

Thomas Estley Community College

Year 7 Summer Term

Knowledge Organiser



What are Knowledge Organisers?

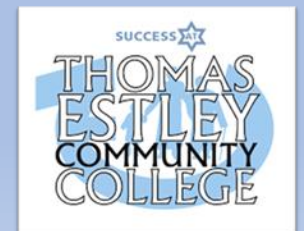
A knowledge organiser is an easy way that each subject can summarise the most important information. Each subject section will include key terms, short explanations, glossary words, diagrams etc making it clear to the student as to what is essential to learn. Each grid has an overall theme and these vary according to the subject being taught.

It will be the students responsibility to keep the knowledge organisers safe and refer to them over the whole academic year.

How will these be used at Thomas Estley?

At Key stage 3, you will be given a knowledge organiser each term. You need to keep these safe in your learning packs that you were provided with at the start of the academic year.

Your subject teachers will use these in a variety of ways, for both class work, remote learning opportunities and homework. They will be used to help with revision for class quizzes and retrieval practice activities. They will also be used for flip learning activities, where subject teachers will ask you to learn some information and then go in to it in more detail in class.



Revision Tips and Tricks!



Record It

Record yourself on your phone or tablet reading out the information. These can be listened to as many times as you want!



Teach it!

Teach someone your key facts and then get them to test you, or even test them!



Flash Cards

Write the key word or date on one side and the explanation on the other. Test your memory by asking someone to quiz you on either side.

Hide and Seek

Read through your knowledge organiser, put it down and try and write out as much as you can remember. Then keep adding to it until its full!



Back to front

Write down the answers and then write out what the questions the teacher may ask to get those answers.



Sketch it

Draw pictures to represent each of the facts or dates. It could be a simple drawing or something that reminds you of the answer.

Post its

Using a pack of post-it notes, write out as many of the keywords or dates as you can remember in only 1 minute!



Practice!

Some find they remember by simply writing the facts over and over again.

Read Aloud

Simply speak the facts and dates out loud as you're reading the Knowledge Organiser. Even try to act out some of the facts – it really helps you remember!



Geography Knowledge Organiser

Year 7: Water World

Key Word	Definition
Water Cycle	The never ending movement of water between the ocean, atmosphere and land.
Water Footprint	The amount of fresh water used in the production or supply of the goods and services used by a particular person or group.
Drought	A prolonged period of unusually low rainfall, leading to a shortage of water.
Agriculture	Practices linked to farming e.g. growing crops.
Surplus	Having too much of something (more than you need).
Deficit	Not having enough of something.
Coral Reefs	A ridge of rock in the sea formed by the growth and deposition of coral.
Coral Bleaching	When water is too warm, corals will expel the algae living in their tissues causing the coral to turn completely white.
Ocean Acidification	Decrease in the pH of the Earth's oceans caused by the uptake of carbon dioxide from the atmosphere.
Ocean Currents	The continuous, predictable, directional movement of seawater driven by gravity, wind and water density.
Fieldwork	Undertaking tasks outside of the classroom, this may be local or in another country!

Useful websites...

<https://www.bbc.co.uk/bitesize/guides/zgx382p/revision/1>

The Hydrologic Cycle

Condensation
Evaporation
Evapotranspiration
Precipitation
Snowmelt and Runoff
Infiltration
Plant Uptake

Geographical enquiry

Introduction and planning
Methods and data collection
Data presentation
Data analysis
Conclusions
Evaluation

Arctic Ocean
Atlantic Ocean
Pacific Ocean
Indian Ocean
Southern Ocean

CORAL BLEACHING

Have you ever wondered how a coral becomes bleached?

REDESIGN

REFUSE

REDUCE

REPAIR

REUSE

RECYCLE

DISPOSAL

HEALTHY CORAL

1 Coral and algae depend on each other to survive.

STRESSED CORAL

2 If stressed, algae leaves the coral.

BLEACHED CORAL

3 Coral is left bleached and vulnerable.

Coral has a symbiotic relationship with microscopic algae called zooxanthellae that live in their tissues. These algae are the coral's primary food source and give them their color.

When the symbiotic relationship becomes stressed due to increased ocean temperatures or pollution, the algae leave the coral's tissue.

Without the algae, the coral loses its major source of food, turns white or very pale, and is more susceptible to disease.

Year 7 Networks

A **network** is where devices are connected together usually by cable or WiFi. This could be a few computers in a room, many computers in a building or lots of computers across the world.



Wired and Wireless data transmission

A computer network can be either wired or wireless.

- Wired networks send data along cables.
- Wireless networks send data through the air using radio waves.

Bandwidth—Bandwidth is the amount of data that can be moved from one point to another in a given time. Higher bandwidth = more data per second



Bandwidth is measured in bits per second

A bit is the smallest unit of data
Data transfer rates are now so good that bandwidth is usually measured in Megabits per second (Mbps)
1Mb—1 million bits

Internet services

There are a range of services provided by the internet. These include:

- World Wide Web
- Email
- Online gaming
- Instant messaging
- Voice over IP (VoIP) – audio calls
- Internet of Things (IoT)
- Media streaming (e.g. watching Netflix online)

The rules for each service are different. As a result, a different protocol is used.

HTTP—HyperText Transfer Protocol—used so that data can be understood when sent between web browsers and servers.

HTTPS—is the secure version of HTTP where data sent is encrypted.

Key Words

bandwidth	Amount of data that can be moved from one point to another in a given time.
buffering	Data arriving slower than it is being processed
internet	A worldwide network of computers
Internet of Things (IoT)	Takes everyday 'things' and connects them to the Internet eg smart light bulb, fridge, heating etc
IP address	A unique address for every device on the internet
packet	Networks send/receive messages in units called packets
protocol	All methods of communication need rules in place in order to pass on the message successfully. These sets of rules are called 'protocols'
Search engine	A website that allows user to look up information on WWW e.g. Bing, Google etc
Web browser	Piece of software(code) used to view information on the Internet
WWW	Part of the Internet that contains websites and webpages. NOT the same as the Internet.

Network Hardware—physical equipment required to set up a network

Hub—Connects a number of computers together. Ports allow cables to be plugged in from each connected computer.

Router—Used to connect two separate networks together across the internet

Server—A powerful computer which provides services to a network

Cable—Used to connect different devices together. They are often made up of a number of wires.

Computing - Programming Part 1

A computer will take inputs (this might be automatic or via human input), process the input and then produce the output. For example when you use a keyboard and mouse, the mouse is used to input data into the computer to be processed and the output is visible on the computer monitor.

Variables are used to store data for use in a program. They can store lots of different types of data such as names and scores.

So set variable score to equal 0

If I score a goal then increase variable by 1

Operators

Comparison operators allow us to compare using =, <, >.

Logical operators use AND, OR, NOT

A **selection** statement in programming allows a computer to **evaluate** an **expression** to **'true'** or **'false'** and then perform an action depending on the outcome.

If 'character has a sword' is true:

Remove from game

Else:

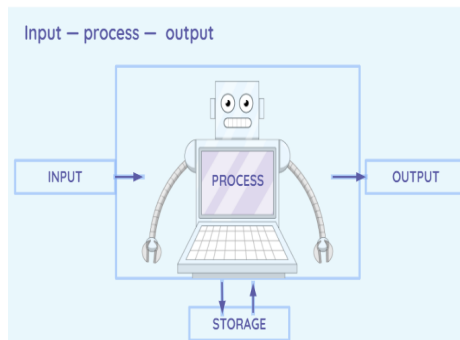
Keep in the game



Debugging is the process of finding an error in your code and taking steps to fix the problem.

Count controlled iteration will execute the commands a set number of times
Example: "perform 200 star jumps"

Condition-controlled iteration will execute the commands until the condition you set is no longer being met
Example: "perform star jumps until 3pm"



Scratch is a block based programming language. We can use predefined code in blocks to create algorithms.

Key Words

abstraction	Identify the important aspects to start with
algorithm	Precise sequence of instructions
Computational thinking	Solving problems with or without a computer
debugging	Looking at where a program might have errors or can be improved
blocks	Scratch bricks that we can use to code algorithms
decomposition	Breaking down a problem into smaller parts
execute	A computer precisely runs through the instructions
iteration	Doing the same thing more than once
selection	Making choices (eg if else)
sequence	Running instructions in order
variable	Data being stored by the computer

We use algorithms in every day life, for example, an algorithm to get to school, to make a cup of tea, to make a pizza, to order a takeaway. These are just precise sequences of instructions.

Sequence, selection and **iteration** are all processes. In order for computers to perform tasks there is more that is needed. For example a computer will take an **input** (this might be automatic or via human input) which the computer will then **process** and the **output** will be visible on the computer monitor.

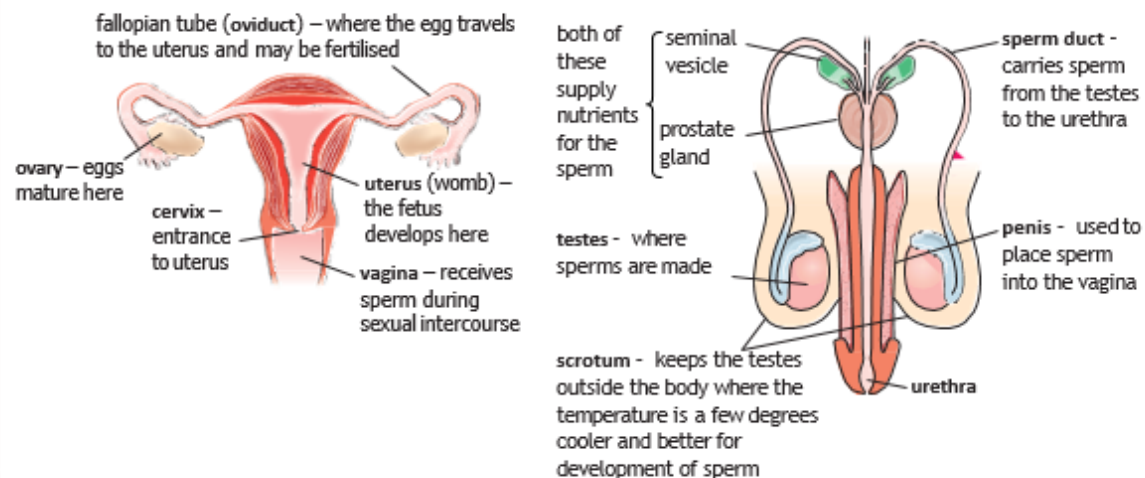
Variation

- The differences in characteristics of living things is known as **variation**
- There is a large amount of variation between different **species**, but within species many more characteristics are shared
- Even though two organisms may look the same, they will always have variation between them

Inherited variation	Environmental variation
<ul style="list-style-type: none"> Is anything that comes directly from your parents, anything that you inherit Examples can include lobe less or lobed ear lobes and eye colour 	<ul style="list-style-type: none"> Is any type of variation that is caused by your surroundings Factors that can cause environmental variation include diet, education and lifestyle

- Environmental factors can also impact inherited factors, for example a poor diet can affect height or your exposure to the sun can affect skin tone
- Characteristics which are inherited and not affected by environmental variation include natural eye colour, blood group and genetic diseases

Reproductive systems

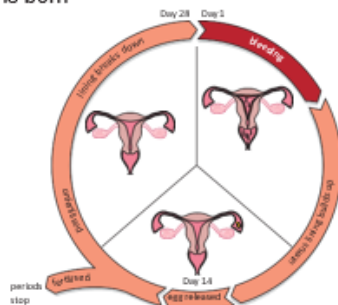


Adolescence

- Adolescence** is the process in which a child changes into an adult, it involves both physical and emotional changes
- The physical changes alone in this time are known as **puberty**, these are caused by **sex hormones**

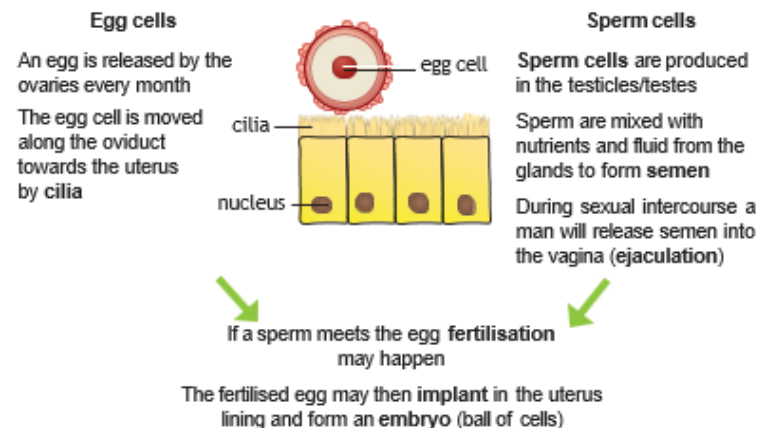
The menstrual cycle

- The **menstrual cycle** is the process in which an egg is released from an ovary and leaves through the vagina
- Day 1: blood from the uterus lining leaves through the vagina, which is known as a **period**
- Day 5: the bleeding stops and the uterus lining starts to re-grow
- Day 14: an egg is released from one of the ovaries during **ovulation**
- If the egg is **fertilised** than the menstrual cycle stops until the baby is born



Fertilisation, implantation and gestation

- Egg cells and sperm cells are also called **gametes**, and each contains half the genetic information needed to form a complete organism.



- During **gestation** the developing **fetus** needs nutrients from the mother, these are passed through the **placenta** which is connected to the fetus by the **umbilical cord**
 - Nutrients are passed from the mother to the baby and waste products are passed back from the baby to the mother
 - The baby is protected from bumps to the mother by the **amniotic sac** which acts as a shock absorber
- | | | |
|------------|--|--|
| Just a dot | | 1 week – cells beginning to specialise |
| 3 mm long | | 4 weeks – spine and brain forming, heart beating |
| 3 cm long | | 9 weeks – tiny movements, lips and cheeks sense touch, eyes and ears forming |
| 7 cm long | | 12 weeks – fetus uses its muscles to kick, suck, swallow, and practise breathing |

B2

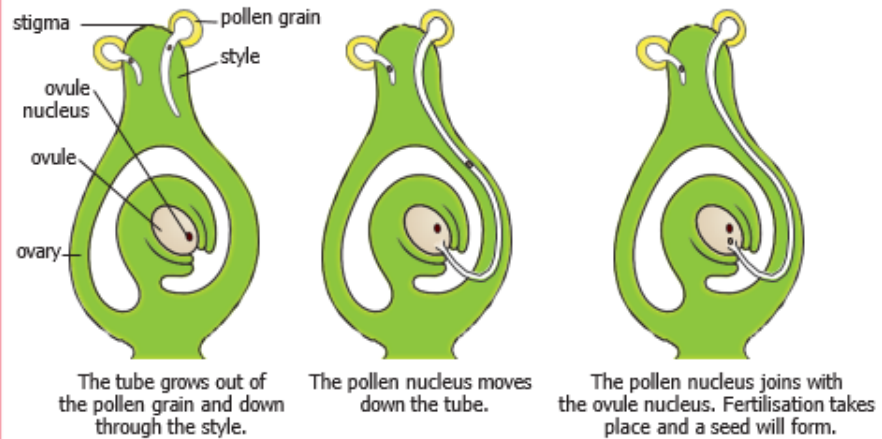
Reproduction
Knowledge organiser
page 1

Activate
Question • Progress • Succeed

Pollination and fertilisation

Pollination is the **fertilisation** of the ovule, the point at which the pollen is transferred to the ovule from the anther to the stigma, there are two types of pollination

- Cross pollination is between two different types of plant
- Self pollination happens within the same plant



Germination is the process in which the **seed** begins to grow, for this to occur the seed needs:

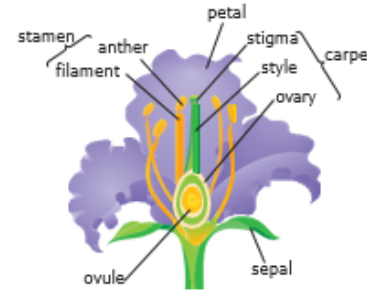
- Water to allow the seed to swell and grow and for the embryo to start growing
- Oxygen for that the cell can start respiring to release energy for germination
- Warmth to allow the chemical reactions to start to occur within the seed

Parts of a flower

Stamen

Male part of the flower

- The **anther** produces **pollen**
- The **filament** holds up the anther



Carpel

Female part of the flower

- The **stigma** is sticky to catch grains of pollen
- The **style** holds up the stigma
- The **ovary** contains **ovules**

Adaptations

- **Adaptations** are characteristics which organisms have developed to best survive in their surroundings
- Organisms with the best suited adaptations can breed and pass these on
- Those who are not best adapted will die out and not be able to pass on their genes

Key terms

Make sure you can write definitions for these key terms.

Adaptation Adolescence Amniotic sac Anther Carpel Cervix Cilia Egg cell Embryo Environmental variation Fertilisation Fetus Gamete Germination Gestation Implantation Inherited variation Menstrual cycle Ovary Ovule Oviduct Ovulation Penis Petal Period Placenta Pollen Pollination Puberty Reproductive system Scrotum Semen Seed Sepal Sex hormones Species Sperm cell Sperm duct Stamen Style Testicles Umbilical cord Urethra Uterus Vagina Variation

B2

Reproduction

Knowledge organiser – page 2

Activate
Question • Progress • Succeed

Chemical reactions

- A **chemical** reaction is a change in which atoms are rearranged to make new substances
- A **reversible** reaction is one where the products can react to get back the substances which you started with, most chemical reactions are not reversible
- You can look for signs that a chemical reaction has taken place such as flames, smells, heat change, a loud bang or gentle fizz

Acids and alkalis

- Acids** and **alkalis** are the chemical opposites of one another
- Both acids and alkalis can be **corrosive** and **irritants**

To see whether a substance is an acid or an alkali, we can use an **indicator**. Indicators show how acidic or how alkaline a solution is by showing its position on the **pH scale**, one example of this is **universal indicator**

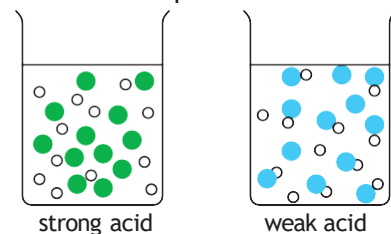
- If the solution has a pH value of 1–6 it is **acidic**
- If the solution has a pH value of 8–14 it is **alkaline**
- If the solution has a pH value of 7 it is known as **neutral**

Another example of an indicator is red & blue **litmus paper**

Strong acid			Weak acid		Neutral	Weak alkali		Strong alkali					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
sulfuric acid, nitric acid, hydrochloric acid	lemon juice cola drinks	vinegar		saliva tea		water blood (7.4)		toothpaste milk of magnesia				drain cleaner	sodium hydroxide potassium hydroxide

Acid strength

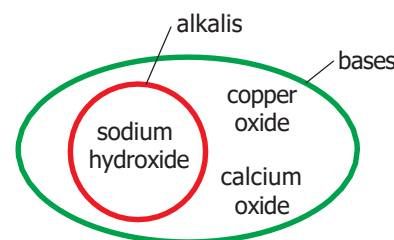
- The strength of an acid depends on how much of the acid has broken apart when it has dissolved in water
- Hydrogen chloride dissolves in water to form hydrochloric acid, this is a **strong acid** as all of the particles split up
- A **weak acid** will have particles that do not all split up



- The **concentration** of the acid is the amount of acid which has dissolved in 1 litre of water
- The more concentrated the acid, the lower the pH

Neutralisation

- Neutralisation** reactions are any reaction in which acids react with a **base** to cancel out the effect of the acid
- These reactions form a neutral solution with a pH of seven
- A **base** is any substance which neutralises an acid
- An alkali is a base which has been dissolved in water

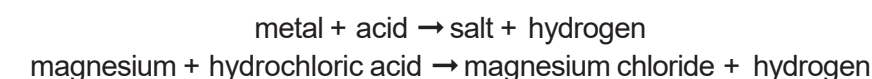


Salts

- Salts** are substances which are formed when an acid reacts with a metal or metal compound
- Different acids form different types of salts:
- Hydrochloric acids form chloride
 - Sulphuric acids form sulphates
 - Nitric acids form nitrates

Metal reactions and gas tests

When a metal reacts with an acid it will produce a salt and hydrogen gas, the fizzing that you see is the hydrogen gas being given off

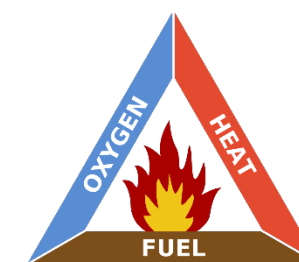


As most gases are colourless and odourless, it is sometimes necessary to test a gas to see what it is. This helps you to understand what has happened during a reaction.

- To test to see if the gas is hydrogen: put a lit spill in the end of the test tube containing the gas. If there is a squeaky pop sound then the gas is hydrogen.
- The sound is caused by the hydrogen igniting and creating a miniature explosion.
- To test to see if the gas is oxygen: Blow out a lit spill so that the end glows. Put the glowing spill into the test tube containing the gas. If the spill reignites then the gas is oxygen
- To test to see if the gas is carbon dioxide: Put a lit spill into the test tube containing the gas. If the spill is extinguished then the gas **could** be carbon dioxide.
- To confirm the gas should be mixed with lime water (*not from the fruit!*). If the lime water turns a cloudy white then the gas is carbon dioxide

Combustion

- When substances burn in oxygen a chemical reaction called combustion takes place.



- Combustion can only take place when there is a fuel to burn, heat to start the reaction and plenty of oxygen. The product of the reaction is an oxide.
- carbon + oxygen → carbon dioxide
- copper + oxygen → copper oxide
- iron + oxygen → iron oxide
- magnesium + oxygen → magnesium oxide

Key terms

Make sure you can write definitions for these key terms.

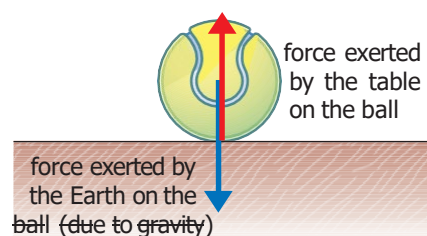
acid acidic alkali alkaline base chemical chemical reaction concentration corrosive displacement hydroxide indicator irritant neutral concentrated
 neutralisation oxide oxidation pH scale reversible reactivity salt strong acid universal indicator weak acid combustion lime water

What is a force?

- A **force** can be a **push** or a **pull**
- A force is measured in **Newtons (N)**
- We measure forces with a **newton meter**
- Forces explain why objects will move, change direction and change speed

- Forces always act in pairs, we call these **interaction pairs**

e.g. the tennis ball exerts a downward force of **weight** onto the table, the table exerts an equal and opposite reaction force onto the ball



Types of forces

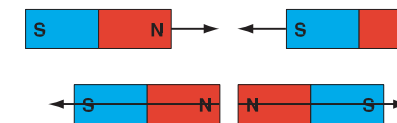
- Contact forces** act when two objects are physically touching
- Air resistance** and **friction** are examples of contact forces
- Non-contact forces** act when two objects are physically separated (not touching)
- Examples of non-contact forces include **gravitational force** and magnetic forces
- We call the region where an object experiences a non-contact force a **field**, examples of these include gravitational fields and magnetic fields

Gravity

- Gravity** is a non-contact force that acts between two objects
- Gravitational force** pulls you back to Earth when you jump
- The size of the gravitational force depends on the mass of the two objects and how far apart they are
- Weight** is the downward force caused by gravity acting upon the mass of an object, it is measured in Newtons (N)
- Mass** is the amount of matter within an object, whereas weight is the downward force of the object, we measure mass in **kilograms**
- We calculate weight with the equation:
$$\text{weight (N)} = \text{mass (kg)} \times \text{gravitational field strength (N/kg)}$$
- The value of the gravitational field strength can vary, so although a person's mass would be the same on different planets, their weight would not be

Magnets

- A **magnet** has two poles, a north and a south pole
- North poles **attract** south poles
- South poles **attract** north poles
- South poles **repel** south poles
- North poles **repel** north poles

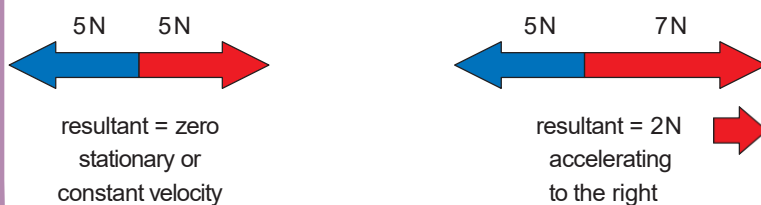


- Magnetic materials** will experience a magnetic force when placed near a magnet, this is a type of non-contact force as the materials do not have to touch for the force to be apparent
- The three magnetic metals are iron, nickel and cobalt

Balanced and unbalanced forces

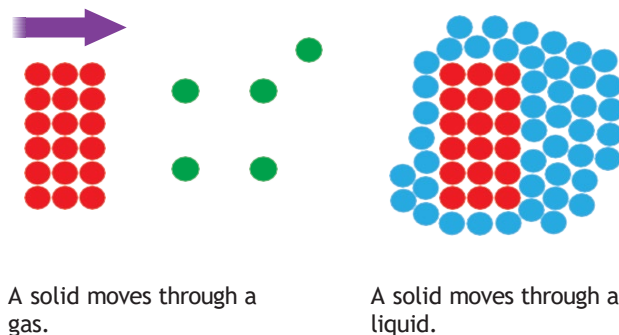
- When forces acting on an object are the same size, but acting in different directions, we say that they are **balanced**
- When forces are balanced, the object is either not moving (stationary) or moving at a constant **speed**

- When the two forces acting on an object are not the same size, we say that the forces are **unbalanced**
- When forces are **unbalanced**, the object will either be in **acceleration** or **deceleration**
- The **resultant force** is the difference between the two unbalanced forces



Friction and drag

- Friction** is a force which will slow down a moving object due to two surfaces rubbing on one another
- The greater the friction, the faster an object will slow down, or the greater the force it will need to overcome the force of friction. For example, it is easier to push a block on ice than on concrete, as the ice is smoother and causes less friction
- When an object is moving through a fluid, either liquid or gas, the force which slows it down is known as **drag**
- The fluid particles will collide with the moving object and slow it down, meaning that more force is needed to overcome this
- Both drag and friction are **contact forces** as the two surfaces in friction, and the object and fluid particles in drag, come into contact with one another
- Both drag and friction are forces so they are measured in **Newtons (N)**

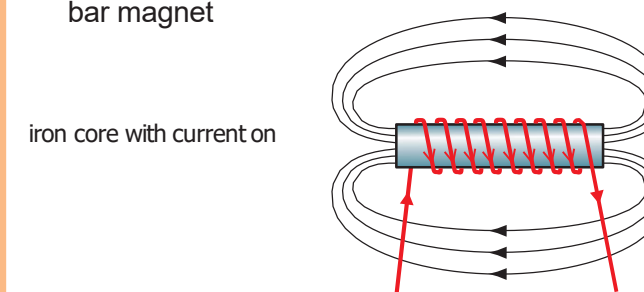


A solid moves through a gas.

A solid moves through a liquid.

Electromagnets

- Electromagnets** are made by wrapping a coil of wire around a magnetic **core**
- Electromagnets only work when electricity is flowing through the coil, which means that they can be turned on and off
- Electromagnets are also stronger than **permanent** magnets
- The electromagnet will produce the same magnetic field shape as a bar magnet



iron core with current on

- You can increase the strength of an electromagnet by:
 - Increasing the number of turns on the coil around the core of the electromagnet
 - Increasing the current which is flowing through the coil of wire
 - Using a more magnetic material for the core, e.g. iron rather than aluminium

Key terms

Make sure you can write definitions for these key terms.

air resistance, atmospheric pressure, contact force, drag, equilibrium, extension, friction, linear relationship, moment, newton, incompressible, stress, resultant force

¿Tienes mascotas?

(Do you have pets?)

Tengo <i>I have</i>	un caballo	<i>A horse</i>	es <i>It is</i>	pequeño/a	<i>small</i>
	un conejo	<i>A rabbit</i>		grande	<i>big</i>
No tengo <i>I dont have</i>	un gato	<i>A cat</i>		amarillo/a	<i>yellow</i>
	un hámster	<i>A hamster</i>		azul	<i>blue</i>
Tiene <i>He/she has</i>	un loro	<i>A parrot</i>		blanco/a	<i>white</i>
	un pájaro	<i>A bird</i>		naranja	<i>orange</i>
	un perro	<i>A dog</i>		rojo/a	<i>red</i>
Me gustaría tener <i>I would like to have</i>	un pez	<i>A fish</i>		verde	<i>green</i>
	un ratón	<i>A mouse</i>		aburrido/a	<i>boring</i>
	No me gustaría tener <i>I wouldn't like to have</i>	una araña		<i>A spider</i>	bonito/a
una cobaya		<i>A guinea pig</i>		divertido/a	<i>fun</i>
Antes tenía <i>Before I had...</i>		una rata		<i>A rat</i>	feo/a
	una serpiente	<i>A snake</i>	gracioso/a	<i>funny</i>	
	una tortuga	<i>A tortoise</i>	ruidoso/a	<i>noisy</i>	
			sería <i>It would be</i>		
			era <i>It was</i>		



Key people

Monarchs:

Henry II (reigned 1154-1189)
King of England from 1154 until his death in 1189. He believed the Church had too much power, so challenged this. Responsible for the death of Thomas Becket.

King John (reigned 1199-1216)
The second son of Henry II. John was very unpopular. In 1215, John was made to sign the Magna Carta by his barons – which limited his power.

Henry III (reigned 1216–1272)
The son of King John. He tried to break the terms of Magna Carta, which led to a rebellion. He was forced to agree to the setting up of a Parliament.

Churchmen and Barons

Thomas Becket
Became Archbishop of Canterbury in 1162. Before this, was good friends with Henry II, however the two men clashed over their different ideas about the role of the Church. He was killed in 1170.

Simon de Montfort
Known also as 'The Father of Parliament'. One of the leading barons in England. Captured Henry III at Battle of Lewes and called a Parliament in 1265

Key terms

The Church. Means all of Christianity in England, not just one building. This means the Catholic Church in Rome in the Medieval Period.

Catholicism A type of Christianity led by the Pope in Rome.

Excommunicate The Pope officially exclude (someone) from participation in the sacraments and services of the Christian Church

Flagellation. The act of whipping oneself to say sorry to God.

Magna Carta A document signed by King John which sets out in law the power of the English king.

Monasteries A building where monks live and work together. Henry VIII destroyed these during the Dissolution.

Martyr. Someone who dies standing up for their religion. They're celebrated by their religion.

Parliament An elected group who a monarch consults in the running of the country.

Priest A religious leader in charge of performing religious ceremonies in churches.

Key events

The Medieval Church

Churches were important as meeting places – most people went to Church at least once a week. In 1066, there were around 1000 monks. By 1300, there were over 12,000 monks in England. Ideas about Heaven/Hell were very important to people. People lived their lives following the Church's rules so they'd go to heaven when they died. Hospitals were run by priests not doctors – people used prayer to cure illness not medicine. This included Black Death, where people whipped themselves to say sorry to God.

Henry II challenged the power of the Church.

Henry II tried to limit to power of the Church by passing the Constitutions of Clarendon. Archbishop Thomas Becket was very unhappy about this, leading to the two men clashing. Due to this, Henry II supposedly organised for Becket to be killed. Henry was punished by the Church for this. He had to give up on the Constitutions of Clarendon and was whipped by monks. Thomas Becket was canonized and became a saint.

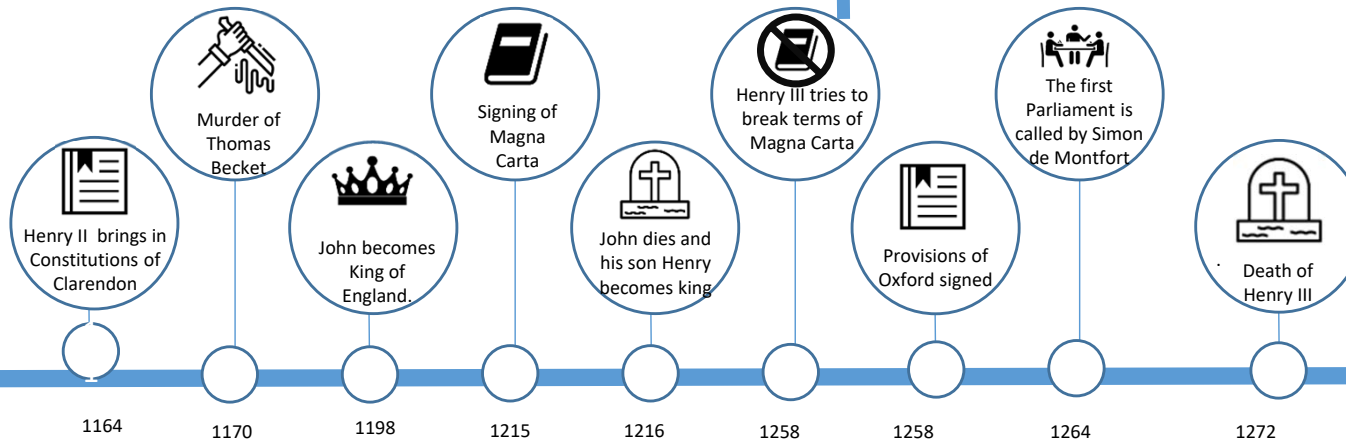
King John and Magna Carta

King John was very unpopular in England. He charged high taxes, offended his barons and tried to interfere in religious matters. John was excommunicated by the Pope which stopped all religious services in England for 7 years. His Baron's made John sign Magna Carta (the Great Charter) setting out the rights that they had.

Henry III, Simon de Montfort and Parliament

John's son; Henry III, also had arguments with his baron's. Henry tried to raise taxes to fight in the Pope's Holy Wars, often without asking his barons. One of his barons, Simon de Montfort, forced Henry to sign the Provisions of Oxford. When Henry broke the Provisions of Oxford, de Montfort led a rebellion against the king. Henry was captured and Simon de Montfort called England's first parliament consisting of 2 commoners from each region. This became known as the House of Commons.

Timeline



UNIT 6 (Part 2/2)

Describing my family and saying why I like/dislike them

<p>Dans ma famille j'ai <i>[in my family I have...]</i></p> <p>Dans ma famille il y a quatre personnes <i>[there are four persons in my family...]</i></p>	<p>mon grand-père, Claude <i>[my grandfather Claude]</i></p> <p>mon père, Georges <i>[my father Georges]</i></p> <p>mon oncle, Paul <i>[my uncle Paul]</i></p> <p>mon petit/grand frère, Olivier <i>[my little/big brother Olivier]</i></p> <p>mon cousin, Tristan <i>[my -boy- cousin Tristan]</i></p>	<p style="text-align: right;">MASC</p> <p>J'aime "mon _____" car il est... <i>[I like my _____ because he is...]</i></p> <p>"Mon père est très/assez..." <i>[My dad is very/quite...]</i></p> <p>"Mon père" est aussi un peu... <i>[My dad is also a bit...]</i></p>	<p>amusant <i>[fun]</i></p> <p>beau <i>[handsome]</i></p> <p>fort <i>[strong]</i></p> <p>généreux <i>[generous]</i></p> <p>grand <i>[tall]</i></p> <p>gros <i>[fat]</i></p> <p>honnête <i>[honest]</i></p> <p>intelligent <i>[clever]</i></p> <p>méchant <i>[mean]</i></p> <p>mince <i>[slim]</i></p> <p>petit <i>[short]</i></p> <p>sympa <i>[nice/kind]</i></p> <p>timide <i>[shy]</i></p> <p>têtu <i>[stubborn]</i></p>
<p>Je m'entends bien avec... <i>[I get along well with...]</i></p> <p>Je m'entends mal avec... <i>[I get along badly with...]</i></p>	<p>ma grand-mère, Thérèse <i>[my grandmother Thérèse]</i></p> <p>ma mère, Eliane <i>[my mother Eliane]</i></p> <p>ma tante, Françoise <i>[my aunt Françoise]</i></p> <p>ma petite/grande sœur, Léa <i>[my little/big sister Léa]</i></p> <p>ma cousine, Claire <i>[my -girl- cousin Claire]</i></p>	<p style="text-align: right;">FEM</p> <p>J'aime "ma _____" car elle est... <i>[I like my _____ because she is...]</i></p> <p>"Ma mère" est très/assez... <i>[My mum is very/quite ...]</i></p> <p>"Ma mère" est aussi un peu... <i>[My mum is also a bit ...]</i></p>	<p>amusante <i>[fun]</i></p> <p>belle <i>[pretty]</i></p> <p>forte <i>[strong]</i></p> <p>généreuse <i>[generous]</i></p> <p>grande <i>[tall]</i></p> <p>grosse <i>[fat]</i></p> <p>honnête <i>[honest]</i></p> <p>intelligente <i>[clever]</i></p> <p>méchante <i>[mean]</i></p> <p>mince <i>[slim]</i></p> <p>petite <i>[short]</i></p> <p>sympa <i>[nice/kind]</i></p> <p>timide <i>[shy]</i></p> <p>têtue <i>[stubborn]</i></p>

UNIT 7

Talking about pets

<p>A la maison, j'ai Chez moi, j'ai <i>[At home I have]</i></p> <p>Je n'ai pas de <i>[I don't have]</i></p> <p>Mon ami Denis a... <i>[My friend Denis has...]</i></p>	<p>un canard <i>[a duck]</i></p> <p>un chat <i>[a cat]</i></p> <p>un cheval <i>[a horse]</i></p> <p>un chien <i>[a dog]</i></p> <p>un cochon d'Inde <i>[a guinea pig]</i></p> <p>un hamster <i>[a hamster]</i></p> <p>un lapin <i>[a rabbit]</i></p> <p>un oiseau <i>[a bird]</i></p> <p>un perroquet <i>[a parrot]</i></p> <p>un poisson <i>[a fish]</i></p> <p>un serpent <i>[a snake]</i></p>	<p>qui s'appelle Bronco <i>[that is called Bronco]</i></p> <p>il est <i>[he/it is]</i></p>	<p>petit <i>[small]</i> grand <i>[big]</i></p> <p>jaune <i>[yellow]</i> bleu <i>[blue]</i> blanc <i>[white]</i> orange <i>[orange]</i> noir <i>[black]</i> rouge <i>[red]</i> vert <i>[green]</i></p> <p>barbant <i>[boring]</i> joli <i>[pretty]</i> amusant <i>[fun]</i> moche <i>[ugly]</i> rigolo <i>[funny]</i> intelligent <i>[clever]</i></p>
<p>Je voudrais avoir <i>[I would like to have]</i></p> <p>Je ne voudrais pas avoir de <i>[I wouldn't like to have]</i></p>	<p>une araignée <i>[a spider]</i></p> <p>une perruche <i>[a budgie]</i></p> <p>une souris <i>[a mouse]</i></p> <p>une tortue <i>[a turtle/tortoise]</i></p>	<p>qui s'appelle Lola <i>[that is called Lola]</i></p> <p>elle est <i>[she/it is]</i></p>	<p>petite <i>[small]</i> grande <i>[big]</i></p> <p>jaune <i>[yellow]</i> bleue <i>[blue]</i> blanche <i>[white]</i> orange <i>[orange]</i> noire <i>[black]</i> rouge <i>[red]</i> verte <i>[green]</i></p> <p>barbante <i>[boring]</i> jolie <i>[pretty]</i> amusante <i>[fun]</i> moche <i>[ugly]</i> rigolote <i>[funny]</i> intelligente <i>[clever]</i></p>
<p>Author's note: in the negative form in French the "un" or "une" turns into "de" Examples: - Je n'ai pas de lapin (I don't have a rabbit)</p>			

Year 7 – spring term focus: Intro to Victorians



Queen Victoria reigned from 1837 to 1901.

There was a strong religious following at the time – the whole country was Christian and attended church on a Sunday.

People tended to have large families in the Victorian period; Victoria had 9 children herself with the “love of her life”, Albert, whom she married when she was 20 years old. →

There were many issues for poorer people living in Victorian Britain: **unsanitary, unclean and unhygienic housing – often overcrowded. Very low wages. No access to varied food, hence poor diet. Lack of employment laws or support for people – when old(er) they were sacked.**



Key terminology:

Industrial revolution
Romanticism
Poor Law
Charles Dickens
Poverty
Disparity
Child labour
Class system

Education was not free for all in the Victorian period; only boys of middle class families would attend school, and sometimes only the first born son would attend. Girls and women had far less rights and access to education and jobs in the 1800s.

Because people were so poor, and there were no laws against, young children were sent to work. This was known as child labour. Children would be used to do jobs where smaller bodies worked better than bulky adult ones – like fitting up chimneys or on a production line (so more could fit in and complete more work). →





The Signal Man by Charles Dickens

VOCABULARY

Tarpaulin

Waterproofed canvas

Ruminate

reflect deeply on a subject

Foreshorten

shorten lines in a drawing so as to create an illusion of depth

Manual Labour

Work done with the hands

Fits and starts

repeated bursts of activity

Coincidence

the property of two things happening at the same time
a small cut

Agonised

expressing pain or agony

Rarity

something unusual -- perhaps worthy of collecting

Saturnine

bitter or scornful

Apprise

inform somebody of something

Natural Philosophy

the science of matter and energy and their interactions

furled

rolled up and secured

Condense

cause a gas or vapor to change into a liquid

Vigilant

carefully observant or attentive

Prolongation

the act of prolonging something

Agonise

suffer agony or anguish

Spectre

a ghostly appearing figure

Gesticulate

show, express, or direct through movement

Notched

notched like a saw with teeth pointing toward the apex

Transgressive

going beyond acceptable boundaries of taste, convention, or the law:

1st person narrative –

Where the book uses “I” and “me”, as though the speaker is actually in the story, explaining and describing events as they happen.

Horror is a literary genre that attempts to make the reader feel fear or disgust in its audience for entertainment purposes. Horror books might include dark subject matter and may deal with transgressive topics or themes. Broad elements include monsters, apocalyptic events, and religious or folk beliefs.



Mystery is a fiction genre where the nature of an event, usually a murder or other crime, remains mysterious until the end of the story. Often within a closed circle of suspects, each suspect is usually provided with a credible motive and a reasonable opportunity for committing the crime.



CLASSROOM RULES

1. Hang your coat and blazer on pegs.
2. Put your bag **UNDER** the table.
3. Pencil cases **ON** the table.



Hessian mat stops your work sticking to the table.

4. **ALWAYS** listen carefully to instructions.
5. Wash hands after using paint, clay etc.



PAINT NAMES



- Black
- Vandyke Brown
- Burnt Sienna
- Crimson
- Vermillion
- Prussian Blue
- Ultramarine
- Hookers Green
- Leaf Green
- Yellow Ochre
- Gamboge
- White



Tie your hair up.



No Jewellery

Always wear an apron.

CLAY LESSON

Guide rules help you to roll out the clay evenly.



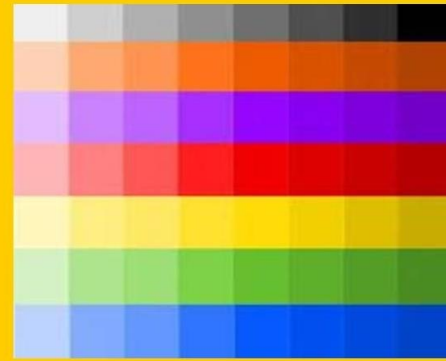
LINE

A Line is the path left by a moving point, e.g. a pencil or a brush dipped in paint. A line can take many forms, e.g. horizontal, diagonal or curved. A Line can be used to show Contours, Movements, Feelings and Expressions.



TONE

Tone means the lightness or darkness of something. This could be a shade or how dark or light a colour appears



SHAPE & FORM

A shape is an area enclosed by a line. It could be just an outline or it could be shaded in.

Form is a three dimensional shape such as a sphere, cube or a cone.

Sculpture and 3D design are about creating forms



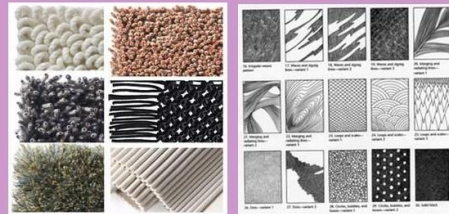
FORMAL ELEMENTS

TEXTURE

Texture is the surface quality of something, the way something feels or looks like it feels. There are two types of texture: Actual Texture and Visual Texture.

Actual Texture— really exists so you can feel it or touch it

Visual Texture—created using different marks to represent actual texture.



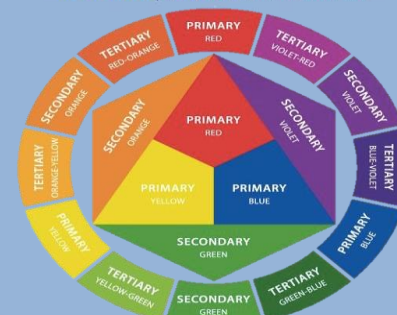
Actual Texture

Visual Texture

COLOUR

There are 3 Primary Colours: **RED, YELLOW** and **BLUE**.

By mixing any two Primary Colours together we get a Secondary Colour; **ORANGE, GREEN** and **PURPLE**



PATTERN

A pattern is a design that is created by repeating lines, shapes, tones or colours.

Patterns can be manmade, like a design on fabric, or natural, such as the markings on animal fur.



Year 7 Textiles - Design and Technology

SMART MATERIALS	Material	Example	Properties
	Thermo chromic		Changes colour with heat
	Photo chromic	PHOTOCHROMIC LENS 	Changes colour with light
	Memory shape alloy		Metal that returns to original shape
	Hydro-chromic		Changes colour in water

Modern MATERIALS	Material	Example	Properties
	Kevlar		Very strong and resists cuts, tears.
	Nomex		Heat and fire resistant
	Micro-encapsulation	Encapsulation Technology 	Tiny beads encapsulated with liquid e.g. antibacterial
	Phosphorescent		Glow in the dark

Equipment

 Sewing machine	 Thread	 Needle	 Scissors
One person at a time. Keep fingers away from moving parts. Use slowly and steadily.	 Pins	 Button	Carry with blade together. Always cut on the table away from fingers. Return to scissor rack when finished.
 Stitch ripper	Pins and needles are kept in containers. Use carefully pointing away from fingers and body.	 Pattern	 Iron
 Tape measure	 Zipper	Pattern pieces are used to make paper templates before cutting fabric out.	Extremely hot. Always ask before using. Turn off after use. Store hot plate down on rack.

Hand Sewing

 Running Stitch	 Back Stitch	 Whip Stitch
Running stitch is quick and easy	Back Stitches are strong and look neat	Whip stitches are used to finish and neaten edges.

More Key words:

- Seam** - joining two separate pieces of fabric together.
- Hem** - fold on the edge of fabric which is sewn down making the edge look neat.
- Fray** - the yarn coming away at the edge of curt fabric.
- Dying** - when the fabric colour is changed by soaking in water and fabric dye.

NATURAL

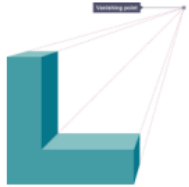
Natural fibre from a plant	Cotton	Used for making jeans, T-shirts and towels. <ul style="list-style-type: none"> Cool to wear Very absorbent Dries slowly Soft Creases easily
Natural fibre from a plant	Linen	Used for summer clothing, tea towels and table cloths. <ul style="list-style-type: none"> Very cool to wear Very absorbent Dries quickly Stiffer than cotton Creases badly
Natural fibre from a plant	Bamboo	Used for clothing and mixed with other fibres like spandex. <ul style="list-style-type: none"> Cool to wear Very absorbent Soft Sustainable (environmentally friendly)

SYNTHETIC

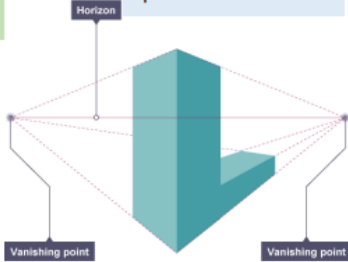
Synthetic Fibre	Viscose	Used for shirts, dresses, linings. <ul style="list-style-type: none"> Low warmth Absorbent Soft Good drape Not durable Creases easily
Synthetic Fibre	Nylon	Used for sportswear, socks, seat belts. <ul style="list-style-type: none"> Warm to wear Absorbent Breathable Soft or course Can shrink Durable
Synthetic Fibre	Polyester	Used for raincoats, Fleece jackets, medical textiles. <ul style="list-style-type: none"> Low warmth Non-absorbent Dries quickly Soft Very durable Crease resistant Can be recycled

Year 7 Resistant Materials Knowledge Organiser

Single-point perspective - This shows an object from the front in a realistic way as it gets smaller going into the distance. The front view goes back towards a **vanishing point**, which is a point on the horizon line that all lines meet at.



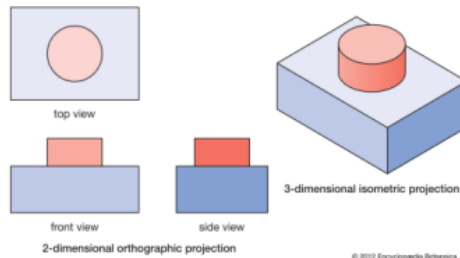
Two-point perspective - This shows an object from the side with two vanishing points.



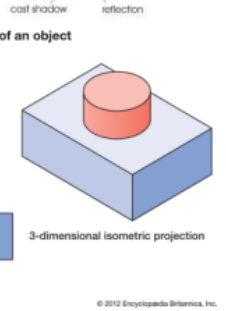
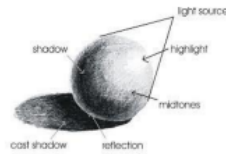
Orthographic Projection

They are used to show an object from every angle to help manufacturers plan production. Starting with a front view of a product, **construction lines** show where areas join and are used to draw a side and plan (top) view, ensuring that the drawing is accurate from all angles. These drawings are **to scale** and must show **dimensions**.

Orthographic and isometric projections of an object



3 Tone shading



Freehand sketching is the quickest way of getting your initial designs on paper before an idea is forgotten. Freehand sketches are often done without a ruler or template and instead are produced quickly and freely.

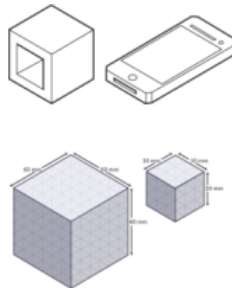


Isometric

Isometric drawings, sometimes called isometric projections, are a good way of showing measurements and how components fit together. Unlike perspective drawings, they don't get smaller as the lines go into the distance.

There are three main rules to isometric drawing:

- **horizontal** edges are drawn at 30 degrees
- **vertical** edges are drawn as vertical lines
- **parallel** edges appear as parallel lines



Rendering

Creating the illusion of light, tone and texture using graphic materials. Creating the illusion that an object is made from a particular material.



Personal protective equipment (PPE)

- Apron
- Leather gloves
- Goggles
- Sturdy shoes

Surface treatments and finishes

Used to improve the appearance and protect the material. Polish, varnish, paint, wax and stain are examples.

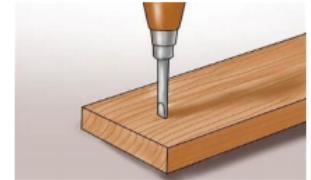


Wasting tools

- Coping saw – used to cut curved lines
- Junior hacksaw – used for sawing plastic and metal
- Hand file – used to shape materials
- Rasp – used to shape wood
- Pillar drill – used to drill holes
- Needle file – used to shape materials, remove material in small spaces
- Disc sander : used to waste material

Marking and measuring tools

- Steel rule
- Bradawl
- Centre punch
- Marking knife
- Try square



Metals and alloys

Metals are found naturally and are mined from the earth. Metals used in products are **extracted** from the natural **ore** using large heat furnaces.

Ferrous metals

Ferrous metals contain iron and are **magnetic**. They are prone to **rust**.



Non-ferrous metals do not contain iron and are not magnetic. They do not rust.

Alloys are mixtures of metal with an element to improve its properties or **aesthetic**. For example brass is a mixture of copper and zinc. Alloys can also be classified as ferrous or non-ferrous.

Timbers Wood comes from trees that are felled. There are three main groups of wood:

Hardwoods - take longer to grow, are not easily sourced and are expensive to buy. Oak, beech and mahogany are hardwoods.

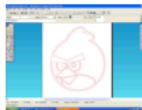
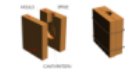
Softwoods - They are faster growing than hardwoods, making them cheaper to buy, and are considered a **sustainable** material. Pine is a softwood

Manufactured board - Manufactured boards are usually made from timber waste and **adhesive**. To make them more aesthetically pleasing they are often **veneered**. They are cheap to buy.

Moulds and casting – used to make complex shapes

Computer aided design (CAD) now has the capability to design new products in 3D, visualise them in a variety of materials and send images around the world for collaboration and consultation.

By using **computer aided manufacture (CAM)**, designs can be sent to CAM machines such as laser cutters, 3D printers and milling machines.



KS3 Athletics

Using the tables, keep a record of what level you are at for each event you try in PE. Put your own scores in the appropriate box on the left

Girls Results

STAGE PROGRESSIONS	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9
SPRINTS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
50m Standards	14.8s	12.2s	10.6s	9.9s	9.2s	8.6s	8.1s	7.7s	7.3s
75m Standards	21.0s	17.3s	15.3s	13.8s	12.8s	12.1s	11.5s	11.0s	10.5s
100m Standards	23.0s	19.0s	17.0s	15.5s	15.0s	14.6s	14.2s	13.9s	13.7s
200m Standards	-	-	-	31.7s	30.8s	30.5s	29.7s	29.2s	28.5s
300m Standards	-	-	-	55.0s	53.5s	52.0s	50.0s	48.5s	46.0s
HURDLES	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
60m Standards	25.0s	19.3s	16.0s	14.0s	12.5s	11.5s	11.0s	10.5s	10.1s
70m Standards	24.0s	21.0s	18.9s	17.3s	15.9s	14.6s	13.7s	13.1s	12.7s
75m Standards	23.0s	21.0s	18.5s	17.0s	16.0s	15.0s	14.0s	13.7s	13.4s
80m Standards	-	-	-	-	-	15.0s	14.2s	13.9s	13.6s
ENDURANCE	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
400m Standards	3m 20s	2m 30s	2m 10s	1m 55s	1m 40s	1m 25s	1m 15s	1m 10s	1m 05s
600m Standards	6m 00s	4m 30s	3m 30s	3m 00s	2m 40s	2m 30s	2m 20s	2m 10s	2m 00s
800m Standards	5m 00s	4m 45s	4m 30s	4m 10s	3m 45s	3m 20s	2m 55s	2m 45s	2m 35s
1500m Standards	7m 20s	7m 00s	6m 44s	6m 30s	6m 17s	6m 06s	5m 55s	5m 42s	5m 24s
JUMPS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
Standing Long Jump	0.35m	0.90m	1.35m	1.55m	1.70m	1.90m	2.20m	2.40m	2.60m
Long Jump	1.00m	1.80m	2.30m	2.80m	3.10m	3.40m	3.70m	4.00m	4.30m
Standing Triple Jump	1.00m	2.40m	3.60m	4.40m	4.80m	5.20m	-	-	-
High Jump	0.20m	0.50m	0.75m	0.90m	1.00m	1.10m	1.20m	1.28m	1.36m
THROWS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
Shot Put	1.00m	2.00m	3.00m	4.25m	5.25m	6.00m	6.50m	7.00m	8.00m
Javelin	1.00m	5.00m	7.00m	9.00m	12.00m	15.00m	18.00m	21.00m	24.00m
Discus	1.00m	3.00m	5.00m	7.00m	9.00m	13.00m	17.00m	19.00m	21.00m

Boys Results

STAGE PROGRESSIONS	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9
SPRINTS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
50m Standards	14.8s	12.0s	10.3s	9.6s	8.9s	8.3s	7.8s	7.4s	7.0s
75m Standards	21.0s	17.0s	15.0s	13.5s	12.5s	11.5s	10.7s	10.0s	9.5s
100m Standards	23.0s	18.7s	16.7s	14.6s	14.2s	13.8s	13.4s	13.0s	12.7s
200m Standards	-	-	-	30.3s	29.3s	28.8s	27.6s	27.0s	26.0s
300m Standards	-	-	-	56.5s	54.0s	51.5s	48.5s	45.0s	42.5s
HURDLES	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
60m Standards	25.0s	19.0s	15.5s	13.5s	12.0s	11.0s	10.5s	10.1s	9.7s
70m Standards	24.0s	20.4s	17.3s	15.8s	14.5s	13.6s	13.0s	12.5s	12.2s
75m Standards	23.0s	21.0s	18.0s	16.5s	15.3s	14.5s	13.8s	13.5s	13.2s
80m Standards	-	-	-	-	-	15.2s	14.4s	14.0s	13.4s
ENDURANCE	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
400m Standards	3m 20s	2m 30s	2m 05s	1m 45s	1m 35s	1m 20s	1m 10s	1m 05s	1m 00s
600m Standards	6m 00s	4m 30s	3m 20s	2m 50s	2m 30s	2m 15s	2m 05s	2m 00s	1m 50s
800m Standards	4m 00s	3m 40s	3m 20s	3m 00s	2m 50s	2m 41s	2m 33s	2m 27s	2m 20s
1500m Standards	6m 20s	6m 05s	5m 50s	5m 38s	5m 28s	5m 19s	5m 10s	4m 59s	4m 46s
JUMPS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
Standing Long Jump	0.35m	0.90m	1.40m	1.60m	1.80m	2.00m	2.30m	2.60m	2.80m
Long Jump	1.00m	1.80m	2.40m	3.00m	3.50m	4.00m	4.40m	4.70m	5.05m
Standing Triple Jump	1.00m	2.40m	4.00m	4.60m	5.10m	5.60m	-	-	-
Triple Jump	-	-	-	-	-	6.40m	8.50m	9.70m	10.60m
High Jump	0.20m	0.50m	0.80m	1.00m	1.10m	1.20m	1.30m	1.40m	1.50m
THROWS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
Shot Put	1.00m	2.00m	3.25m	4.80m	5.80m	6.80m	8.00m	9.40m	10.15m
Javelin	1.00m	5.00m	10.00m	12.00m	15.00m	19.00m	26.00m	30.00m	33.50m
Discus	1.00m	5.00m	8.00m	10.00m	12.00m	17.00m	22.00m	24.00m	26.00m