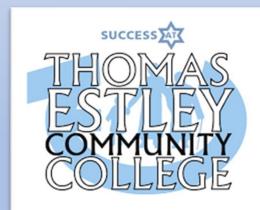
# Thomas Estley Community College Year 9 Autumn Term Knowledge Organiser







#### What are Knowledge Organisers?

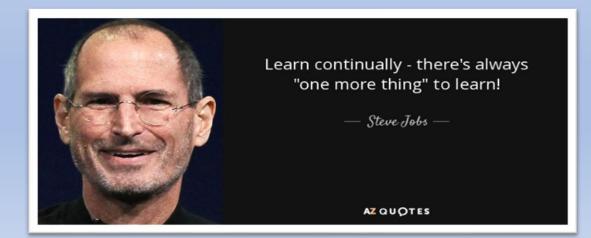
A knowledge organiser is an easy way that each subject can summarise the most important information. Each subject section will include key terms, short explanations, glossary words, diagrams etc making it clear to the student as to what is essential to learn. Each grid has an overall theme and these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

#### Teach it!

Teach someone your key facts and the 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!

### 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.

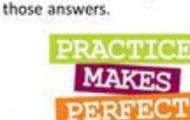
#### Record It

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



#### Post its

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



**Back to front** 

Write down the answers

and then write out what

teacher may ask to get

the questions the

## Practice!

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

Ť 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!

**Read Aloud** 



**Cybersecurity** looking at common attacks and methods to protect ourselves and our networks against these attacks. Data: raw facts and figures Information: data that has been processed and has context





	Key words			
adware	adverts for products a user may be interested in, based on internet history			
authentication	verifying the identity of a user or process			
auto update	updating software to remove vulnerabilities automatically			
biometrics	'password' created from the user fingerprint, iris, retina, facial, voice			
blagging	inventing a scenario to obtaining personal information			
САРТСНА	Completely Automated Public Turing Test To Tell Computers and Humans Apart			
DoS/DDoS	Denial of Service attack/Distributed Denial of Service			
encryption	mathematically converts data into a form that is unreadable without a key			
firewall	checks incoming and outgoing network traffic for threats			
hacking	gaining unauthorised access to or control of a computer system'			
malware	a variety of forms of hostile or intrusive software			
penetration testing	testing a network/program for vulnerabilities			
pharming	redirecting web traffic to fake websites designed to gain personal information			
phishing	messages designed to steal personal details/money/identity			
ransomware	virus which locks a computer and encrypts files until a "ransom" is paid			
script kiddies	hackers with no technical hacking knowledge using downloaded software			
shouldering	directly observing someone enter personal details e.g. PIN number, password.			
social engineering	manipulating people so they give up personal/confidential information			
spyware	gathers information about a person or organisation without their knowledge			
trojans	masquerades as having a legitimate purpose but actually has malicious intent			
viruses	self-replicating software attached to another program/file			
worms	Replicate and spread through the network			

#### **Data Protection Act 2018:**

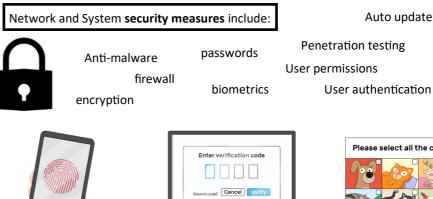
All organisations and people using and storing personal data must abide by the DPA principles . It states how data should be stored/accessed and what rights a data subject has for the protection of their data.

Computer Misuse Act 1990: It is an offence to

1.have unauthorised access to computer material

2.have unauthorised access with intent to commit or facilitate the commission of further offences

3.commit unauthorised acts with intent to impair, or with recklessness as to impairing, the operation of a computer.



Please select all the cats!

Auto updates

Hacking in the context of cyber security is gaining unauthorised access to or control of a computer system .

#### Unethical versus ethical hacking

Penetration testers (pen testers) are people who are paid to legally hack into computer systems with the sole purpose of helping a company identify weaknesses in their system.

# **Computing:**

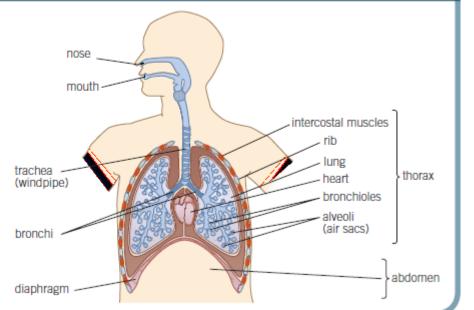
Python is a **text** based **programming language**. That can be used to create programs, games, applications and much more!

# **Introduction to Python**

			Useful snippets of code	
A <b>program</b> is a set of precise instructions, expressed in a <b>programmi</b> <b>Translating</b> the programming language is necessary for a machine to b		print ("Year 9")	Will display the string "Year 9"	
To execute a Python program, you need a <b>Python interpreter</b> .		input ()	Reads a line of text from the keyboard and returns	
This is a program that translates and executes your Python program.		variable name = expression	Allows an expression to be assigned to a variable. E.g. year=1944	
A <b>selection</b> statement allows a computer to <b>evaluate</b> whether an <b>expression</b> is 'true' or 'false' and then perform an action depending on the outcome.	You will need an if or an if, else: when there is <b>more than one possible path</b> for your program to follow.	Name=[item1, item2, item3]	Allows creation of a list e.g. shopping = ["oranges", "apples", pears"]	
Syntax Errors All programming languages have rules for syntax, i.e. how statements can be assembled. Programs written in a programming language must follow its syntax. Programs with syntax errors cannot be translated and executed.	if condition : block of statements if condition : block of	Some data types Whole numbers—integ Yes/no or True/False— boolean	- difference * multiplication / division	
input Some programming key terms algorithm	else: block of statements	Letters, combination of numbers— <b>string</b>	% remainder of integer division ** exponentiation (to the power of)	
variable selection assignment sequence valk through iteration logical operators list output	You can use multiple branches using if, elif and else Python helps by telling the programmer where the error is. So if you see red error text—read it first.	<ul> <li>use if and else—</li> <li>A colon : is alwa</li> <li>Use indentation block and the el</li> <li>The == operator</li> </ul>	ys required after the if condition and after else. to indicate which statements 'belong' to the if	

#### Gas exchange and breathing

- Gas exchange is the process of taking in oxygen and giving out carbon dioxide
- This occurs in the respiratory system
- The proportions of gases in the air we inhale and exhale changes due to using oxygen in respiration and producing carbon dioxide

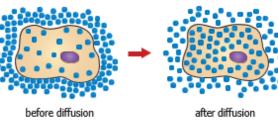


#### What happens when you breathe in and out

when you breathe in (inhale)	<ul> <li>muscles between the rubs contract</li> <li>ribs are pulled up and out</li> <li>diaphragm contracts and flattens</li> <li>volume of the chest increases</li> <li>pressure inside the chest decreases</li> <li>air rushes into the lungs</li> </ul>
when you breathe out (exhale)	<ul> <li>muscles between ribs relax</li> <li>ribs are pulledin and down</li> <li>diaphragm relaxes and moves up</li> <li>volume in the chest decrease</li> <li>pressure inside the chest increases</li> <li>air is forced out of the lungs</li> </ul>

#### Movement into and out of cells

- The process in which substances move into and out of cells is known as diffusion
- This occurs across the cell membrane
- During diffusion particles move from an area of high concentration, to an area of low concentration



 Oxygen and nutrients enter the cell by diffusion, carbon dioxide and waste products leave



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#### Drugs

- Drugs are chemicals that affect the way that our body works
- · Medicinal drugs are used in medicine, they benefit health
- If medicinal drugs are not taken in the correct way they can harm health
- · Examples include antibiotics and pain killers
- Recreational drugs are taken by people for enjoyment
- Recreational drugs normally have no health benefits and can be harmful for health
- Examples include alcohol and tobacco
- Drug addiction is when your body gets so used to a drug, it feels it cannot cope without it
- If someone who has an addiction stops taking the drug, they will experience withdrawal symptoms

#### Key terms Make sure you can write definitions for these key terms.

Aerobic respiration Anaerobic respiration Antagonistic muscle pairs Bone Bone marrow Cartilage Diffusion Drug Exhale Fermentation Gas exchange Haemoglobin Inhale Joints Lactic acid Ligaments Medicinal drug Muscle Oxygen debt Plasma Recreational drug Red blood cells Respiration Respiratory system Skeleton Tendons Tissue Withdrawal symptoms

#### Respiration

- Respiration is the process in which energy is released from the molecules of food which you eat
- Respiration happens in the mitochondria of the cell
- Aerobic respiration involves oxygen, it is more efficient as all of the food is broken down to release energy glucose + oxygen → carbon dioxide + water
- The glucose is transported to the cells in the blood plasma
- The oxygen is transported to the cells in red blood cells, by binding with haemoglobin
- Carbon dioxide is a waste product and is transported from the cells to the lungs to be exhaled
- Anaerobic respiration is a type of respiration which does not use oxygen, it is used when the body cannot supply the cells with enough oxygen for aerobic respiration
- Anaerobic respiration releases less energy than aerobic respiration

glucose → lactic acid + carbon dioxide

- The lactic acid produced through anaerobic respiration can cause muscle cramps
- Lactic acid will build up if there is not enough oxygen present in the blood supply to break it down. This is known as an oxygen debt

#### Fermentation

- Fermentation is a type of anaerobic respiration which occurs in yeast
- Instead of producing lactic acid, yeast produces ethanol, which is a type of alcohol glucose → ethanol + carbon dioxide
- This process can be used to form alcohol to drink or to allow bread and cakes to rise



#### Muscles

- Muscles are a type of tissue which allows movement
- They pull on tendons which in turn pull on bones to allow movement
- Muscles like the triceps and biceps are known as antagonistic muscle pairs, they work together -as one contracts, the other will relax

#### The skeleton

jaw bone -

femur

fbula.

sternu

humerus

pelvis

(backbone)

collar bone

kneecap

tibia

ankle

.ulna

radius

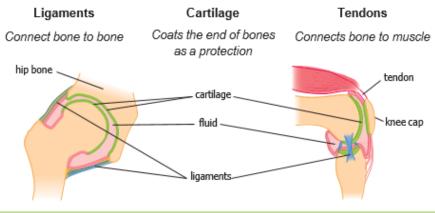
- The skeleton is made up of 206 bones which are a type of tissue
- Bones have a blood supply and are a living tissue
- The skeleton is part of the muscular-skeletal system vertebral column
- The four main functions of the skeleton are:
- To support the body to keep you upright and hold organs in place
- Protect organs such as the skull protecting the brain
- Movement by working with muscles to allow you to move
- Making blood cells the bone marrow produces red and white blood cells

#### Movement

Joints occur between bones and allow movement, there are three main types of joints

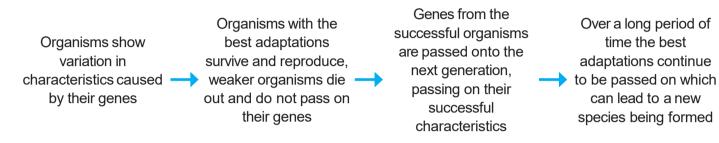
Hinge	Ball and socket	Fixed
For back and forward	For movement in all	Do not allow movement,
movement, e.g. knees	directionse.g. hips	e.g. skull

Joints have three main types of tissue:



#### Natural selection

- Scientists believe that the organisms which we see on Earth today have gradually developed over millions of years, this is known as **evolution**
- Charles Darwin came up with the concept of natural selection, he said that only the best adapted animals will survive to pass on their genes, weaker animals will die out



- One example of natural selection can be seen in giraffes, only the giraffes with the longest necks would be able to eat from trees, the ones with shorter necks would not be able to eat and die out
- This would mean that only the gene for long necks would be passed on, leading to all giraffes having long necks

#### **Extinction**

- · A species will become extinct when all of a species die out
- The fossil record shows us that animals have existed in the past which have now become extinct
- Extinction can be caused by:
- · Changes to the environment
- Destruction of habitat
- New diseases

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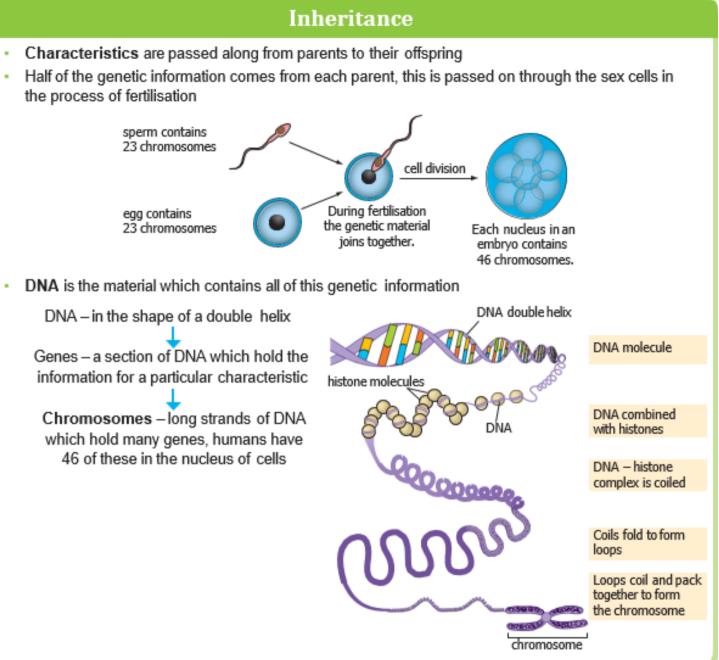
- Introduction of new predators
- Increased competition
- When a species becomes extinct, the variety of species within an ecosystem is reduced, this is also known as a reduction in **biodiversity**
- The more diverse a **population** is, the more likely they are to survive environmental changes

#### **Punnet squares**

	Possible alleles from father						
her		B (dominant allele for browneyes)	<b>b</b> (recessive allele for blue eyes)				
Possible alleles from mother	<b>b</b> (recessive allele for blue eyes)	<b>Bb</b> Offspring will have brown eyes as B is dominant	<b>bb</b> Offspring will have blue eyes as both alleles are recessive				
Possible all	<b>b</b> (recessive allele for blue eyes)	<b>Bb</b> Offspring will have brown eyes as B is dominant	<b>bb</b> Offspring will have blue eyes as both alleles are recessive				

#### **Genetic modification**

- Genetic modification is the process which scientists can use in order to alter the genes of an organism
- Examples of this include altering cotton to produce higher yields, altering bacteria genes to produce medicines and altering crops to produce their own insecticides



- code for the same characteristic, one is inherited from each parent
- this is represented by a capital letter
- We can predict the inheritance of characteristics using a Punnet square

#### Key terms

Allele Biodiversity Characteristics Chromosome Competition DNA Dominant Evolution Extinct Fossil record Gene Genetic modification Mutation Natural selection Population Punnet square Recessive

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#### Genetics

For every characteristic an organism will have two alleles, this is two different genes which can

Dominant alleles will cause the characteristic to be displayed even if they are with another allele,

Recessive alleles will not be displayed as characteristics unless there are two of the same allele, they are the characteristic least likely to be shown, this is represented by a small letter

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# **5** Metals and reactivity Knowledge organiser

#### Salts

**Salts** are substances which are formed when an acid reacts with a metal or metal compound. The name of the salt produced depends on the metal and the acid involved in the reaction.

Different acids form different types of salts:

- · Hydrochloric acids form chloride
- Sulphuric acids form sulphates
- Nitric acids form nitrates

Metal acid reaction:

metal + acid ⇒ salt + ...... iron + sulphuric acid ⇒ iron sulphate + ......

Metal carbonate reaction:

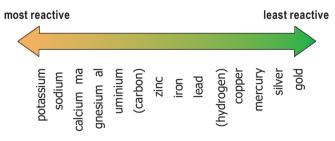
metal carbonate + acid → salt + ...... calcium carbonate + nitric acid → calcium nitrate + .....

Neutralisation reactions (one from year 7):

Metal hydroxide + acid → salt + ..... sodium hydroxide + hydrochloric acid → sodium chloride + .....

## The reactivity series

- The reactivity series describes how reactive different metals are compared to one another
- The higher the metal is in the reactivity series the more reactive it will be.
   This means that it will react much more vigorously.



Carbon and hydrogen are in the reactivity series so that you can see their relative reactivity. Metals higher than carbon in the series must be extracted using **electrolysis**.

#### Metal reactions

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.

 $metal + acid \Rightarrow salt + hydrogen$   $magnesium + hydrochloric acid \Rightarrow magnesium chloride + hydrogen$ 

When a metal **carbonate** reacts with an acid, a salt, water and carbon dioxide is given off.

Metal carbonate + acid  $\Rightarrow$  salt + water + carbon dioxide Sodium carbonate + sulphuric acid  $\Rightarrow$  sodium sulphate + water + carbon dioxide

When a metal reacts with oxygen a metal **oxide** is formed, this process is known as **Oxidation**.

metal + oxygen → metal oxide aluminum + oxygen → aluminum oxide

When a metal reacts with water it forms a metal **hydroxide** and hydrogen gas. The alkali (group 1) metals react most vigorously, giving off a brightly coloured flame.

metal + water → metal hydroxide + hydrogen

sodium + water → sodium hydroxide + hydrogen

A special oxidation reaction happens between iron and oxygen in the presence of water. This is called rusting.

Iron + water + oxygen  $\Rightarrow$  hydrated iron oxide

When a more reactive metal reacts with a compound containing a less reactive metal, it can take it's place, this is known as a **displacement** reaction



- If the metal on it's own is higher in the **reactivity series** than the metal in the compound a reaction will take place
- If the metal on it's own is lower in the reactivity series than the metal in the compound, a reaction will not take place

C	Keyt	terms	Make sure	you can write defini	tions for these	key terms.					
		acid	acidic	neutralisation	oxide	chemical	carbonate	reactivity	reactivity series	salt	displacement
			su	lphuric acid	nitric acid	l ore	electrolysis				



### **Metal extraction**

Unreactive metals such as gold are found in the Earth's crust as elements. However most metals are found combined with other elements to form compounds.

Most metals are extracted from **ore** found in the Earth's crust. An ore is a rock that contains enough of a metal or a metal compound that makes extracting it worthwhile.

If a metal is less reactive than carbon then heating the metal in a fire with carbon will cause the carbon to **displace** the metal from its compound.

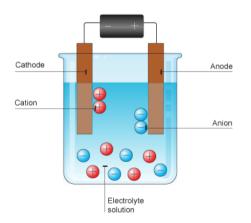
An example of this is the extraction of copper from it's ore Malachite.

copper oxide + carbon ⇒ copper + carbon dioxide

## Electrolysis

When a metal is more reactive than carbon then extraction by heating with carbon does not work.

Electrolysis can be used instead to extract these metals from their compounds.



The metal compound is melted and electrical current is passed through. The metal ions are attracted to and form a layer on the cathode (the negative electrode).

#### hydroxide

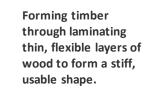
hydrochloric acid

#### Year 9 Resistant Materials Knowledge Organiser



Finger ioint





Forces and stresses

•tension - a pulling force •compression - a pushing force

•torsion - a twisting force

#### Dowel joint



Lap Joint

MDF is made from small timber fibres that are mixed with wax and resin. They are heated and compressed so that a flat, usable sheet is produced.

#### Machinery and Tools in the workshop

- Tenon Saw: used for sawing straight lines in wood.
  - Chisel: used to shape wood. Can cut out sections
  - File: Abrade a thin surface area of wood.
  - Hand Drill: used to drill holes into materials
  - Rasp: Abrade a thick surface area of wood.
  - Coping Saw: used to saw curved lines into wood.

Product analysis - Looking at products that already exist can help improve further designs by pinpointing issues to improve designs and prototypes.

#### Modelling

Modelling ideas in card, paper, clay or other materials can create a cheap and quick way to do initial trials with a product. Using an easy to modify material provides a good way of seeing how a product looks and works, eg checking handles are in the right place or parts fit together well. Taking photographs or video throughout this can show development.



LINEAR MOTION

ROTARY MOTION

RECIPROCATING MOTION

OSCILLATING MOTION

Forces act on materials all the time - even if a material appears stationary it still has a force acting on it. There are five terms used to

describe what type of force can act on a material:

•bending - forces at an angle to the material

shear - forces acting across the material

Paper	Properties	Uses
Layout paper	Lightweight, thin, cheap, smooth surface	Graphic drawings, animations
Bleed proof (marker) paper	Contains more chalk, smooth, hard, doesn't absorb ink, doesn't bleed	Creating special effects for designers or artists
Tracing paper	Good transparency, expensive	For seeing an image underneath
Grid paper	Covered with continuous square grid	Used in many maths contexts
Cartridge paper	Heavier weight, good quality, opaque	Writing and sketching

#### Boards

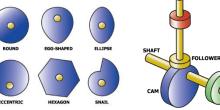
Board is selected by its thickness, measured in microns. One micron is 1/1,000th of 1 mm. Sometimes the thickness of board is given in sheets, referring to the number of pieces of paper that have been glued together to make a sheet of board.

Board	Properties	Uses
Corrugated cardboard	Strong, lightweight	Packaging protection in transportation of products and used to package some hot food such as a pizza due to its insulating properties.
Duplex board	Cheaper than white board, available with different finishes (metallic, holographic etc.)	Food packaging, eg biscuit boxes or containers
Solid white board	Top quality, range of thicknesses, excellent to print on	Hardback books
Foil-lined board	Expensive, good quality, aluminium foil lining, excellent barrier against moisture	Pre-packed food packages, cosmetic cartons
Inkjet board	Expensive, printable, photo quality	Posters, photography, art reproductions
Foam-core board (foam board)	Strong, lightweight, paper face, foam core	Model making, mounting photographs

#### Cams and followers

A cam mechanism has two main parts:

•a cam - attached to a crankshaft, which rotates •a follower - touches the cam and follows the shape, moving up and down



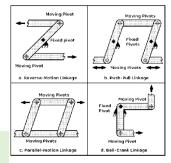
The Forest Stewardship Council (FSC) is an international organisation that promotes responsible forest management.

#### Reinforced materials and methods include

- Corrugated cardboard
- lamination of timber (plywood)
- lamination of paper
- Reinforced concrete

#### Linkages

Levers can be joined together to form linkages. Simple linkages change the direction of motion and the amount of force.







#### Energy

- **Energy** is needed to make things happen
- · It is measured in joules or kilojoules
- The law of conservation of energy says that energy cannot be created or destroyed, only transferred
- This means that the total energy before a change if always equal to the total energy after a change

Energy can be in different energy stores, including:

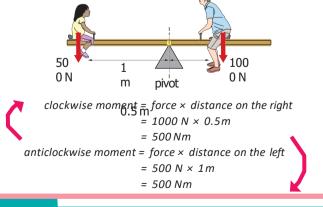
- Chemical to do with food, fuels and batteries
- Thermal to do with hot objects
- **Kinetic** to do with moving objects
- Gravitational potential to do with the position in a gravitational field
- Elastic potential to do with changing shape, squashing and stretching

#### **Turning forces**

- A moment is the turning effect of a force, it is measured in Newton meters
- We can calculate a moment with the equation:

moment (Nm) =force  $(N) \times$ distance from the pivot (m)

- The size of the moment will increase as the distance from the **pivot** or the size of the force increases
- When an object, such as a seesaw is balanced, the clockwise and the anticlockwise moments will be equal and opposite, which is known as equilibrium
- When forces are equal and opposite to each other, there is no resultant force



#### 🔎 Key terms

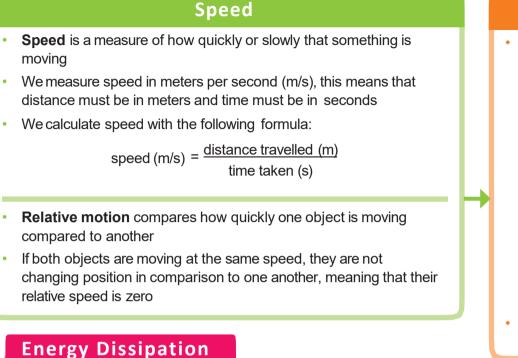
#### Make sure you can write definitions for these key terms.

**Power and energy** 

- **Power** is a measure of how much energy is transferred per second
- Power is measured in watts (W)
- Each appliance has it's own power rating to tell us how quickly it uses energy
- We can calculate power with the equation:

energy (J) power (W)= time (s)

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area

pressure =  $\frac{\text{force}}{}$ 

We say that energy is dissipated when it is transferred to a nonuseful store. it cannot be used for what it was intended for

Energy can be wasted through friction, heating up components or heating the surroundings

**Efficiency** is a measure of how much of the energy has been used in a useful way, we can calculate this with the equation:

Efficiency (%) =

**Pressure in solids** 

The greater the area over which the force is exerted over, the lower the pressure,

this is why snowshoes have a large area to prevent you sinking into the snow

• The pressure which is exerted on a solid is known as stress

**Pressure** can be calculated using the following equation:

useful energy output × 100 energy input

- gas will be
- Gas pressure can be increased by:

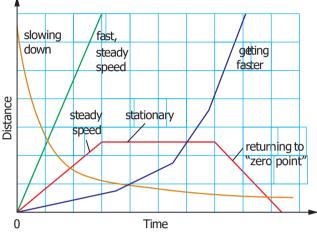
  - there are more collisions
- are more particles weighing down on you so the pressure is greater
- The higher you go, the smaller the atmospheric pressure, this is because there will be less particles weighing down on you
  - Liquids are incompressible
  - them to compress

Acceleration, air resistance, atmospheric pressure, balanced, contact force, deceleration, distance-time graph, drag, equilibrium, field force, friction, gas pressure, gravity, gravitational force, interaction pair, kilograms, mass, moment, Newton, non-contact, pivot, pull, push, pressure, relative motion, resultant force, speed, unbalanced, weight



#### **Distance-time graphs**

**Distance-time graphs** tell the story of a journey, they show how much distance has been covered in a certain period of time



To find the average speed, the total distance must be divided by the total time

#### Gas pressure

Gas pressure is caused by the particles of a gas colliding with the wall of the container which they are in • The more often that the particles collide with the wall of the container, the higher the pressure of the

 Heating the gas so the particles move more guickly and collide with the container with a higher energy Compressing the gas so there are the same amount of particles within a smaller volume meaning that

Increasing the amount of particles within the same volume so there are more collisions

Atmospheric pressure is the pressure which the air exerts on you all of the time, nearer the ground there

#### ¥ **Pressure in liquids**

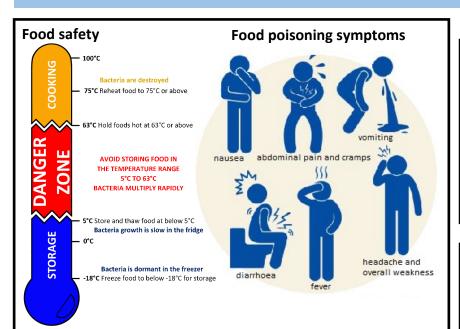
• The particles in a liquid are already touching, meaning that there is little space between

Liquids will transfer the pressure applied to them, this is seen in hydraulic machines As the ocean gets deeper, the pressure will increase, this is because the pressure depends on the weight of the water above

The greater the number of water molecules above, the higher the pressure will be

Year 9 Autumn Term		Key dates					Key people		
World Conflict 1914-1939	28 <sup>th</sup> June 1914	Assassination of Archduke Ferdinand, heir to the Austro-Hungarian throne		Archduke Ferdi	inand		Franz Ferdinand Carl Ludwig Joseph Maria of Austria was the heir presumptive to the Austria-Hungary.		
1914-1939	4 <sup>th</sup> August 1914	Britain enters the War against Germany		Gavrilo Princip		Gavrilo Princip Bosnian Serb member of Young Bosnia who sought an end to Austro-Hungarian rule Herzegovina			erb member of Young Bosnia who sought an end to Austro-Hungarian rule in Bosnia and na
Lesson Content	1 <sup>st</sup> July 1916	Battle of the Somme, worst day of the war for British casualties		Alfred von Schl	lieffen	German fi 1891 to 19	eld marshal and strategist who served as chief of <b>the</b> Imperial German General Staff from 106.		
The path to war	November 1917	The Russian Revolution brings the Communists into power		Field Marshal H	laig		cer of the British Army. During the First World War, he commanded the British ary Force (BEF) on the Western Front from late 1915 until the end of the war.		
The Schlieffen Plan	11 <sup>th</sup> November 1918	End of World War 1, Armistice Day		Emmeline Pank	khurst		itical activist. She is best remembered for organizing the UK suffragette movement and men win the right to vote.		
Ducus and and isining	1918	women could vote at 30 with property qualifications or as graduates of UK universities		Emily Davison		English Sut	ffragette who threw herself under the King's horse as a protest.		
Propaganda and joining up	28 <sup>th</sup> June 1919	Treaty of Versailles signed		David Lloyd Ge	orge	British stat	tesman who served as Prime Minister of the United Kingdom from 1916 to 1922		
	October 1922	First fascist state set up in Italy under Mussolini		Georges Cleme	nceau	French sta until 1920	tesman who served as Prime Minister of France from 1906 to 1909 and again from 1917		
Life in the Trenches	November 1923	Hitler attempts to take over Germany during the Munich Putsch – it fails!		Woodrow Wils	on	Thomas W	foodrow Wilson was an American politician, lawyer, and academic who served as the 28th of the United States from 1913 to 1921.		
WW1 Technology	October 1929	The Wall Street Crash – worldwide economic depression follows		Karl Marx			ch Marx was a German philosopher, economist, historian, sociologist, political theorist,		
	January 1933	Hitler becomes Chancellor (Prime Minister) of Germany					infrict Marx was a German philosopher, economist, historian, sociologist, political theorist, list and socialist revolutionary		
Did the generals know	March 1936	Hitler occupies the Rhineland		Benito Mussoli	ni	Italian prir	talian prime minister (1922–43) and the first of 20th-century Europe's fascist dictators.		
what they were doing?	March 1938	Hitler reunites Germany with Austria		Joseph Stalin			evolutionary and Soviet politician who led the Soviet Union from the mid-1920s until 1953 eral secretary of the Communist Party of the Soviet Union and premier of the Soviet		
The Home Front	March 1939	Hitler takes over all of Czechoslovakia				Union.			
Who were the	3 <sup>rd</sup> September 1939	Britain declares war on Germany, after Hitler's invasion of Poland		Adolf Hitler		Adolf Hitler was a German politician and leader of the Nazi Party. He rose to power as the chancellor of Germany in 1933 and then as Führer in 1934.			
Suffragettes?				Key Words	- Glossa	nry			
Women and the War	Austro- Hungary	Dual Monarchy established in 1867, consisting of what are now Austria, Czech Republic, Slovakia, Slovenia, Croatia, and Bosnia-Herzegovina, an Romania, Ukraine, and Italy.			armisti	ce	an agreement made by opposing sides in a war to stop fighting for a certain time; a truce.		
Was the war a "World War"?	assassination	murder by sudden or secret attack often for political reasons : the act o assassinating someone	r an	instance of	Econon depress		In economics, a depression is a sustained, long-term downturn in economic activity in one or more economies.		
What was the Versailles Treaty?	propaganda	information, especially of a biased or misleading nature, used to promo or point of view.	te a	political cause	Fascism	1	a form of government that is a type of one-party dictatorship. They work for a totalitarian one-party state. This aim is to prepare the nation for armed conflict, and to respond to economic difficulties. Fascism puts nation and often race above the individual.		
Why did Dictatorships	conscription	compulsory enlistment for state service, typically into the armed forces.	-		Marxisı	m	the political and economic theories of Karl Marx and Friedrich Engels, later developed by their followers to form the basis of communism.		
grow after WW1? What were Hitler's aims?	stalemate	A position or situation in which no action can be taken or progress made	e; de	eadlock Comm		ınism	a theory or system of social organization in which all property is owned by the community and each person contributes and receives according to their ability and needs		
The path to WW2	"Lions led by donkeys"	phrase popularly used to describe the British infantry of the First World the generals who <b>led</b> them. The contention is that the brave soldiers ( <b>lic</b> their deaths by incompetent and indifferent leaders ( <b>donkeys</b> ).			Nazism		the political principles of the National Socialist German Workers' Party., extreme racist or authoritarian views or behaviour		
Key resources:	attrition	the process of reducing something's strength or effectiveness through s pressure	susta	tained attack or appeasen		ement	Foreign policy of pacifying an aggrieved country through negotiation in order to prevent war. The prime example is Britain's policy toward Fascist Italy and Nazi Germany in the 1930s		
www.tecchistoryks3. blogspot.com		Key Assessment: - 50 minute assessmen	nt k	based on sk	cills fro	om Pape	er 1+3 GCSE History, Questions 1-4 or 5		

# Year 9 - Lifestyle & Choice



https://www.youtube.com/watch?v=flxmB8NKMzE https://www.nhs.uk/live-well/eat-well/10-ways-to-prevent-food-poisoning/ https://www.food.gov.uk/safety-hygiene/avoiding-cross-contamination

**Food labelling**: lots of information is required by law. Storage instructions are particularly important for food safety.



#### Key vocabulary

safety / hygiene / cross-contamination pathogenic / food poisoning / symptoms nutrition / hydration / shelf life perishable / ambient / dormant ethical / moral / cultural / preferences allergies / intolerances / life stages

RITION

Nutritional needs and health: some people have special dietary needs based on their age, lifestyle or allergies.



Senses: influence our enjoyment of food.

VISION HEARING SMELL TASTE TOUCH



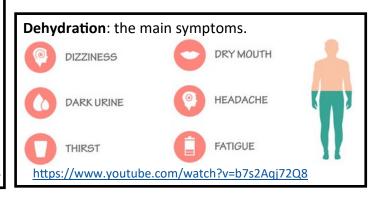
https://www.youtube.com/watch?v=zNchJla7G0E

**The Eatwell Guide** shows the types and proportions of foods people need for a healthy and well-balanced diet.



https://www.youtube.com/watch?v=7MIE4G8ntss https://www.nhs.uk/live-well/eat-well/the-eatwell-guide/ https://www.youtube.com/watch?v=8aWqZd9RScQ





Year 9 - Cooking skills



#### **Skills and Processes**



Used in: tomato and basil tarts

#### Whisking



Used in: tomato and basil tarts, Swiss roll

#### **Dividing and shaping**



**Used in**: burgers, fish cakes, croquettes, Swedish meatballs

#### Folding and wrapping



Used in: samosas, spring rolls

Key word	Meaning
Denaturation	When protein foods are heated causing them to change size, colour and texture eg. burgers, meatballs, chicken.
Stir-frying	A cooking technique in which ingredients are fried in a small amount of very hot oil while being stirred in a wok
Aeration	The process of incorporating air into a mixture to help provide structure and volume eg. whisking eggs for Swiss roll.
Reduction	Simmering a liquid over heat until it thickens due to evaporation.

#### Independent skills I need to learn in Year 9

Select the correct colour coded chopping boards to prevent cross contamination.

**Use a wide range of preparation and cooking techniques** eg. finely dicing, blind baking, whisking, sautéing, shaping, mashing, enrobing, stir-frying etc.

Organise my workspace, remove food waste promptly, clean as I go.

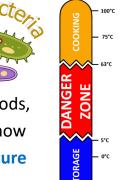
Manage temperature control know when to turn heat up and down accordingly.

**Check for readiness** using a food thermometer to check the internal temperature.

Food safety

#### Know the critical

**temperature** for cooking foods, the effect on **bacteria** and how to **check the core temperature** of meat.





# Fate, Family and Feuds



#### Romeo and Juliet – Shakespeare's most infamous tragedy.

An age-old vendetta between two powerful families erupts into bloodshed. A group of masked Montagues risk further conflict by gatecrashing a Capulet party. A young lovesick Romeo Montague falls instantly in love with Juliet Capulet, who is due to marry her father's choice, the County Paris. With the help of Juliet's nurse, the women arrange for the couple to marry the next day, but Romeo's attempt to halt a street fight leads to the death of Juliet's own cousin, Tybalt, for which Romeo is banished. In a desperate attempt to be reunited with Romeo, Juliet follows the Friar's plot and fakes her own death. The message fails to reach Romeo, and believing Juliet dead, he takes his life in her tomb. Juliet wakes to find Romeo's corpse beside her and kills herself. The grieving family agree to end their feud. (source: www.shakespeare.org.uk)



#### Keywords and terminology:

Iambic pentameter – 10 syllables in a line of writing/poetry. Simile – comparing two things using "like" or "as".

Vendetta - a blood feud in which the family of a murdered person seeks vengeance on the murderer or the murderer's family.

Dichotomy – a division or contrast between two opposed things.

Epithet - an adjective or phrase expressing a quality or attribute regarded as characteristic of the person or thing mentioned ("star-crossed lovers").

Foreshadowing – ideas or events which hint at later events in the story.

Dramatic Irony – When a character is not aware of events in the story, but the audience are aware.

Microcosm – a small group of society used to represent a much larger issue.

Soliloquy – a monologue spoken by a character on stage, verbalising their inner thoughts for the sake of the audience.

Stichomythia - dialogue in which two characters speak alternate lines of verse.



# **Blood Brothers by Willy Russell**

#### <u>Causes</u>

- The play is set sometime between the 1960s and 1980s
- The River Mersey was the "life-blood" of Liverpool and when it collapsed not only effected unemployment but mental health of people.
- 1960s saw the emergence of 'youth culture'
- Rise of mass advertising and colour television, children were exposed to films, television programmes and celebrities.
- Family structure was still very traditional
- When Russel wrote the play, Margaret Thatcher was Prime Minister
- Strong class divide

#### <u>Effects</u>

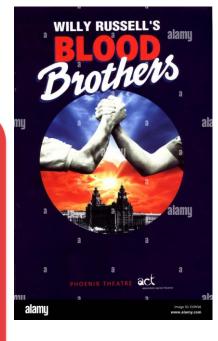
- There are references throughout to real issues that affected people in the late 1960s and 1970s.
- Influenced by issues such as rising unemployment and the recession.
- Mr Lyons refers to the "shrinking pound" and the "rising price of oil"
- "Teenagers" became a recognised age group, first time it was accepted that young people had their own culture and ways of behaving.
- Mickey, Edward and Linda's teenage years are presented in a very positive light. A quick sequence of scenes show them going out together to places like the beach and the rifle range. Narrator emphasises how carefree they are at this time.

#### Key terminology:

Superstition Education Welfare state Unemployment Class system/working class Poverty Inequality Margaret Thatcher/Thatcherism Nature vs nurture Society Discrimination Adoption Playwright Liverpool/Liverpudlian/scouse

#### Effects Continued

- Bands like 'The Beatles' had huge fan bases came from Liverpool.
- Young people became an important force in protest movements against nuclear weapons etc, believed in their power to shape the future, started to break away from their parents' views.
- Social attitudes were slow to change, families expected to have a 'nuclear' structure (mother, father, children). Single parent families were frowned upon.
- Most families were patriarchal (man led the family), husband went to work, wife stayed in and did house work. Mr and Mrs Lyons typical family, Mrs Johnstone fills both roles.
- 1970s Britians traditional industries were in the decline because they were insufficient in keeping up with forgein competition and weren't economically viable anymore, Margaret Thatcher closed them down.
- Mickey represents the many working-class men who became unemployed in this period. He loses his job, signs onto the dole and despite desperately searching for work he can't find any. Begins his descent into depression and prompts him to turn to crime.
- Working-class families struggled financially. Many found it difficult to afford basic things like food, clothes and heating.
- Middle-class were largely unaffected, those who did work in decling industries were running them nd had transferable skills like management so could get new jobs
- Educational class divides. Middle-class children went to private schools, UNI and then got well paid jobs. Working-class, UNI wasn't an option and became stuck in low-paid jobs for life, with little oppotunity for progress.
- Mr Lyons shows no compassion towards his secretary, Miss Jones, when he fires her. His own job is secure so he dismisses her by saying "It's just another sign / Of the times"









Торіс	Key fact	Hegarty maths clip number			
Percentage of Amount	Turn the percentage into a decimal and multiply it by e.g. 45% of 60 is 0.45 x 60 = 27	y the amount. 83 to 87			
	The 0.45 is called the decimal multiplier	·			
	If it is a percentage increase, the decimal multiplier will	be 1.something 88 to 92			
	because you are getting more than 100%	6.			
	If it is a percentage decrease, the decimal multiplier wil	u u			
Percentage	because you are getting less than 100%				
Increase &	e.g increase £200 by 40% would be 200 x				
Decrease	decrease £200 by 40% would be 200 x 0. Sale price is £320				
Reverse percentages	What was the original cost of the laptop? $7 - 20\% = \text{\ }320$ $100\%$ $\text{\ }80\% = \text{\ }320\text{\ }\text{;}8$ $\text{\ }10\% = \text{\ }400\text{\ }\text{;}10$ $\text{\ }100\% = \text{\ }400\text{\ }\text{;}10$	96			
	×10 (100% = £400 ×10				
Expanding a single bracket	Expanding 5n(n + 3) $= 5n^2 + 15n$	160 – 161			
Expanding	Expanding – multiplying out the bracke	ts. 162 - 165			
double brackets		mplify by Combining the Like Term items.			
Linear	Square: 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144,	196 – 198			
sequences (n <sup>th</sup>	Cube: 1, 8, 27, 64, 125,				
term) & Special	Triangular: 1, 3, 6, 10, 15, 21, 28, 36, 45,				
Sequences	n <sup>th</sup> term: General rule for a sequence. Find the difference between each term, then how do you	get from that times			
	table to the sequence: (e.g. $3n + 2$ ) 3n + 2) 3n + 2				
Pythagoras'	c = hypote	enuse 497 – 504			
Theorem	a $a^{2} + b^{2} = c^{2} - b^{2} = c^{2} - a^{2} = c^{2} - a^$	$=a^2$			
	Remember to square root your answer to find t	he missing side.			
Indices	$a^m x a^n = a^{m+n}$	102 to 106			
	$a^m / a^n = a^{m - n}$				
	$(a^m)^n = a^{m \times n}$				
	a <sup>0</sup> = 1				
	-1 -				

a<sup>1</sup> = a

#### Year 9 Autumn Maths Knowledge Organiser

Calculations with numbers in standard form	Multiplying & dividing: do the 'normal' numbers like usual; then use indelaws for the $\times 10^n$ Adding & subtracting: make them ordinary numbers first; do column addition or subtraction; change back to standard form	ex 125 to 128
Negative and Fractional Indices	$m^{a/b} = \sqrt[b]{m^a}$ $\boxed{a^{-c} = \frac{1}{a^c}} \qquad \boxed{\left(\frac{1}{a}\right)^{-c} = a^c} \qquad \boxed{\left(\frac{x}{y}\right)^{-c} = \frac{y^c}{x^c}}$	104 to 108
Direct Proportion	One quantity <b>increases</b> at the same rate as the other quantity <b>increases</b> .	339 M
Inverse Proportion	One quantity <b>increases</b> at the same rate as the other quantity <b>decreases</b> .	tional 342

#### Key Vocabulary

- Integer A whole number.
- Power/Indices The index of a number says how many times to use the number in a multiplication. It is written as a small number to the right and above the base number.
- Square number the answer you get when you multiple a number by itself.
- Cube number the answer you get when you multiply a number by itself 3 times.
- Root The inverse operation of a power.
- Expand to multiply the term before bracket by the terms in the bracket using the
- Factorise To put into brackets by taking out the highest common factor.
- Hypotenuse the longest side in a rightOangled triangle.
- Direct proportion one quantity increases at the same rate as the other quantity increases.
- $\circ$  Inverse proportion one quantity increases at the same rate as the other quantity decreases.
- $\circ$   $n^{th}term$  the position to term rule for a sequence. Can be used to find any number in a sequence.

# Year 9 PSHE – Drugs and Good Vs Evil

<u>Key Words</u>	<u>Nature Vs Nurture?</u>			
Good	Are people born or made evil?			
Evil	• <b>Nature:</b> Supporters of this side argue that genes are the major influence on our			
Drugs	intelligence and behaviour. In other words, we			
Illegal	<ul> <li>are born this way.</li> <li>Nurture: Supporters of this side argue</li> </ul>			
Legal	that our intelligence and behaviour are learned through a complex process known a			
Prescription	socialisation (learning how to behave in			
Crime	society from the people around us).			
Motivation	Are we free to choose?			
Christianity	Can our choices in life ever really be our			
Islam	own?			
	Think about how we are influenced by the			

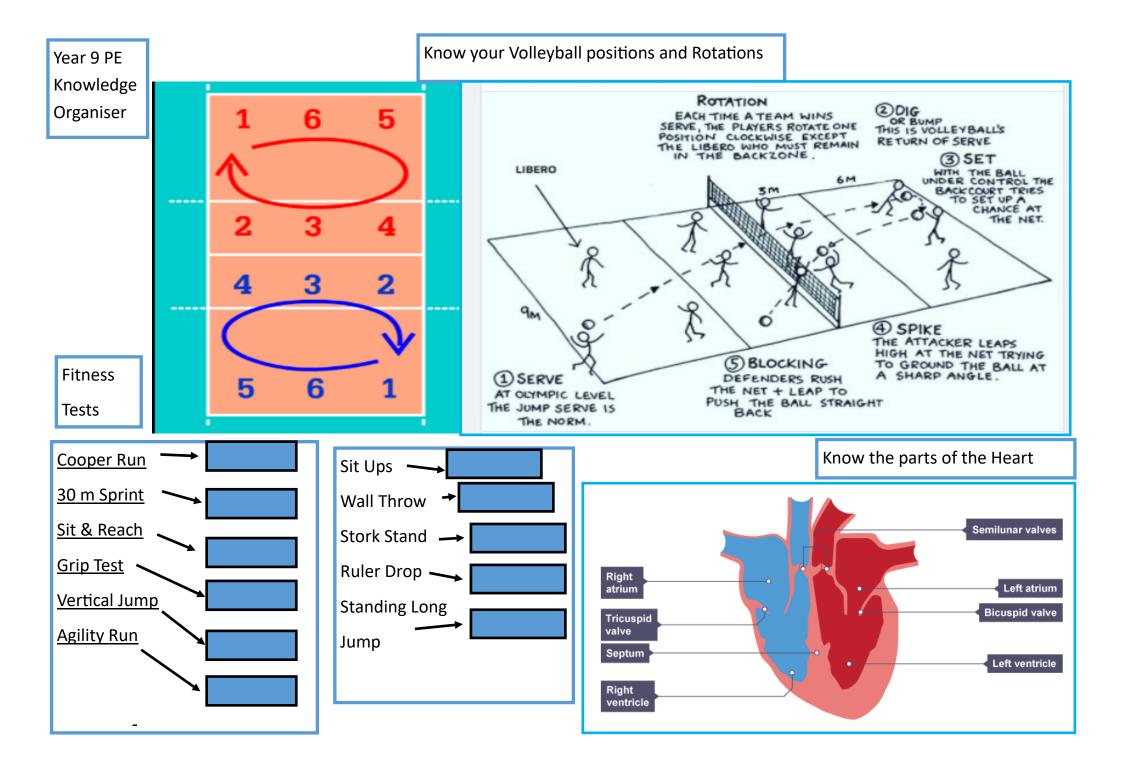
Think about how we are influenced by the

people and things in our life. Such as our parents, our history, our religion, our culture and the society we live in. It is easy to point out the rights and wrongs of people's decisions but perhaps not the motivations behind them.

The death penalty

Can the death penalty ever really be justified?

Key Questions To Ask Yourself
What is evil?
What is good?
Are we free to make choices?
Why do people commit crime?
How should we respond to crime?
What are the rights and wrong of the death penalty?



# Unit 15 Talking about weather and free time

Cuando tengo tiempo [when I have time] Cuando está despejado [when the sky is clear]	juego [l play]	al ajedrez [chess] a las cartas [cards] al baloncesto [basketball] al fútbol [football] al tenis [tennis]
		<b>con mis amigos</b> [with my friends]
<b>Cuando está nublado</b> [when the sky is cloudy]		
[when the sky is cloudy]		ciclismo [cycling]
Cuando hace buen tiempo	hago [I do]	deporte [sport]
[when the weather is good]		equitación [horse riding]
		escalada [rock climbing]
Cuando hace mal tiempo		esquí [skiing]
[when the weather is bad]		footing [jogging]
		natación [swimming]
Cuando hace calor [when it is hot]		los deberes [homework]
		senderismo [hiking]
<b>Cuando hace frío</b> [when it is cold]		
Cuando hace sol [when it is sunny]		a casa de mi amigo [to my friend's house]
<b>Cuando hace viento</b> [when it is windy]		al campo [to the countryside]
	<b>voy</b> [I go]	al centro comercial [to the mall]
Cuando hay niebla [when it is foggy]		al gimnasio [to the gym] al parque [to the park]
Cuando hay tormentas		a la piscina [to the pool]
[when there are storms]		a la playa [to the beach]
		al polideportivo [to the sports centre]
Cuando llueve [when it rains]		de pesca [fishing]
L J		en bici [on a bike ride]
Cuando nieva [when it snows]		
	me quedo [I stay]	en mi casa [at my home]
_		en mi habitación [in my room]
A veces [sometimes]		
Los días de semana [on weekdays]		
Los fines de semana [at the weekends]		



## Saying where I live

<b>J'habite à</b> [I live in] <b>Nous habitons à</b> [We live in]	Berlin Cardiff Dublin Edimbourg Londres Madrid Nice Paris Rome	<b>C'est dans</b> [It is in]	le centre d le nord d l'est de le sud de l'ouest de le nord-oues le sud-est o	e e e st de	l'Allemagne [Germany] l'Australie ]Australia] l'Ecosse [Scotland] l'Espagne [Spain] la France [France] du Pays de Galles [Wales] l'Angleterre [England] l'Irlande [Ireland] l'Italie [Italy]	
Près de ma maison [Near my house] Dans ma ville [In my city] Dans le centre [In the centre] Dans mon quartier [In my neighbourhood] Dans ma rue [In my street]	il y a [there is/are] il n'y a pas (de) [there isn't / aren't] nous avons [we have] nous n'avons pas [we do not	[a lot of]installationsmagasins [s]plein de/d'vieux bâtim		un [a y un [a l [a s un [a l of this s [a l beaut s spon shops] eents	un cinéma [a cinema] un club de jeune [a youth club] un grand parc [a big park] un centre sportif [a sports centre] un jardin botanique [a botanical garden] of things to do] of things to see] [a lot to do for young people] beautiful streets] sportives [sports facilities]	
[I like my neighbourhood because]	have] c'est [it is] il est [it is]	dangereux [dangerous]         sûr [safe]         propre [clean]         sale [dirty]         bien/mal tenu [well/badly kept]         beaucoup de pollution [a lot of pollution]				
Je n'aime pas mon quartier car [I don't like my neighbourhood because]	il (n') y a (pas) [there is -not-] on (ne) peut (pas) [one can -not-]	beaucoup de bruit [a lot of noise]         beaucoup de circulation [a lot of traffic]         manger bien [eat well]         faire du sport [do sport]				



# Unit 16 Talking about my daily routine

A eso de [around]	de la	almuerzo [I have lunch]	luego
	mañana	·····	[then]
<b>A</b> [at]	[in the		
	morning]	<b>ceno</b> [I have dinner]	
las cinco [5]			después
las seis [6]		desayuno [I have breakfast]	[after]
	J. J J.		
las siete [7]	de la tarde	descanso [I rest]	
	[in the		finalmente
las ocho y cinco [8.05]	evening]		[finally]
		hago mis deberes	
las ocho y diez [8.10]		[I do my homework]	
las ocho y cuarto [8.15]	de la noche		
	[at night]	juego en el ordenador	
las ocho y veinte [8.20]		[I play on the computer]	
las ocho y veinticinco [8.25]		<b>me acuesto</b> [I go to bed]	
		ine acaesto [i go to bea]	
las ocho y media [8.30]			
las ocho y treinta y cinco [8.35]		me lavo los dientes	
		[I brush my teeth]	
las nueve menos veinte [8.40]			
L J		<b>me levanto</b> [I get up]	
las nueve menos cuarto [8.45]			
		<b>me visto</b> [I get dressed]	
las nueve menos diez [8.50]		ine visto [i get u esseu]	
las nueve menos cinco [8.55]			
		salgo de casa	
A mediodía [12 pm]		[I leave my house]	
A medianoche [12 am]		voy al colegio en autobús	
		[I go to school by bus]	
		<b>veo la tele</b> [I watch the telly]	
		•	
		<b>vuelvo a casa</b> [I go back home]	



### UNIT 2: Saying what I can do in my neighbourhood

**Dans mon quartier on peut faire beaucoup de choses** [In my neighbourhood one can do many things]

	faire	de l'équitation [horse riding] de la natation [swimming] de la randonnée [hiking] du footing [jogging] du sport [sports] du tourisme [sightseeing]	à la piscine [in the swimming pool] au centre commercial [in the mall] au centre sportif [at the sports centre] au cinéma de mon quartier [at my neighbourhood cinema]		
jouer		au football au golf au rugby	au club de tennis [at the tennis club] au parc [in the park] au stade [at the stadium]		ennis club]
[For example, one can] voi	aller	en boîte de nuit [clubbing] faire les magasins [shopping] se promener [go for a walk]	au terrain de foot près de chez moi [on the football pitch near my house] dans la rue piétonne		
	voir	des concerts [concerts] des films [films] des matchs de foot [football games] des spectacles folkloriques [folklore shows]	dans la viei dans le cen [in the city dans les bo		]
	visiter	des châteaux [castles] des galeries d'Art des musées des palais historiques des ruines romaines [Roman ruins]	dans le quartier [in the area]	des affaires historique industriel touristique	de la ville [of the city]

Avant-hier [The day before yesterday] Hier [Yesterday]	je suis allé(e) [I went]	au stade voir un match de foot [to the stadium to watch a football match] me promener au parc avec mon/ma petit(e) ami(e) [for a walk in the park with my boyfriend/girlfriend] voir un concert de Stromae au stade [to see a Stromae concert at the stadium]
<b>II y a trois jours</b> [Three days ago]	<b>j'ai fait</b> [I did]	de la natation à la piscine municipale [swimming in the local pool] du footing dans le parc [jogging in the park] du tourisme dans la vieille ville [sightseeing in the old town]
Le week-end dernier [Last weekend]	j'ai joué [I played]	au tennis au centre sportif [tennis at the sports centre]
Vendredi dernier	[1 walched]	
[Last Friday]	<b>j'ai visité</b> [I visited]	le musée local [the local museum] une galerie d'art [an art gallery]



UNIT 3: Describing my street
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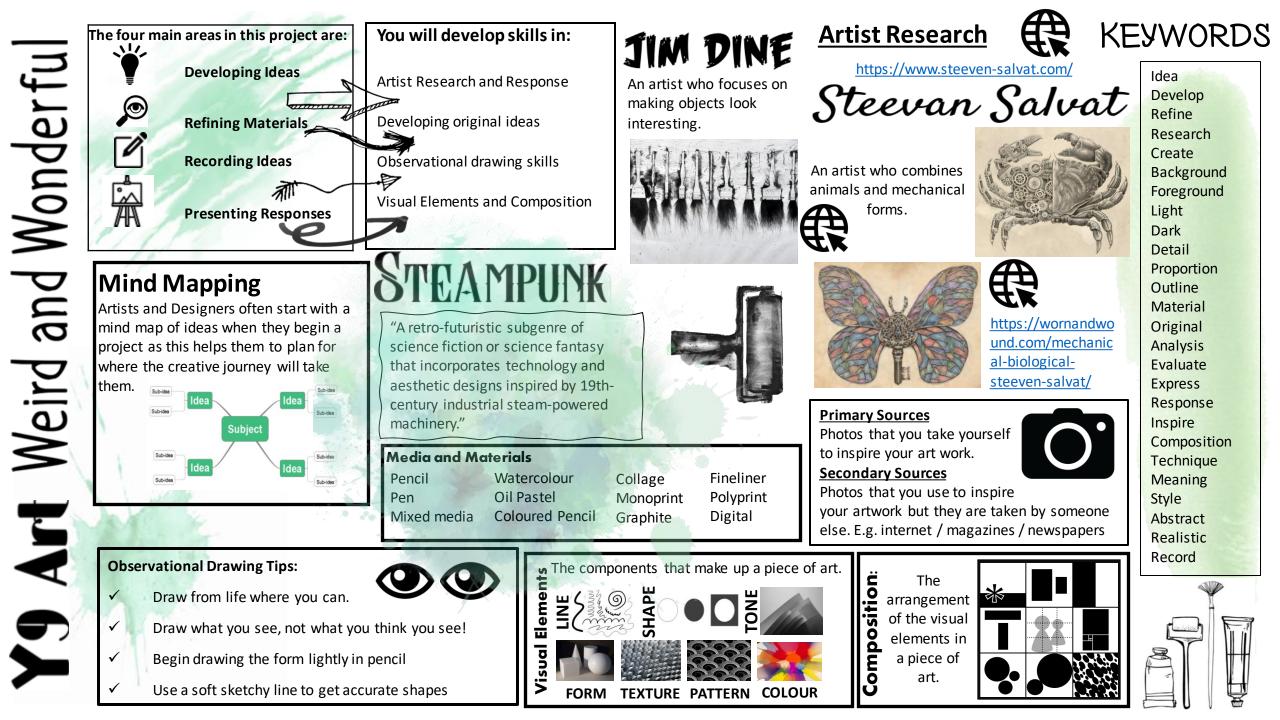
		Masculine no	uns		Femir	nine nouns
Dans ma rue, il y a [On my street, there is] Près de chez moi, il y a [Near my house, there is]		un arrêt de bus [bus stop] un bâtiment [a building] un centre commercial un centre sportif un petit parc un restaurant chinois/indien un supermarché un terrain de foot un théâtre			remnic nounsune bibliothèque [a library]une boucherie [a butcher's]une boulangerie [a bakery]une église [a church]une épicerie [a grocery shop]une gare [a train station]une mosquée [a mosque]une piscine municipale[a local pool]une synagogue [a sinagogue]	
	un maga		<b>e</b> [a shop]	-	ort [sports] tements [clothes]	
Le cinéma [The cinema] Ma maison [My house] Mon immeuble [My block of flats] Mon appartement [My flat]	est [is]	à droite [to the right] à gauche [to the left] à dix minutes à pied [a 10 minute walk away] à dix minutes en voiture [a 10 minute car ride away] à côté [next to] près [near] devant* [in front] en face [opposite] derrière* [behind] loin [far] au bout de la rue [at the end out		de *la [of/ Ma du *le	a boulangerie boulangerie piscine asc. nouns centre commercial collège magasin de musique musée f/from] parc stade terrain de foot	
Mon appartement Ma maison	est	entre [between]	la boucherie le cinéma	e	et	la piscine le supermarché
<b>Il n'y a</b> [There is not]	aucun [any -	- sg. masc]	restaurant	C	lans m	où j'habite [near where I live] on quartier peighbourhood]



aucune [any – sg. fem]

par ici [around here]

boutique





Brooklyn Harlem New York

SHEPARD FAIREY

Activist, Political, propaganda, posters, blue and red, graphic design, mixed media

Stencil, controversial, anonymous, Flower Thrower, Girl with Balloon, spray paint, street art

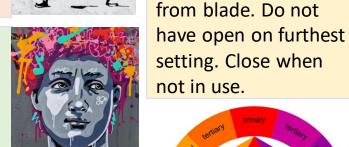
# DASHONE

Mixed media, monochromatic, bright colours, neon, celebrities, hip hop

Artist research Artist analysis Artist copy Artist response







Primary Secondary Harmonious Contrasting Monochromatic



Make sure it is always

Metal safety rule

Keep hands away from

the side when cutting.

Craft knife

Keep hands away

under your laminate

when cutting



TAG: A tag is the most basic writing of an artist's name or nickname.

**Artist Research:** 

Title

Images

Information

Artist

copy/response



The arrangement of the visual elements in a piece of art.

### **Stencilling Process:**

SI

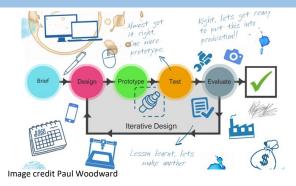
Comp

- 1. Print and laminate your image
- 2. <u>Place your laminated image on a cutting mat</u>
- 3. Carefully cut away the black sections of your stencil
- 4. <u>Masking tape your stencil onto paper making sure it</u> <u>is flat</u>
- 5. <u>Use a sponge and poster paint and dab it carefully</u> <u>over your stencil to create your print</u>

## Key Words:

Mixed Media Stencil TAG **Materials** Sources Craft knife Taki 183 Banksy Shepard Fairey Dashone **Keith Haring** Grid method Graphite transfer Research Analysis Composition Proportion Printing Style Technique Digital Manipulation

**Iterative design** is a **design** method based on a process of making prototypes, testing them, improving them, testing again and repeating this cycle until the best solution has been found.



A **design brief** is the information a client gives to a designer explaining what they want their product to be like, eg 'Design a drinks bottle holder for use while riding a bicycle'. The designer could also produce a brief for the client, as the client might have identified a problem but not know how to solve it.

A **design specification** is a list of criteria a product needs to achieve. Using the brief to begin research, a specification can be written after the research has been carried out and when more information is known.

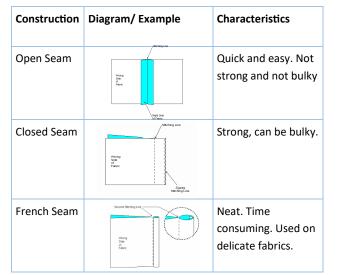
**Modelling** is a quick, cheap way to test ideas before making the final product.

#### Key Terms:

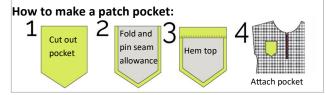
Technical Textiles are made to be functional e.g. Nomex is fire—resistant, Kevlar is strong, 3M Scotchlite is reflective. Planned obsolescence is when products are designed with a short lifespan in mind e.g. a disposable razer. Linked to environmental issues in design.

Designing for Maintenance is when products are designed to be repaired if they break. This is a good design principle. Stock forms are the standard ways of storing materials and components e.g. a reel of cotton, a roll of fabric. Sustainable Design is when products can continually be made without harm to people of the environment.

# Year 9 Textiles Design and Technology



Decorative Technique	Diagram/ Example	Characteristics
Quilting		Padded, protective. Warm.
Tie Dye		Different patterns, resist dye technique. Can achieve irregular or regular designs
Reverse Applique		Time consuming. Can use various layers and textures.

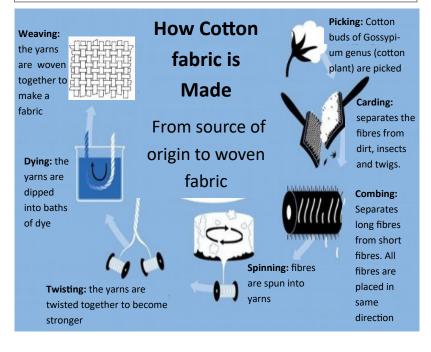




#### Vivienne Westwood

- Famous in 1970's
- Known for moving punk music movement into fashion
- Controversial and artistic style
- Her collections have been diverse and include inspiration of pirates, royalty, aristocracy and India.
- Now designs Ethical fashion





#### Mary Quant

- Famous in 1960's
- Invented the miniskirt and hot pants
- known for her use of pop art in fashion
- Changed the look of women worldwide
- Bright colours and
- monochrome