, which we get from laws, and we also have responsibilities.

Responsibilities can be legal (for example, to pay taxes and obey other laws) or they can be moral. Something that is moral is the correct thing to do, though we are not always forced to do it by law.

What does it mean to be British?

Modern Britain was shaped by a "rich mix of all different ethnic and religious origins".

British Values

- Democracy Being able to vote and having a fair vote
- Rule of law no individual or group is above the law
- Individual liberty fair treatment for all
- Mutual respect and tolerance respecting individual's differences and others of a differing faith or belief

British Culture

Immigration - People who move into a country

Why did Britain need immigration? Britain needed workers since many men had died in World War Two. In 1948, the British Nationality Act gave 800 million people in the Commonwealth the right to claim British Citizenship.

Diversity (fairness and equality) and Multiculturalism (where people of different skin colour, nationality, languages and beliefs are living as one society) are at the heart of UK society.

How has immigration improved Britain?

Better skilled workers, TV/film, music, sport, fashion, technology, food

Protecting Human Rights

Human rights violation examples – child labour and child soldiers.

Amnesty International is a worldwide movement of people who campaign for internationally recognized human rights for all. With more than 2.2 million members and subscribers in more than 150 countries, they conduct research and generate action to prevent and end grave abuses of human rights and to demand justice for those whose rights

and they link together - one depends on the other.

right to work, the right not to be treated like a slave etc.

There are 30 human rights e.g. the right to education, the

groups are protected, equality and everyone is protected.

They ensure people have basic needs met, the vulnerable

Human rights cannot be prioritised as they are all important

are entitled to regardless of their age, race, religion or

Human rights are a set of universal rights that all humans

Human Declaration of Human Rights

gender.

How religion has shaped the UK Some people argue that religion does not

play a part in society because:
Religious beliefs, practices and

organisations are becoming less important in society (secularisation)

Religious teachings and organisations are no longer respected

People can rely on material comforts for happiness and so have less need to believe in God

Humanism is on the rise - way of seeing and reacting to the world using science

However, it can be argued that religion does play a role un society:

Christianity - 10 commandments e.g. Thou shall not kill which is part of current law and Christian teachings still used today e.g. treat others as you would like to be treated.

Islam – charity work, give 2.5% of savings (zakah)

Sikhism – fought for British army in WW1/2

Social injustice

Unfairness or undeserved actions such as discrimination.
Social justice is about seeking to protect people's civil liberties, rights and opportunities, and taking care of the least advantaged members of society.

People who have stood up for the

of the least advantaged members of society.

People who have stood up for the weak or oppressed: Mahatma Gandhi, Mother Teresa, Martin regime

Prejudice and Discrimination (Key Words)

Prejudice is forming an unfavourable opinion or feeling about a person or a group of people, without a full examination of the situation.

Discrimination is the treatment of a person or group (actions) such as verbal or physical abuse

Homophobia_- dislike of or prejudice against gay people

Transphobia- the persecution of someone who identifies as a different gender to their sex.

Racism – prejudice and discrimination directed against someone of a different race based on the belief that one's own race is superior.

Islamophobia- dislike of or prejudice against Islam or Muslims

Classism-to treat someone differently because of the class which they were born into

Disablism – discrimination or prejudice against disabled people

Prejudice makes the victim feel less than fully human. When people are undervalued by others, their self-esteem suffers and they stop trying to improve themselves. The consequences of prejudice and discrimination can lead to individuals and entire communities feeling vulnerable, frightened and worthless.

Y7: Formal Elements of Art and Design

Key Figures



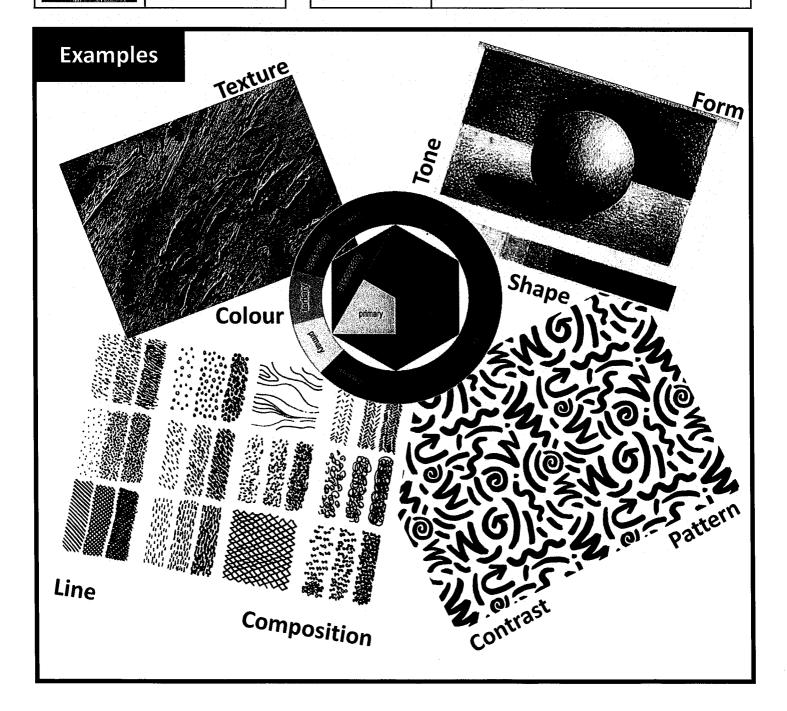
Michael Craig Martin CBE RA

(born August 28, 1941)

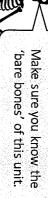
Is an Irish-born

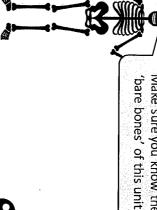
contemporary
conceptual artist and
painter. He is noted for
fostering the Young
British Artists, many of
whom he taught, and
for his conceptual
artwork, An Oak Tree.
He is Emeritus
Professor of Fine Art at
Goldsmiths.

Key Terms	
Colour	Colour is what we see when light enters our eyes! Primary, colours can be mixed together to create secondary and tertiary colours.
Composition	Composition is the placement or arrangement of visual elements in a work of art.
Contrast	Contrast is the scale of difference between dark and light areas in images.
Form	A form is a three-dimensional geometrical shape
Line	Lines can be horizontal, vertical, or diagonal, straight or curved, thick or thin.
Shape	An area enclosed by a line. It can be empty and just be an outline or shaded in
Texture	Texture is the perceived surface quality of a work of art.
Tone	This could be a shade or how dark or light a colour appears
Pattern	Texture is the perceived surface quality of a work of art.



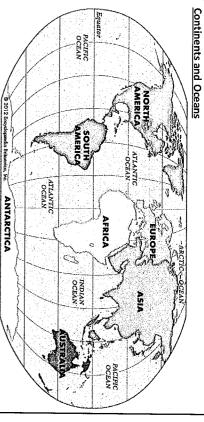
Fantastic Places Year 7



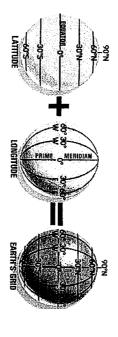


seywords:

- Continent the main land masses on Earth. It is divided into countries that have boarders to separate them
- Ocean large body of water that separate
- Physical Geography linked to the natural feature of the world
- Human Geography linked to people and how we
- Relief height and shape of the land
- Contour lines orange/brown lines on a map showing the relief
- Longitude lines running east and west of the Greenwich Meridian
- Latitude lines running north and south of t he
- Conservation landscapes from harm protecting resources and
- precipitation of a location the average temperature and
- Scale –difference in distance between different points

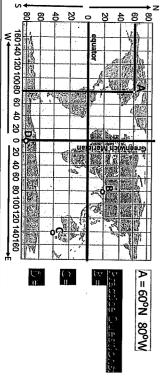


Longitude and Latitude



Instructions to find longitude and latitude:

- Find the latitude. Remember to follow the lines that go left to right.
- Write down the number
- Is it North or South of the equator? Add this to your number
- Now look at the **longitude**. Remember these are the lines that go <u>up and</u>
- ბ ზ Write down the number
- Is Eastor West of the Greenwich Meridian? Add this to your number



Geography of the UK

own capital city (shown on the map) Ireland, Scotland and Wales. Each has its The UK is made up of England, Northern

Physical Geography of the UK

- Ben Nevis (the tallest mountain at 1,345m)
- River Severn (longestriver)
- Coastlines

Human Geography of the UK

- Towns and cities
- Famous landmarks like Big Ben Buckingham Palace, The Angel of the

NORTHERN IRELAND NORTH ATLANTIC

- It is located in the Southern Hemisphere; it is the most southern continent Antarctica does not have a permanent population, instead a there is a scientific resear North and Blackpool Tower
- base with up to 4,000 scientific researchers
- Antarctica is one of the coldest places on Earth with ninety-nine percent of it covered by can be classed as a cold desert as it receives less than 250mm of rainfall per year ice sheet. Average temperatures inland are -57°C and in the summer it can be up to 8°C.

Tourists scaring

Oil leaks from tourist ships

Climate change melting the ice

Treats

wildlife e.g. penguins during mating

Management

- SSSIs (Sites of Special Scientific Intere tourists cannot access the area a cannot disrupt wildlife
- The IAATO (International Association Antarctic Tour Operators) - Ensi companies look after the environment

- Africa is the second biggest continent remember it is not a country!
- It is the oldest inhabited continent with people living here for 5 million years
- It has a total of 54 countries; the biggest being Algeria

Physical Geography

the Congo River Basin you have tropical rainforest. Sahel. In central Africa you have grasslands and along Desert and south of this is the semi arid region of the and ecosystems vary. In the North you have the Sahara Due to the large scale of the continent the climate

Human Geography

in Nigeria has 21m people living there! There rapid Many cities in Africa are facing rapid population, Lagos Population growth is resulting in some countries naving rapid development and attracting globa



ne Great Barrier Reef

ne Great Barrier Reef is located off the north eastern coast of eef stretches for 1429 miles.

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provide food and

attracts 1.6 million tourists every year millions of people around the world livelihoods for hundreds of Tourism creates jobs – it

Mining coral for building

causing it to bleach

Endangered species

materials

protect shorelines from

range of species coral reef and is home to a Makes up 10% of the worlds

ountry of Ecuador.

supporting the economy year creating jobs and the Galapagos Islands each Around 260,000 people visit **Importance** ney belong to the continent of South America and form part of the

ney are made up of 19 islands in the Pacific Ocean

ne Galapagos

Climate change – warmer

oceans are killing off the coral

Overfishing

This is a mountain range in Asia. It is found in India, China and Nepal. The worst tallest mountain, Mount Everest, is found here.

The Himalayas



Opportunities - - - -

- which provide timber coverage so there are trees The slopes have forest
- snow melts providing water to the rivers which settlements use to
- attracts lots of mountain bringing money to the area climbers and tourists generate electricity

Challenges

- Earthquakes and
- cold climate makes staying for heating limited energy resources warm difficult, there are avalanches threaten lives
- mountains make it virtually making large areas impossible to build roads

amazing landscape with deep canyons, rivers, lush forests, hot springs Earth). and geysers (blasts of hot spring water due to the heat from within the Yellow Stone is a National Park located in the USA. Yellowstone has an

often, and it occurs around every 100,000 years. would have global impacts if it was to erupt. Luckily, they don't erupt

animals, plants, seeds and Tourists can bring foreign

Threats

bacteria onto them without

would be uninhabitable

Economic Impacts - Air travel would be hugely disrupted, causing economic damage, The global economy will be placed under huge

Environmental Impacts - The ash in the atmosphere could lower global temperatures by 10oC for up to 10 years

animals, not using a flash when taking photos, no water sports. wildlife and is lands for the future. This includes staying 2m from the Tourists must follow strict rules when they are there to protect the the Islands were declared a national park.

In order to protect the species found on the islands, in 1959 97% of

Oil leaks from boats Over fishing

Super Volcanoes – Yellow Stone

Yellowstone has a super volcano beneath it; this is a huge volcano which

Social Impacts -87,000 could be killed in the area, Two thirds of the USA

pressure and likely collapse due to the damage in the USA

Key Vocab	Definitions
Saxons	The English army at Hastings
Normans	William's men (from Normandy in France)
Fyrd	Working men who were called up to fight for King Harold
Housecarls	Well trained, full time Saxon soldiers. Harold's bodyguard
Mounted knights	Soldiers on horseback
Archers	Soldiers with bows & arrows
Shield Wall	Saxon defensive tactic
Oath	A promise
Domesday Book	Survey of English lands & property made about 1086.
Feudal system	System of government introduced by William I
Senlac Hill	Where the Battle of Hastings was fought
Bayeux tapestry	Norman embroidery depicting the battle
Rebellion	An act of armed resistance
Heir	Next in line to the throne
Pevensey	Where William's army landed
Conquest	Invasion & control of a country using military force

Year 7: The Norman Conquest

Claimants to the Throne

should be king: in January 1066. 4 men believed they King Edward the Confessor died childless

- Edgar the Atheling
- William Duke of Normandy
- Harald Hardrada
- Harold Godwinson

William then each launched invasions Godwinson to be king. Harald Hardrada & The Witan (royal council) chose Harold

Castles



so were easy to burn down. From around bailey castles. They were made of wood concentric castles were built (outer & were built. In the 12th & 13th centuries inner walls) first stone castles had a <u>rectangular</u> The earliest castles were **motte &** <u>keep</u>. Later, castles with <u>round towers</u> 1100, castles were made from <u>stone.</u> The

portcullis, murder holes, arrow slits. Castle defences: moats, ramparts machicolations, battlements, drawbridge

siege wartare. & mangonel, mining, siege tower, ladders Attacking a castle: Fire arrows, battering ram, catapults e.g. trebuchet

Why did William win the Battle of Hastings?

- Harold's bad luck e.g. had to victory at Stamford Bridge rush south into battle after
- William's men were better prepared & more experienced
- The Norman army was stronger.
- by using a fake retreat. They had better tactics. The Normans tricked the Saxons
- Ģ support The Normans had the Pope's

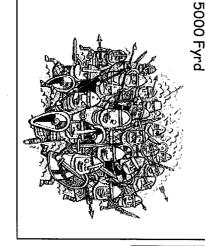
Armies at Hastings

Normans

3000 mounted knights (cavalry) 3000 foot soldiers (infantry) 2000 archers

Saxons

2000 Housecarls



North The Harrying of the

armies. claim to the throne. He was It was led by Edgar the the north of England in 1069 against William's rule, Some English people rebelled Atheling, who had a bloodincluding Hereward the Wake The biggest rebellion was in oined by Danish and Scottish

of England, he ordered animals and crops were burnt villages to be destroyed and rebellion. In the north-east William <u>defeated</u> the Most people who survived people to be killed. Herds of later starved to death.

Battle of Hastings 14 Oct 1066

crownedking 25 Dec 1066 William is

'William the Conqueror'

wins the Battle of Stamford Bridge

25 Sep 1066 King Harold

Harold's 1064

oath

Harold is crowned King Edward dies Jan 1066

Battle of Fulford Hardrada wins 20 Sep 1066

Year 7, Term 1 Dama

Introduction to Stage Craft

Vocal Expression

Posture

How an actor communicates meaning using their voice.

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

Gesture

Mime gesture are used to communicate meaning. A wordless form of entertainment in which movement and

meaning/intention. A movement of the head, hand or other body part to express

movement **Ensemble** group that is abstract in style rather than naturalistic A choreographed movement sequence performed by a

Still Image

expression. upon use of space/proxemics, levels, body language and facial sometimes called a freeze frame or tableau. It can provide insight into character relationships with a clear focus This is a frozen picture which communicates meaning. It's

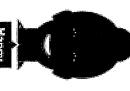
Proxemics

This refers to the use of space between actors and how that use of space communicates their relationship to the audience.

Pantomime

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

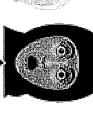
Facial Expression Using your face to communicate how the character is feeling.













in speech for dramatic effect. Pause – A pause (or beat) is a short break Pace - How quickly you deliver your lines Pitch – How high or low the voice sounds

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

within a sentence to indicate importance place stress on a particular word or phrase **Emphasis** – This is where a performer will

depending on intention/emotion.

Volume – How loud or quiet you speak

Stock Characters in Pantomime

Queen) **Villain** – An evil character in the story. (Captain Hook or The Evil Hero – The character who saves the day. (Aladdin or Peter Pan)

Dame – A female character played by a man in drag. (Widow Twanky)

Jasmine) **Damsel** — A lady in need of rescuing. (Rapunzel or Princess

Sidekick – A best friend to the damsel OR the villain. (Wishee Washee or Mr Smee)

Physical Skills

Pace Movement Levels Gesture Proximity Style louch Facial Expression Stance Posture

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 Prime numbers – a number that can only be divided by 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

Factors – numbers which divide into another number with no remainder

Multiples – answers to times tables

Multiplication and division

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Answer: 3224



Answer: 28-8

Types of numbers

Here are a list of numbers 23, 24, 27, 28, 31, 33, 34, 35

a) List the prime numbers 23, 31
Can only be divided by 1 and itself, 24, 28, 34 can be divided by 2, 27 and 33 are in the 3 times table (and others), 35 is in the 5 times table

b) Find the cube number: 2 1x1x1=1, 2x2x2=8, 3x3x3=27

BIDMAS – Order of operation

ഗ	Þ	3	O	Н	8
Subtraction	Addition	M Multiplication 10-4×2-10-8-2	Division	Indices	Brackets
10+2-3=5-3=2	10 × 4 + 7 = 40 + 7 = 47	10-4×2=10-8=2	10+6÷2=10+3=13	5+22=5+4=9	10 × (4 + 2) = 10 × 6 = 60

Using a given number fact

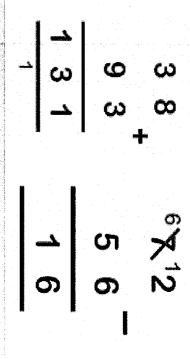
Given that $37 \times 432 = 15984$

 $3.7 \times 4.32 = 19.984$

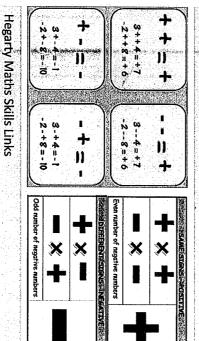
3.7 is 10 times smaller than 37,4.32 is 100 times smaller than 432. So the answer is 1000 times smaller than 15984

 $159.84 \div 43.2 = 3.7$ Rearrange original $15984 \div 432 = 37$ 159.84 is 100 smaller than 15984, 43.2 is 10 times smaller than 432. So the answer is 10 times smaller than 37

Addition and subtraction



Negative numbers - directed



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

Factors – numbers which divide into another number with no remainder

Multiples – answers to times tables

Prime factor decomposition - write a number as a product of its prime

Rounding – make a number simpler but still close to the original number

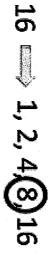
Significant figures – the importance of each single digit in a number

Approximate – estimate calculations by rounding each number to 1 significant figure first

Factors and Highest common factor

exactly into that number with no remainders To find the factors of a number, find all of the numbers that can divide

and then find the highest number that appears in both lists To find the HCF of two or more numbers, find the factors of each number



24 \(\infty\) 1, 2, 3, 4, 6(8)12, 24

So the highest common factor of 16 and 24 is 8



· d

Multiples and LCM

then loo for the lowest number in each list To find multiples of a number, list the answers in that ties table To find the LCM of two or more numbers, find multiples of each number

Multiples of 3:



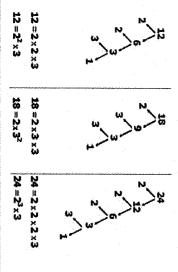
Multiples of 4:

O4, 8 (2) 16, 20 (2) 28 ...

The LCM of 3 and 4 is 12

Prime factor decomposition

Write these numbers as a *product* of prime factors



Significant figures

Rounding to 1.s.f

0.3901 = O-4

Approximate calculations

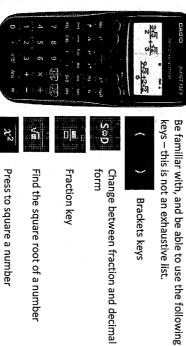
19 x 1.73 ≈ 40 Round each number to 1 significant figure then calculate

$$\frac{(2.1+17.3)}{(11.4)} \approx 10$$

$$\frac{50+20}{10} = \frac{100}{5}$$

22.03×38.4

Using a calculator



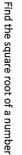
Brackets keys













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Product of prime factors	Using a calculator	Approximate calculations	Significant figures	Factors and multiples
29,30	129	131	130	27, 31, 32, 33, 34, 35

Primary data - data collected first hand, in a survey or experiment

Secondary data - data collected by someone else

Discrete -- can only take certain values, usually something you can count

Continuous - data that can be measured, can take any value

Average – a typical value for some data, see mean, mode and median

Distribution – how data is spread out, takes account of average & range

Averages



Awerage

Advantages

Disadvantages





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			200.00
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TOTAL

360° + 72 = 5

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1

x 5 = 195°

3600

Tally Charts and bar charts

Red, blue, red, green, red, purple, red, green, red Complete a tally chart for the most popular colour of car

purple, green, blu	purple, green, blue, red, green, blue, red, red, red	e, red, red, red
Colour	Tally	Frequency
Red	淅ഡ	9
Blue	Ш	3
Green	Ш	4
Purple	11	2

Frequency

Favourite Colour of Car

The <u>number</u> of red, blue, green and purple cars is the frequency (height of the bars).

IMPORTANT

The bars are the SAME width

The gaps between the bars are the SAME width

Both axes are labelied

Frequency starts at 0 The graph has a title



Range



Largest value - smallest value

Pie chart

- Sum (add up) the frequency
- 360° ÷ frequency
- 360°+72=5
- Bream Perch 쟔 Multiply each category X5 to find sector size 13 Б x5=115° x5=50°

This table give information about then number of fish in a lake. Draw an accurate pie chart to show this information. 115°

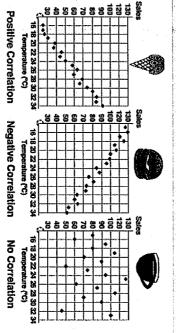
Scatter graphs

Car Colours

Green

Purple

Z



Hegarty Maths Skills Links

Averages

404, 405, 406, 407, 408, 409, 410, 413

401, 425

Tally and bar charts

Scatter graphs 453, 454

427, 428, 429

Pie charts

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

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



 $= 3.142 \times 6 \text{ cm}$ = 25.14 cm

 $= 18.85 \, cm$

 $C = \pi d$

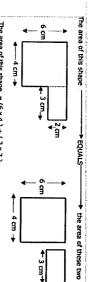
 $C = 2\pi r$

 $A = \pi r^2$

 $= 2 \times 3.142 \times 4 \text{ cm}$

 $=3.142 \times 6^2$ $= 113.11 \text{ cm}^2$ $= 3.142 \times 36$

Compound area



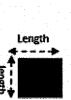
The area of this shape = $(6 \times 4) + (2 \times 3)$ = 24 + 6= 30 cm^2

Learning Trust North East

1

Area

A = Length? SQUARE



RECTANGLE

A = Length x width



=5×8×13

= length × width × height

Volume of cuboid

 $= 520 \text{ cm}^3$

TRIANGLE

A = 2 Base x height*



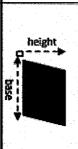
TRAPEIZUM

 $A = \frac{1}{2}(a + b) \times \text{height}^{+}$

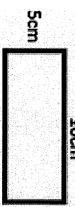


PARALLELOGRAM

A = Base x height*



Perimeter



= 30cm 10+10+5+5

Volume of a cuboid

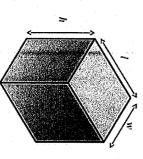
What is the volume of this cuboid?

5 cm

Surface area of a cuboid

8 cm 13 cm

as follows. We can find the formula for the surface area of a cuboid



2 × /w Surface area of a cuboid =

Top and bottom

+2×hw Front and back

Left and night side

= 2lw + 2lw + 2lh

Hegarty Maths Links

Circles Area Volume Perimeter 534, 535, 536, 537, 538, 539, 548, 549, 550, 551, 552 553, 554, 555, 556, 557, 558

567,568 540,541, 542, 543

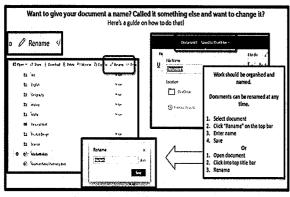
584, 590

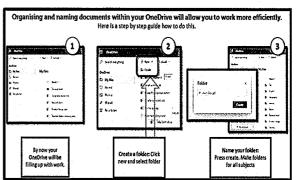
Surface area

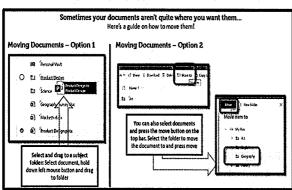
Knowledge Organiser - Microsoft OneDrive

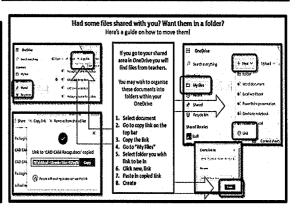
OneDrive is the Microsoft cloud service that connects you to all your files. It lets you store and protect your files, share them with others, and get to them from anywhere on all your devices.

Staying Organised

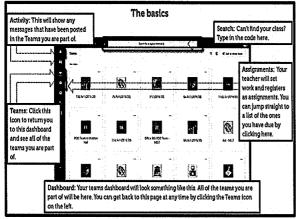


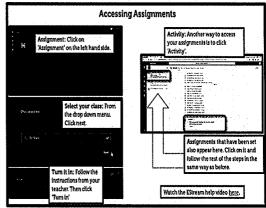


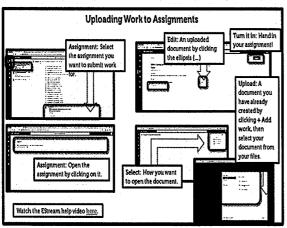




Knowledge Organiser - Microsoft Teams







Things to think about:

Microsoft Teams is a communication and collaboration platform that combines chat, video meetings and file storage.

Think of a "team" as a house - in Microsoft Teams you work in different "teams". You can think of each team as a house where you work together with others. Everyone who is a member of the house will be included in everything that goes on in the house.

Think of a "Channel" as a room - When you first build your house it only has one room. In Microsoft Teams this corresponds to the "General" channel.

Think of the "Activity Feed" as the hallway - In the middle of the house you have a hallway. You can stand in the hallway, open the doors to the rooms you are most interested in, and hear all the conversations going on in the various rooms – without leaving the hallway!

Knowledge Organiser - E-Safety - Cyber Bullying

Cyberbullying is when a person, or a group of people, use the internet, mobile phones or other digital technologies to threaten, tease or abuse someone.

Types of cyber bullying

- EMAIL: Sending threatening emails or intimidating
- SOCIAL NETWORKING SITES: Posting hurtful comments on someone's profile, faking profiles
- CHAT: Saying nasty things in chat and instant GAMING: Ganging up on another player or excluding
- PHONES: Making prank calls, nasty texts and photo
- WEBCAMS: Making people do things on webcams that upset them
- FORUMS AND MESSAGE BOARDS: Ganging up on someone, excluding someone, making hurtful
- EMAIL: Sending threatening emails or intimidating
- SOCIAL NETWORKING SITES: Posting hurtful comments on someone's profile, faking profiles
- CHAT: Saying nasty things in chat and instant messaging
- GAMING: Ganging up on another player or excluding
- PHONES: Making prank calls, nasty texts and photo
- WEBCAMS: Making people do things on webcams
- FORUMS AND MESSAGE BOARDS: Ganging up on someone, excluding someone, making hurtful comments

How to avoid cyber bullying

- Don't post stuff that is very personal - keep information general
- Think carefully about posting pictures online - once it's there, anyone can see it or use it
- Don't share your passwords keep your personal information private!
- It's not a good idea to meet up with anyone you meet online -you don't really know who they
- Try to think carefully before you write things online - people can get the wrong end of the stick
- Respect other people's views just because you don't agree with them, it doesn't mean you have to be rude or abusive
- Understand everyone is unique everyone is different!

Who can you contact in school

Talk to someone you trust like a teacher, or a parent. They can

Report any cyberbullying, even if

Never respond as it could make

Save any bullying messages,

posts, pictures or evidence that

Make a note of the dates and

Keep your passwords privatel

Do not post any personal

Have fun... But be safe when using the

internet!

help stop or prevent bullying!

it's not happening to you

matters worse

ou receive

times they occurred

information onlin

- Pastoral Department o Mrs Walshaw

 - Mrs Bridgewater Mrs Heseltine
- Sept Tutors
- Teaching Staff
- Head of Year

CEOP

There is a Click CEOP button on the Shotton Hall website in order to provide children and young people with information, advice and a direct reporting route to CEOP. CLICK CEOP

Knowledge Organiser - E-Safety - Digital Footprint

A digital footprint is a funny term used to describe the traces of yourself that you leave online. It's called a footprint because, with every website you visit, you leave a trail or footprint showing that you've been there - much like the footprints you leave while playing outside in the snow.





Email

DELETE emails from people you don't know

NEVER SEND PHOTOGRAPHS to anyone you

Treat people as you would like to be treated

your computer

people you don't know

don't know personally

digital footorint)

Social media

- Remember: you should be 13+ to have social media accounts.
- Good for: Keeping in touch with people, sharing pictures and videos
- DO: Keep your privacy settings to friends only
- DON'T: give address, post photos you wouldn't want your family to see, locations on photos, mobile number, school, or pictures of your school uniform with logo

Your Digital Footprint



Online chatting and chat rooms

NEVER GIVE OUT PERSONAL INFORMATION (name, address or school). Il someone asks you fo nal information, tell a trusted

NEVER ARRANGE TO MEET SOMEONE you have only met online. People may not be who they

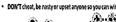
Your Digital Postprint

Internet Safety



Your Digital Footprint

- Online gaming
- You can play online games with lots of people, even people all around the
- You can make new gaming friends and chat to people
- . ALWAYS play games that are suitable for your age
- · ALWAYS use a nickname and NEVER give personal information
- . REMEMBER it is just a game, so behave in a sporting way







Your Digital Footprint







Your Digital Footprint

Instant messaging and messaging apps

- . A way to chat privately with friends and family
- You can use webcams or FaceTime to see the other person
- You have a contacts list
- BLOCK anyone you don't know who adds you to their contacts list
- NEVER GIVE OUT PERSONAL INFORMATION
- AVOID using a photo of yourself on your profile
- . NEVER USE A WEBCAM with people you don't know



music or films

Your Digital Footprint

File sharing

- File sharing is not a good way of downloading
- Files could contain viruses or nasty images
- Many files are illegally downloaded films or music (piracy)
- You can try YouTube, but ask a trusted adult first
- . If you want new music or videos, it's better to get them from a reputable site where you can pay for
- . Ask an adult to help you share files legally





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		(I live in)	je vis à	j'habite à (I live in)			
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J'ai (I have*)	∠ea	
onze (11) douze (12)	Year 7 French Sentence Builder 2 Age and Birthday	
ans (years)	rench Sentence E Age and Birthday	
et (and) aussi (also) en plus (in addition)	Builder 2	
mon anniversaire c'est le (my birthday is the)		
cinq (5) six (6) sept (7) huit (8) neuf (9) dix (10) onze (11) douze (12) treize (13) quatorze (14) quinze (15) seize (16) dix-sept (17) dix-neuf (19) vingt (20) vingt-deux (22) vingt-deux (22) vingt-trois (23) vingt-cinq (25) vingt-sept (27) vingt-sept (27) vingt-neuf (29) trente (30) trente (30)	deux (2) trois (3) quatre (4)	premier (first)
mars (March) avril (April) mai (May) juin (June) juillet (July) septembre (September) octobre (October) novembre (November) décembre (December)	février (February)	janvier

to the reader!	Indicates	Identifies	Implies	done.	
of other things too, but for now we will stick	Impacts	Illustrates	Ignites	Express an objection to what someone has said or	Protest
learn As you get older, you will begin to link to lots	Identifies	Hints	Highlights	Having or expressing devotion to and vigorous support for one's country.	Patriotic
Link to how the reader feels and what they	Generates Lir	Forces	Exposes	idea of a particular type of person or thing.	
_	Explores	Emphasises	Exaggerates	A widely held but fixed and oversimplified image or	Stereotype
Explode Where you put all of your ideas about words,	ľ	Lillalices	Filcodiages	What comes to mind when you think of a word	Connotations
Might group quotations	Fetahlichae	Enhances	Encourages	ty between.	
Evidence A quotation, precise and embedded	0,	Confirms	Concludes	Estimate, measure, or note the similarity or dissimilari-	Compare
idea.		Alludes to	Allows	reasoning rather than from explicit statements.	
An opening sentence which introduces your	Affects	Advances	Achieves	Deduce or conclude (something) from evidence and	Infer
Point Answers the question		This Quotation/ Reference	This Q	Tier 2 and 3 Vocabulary	
PEEL Paragraphs	Text) n Brodie)	Carol Ann Duffy (<i>Text</i>) Muriel Spark (<i>Jean Brodie</i>)		seen before are challenged!	evolving)
speech are reproduced in speech marks		Events)	l' conventions we've	have to always exist in postmodern literature! The 'normal' conventions we've	(1950—Still
		Lemony Snicket (Unfortunate	ty! Meaning does not	Postmodern challenges our view about certainty and reality! Meaning does not	Postmodernism
questions	q			world.	
Rhetorical Questions which don't require an answer	R		estion the way of the	pessimistic and unstable. They are often confused and question the way of the	
	fic		ks which are chaotic,	had vanished forever. Modernism is characterised by works which are chaotic,	(1920—1940)
Semantic A group of words which are associated in		' Virginia Woolf (<i>Mrs Dalloway</i>)	nse that the 'old world'	After World War 1, amidst shock and grief, there was a sense that the 'old world'	Modernism
Stanza A paragraph in a poem.	St			the hopes and disappointments of an entire generation.	
Rhythm A repetitive beat.		Matter?)	reparable effects, but	voice, illuminating not only the war's tragedies and their irreparable effects, but	
Rhyme Words that have the same sound.			ecame a collective	First World War poets – many of whom lost their lives – became a collective	1918)
cation human.		Jessie Pope (Who's for the	which the atmosphere	The First World War inspired profound poetry – words in which the atmosphere	First World War
			me poorer!	stronger than ever – the rich got richer and the poor became poorer!	
-	5		ant class divides were	the world as we know it today; heavy industrialisation meant class divides were	
Metaphor Something is presented as something else.	-	7)	ciences, which shaped	trial power; revolutionary breakthroughs in the arts and sciences, which shaped	
		Robert Browning (The Laborato-	e the first global indus-	nation. The period saw: the British Empire grow to become the first global indus	
Simile Something is presented as like something		George Eliot (Silas Marner)	as figurehead for the	vear reign of Queen Victoria (1837-1901). Victoria served as figurehead for the	1901)
	(1)	Charles Dickons (Oliver Twict)	mairo capac tho 60	The Victorian or of the United Victorian and its outrops	Vi atarian (1027
		Percy Shelley (I ou		4. Celebiation of the marination	
Preposi- Describes the location of something, e.g. the	_	John Keats (<i>La Belle Dame sans</i>		3.Awe of and respect for nature.	
quickly).	oison Tree)	William Blake (A Poison Tree)		2.Strong sense, emotions and feelings.	
ly), adjective (very pretty) or adverb (very	cloud)	dered Lonely as a Cloud)		1.Interest in the common man and childhood.	(1770—1850)
Adverb Gives information about a verb (jump quick-	/an-	William Wordsworth (/ Wan-		Romanticism has 5 key elements	Romanticism
Adjective Describes a noun (happy girl, grey wall).				The Renaissance was seen as a "rebirth" of that learning.	
situation (be) or change (evolve).			e and Rome.	ancient times, in particular, the learning of Ancient Greece and Rome.	
Verb Describes an action (jump), event (happe-		Aphra Behn (The Rover)	est in the learning of	name because at that time, people started taking an interest in the learning of	(1550—1660)
		John Milton (Paradise Lost),	riod is called by this	"Renaissance" is a French word meaning "rebirth". The period is called by this	Renaissance
Noun Identifies a person (girl), thing	2	Pardoner's Tale)	nd religion."	felt people in this time period were mired in "barbarism and religion."	1500)
Word Classes		Chaucer (The	orian Edward Gibbon	Also known as the Middle Ages, 18th-century English historian Edward Gibbon	Medieval (476—
17 English Language An			is	Literary Time Periods	

4r7 Graham - Introduction to Grafish

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Agitation es. Galvanise Inequality hen Unprecedented Condemnase. Simile starter in. Subordinate clausestarter starter Adverb starter Adverb starter	beginning of words Something proven to be true. A view/judgement on something. Repeating something to emphasises force. Words/phrases which appeal to the A piece of data (number) used to prough the A piece of data (number) used to prough the A question which does not require a	Facts Opinion Repetition Emotive Language Statistics Three Rule Rhetorical Q
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" se.	The eccurrence of the came cound /	Alliteration
Agitation es. Galvanise d at Inequality hen Unprecedented Condemnase. Simile starter 5.		
Agitation Galvanise Galvanise Inequality Conprecedented ed Condemna- Simila starter	Giving human traits to something non-human	Personification
Agitation Galvanise Inequality Unprecedented ed Condemnation 5.	When the writer provides mental "pictures"	lmagery
7 =	Something is presented as something else	Metaphor
7 7	Something is presented as like something else.	Simile
ss.	3. Language Techniques	
s. s.	na."	
	she goes to the shop, she likes to buy a bana-	
	least one dependent clause. "Sometimes, when	complex
	"She went to the shop and bought a banana"	Complex
	A sentence with multiple independent clauses	Compound
	"She went to the shop."	
Agitation	A sentence with one independent clause	Simple
	2. Sentence Structures	
	pen was found under the table.	
, e.g. the Abyss	Describes the location of something, e.g. the	Preposition
ery quickly).	adjective (very pretty) or adverb (very quickly).	Adverb
(Alda)	Charles a Hour (Happy Sir, Stey wail)	Adjective
Oppression	Situation (be) of change (evolve).	A di la di
happen),	Describes an action (jump), event (happen),	Verb
	Identifies a person (girl), thing (wall), idea (luckiness) or state (anger).	Noun
Nietolic	1. Word Classes	
Dho+oric	Language Subject Terminology	

	4. Tier 2 Vocab		
Rhetoric	Art of using language persuasively in written or spoken form.	4 English	Other Writing Skills (LAM 1. 2.) 6. How to structure
Languish	To be or become feeble or weak.	1. Opening	Make your viewpoint clear and engage the
Oppression	Prolonged or unfair treatment of a group of people.	Paragraph	audience (you could use an anecdote to do this).
Minute	Very small; of small importance.	2. Main part of the text	Explain one reason why you agree/ disagree with the statement.
Abyss	A deep or seemingly bottomless pit.		
Agitation	Situation in which people pro- test or argue, especially in pub-	3. Main part of the text	Explain another reason why you agree/ disagree with the statement.
	lic, in order to achieve a particu-		
Charles	Shock or excite (sempone) into	+. Coliciasion	viewpoint is. Hammer vour message home.
Galvailise	taking action.		
Inequality	When people are not treated		7. Things to consider
	the same.	Audience	Consider who have you been asked to
ed ed	ואכייכו מטוום טו אווטאוו ביכוטו כ.		write for and how can your language choices reflect this
Condemna- tion	Very strong disapproval.	Format	In what style have you been asked to
5.	Sentence Starters	Register	How formal or informal should your re-
Simile starter	Like a dulled mirror,		sponse be?
	society ignores	Clear View- point	Have a backbone argument that you are continually referring to throughout.
2 Adjective starter	young people believe		8. Sophisticated Punctuation
- - -		Brackets ()	To contain extra information
starter	sential, it must be con-	Semi-colon;	To link two main clauses which link in
	sidered		my coat.
Verb starter	Arguing this point	Comma ,	To separate a main clause and subordinate clause
Adverb starter	Surely, it is realised	Colon :	To introduce a list or an idea. The worst thing about school: the homework.
		Dash—	To add further information in a sentence.
Anaphora	It couldn't be denied it was beautiful. It could-	X X	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	n't be denied it was		Money of the treatment

moments in thickery