# Thomas Estley Community College Year 8 Spring 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!

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



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### 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

those answers.

# Practice!

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

# Geography Knowledge Organiser Year 7: People and Place

Key Word	Definition
Population	The number of people in a given area.
Pull Factors	Reasons a person might be attracted to an area.
Push Factors	Reasons a person might leave an area.
Settlement	A place where people live.
Site	The land the settlement is built on.
Function	The reason it is there and the things it provides.
Dispersed	A settlement that is spread out allowing more space for farms.
Nucleated	A settlement that is centred on a focus point e.g. cross-roads, shops etc.
Linear	A settlement that is long and thin (like a line) along a narrow valley or a main road.
Urban Regeneration	Taking an old run-down area and turning it into something different and new.
Burgess Model	Theoretical model for the layout of cities.

Useful websites... https://www.bbc.co.uk/bitesize/topics/zg7nvcw



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## Geography Knowledge Organiser Year 7: British Geography

Key Word	Definition
Weather	The day to day condition of the atmosphere.
Climate	The average weather conditions of a place taken over many years.
Climate Graph	A graph which shows the climate of a place including temperature and precipitation.
Prevailing Wind	The most common wind direction, in the British Isles this is from the south-west.
National Parks	Large areas of public land chosen by the government for its scenic, recreational, scientific, or historical importance given special protection.
Microclimate	A small area with a distinctive climate which is different to that of the surrounding area e.g. temperature.
Fieldwork	Undertaking tasks outside of the classroom, this may be local or in another country!
Data	Information collected together to look into what is happening.
Method	What you did for your fieldwork to collect your data.
Analysis	Applying your understanding to your data.
Evaluation	What could improve your fieldwork if you were to do it again?



process &

present data

Northumberland

3 6

Peak District

New Forest

Yorkshire

Dales

Lake Dist

Dartmoor

Pembrokeshire Coast

North York Moors

South Downs

Broads

process

draw

apply wider

understanding

Useful websites...

https://www.geographyinthenews.org.uk/issues/issue-25/theunited-kingdom/ks3/



Spreadsheets are used to model data.

That means that they can be used to perform calculations on data and make predicts.

SPREGUSILEEDS			Column— runs down a sheet	7
Spreadsheets use data which is held in cells.	Cell reference	Formula bar	assigned a letter	
<ul> <li>Data and information are not the same.</li> <li>Data: facts and figures in their raw form</li> <li>Information: data that has been given structure or meaning</li> </ul>	File       Home       Insert       Page Layout       Formulas       Data       ieview       View       Help         Image: A structure       Image: A structure <t< th=""><th>p General ∽ 6 9 €0 9 Fs umber Fs</th><th>al Format as Cell Table ~ Styles ~ tyles Cells Cells Editing</th><th>☆ Share     □ Comments       ↓     ↓       Ideas     Sensitivity       ↓     ↓</th></t<>	p General ∽ 6 9 €0 9 Fs umber Fs	al Format as Cell Table ~ Styles ~ tyles Cells Cells Editing	☆ Share     □ Comments       ↓     ↓       Ideas     Sensitivity       ↓     ↓
For example: Data—10, 2107, 18 Information—Time 10am, date 21st July, temperature 18°	A         B         C         D         E         F         I         I           1         -	J K L I	M N O P Q R	S T U
<ul> <li>Data can be gathered from different sources</li> <li>Primary source: collecting data yourself</li> <li>Secondary source: someone else collects the data</li> </ul>	5     6     7     8     9     10     11     12     13       Associated a number			
Each box on a spreadsheet is called a <b>cell</b> and they hold data. Each <b>cell</b> has a unique <b>cell reference</b> to identify its location.	14 assigned a number 14 assigned a number 15 assigned a number 16 assigned a number 17 assigned a number 18 assigned a number 19 assigned a number			
Example G7	Sheets Sheet1 (+) Sheet1 (+)	<sbook< td=""><td>: (t)</td><td></td></sbook<>	: (t)	
In order to complete calculations spreadsheets make use of formula. A formula uses the following basic symbols The = symbol is always at the start of a formula The + symbol is used for addition The - symbol is used for subtraction The * symbol is used for multiply The / symbol is used for divide Functions are also used which are predefined formula.	Common functions are SUM—adds a range of cells MAX—returns the largest value from selected cells MIN—returns the smallest value from selected cells AVERAGE—provides the arithmetic mean (average) of selected cells COUNTIF—counts the number of cells in a range that meet the given criteria IF— allows logical comparisons COUNTA—counts cells that are not empty	The tool bar at Changing colou There is a <b>sort</b> a ranged in ways cal, highest first at <b>Conditional for</b> to <b>automatical</b> a cell might tur	the top allows for <b>formatting</b> o ur, size, style etc and <b>filter</b> tool that allows for da that is most useful for the user at etc. <b>rmatting</b> can be set to allow the <b>lly</b> change if certain criteria is mo rn red if there was a negative nu	<sup>t</sup> the data. ta to be ar- e.g. alphabeti- cell <b>formatting</b> et. For example mber



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

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.



#### **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 that 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 Inter- net
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

Sever—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.





#### 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

•	Is anything that comes directly from your	•	Is any type of variation that is caused by your	Ī
	parents, anything that you inherit		surroundings	L
•	Examples can include lobe less or lobed	ŀ	Factors that can cause environmental variation	L
	ear lobes and eye colour		include diet, education and lifestyle	

Environmental variation

- 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 menstrualcycle stops until the baby is born



#### Fertilisation, implantation and gestation





**Knowledge organiser** 

page 1

#### 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 tostart growing
- · Oxygen for that the cell can start respiring to release energy forgermination
- · Warmth to allow the chemical reactions to start to occur within the seed

#### Parts of a flower Stamen Carpel Male part of the flower ,stigma∖ Female part of the flower anther carpel filament The anther produces The stigma is sticky to pollen catch grains of pollen The filament holds up The style holds up the the anther 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

# Acids and alkalis **Knowledge organiser**

• The more concentrated the acid, the lower the pH

#### **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



Nitric acids form nitrates

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



Key terms	Make sure ye	ou can wri	te definition	is for thes	e key terms.							
acid	acidic	alkali	alkaline	base	chemical	chemical	reaction	concentration	corrosive	displacement	hydroxide	indica
		neutral	isation	oxide	oxidation	pH scale	reversible	reactivity	salt	strong acid	universal indicator	w

oxide

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#### Metal reactions and gas tests

- When a metal reacts with an acid it will produce a salt and hydrogen gas, the fizzing
  - metal + acid  $\rightarrow$  salt + hydrogen magnesium + hydrochloric acid → magnesium chloride + hydrogen

#### 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  $\rightarrow$  carbon dioxide
    - copper + oxygen  $\rightarrow$  copper oxide
    - iron + oxygen  $\rightarrow$  iron oxide
    - magnesium + oxygen  $\rightarrow$  magnesium oxide

irritant neutral concentrated tor eak acid combustion lime water

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Year 7 Spring	Key dates			Key people				
Term	24 June	Battle of Bannockburn	Richard II	King of England	d from 1377 until he was	deposed in 1399.		
Britain	1314		John Ball	an English prie	an English priest who took a prominent part in the Peasants' Revolt of 1381.			
	April 1337	The Hundred Years War begins	Wat Tyler	a leader of the	a leader of the 1381 Peasants' Revolt in England.			
C1348 – 1500S			Llewellyn	was Prince of	was Prince of Wales from 1258 until his death in 1282.			
Lessen Content	June 1348	Black Death arrives in England	Owain Glyndwr	a Welsh leader aim of ending	a Welsh leader who instigated a fierce and long-running yet ultimately unsuccessful war of independence with the aim of ending English rule			
	1356	Battle of Poitiers	Edward I	also known as	Edward Longshanks and	the Hammer of the Scots , was King of England from 1272 to 1307		
Medieval Towns and	15 June	The Peasants Revolt begins	Robert the Bruce	was King of Sc	ots from 1306 to his deat	h in 1329.		
Cities	1381		William Wallace	a Scottish knig	ht who became one of th	e main leaders during the First War of Scottish Independence.		
The Black Death	25 October 1415	Battle of Agincourt	Joan of Arc	a heroine of Fi	rance for her role during	the Lancastrian phase of the Hundred Years' War		
The Descentia Develt			Richard III	was King of En	gland from 1483 until his	death in 1485. He was the last king of the House of York.		
	22 May 1455	The Wars of the Roses begins at	Henry VII	King of England monarch of th	King of England from his seizure of the crown on 22 August 1485 to his death in April 1509. He was the monarch of the House of Tudor.			
Controlling other	Controlling other		Martin Luther	Religious reformer who criticised the Catholic Church, and helped to start the Reformation in Europe.				
countries - wales	22 August	Battle of Bosworth Field:	Henry VIII	King of Englar	nd from 1509 until his dea	th in 1547. Henry is best known for his six marriages.		
Controlling other countries - Scotland	1405		Cathering of Alagon Ulgen of fingland from June 1509 until May 1533 as the first wife of King Henry VIII.					
Controlling other		Key Words - Glossary						
countries -	urban	means "related to a city"	lated to a city"		chivalry	the medieval knightly system with its religious, moral, and social code		
Ireland+France	rural	countryside rather than the t	town		Civil War	a war between organized groups within the same state or country.		
The Wars of the Roses	disease	any harmful deviation from t of an organism	he normal structural or fu	nctional state	archeologist	a person who studies human history and prehistory through the excavation of sites and the analysis of artefacts and other physical remains.		
The King in the Cor	plague	an epidemic disease that cau	ises high mortality		dynasty	a line of hereditary rulers of a country.		
park	symptoms	a physical or mental feature condition of disease	e which is regarded as indicating a		divorce	the legal dissolution of a marriage by a court		
Henry VII	insurrection	a violent uprising against an	authority or government.		catholicism	the faith, practice, and church order of the Roman Catholic Church		
	Cymru	the Welsh name for Wales			protestantism	the faith, practice, and Church order of the Protestant Churches		
Henry VIII	heir	a person legally entitled to th person's death	e property or rank of another on that		reformation	a 16th-century movement for the reform of abuses in the Roman Church ending in the establishment of the Reformed and Protestant Churches		
Religious Changes	disembowelle	d cut open and remove the inte	ernal organs of		heresy	belief or opinion contrary to orthodox religious (especially Christian) doctrine.		
					-			

Key resources: www.tecchistoryks3.blogspot.com **Key Assessment:** 50 minute assessment based on skills from Paper 1 GCSE History Questions 6a – 8 or 9

## **Oliver Twist**

Key Vocabulary	Definition
Morality	-a code of wrong or right. Good = moral, bad = immoral
Vulnerable	- In a situation in which you could be easily harmed (on the streets)
Naive	- To have no experiences of the complications of life
Workhouse	- Place where people who couldn't support themselves worked
Poverty	- State of being very poor
Malicious	- Meant to harm or upset someone

Character		
Oliver	<ul> <li>'pale, thin' orphan who is treated badly by almost everyone he meets. He tries his best to be a good person and experiences 'horror and alarm' whenever he sees crimes being committed.</li> </ul>	
Fagin	An old man who runs the gang of pickpockets. He seems kind but his 'villainous-looking and repulsive face' reflects his selfish nature as he gets young boys to do his dirty work for him.	
Jack Dawkins (The Artful Dodger)	A young boy who introduces Oliver to Fagin's gang who has 'all the airs and manners of a man'. He's confident and cunning.	
Bill Sikes	A 'rough man' who has been a criminal for many years. He beats his dog viciously and brutally kills his girlfriend, Nancy.	
Nancy	Bill's girlfriend who risks her life to help Oliver escape from the gang. She loves Bill even though he treats her abusively and she feels guilty about the life of crime she has led.	

Context			
Charles Diskons	Charles Dickens was born 7th February 1812 in Portsmouth. His novels are set 1900). Dickens had to work in harsh conditions as a child when his father was so London was a hum site growing bigger all the time due to the located activity Boyel	n Victorian times ( ent to prison. Victo	1830- orian
Charles Dickens	where crime developed and in the early 1800s the first police force was created expected to know their place in society and the church taught people to be cor	d. Victorian people	were were on'.

# Writing and Reading around the world

#### Language Devices

Alliteration	Repetition of the same letter at the start of two or more words
Connotation	Associated meaning of the word
Extended Metaphor	When an author uses a metaphor throughout a long passage or even an entire poem
Imagery	Visually descriptive language
Metaphor	Saying something <u>is</u> some- thing else, for effect
Onomatopoeia	Where words are used to imitate sounds
Personification	Making objects have hu- man characteristics
Simile	Comparing using "like" or "as"
Sibilance	The repetition of an "s" sound in one or more words
Theme	The central idea of a piece of literature

Key Vocabular	Key Vocabulary				
Haiku	A Japanese poem of seventeen syllables, in three lines of five, sev- en, and five				
Myths	A myth is a traditional story that explains the beliefs of a people about the natural and human world. The main characters in myths are usually gods or super- natural heroes.				
Legends	A legend is a traditional story about the past. The main charac- ters are usually kings or heroes. Some examples of well-known legends include the tales of Odys- seus from Ancient Greece, Beowulf from the Norse lands and King Arthur from Old England. Like myths, legends were thought to be true				
Colonisation	The action or process of settling among and establishing control over the indigenous people of an area.				

#### More Vocabulary to Learn

Articulate	To express things clearly.
Create	To make something new, or invent something.
Epic	Used to describe events that happen over a long period and usually involve a lot of action and difficul- ty.
Hero	A person who is admired for having done something very brave or having achieved something great.
Intent	To have as your plan or purpose.
Narrative	A story or description of a series of events.
Structure	The way something is ar- ranged or organised.

### Y7 Spring Maths Knowledge Organiser

Торіс	Key fact								Hegarty maths clip number
Read, write and compare positive integers and decimals		Hundreds Tens	Ones	Decimal point	Tenths	Hundredths	One-Thousandths		13, 14 45 & 46
Multiply and divide by powers of 10		Multiplying: Move the digits to the left Dividing: Move the digits to the right							
Calculations with integers	Di	Addition and Subtraction: put in columns Multiplication: Remember place holder Division: Remember bus stop and remember to carry							
Rounding	5 or more: round up 4 or less: keep the same Look to the right								17, 56 & 130
Fatimation		Significant f	igures: star	t count	ing at fir	st non-z	ero		121
Estimation		Round	each value			ingure			131
expressions	Collect a e.g.	Collect all the 'like' terms (numbers, x, x <sup>2</sup> , x <sup>3</sup> are all separate terms) e.g. 12 + 3x + 6x <sup>2</sup> - 2x <sup>3</sup> - 5 - 3x + 5x <sup>2</sup> + 7x <sup>3</sup> = 7 + 11x <sup>2</sup> + 5x <sup>3</sup> 3y means 3 x y <u>7</u> X means 7 ÷ x							
Simplifying ratio	Divide all parts by the highest common factor. Always include the colon (:).								329
Perimeter	Perimeter is the distance all the way round a shape. All sides added together.								548-552
Area	rectangle b A = bh	e h	parallelog h A = bh	ram	tria h A =	ngle $\frac{1}{2}bh$			553-559

Pictograms	Use the key to work out the numbe	426	
		day.	
	Monday 🧉 🚽 🖕 🧉	5 x 6 = 30	
	Tuesday	2.5 x 6 = 15 4 x 6 = 24	
	Wednesday = 6 cupcakes	3.5 x 6 = 21	
	Thursday	7 x 6 = 42	
	Friday	10 x 6 = 60	
	Saturday	9.5 x 6 = 57	
	Sunday		
Bar charts	Which type of movie was most popula How many people said comedy was th	ar? <b>Romance</b> nis favourite? <b>4</b> How many people were asked in total? 4 + 5 + 6 + 1 + 4 = <b>20</b>	425
	0 Comedy Action Romance Drama SciFi		

#### Key Vocabulary

 $\circ$  Integer – a whole number  $\circ$  Product – the result of a multiplication.  $\circ$  Divisor – the number that you are dividing by. Eg. 16 divided by 2. 2 is the divisor.  $\circ$  Quotient - the answer after you divide one number by another.

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.
 Root – The inverse operation of a power.
 Significant figures - Leading zeros are not significant. For example, 0.00052 has two significant figures: 5 and 2. Trailing zeros in a number containing a decimal point are significant.

• Remainder - A remainder in mathematics is what's left over in a division problem.

 $\circ$   $\;$  Round - Rounding means making a number simpler but keeping its value close to what it was.

○ Truncate – A method of approximating a decimal number by dropping all decimal places past a certain point without rounding. ○ Estimate - To estimate means to find something close to the correct answer. ○ Approximate – an alternative word for estimate. ○ Area: The space inside a 2D shape ○ Perimeter: Distance all around a shape ○ Term- each part of an expression. A single number or variable within an expression. ○ Expression- a mathematical sentence containing numbers and variables. ○ Simplify: Write in shorter form.

MES PASSE-TEMPS Image: Scan the QR code with your phone camera to practise on Quizlet	Qu'est ce que tu aimes faire ?       • What do you like doing ?         Le soir/ le weekend       in the evenings/ at the weekends	mer
Les ordinateurs et les portables	Le samedi matin/ on Saturday mornings   en hiver in the winter après-midi/soir afternoons/evenings   guand il fait beau when it's nic	er e weather
Qu'est ce que tu fais ? avec ton ordinateur ? avec ton portable?What do you do/ are you doing ? with your computer? with your mobile? I play I surf /i'm surfing the net I chat/ I'm chatting on MSN.Je regarde des clips vidéos Je télécharge de la musique J'envoie des SMSI watch / I'm watching video clips I download/I'm downloading music I send/ I'm sending SMS	J'aime       I like         J'aime       I like        retrouver mes amis en ville.      meeting my friends in town.        regarder la télé      watching TV        jouer sur ma PlayStation.      playing on my PlayStation.        faire les magasins.      going shopping.        jouer au football.      playing football.        trainer avec mes copains      phoning my mates.	s d
Je texte I text/ I'm texting Je parle avec mes copains/ I talk/ I'm talking to my friends/mates mes copines/ mes ami(e)s J'envoie des e-mails I send/I'm sending e-mails	Le futur       Je vais       I'm going       Ce sera = It will be       quelque fois       sometimes         Je vais       I'm going       Ce sera = It will be       tous les jours       often         II / elle va       He/ she is going       often       tous les jours       everyday         On va       We are going       tous les soirs       every even         aller on ville       tous inféree       all the times	ìing
Le sport • Sport Je joue I play au basket basketball	faire du sport / de la natation to do sport / go swimming manger au restaurant to go shopping de temps an the time faire les magasins to go shopping deux fois par semaine twice a	, me to time a week a week
au billiard       billiard/snooker/pool         au foot(ball)       football         au hockey       hockey         au tennis       tennis         au volleyball       volleyball         sur la Wii       on the Wii         à la pétanque/ aux boules       boules         au tennis de table /au ping-pong       table tennis	Qu'est ce qu'ils font?       • What do they do?         Il fait de la lutte       he does wrestling         Elle fait du jogging       she goes jogging         Elle fait du jogging       she goes jogging         Elle a gagné le match       she won the match         Il est champion régional       he's the regional champion         Elle s'entraine (trois) fois       she trains (3) times	2 g ng
Tu es sportif(ve)? Are you sporty? Je suis (assez) sportif(ve) I'm quite sporty Je ne suis pas très sportif(ve) I'm not very sporty Mon sportif/ ma sportive préférée My favourite sportsman/ sportswoman is	par semainea weekJe fais du véloI go cyclingIls font de la musculationthey do weight trainingJe fais de la danseI do danceElles écoutent de la musiquethey listen to musicJe fais de la gymnastiqueI do gymnasticsIls jouent au footthey play footballJe fais de la natationI go swimmingElles regardent la téléthey watch TVJe fais de l'équitationI go horse-ridingJe fais de s promenadesthey like R&BJe fais des promenadesI go for walks	

### **Employment Keywords:**

Full time Freelance Part Time Venue Manager Session musician Studio manager Mastering Engineer Live sound technician Sound engineer Roadie Artist Manager Record Producer



# The role of the recording studio:

A recording studio is a facility where sound recording and mixing takes place. A number of job roles work with the studio to ensure the studio runs efficiently and produces a professional sound. In this section you will learn about these different recording roles and the process of making a sound recording. A recording studio works with other organisations in the industry: - a record label might book the studio to record a song for one of their artists for which they will then own. - An artist/band might book a studio to record their own songs to create a demo - A composer might book the studio themselves (as well as the musicians) to record a version of their song so they can pitch their music to publishers

#### Venues:

Sports arena Theatre Park band-stand Restaurant Dance festival Pub Outdoor festival Concert hall

Revision Video <u>https://www.youtube.com</u> <u>/watch?v=QtJR-</u> <u>OEMU7Y&feature=youtu.b</u> <u>e</u>

The music industry

Year 8 Music

#### Extravaganzas

Melodramas

Minstrelsy

#### Dissonance

Blue notes

Syncopation

Push rhythms

Interval

Tritone

Riff

**Cross rhythms** 

Texture

Tonic

Dominant

Word painting

Neapolitan chord

duet

# The background.....

West Side Story is an American musical and was completed in 1957. The music is by **Leonard Bernstein** and the words are by **Stephen Sondheim**. It is a jazzy musical based on Shakespeare's story of Romeo and Juliet but set in 20th-century New York against a background of racial gang warfare.

There are two rival gangs - the Sharks who are originally from Puerto Rico and the Jets who were born in New York. **Tony** (tenor) and **Maria** (soprano) meet at a dance and fall in love but have allegiances with opposing gangs. Both acts end with a murder.

The musical was groundbreaking because of its tragic tone, sophisticated musical style and innovative extended dance sequences which are integral to the show. The music has elements of opera, musical, jazz and Latin-American dance music. 'Something's Coming' is one of the well-known songs from West Side Story. Others include 'Somewhere', 'Maria' and 'Tonight'.

The first production was on Broadway. In 1961 it was made into a successful film and since then has been performed many times by theatre, opera companies and schools.

'Something's Coming' is taken from Act I and is Tony's first solo. At this point he has not met Maria. He has become disillusioned with gang warfare and looks forward to a better future. He wants to leave the Jets but agrees to join them to go to a dance later that evening. **ARIA** 

Somethings coming: <u>https://www.youtube.com</u> /watch?v=FOQPMjKLQQU



Year 8 Music



#### 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



### **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



#### $(\mathcal{P})$ **Key terms**

Make sure you can write definitions for these key terms.

#### **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 noncontact field. force а 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:

```
weight (N) = mass (kg) × gravitational (N/kg) field strength
```

• 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

#### 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)



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





- 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

## **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



¿Qué estudiasr?	What do you s	tudy?		El uniforme uni	form	Opiniones Opinion	ns		h a si sa	¿Cómo es tu ins	ti? What's y	our school li	ike?
Estudio	Letudy	informática		Llevo I wea	r	dibujo?	DO YOU IIKE art?	e Aburrido/d	boring	Es	It is	pequeño/a	small
		í		Una camiseta	a T- shirt	Sí, me gusta el	Yes, I like c	urt <b>Difícil</b>	difficult	antiguo/a	old	mixto	mixed
ciencias	science	inglés	English	Una camisa	a shirt	dibujo		Divortido/a	fup	bonito/a	pretty	masculino	boys
dibujo	art	matemáticas	maths	Una chaqueta	a blazer			Divernao/a	1011				school
educación física	PE	música	music	Una corbata	a tie	No, no me gusta el dibujo	No, I don'i like art.	Fácil	easy	bueno/a	good	femenino	girls school
español	Spanish	religión	RE	Un jersey Una falda	a jumper a skirt			Importante	important	feo/a	ualv	publico	public
francés	French	teatro	drama	Un vestido	a dress	Te gustan las ciencias?	Do you like science?	e Interesante	interesting	neo, a			
				Unos pantalone	s trousres			Práctico/a	practical	granae	big	privado	private
geografia	geograpny	fechologia	technology	Unos zapatos	shoes	Sí, me encantan las ciencias	Yes, I love	Útil	useful	horrible	horrible		
historia	history						Science			moderno/a	Modern		
¿Cuál es tu día fa	avorito? What i	s vour favourite	dav?	¿Qué hay en t	u insti? What is	s there in your school	?	¿Qué haces du	rante el recreo? \	Vhat do you do du	ring break?		
		- ,				·		Como	Leat	Bebo	•	l drink	
Mi día favorito es	s el lunes M	y favourite day i	s Monday			In my school there is	s			ch Aqua		Watar	
Los martes estudio On Tuesdays I study		ly	Un campo de fútbol		A football pitch		Un bocadilio	A sandwic			water		
¿Por qué?	W	hy?		Un comedor		A dining room		Unos caramelos Sweets		Un refresco		A fizzy drin	k
Porque	Be	ecause		Un gimnasio		A gym		Chicle	Chewing	gum <b>Un zumo</b>		A juice	
Por la mañana	In	the morning		Un patio		A playground		Una chocolatine A chocol		te bar Leo mis S	MS	I read my t	exts
Por la tarde	In	the afternoon		Una biblioteco	a	A library		Fruta	Fruit	Escribo S/	٨S	I write my t	exts
Estudiamos	W	e study		Una clase de	informática	An ICT classroom		Unas patatas fi	itas Some crisp	Nunca ha	igo mis	l never do	my
No estudio	lo	, don't study		Una piscina		A swimming pool				Gebeles		Homework	
		,		Unos laborato	rios	Some laboratories			Expresiones de	tionen o Tineo	Palab		uantas
Los profesores Te	achers			lings clases		Some classrooms			expressions	nempo nme	High fr	equency wo	ords
El profesore es	The (m	ale) teacher is							normalmente	normally	algo	some	ething
La profesora es	The (fe	male) teacher is .		No nay piscing	a	Inere isn't a pool	Los días de of the week	la semana- days	siempre	always	donde	wher	e
paciente	patien	t		To revise th	his topic		lunes martes	Monday Tuesdays	a veces	sometimes	tambie	<b>én</b> also	
raro/a	a odd			miércoles	Wednesday Thursday	nunca	never	tampo	nor/r	neither			
severo/a	strict			Miln	isti		viernes sábado	Friday Saturday	primero	first	hay	there	e is
simpático/a	kind,ni	се		Vocabu	Ilario	SCAN ME	domingo	Sunday	luego	then	pero	but	

# Gramática

#### Me gusta / me gustan

- You use **me gusta / me gustan** to say whether you like something.
- You must put the correct definite article (el,la,los or las) in front of the noun.
- Me encanta/me encantan (I live) works in the same way.

## Singular Me gusta el/la ... No me gusta el/la ... Me encanta el/la...

Plural Me gustan los/las... No me gustan los/las... Me encantan los/las...

#### Adjectives

Adjectives describe nouns. Their endings change to agree with the noun they describe. Adjectives fall into three main groups. The endings for each group work like this:

Singular		Plural			
Masculine	Feminine	Masculine	Feminine		
Seri <b>o</b>	Seri <b>a</b>	Seri <b>os</b>	Seri <b>as</b>		
Verde	Verde	Verd <b>es</b>	Verd <b>es</b>		
Azul	Azul	Azul <b>es</b>	Azul <b>es</b>		

#### The definite & indefinite articles

The plural form of un/una (a) is unos/unas (meaning some)

	Singu	ular	Plural		
Masculine	<b>Un</b> laboratorio	A laboratory	Unos laboratorios	Some laboratories	
Feminine	<b>Una</b> clase	A classroom	Unas clases	Some classrooms	

Remember, there are also four words for 'the' in Spanish.

	Sing	jular	Plural		
Masculine	el laboratorio	the laboratory	los laboratorios	the laboratories	
Feminine	la clase	the classroom	las clases	the classrooms	

#### Present Tense Verbs

There are 3 groups of verbs in Spanish:

-ar verbs	-er verbs	-ir verbs
Estudiar to study	Comer to eat	Vivir to live
Estudi <b>o</b> I study	Com <b>o</b> l eat	Viv <b>o</b> I live
Estudi <b>a</b> You sg study	Com <b>es</b> You sg eat	Viv <b>es</b> You sg live
Estudi <b>a</b> He/she/it studies	Com <b>e</b> He/she/it eats	Viv <b>e</b> He/she/it lives
Estudi <b>amos</b> We study	Com <b>emos</b> We eat	Viv <b>imos</b> We live
Estudi <b>áis</b> You all study	Com <b>éis</b> You all eat	Viv <b>ís</b> You all live
Estudi <b>an</b> They study	Com <b>en</b> They eat	Viv <b>en</b> They live



# Year 7 PSHE – Health, Wellbeing and Relationships

	-	
<u>Key Words</u>	Thi	ngs to think about:
Friends	1.	Who is important to me?
Kindness	2.	Why are those people important?
Equality	3.	Do I like change?
Health	4.	How to I react to change?
Change	5.	How do I make friends?
Bullying	6.	Why am I friends with my friends?
Media	7.	What influences me?
Influence	8.	How do I make decisions?
Stability	9.	What is a healthy lifestyle?
Negativity	10.	Do I have a healthy lifestyle?
	11.	What is positive in my life?
	12.	What is negative in my life?
	13.	What type of person do I want to be?

## Examples of what could be considered as negative influences

- The media tv/news or adverts
- Friends
- Social media

# <u>Key Words</u>

**Prejudice** - preconceived opinion that is not based on reason or actual experience.

**Discrimination** – the unjust treatment of different categories of people, especially on the grounds of race, age, sex, or disability.

Hate Crime - acts of violence or hostility directed at people because of who they are or who someone thinks they are.

**Resilience** - the capacity to recover quickly from difficulties.

**Influence** - the capacity to have an effect on the character, development, or behaviour of someone or something

#### 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.





top view

front view

2-dimensional orthographic projection

Orthographic and isometric projections of an object

Two-point

perspective - This

from the side with

shows an object

two vanishing

#### **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.

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.



#### 3 Tone shading



3-dimensional isometric projectio

#### 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.

#### 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.

Wasting tools

small spaces

Steel rule

Centre punch

Marking knife

Try square

Bradawl

Coping saw – used to cut curved lines

Hand file – used to shape materials

Disc sander : used to waste material

Rasp – used to shape wood

Pillar drill – used to drill holes

Marking and measuring tools

Junior hacksaw - used for sawing plastic and metal

Needle file - used to shape materials, remove material is

#### 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 a 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.



side viev



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





Material	Example	Properties	Year 7 Texti	les - Des	ign and T	Technolog	У 📃
Thermo	010	Changes		Equipr	nent		bre from a ant
chromic	JE.	colour with heat		R	1 0	X	Natural fi
Photo chromic	PHOTOCHROMIC LENS	Changes colour with	Sewing machine	Thread	Needle	Scissors	0m a
		light	One person at a time. Keep fingers away from moving parts	Whete		Carry with blade together. Always cut on the table	ral fibre fro plant
/lemory hape lloy		Metal that returns to original shape	Use slowly and steadily.	Pins	Button	away from fingers. Return to scissor rack when finished.	Natu
Hydro- chromic		with heat Changes colour in water	1º	Pins and needles are kept in containers. Use carefully pointing away from fingers and	F	Iron	atural fibre from a plant
	Ory = white		Such upper	body.	Pattern nieces are	Extremely hot.	2
Material	Example	Properties			used to make paper templates before cutting fabric out.	Always ask before using. Turn off after use. Store bot plate down	
Kevlar	POLICE	Very strong and resists cuts, tears.	Tape measure	Zipper Hand S	ewing	on rack.	hetic Fibre
Nomex		Heat and fire resistant		32			C Fibre Synt
Micro- encapsulatior	Encapulation Technology	Tiny beads encapsulated with liquid e.g.	Running S Running stitch is qui and easy	titch Back Stitch ck Back Stitches and look nea	s are strong Whi at finis	nip Stitch p stitches are used to h and neaten edges.	Syntheti
	Antibacterial to stop feet smelling	antibacterial	More Key words:	senarate nieces of fa	bric together		Fibre
Phosphorescen	t	Glows in the dark	Hem - fold on the ed Fray - the yarn comi	dge of fabric which is ing away at the edge	s sewn down makin of curt fabric.	g the edge look neat.	Synthetic

**Dying** - when the fabric colour is changed by soaking in water and fabric dye.

Very durable
Crease resistant
Can be recycled



# **Charles I and the Civil War**

#### **Causes of the Civil War**

#### Money

- Charles I had a lavish lifestyle and spent his money on clothes and art.
- He raised taxes without asking Parliament.
- Ship tax which was used not on ships, but on himself!

#### Religion

- Charles married a catholic, Henrietta Maria of France. This upset Protestant England.
- Introduced a new prayer book in Scotland to make it more Catholic.
- People were worried Charles would make England Catholic again.

#### Power

- Charles believed in the Divine Right of Kings.
- Charles did not want to listen to Parliament and wanted to rule on his own.
- Charles was very arrogant.

#### The Battle of Marston Moor

The battle of Marston Moor, which took place on the **2nd July 1644**, is believed to have been the **largest battle ever fought** on English soil.

The Royalists had 10,000 fewer troops than the Parliamentarians.

#### The Royalists were defeated in dramatic fashion.

In just a couple of hours on Marston Moor...

- > the the fate of York and control of the North was decided
- > the Royalist Northern army was effectively destroyed
- > Prince Rupert and the royalist cavalry lost their reputation as an invincible force.

- 1. He ruled without Parliament and ruled according to his own will
- 2. He wickedly made war on his own subjects
- 3. He was responsible for all of the murders, raping's, burnings and damage caused by the wars
- 4. He restarted war after being defeated.

#### The trial and execution

Charles I was put on trial for 4 charges:

Charles was not defended at his trial and did not accept the authority of the court. No one had ever put a king on trial before! The King appeared before his judges four times, charged with tyranny and treason. The exchanges always took a similar form with the King challenging the court's authority and its right to try him. He refused to answer the charges against him. After each day, soldiers had to take him away. If Charles had defended himself, he may not have been executed...

On 30 January 1649, King Charles I was beheaded outside Banqueting House in Whitehall.

The assembled crowd is reported to have groaned as the axe came down. Although the monarchy was later restored in 1660, the execution of Charles I destroyed the idea of an all-powerful and unquestionable monarch.





# 'ER CROMWEI **KNOWLEDGE ORGANISER**

#### **Overview**

Oliver Cromwell (25<sup>th</sup> April 1599 – 3<sup>rd</sup> September 1658), was an English military and political leader.

He made England a republic. He did so by leading armies of the parliament of England against Charles I during the Enalish Civil War.

He led the Commonwealth of England, ruling as Lord Protector from 1653 until his death in 1658.

Cromwell was the first ruler of England to be a Puritan: under his rule, the Protectorate expressed that religious views should be respected – however, people who went against popular views were often tortured or imprisoned.

Although a quiet man, Cromwell gained respect throughout his life as a strong leader and commander.



Times in His Life							
	Early Life	Young Adulthood					
×.	-Cromwell was born on 25 <sup>th</sup> April 1599, in Huntingdon (near Cambridge), England.	-In 1628, he became a puritan and an MP. He supported parliament in its disagreement with the King.					
-H	e lived an ordinary life as a young man, studying at						
luntir	ngdon Grammar School and then Sidney Sussex College at the University of Cambridge.	-He particularly disliked many of t churches, and supported their i	he bishops in removal.				
	The English Civil War						

-Parliament continued to disagree with Charles I about the way that the country should be run. In January 1642, Charles I marched into Parliament with guards, to arrest five members of Parliament who disagreed with him. They escaped, and decided the King needed to be removed.

-As the country drifted towards Civil War, Cromwell became an outspoken leader of the Parliamentarians. He also acquired a reputation as a brilliant military mind. He noticed that the Royalist forces were far more skilled and dedicated, and so he trained the Parliamentarians to fight more effectively. He quickly rose to become Lieutenant General and major strategiser for the Parliamentarians, as they eventually defeated the Kings armies.

Н

The Commonwealth and Protectorate

-Cromwell was amongst those who agreed for the King to be executed after the war. After this happened, a republic was declared, known as the Commonwealth of England. A Council of State was appointed to manage the country, and Cromwell was amongst this group.

-Cromwell had the support of the army, who eventually took control and declared Cromwell Lord Protector. Cromwell largely ruled through his major-generals, with England essentially became a dictatorship. When he died, his son succeeded him but the Protectorate collapsed. Charles II was restored as King the next year.

#### Why did Cromwell/ parliament disagree with

Roundheads and Cavaliers?

 Parliament and Charles I disagreed on many things These included religion and money. Charles I had brought back many features of the Catholic church, which worried Puritans (many of whom were in Parliament). He also wanted to raise taxes, which he could not do without Parliament's agreement. The King believed in 'divine right', meaning that Kings could do whatever they wanted as it was God's will. He disliked having to work with Parliament, and had it shut down between 1629 and 1640.

What was Cromwell like as Lord **Protector?** 



celebration of Christmas!

-Cromwell is thought to have suffered from malaria, and died at Whitehall on 3<sup>rd</sup> September 1658 (this was the anniversary of his famous victories at Dunbar and Worcester). He was succeeded as Lord Protector by his son Richard. However, Richard had no power in the army or parliament and was forced to resign in 1659. Parliament restored Charles II as King.

	Тор 10	Facts
1.	Cromwell firmly believed that the Bible should govern all of one's actions in daily life.	6.
2.	His many military victories included gaining control over Ireland and Scotland.	7.
3.	Under Cromwell, Jews were allowed to settle in England for the first time in 400 years.	8.
4.	In 1657 Cromwell was offered the throne, but after some deliberation rejected it.	9.
5.	Oliver Cromwell married Elizabeth Bourchier in 1620. Her father was wealthy and owned a lot of land in Essex.	10.

#### **Oliver Cromwell Timeline**

25<sup>th</sup> April 1599: Born in 1616: Enters Sidney 1628: Becomes 1640: Becomes MP 1642: Raises troops for 1645: Has risen to January 1649: Supports the 1653: Dissolves parliament on MP for Huntingdon, England. Sussex College, for Cambridge. Parliament against Royalists Lieutenant execution of the King -20<sup>th</sup> April, and then becomes Cambridge. Huntingdon. of Charles I. General. Charles I. Lord Protector 16<sup>th</sup> December.



happened **Cromwell's** death?



Who were the

**Charles I?** 

-'The Roundheads' was the name given to the Parliamentarians (those on the side of Oliver Cromwell) and 'The Cavaliers' was the name given to the Royalists (those backing Charles I).



Answers to Im	portant (	Duestions	and Key	Vocabular	J
	por carre y	Puestions	and ney	Vocubului	7

-Even to this day, many people disagree as to whether Cromwell was a 'good' Lord Protector. Although he saved the country from the tyranny of Charles I, he also gained a reputation as a cruel and harsh dictator. For example, he is thought to have massacred many Catholics in Ireland, and also introduced many moral laws, including banning the **Key Vocabulary** 

Oliver Cromwell

Leader

Lord Protector

Military

Political

Civil War

Royalist

Parliamentarian

Roundhead

Cavalier

**Divine Right** 

- Oliver and Elizabeth had nine children together.
- In 1631 Oliver Cromwell sold the majority of his property in Huntingdon and moved to St Ives.
- Cromwell splits opinion he is either loved or hated by many people!
- Although the monarchy was restored, it has never had the same level of power since then.
- In 1661, Charles II and his new parliament ordered that Cromwell's body was exhumed and posthumously 'executed.'

3<sup>rd</sup> September 1558: Dies at Whitehall, London, England.

## Year 8 Knowledge Organiser (KO) - How does population, shape places?



Why is population density as it is in these places? What factors affect it? Glue the photos into your book and add these annotations to the correct photograph.



Traditional culture

Broadband internet



What should I already know? How to locate a place on a map Different types of settlements

What is Leicester like

 Push and Pull Factors

 What is a push factor?

 Push factors are factors that will make

 people want to leave a particular location.

 What is a pull factor?

 Pull factors are factors that will make

 people want to live in a particular area.

 Task

 Colour code the statements into Push Factors (for Poland) and

 Pull Factors (for the UK).

Polish unemployment in	The desire to live	immigration (as well as
2005 was 18.2%.	abroad.	Ireland and Sweden).
UK skill shortages in tourism and construction industry.	Rural areas in Poland have 40% unemployment.	UK unemployment in 2005 was 5,1%/
Poland has a high youth unemployment rate.	Average UK job vacancies for Jan 2007 was over 600,000.	The average salary in the UK is \$30,900.
Unskilled labour needed	The opportunity to improve	The average salary in
in farming.	in the English language.	Poland is \$12,700.

Keywords	Definition
Birth rate	The number of babies born per 1000 people (per year)
Death rate	The number of deaths per 1000 people (per year)
ertility rate	The number of babies born per woman
Migration	When people move from one place to another
Push factor	A reason that forces people to move away
Pull factor	A reason that draws people to a new place
Dbstacle	A reason that prevents people from migrating when they might
	want to
Nomad	A person with no fixed home – they are permanently migrating
Nomad	A reason that prevents people from migrating when they might want to Want to A person with no fixed home – they are permanently migrating

# Unit 19 My holiday plans

Este verano voy a ir de vacaciones a [this summer I am going to go on holiday to] Vamos a ir [we're going to go]	Argentina Chile Cuba España México	en autocar [by coach] en avión [by plane] en barco [by boat] en coche [by car]	Será aburrido [it will be boring] Será divertido [it will be fun]
<b>Voy a pasar</b> [I am going to spend] <b>Vamos a pasar</b> [We are going to spend]	<b>1 semana</b> [1 week] <b>2 semanas</b> [2 weeks]	<b>allí</b> [there] <b>con mi familia</b> [with my family]	<b>Será guay</b> [it will be cool]
<b>Voy a quedarme en</b> [I am going to stay in] <b>Vamos a quedarnos en</b> [We are going to stay in]	la un ho un hot		
Voy a [I am going to] Vamos a [We are going to] Me gustaría [I would like to] Nos gustaría [We would like to]	bailar [dance] comer y dormir [eat and sleep] comer comida deliciosa [eat delicious food] comprar recuerdos [buy souvenirs] descansar [rest] hacer buceo [go diving] hacer deporte [do sport] hacer deporte [do sport] hacer turismo [go sightseeing] ir a la playa [go to the beach] ir de compras [go shopping] ir de marcha [go clubbing] jugar con mis amigos [play with my friends] montar en bici [go biking] salir al centro [go out into town] tocar el ukulele [play the ukulele] tomar el sol [sunbathe]		



# **UNIT 8**

# Saying what jobs people do, why they like/dislike then and where they work

Mi padre [my father] Mi hermano [my brother] Mi tío [my uncle]	es [he is] trabaja como [works as a]	actor [actor] abogado [lawyer] amo de casa [house-husband] cocinero [chef] contable [accountant] enfermero [nurse] granjero [farmer] hombre de negocios [business man] ingeniero [engineer] mecánico [mechanic] médico [doctor] peluquero [hairdresser] profesor [teacher]	le gusta porque es [he/she likes it because it is] no le gusta porque es [he/she doesn't like it because it is]	aburrido [boring] activo [active] difícil [difficult] divertido [funny]	Trabaja en [he/she works in]el campo [the countryside]el campo [the countryside]casa [at home]la ciudad [the city]un colegio [a school]una empresa [a company]un garaje
Mi madre [my mother] Mi hermana mayor [my older sister] Mi tía [my aunt]	es [she is] trabaja como [works as a]	actriz [actress] abogada [lawyer] ama de casa [house-wife] cocinera [chef] contable [accountant] enfermera [nurse] granjera [farmer] ingeniera [engineer] mujer de negocios [business woman] mecánica [mechanic] médica [doctor] peluquera [hairdresser] profesora [teacher]	le encanta porque es [he/she loves it because it is] lo odia porque es [he/she hates it because it is very]	estimulante [stimulating] estresante [stressful] fácil [easy] gratificante [rewarding] interesante [interesting]	[a garage] una granja [a farm] un hotel [a hotel] una oficina [an office] un restaurante [a restaurant] un taller [a workshop] un teatro [a theatre]



# Year 8 Social Studies – Careers

Key Words	Positives and Nega
Impact Aspiration	<ul><li>What are your s</li><li>What are your y</li></ul>
Career	• How could thos a workplace?
Education Qualification	<ul> <li>How could thos from getting a job?</li> <li>What is self-aw</li> </ul>
Teamwork	What contributes t
Resilience	Religion
Independence	<ul><li>Family</li><li>Genetics</li></ul>

- Nationality
- Appearance
- Culture
- Interests
- Background
- Location

Key Questions To Ask Yourself

What do I enjoy doing?

What am I good at?

What GCSE options might I be interested in?

What qualifications do I need to get the job I want?

Do I need any extra training?

What skills do I need?

# atives

- strengths?
- weaknesses?
- se strengths be applied to

se weaknesses stop you

areness?

# <u>to who you are?</u>

- Gender



## Wiring a Plug

- Most appliances are attached to the electricity supply using a three pin plug.
- These are usually made from a hard wearing plastic as plastic is an insulator.
- There are three wires in the plug; the Earth, the live and the neutral wire.
- Plugs contain a fuse which breaks the circuit if the current flowing gets too high.
- We use brass for the pins as it is a good conductor and hard wearing.
- Copper is used for the wires as it is an excellent conductor.



#### Current

- Current is the amount of charge flowing per second The charges that flow in a circuit are **electrons**, they are negatively charged
- **Electrons** leave the negative end of the **cell** and travel around the circuit to the positive end of the cell
- Current has the unit of Amps (A) and is measured with an

ammeter (which is placed in series or in the main circuit)

#### **Potential difference**

Potential difference is the amount of energy transferred by the cell or **battery** to the charges

The value of potential difference tells us about the force applied to each charge and then the energy transferred by each charge to the component which it passes through

Potential difference has the unit of volts (V) and is measured with a voltmeter (which is placed in parallel to the circuit)

proton

neutror

electron

8



- Series circuits only have one loop
- If one component breaks, the whole circuit stops working
- Current is the same everywhere in a series circuit
- is shared between the components in a series circuit
- of the bulbs



- **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

**Electrical signals in the body** 

**Nerve** cells are long and thin and carry electrical impulses around the body.

Electricity from our surroundings can over power these impulses and cause us harm.

#### The atom

- The atom consists of a central nucleus with electrons orbiting around the outside in shells
- **Electrons** have a negative charged
- **Protons** are inside the nucleus and have a positive charge
- **Neutrons** are inside the nucleus and have a neutral charge

**Key terms** 

Make sure you can write definitions for these key terms.

## **Static electricity**

- Static electricity is the caused by the rubbing together of two insulators
- This causes electrons to be transferred, leaving one object with a positive charge, and one object with a negative charge



Like charges will **repel**, opposite charges will **attract** 



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

Ammeter, atom, attract, battery, cell, conductors, current, electrons, electric charge, insulator, neutral, neutrons, potential difference, protons, repel, resistance, parallel, series, voltmeter





#### Electromagnets



Increasing the current which is flowing through the coil of wire

# Heating and cooling Knowledge organiser

#### Conduction

- **Conduction** is the transfer of thermal energy by the vibration of particles, it cannot happen without particles
- This means that every time particles collide they transfer thermal energy
- Conduction happens effectively in solids as their particles are close together and can collide often as they vibrate around a fixed point
- Metals are also good thermal conductors as they contain electrons which are free to move
- In conduction the thermal energy will be transferred from an area which has a high thermal energy store (high temperature) to an area where there is a low thermal energy store (low temperature)
- Gases and liquids are poor conductors as their particles are spread out and so do not collide often, we call these insulators

## **Energy and temperature**

- The **temperature** of a substance is a measure of how hot or cold it is
- Temperature is measured with a **thermometer**, it has the units of degrees Celsius (°C)
- The thermal energy of a substance depends on the individual energy of all of the particles, it is measures in Joules (J)
- As all particles are taken into account, a bath of water at 30 °C would have more thermal energy than a cup of tea at 90 °C as there are many more particles
- The faster the particles are moving, the more thermal energy they will have
- When particles are heated they begin to move more quickly
- The energy needed to increase the temperature of a substance depends on:
  - the mass of the substance

Keyterms

- · what the substance is made of
- how much you want to increase the temperature by

### Convection

- **Convection** is the transfer of thermal energy in a liquid or a gas, it cannot happen without particles
- As the particles near the heat source are heated they spread out and become less dense, this means that they will rise
- More dense particles will take their place at the bottom nearest the heat source creating a constant flow of particles
- This is known as a **convection current**
- Convection cannot happen in a solid as the particles cannot flow, they can only move around a fixed point



### Radiation

- **Radiation** is a method of transferring energy without the need for particles
- An example of radiation is thermal energy being transferred from the Sun to us through space (where there are no particles)
- This type of radiation is known as **infrared radiation**, it is a type of wave just like light
- The hotter an object is the more infrared radiation it will emit (give out)
- The amount of radiation emitted and absorbed depends on the surface of the object:

thermal

store at

emperature

a low

- Darker matte surfaces absorb and emit more infrared radiation
- Shiny and smooth surfaces absorb and emit less infrared radiation, instead reflecting this
- The amount of infrared radiation being emitted can be viewed on a thermal imaging camera



Make sure you can write definitions for these key terms. conduction convection convection current density insulator infrared radiation temperature thermometer thermal conductor thermal energy store thermal imaging camera density

840824\_AQA\_Activate\_Book2.indd 4

9



#### **Convection currents**



thermal store at a high temperature

#### Nutrients

- A balanced diet involves eating the right amount of nutrients for your body to function
- Not eating enough of a nutrient means you have an unbalanced diet, and this can lead to a **deficiency**

Nutrient	Role in your body
carbohydrates	main source of energy
lipids	fats and oils provide energy
proteins	growth and repair of cells and tissues
vitamins and minerals	essential in small amounts to keep you healthy
water	needed in all cells and body fluids
fibre	provides bulk to food to keep it moving through the gut

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

Amylase Balanced diet Benedict reagent Carbohydrase Carbohydrate Catalyst Deficiency Enzyme Fibre Glucose Iodine Lipid lipase Mineral Nutrient Protease Protein Vitamin

#### Enzymes

- Enzymes are biological catalysts, they speed up the digestion of nutrients
- · Each enzyme is specific to each nutrient
- The way the enzyme and nutrient bind with each other is called a lock and key model
- Carbohydrases break carbohydrates down into simple sugars
- Proteases break proteins down into amino acids
- Lipase breaks lipids (fats) down into fatty acids and glycerol









#### Year 8 Resistant Materials Knowledge Organiser

#### Design for maintenance and repair

#### Advantages of repairable products and those that can be maintained:

Can be updated, to be more efficient, lengthening their useful life time. It is cheaper to repair than replace an entire product. Repairable products are environmentally friendly

A standard component is a pre-manufactured product that is used in the manufacturing of another product. As well as saving time, using a standard component can ensure a consistent product is produced. Users can remove standard fittings to help them repair or replace parts. Nuts, bolts, washers, zips, buttons are just some examples.

#### CAD - Computer aided design.

2DDesign , Google Sketch-up Advantages

- Easy to make changes
- Show clients 3D models of your idea
- Files can be emailed across the world instantly
- You can test your idea in a virtual environment

#### Disadvantages

- Software can be expensive
- You need training

#### CAD Tools





Accurate , can be used to make multiple copies



**Design movement**: A design movement is a group of designers with a common cause view or idea who then produce designs based upon their views or ideas. Memphis Design movement, Art Deco, modernism and Art Nouveau are examples from the 20<sup>th</sup> century.



These devices form the crucial control needed for a product to operate. Most input components need to be bought but some can be manufactured especially for a project. For instance, a pressure sensor.

Light dependent resistors (LDRs) are a type of variable resistor whose resistance increases with light.

**Switches** are simple input devices which allow electrical current to flow when pushed.

Motion sensors use infrared to detect changes in the environment to activate the system.

**Thermistors** are a type of variable resistor whose resistance changes when it becomes hot or cold.

Solder

Soldering

iron

Side

cutters

Tenon

saw



These devices are used in combinations to turn the signal from the input component into the signal to the output component. Careful designing and a good knowledge of the way circuits are designed is crucial

**Resistors li**mit current flow in an electronic circuit and have to be placed before some components to prevent damage.

Integrated circuits (ICs) are manufactured for many different uses and functions. A tiny circuit is encased in silicone (a semiconductor material). Although they look complex, they follow the same logic as simple circuits. Because of their reduced size, smaller products can be achieved as more technology can be made to fit into smaller spaces.

Microcontrollers are tiny integrated circuits used widely in automatically controlled devices such as engine management in cars. These can be combined with drivers to control devices such as motors. Raspberry Pi and BBC micro:bit computers are examples used in schools.

#### Analysing products

When a designer is developing a new design, it is useful to analyse existing products to see how successful they have been and identify any areas in which they could be improved



**Printed circuit board** . Electronically connect components using copper tracks.

A **hazard** is any source of potential damage, harm or risk.

A **precaution** is a measure taken to prevent something dangerous or harmful happening

Soldering is a permanent addition method for electronic components.

**Short-circuit** In a circuit, often as the result of a solder bridge, electricity will flow in the shortest path back to the battery.

**Insulator** A material that does not conduct electricity and can therefore be used as a coating to components, circuit boards and wires. PVC is a example.

**Conducto**r A material which allows heat or electricity to pass through it easily. Copper is an example .



The output is the end function of the product. In most cases, the output can be classed as light, sound, motion or a combination of two or more functions.

Light emitting diode (LED) come in different colours and levels of brightness. They have replaced the filament bulb in many everyday uses.

Light bulbs are not as widely used because of LEDs in an everyday context but minilight bulbs do not require soldering, so can still be useful.

**Buzzers** use electric current to create their own sound. Used in alarm systems. **Speakers** allow a sound signal from a circuit to be amplified.

**Motors** are magnetic devices and are behind nearly all moving parts in electronic systems.



#### Anthropometrics

Anthropometrics is the practice of taking measurements of the human body and provides categorised data that can be used by designers.

Ergonomics is a consideration that leads to a product being designed in a way to make it easy to use. Size, weight, shape, position of buttons and controls are all aspects that contribute to it being ergonomically designed.



### Y8 Spring Maths Knowledge Organiser

Торіс	Key fact	Hegarty maths clip number
Expanding single brackets	$2(y-3) = 2xy - 2x3 = 2y - 6 \checkmark$	160 - 161
Plotting linear graphs using a table of values	<ul> <li>Need minimum 3 pairs of coordinates.</li> <li>Start at x = 0.</li> <li>Do the positive x co-ordinates first. ■ X co-ordinate: along the corridor ■ Y co-ordinate: up the stairs.</li> <li>Y = mx + c will be a straight line.</li> </ul>	206
Identifying gradient and y- intercept	The number in front of x is called the gradient and tells us how many up (+) or down (-) the graph goes for every 1 across (right). y = mx + C y-intercept y = -2x + 5	207
Calculating with Decimals	Addition and subtraction: line up the decimal point. Multiplication: Change to whole numbers and remember to put the point in at the end. Division: If dividing by a decimal times both numbers by 10, 100 or 1000. Do not put decimal back in.	47 - 51
Four Operations with Fractions	To add and subtract fractions you need to write all fractions in a sum with the same denominator by writing equivalent fractions. Multiplying: Cancel down whenever possible, then multiply the numerators together and multiply the denominators together. Dividing fractions: KFC (Keep the first, Flip the second and Change the sign to x)	65 -78
Sharing in a given ratio	Always find 1 part	332 to 334
Ratio problems	Set out in columns and put information below the appropriate column	335 to 338
Proportion	Direct proportion: as one quantity increases so does the other Inverse proportion: as one quantity increases the other decreases	339 to 342

Multi-step Angle	Angles on a straight line add up to 180°. Angles	477 - 480,
Reasoning	in a triangle add up to 180°.	484 - 491,
	Angles in a quadrilateral add up to 360°.	812 - 815
	Vertically opposite angles are equal.	
	Angles around a point add up to 360°.	
Pie Charts	<ul> <li>Find the angle for each category:</li> <li>360° ÷ total frequency =         the number of degrees         per piece of data</li> <li>To work out each category's         associated angle we multiply the         number of degrees per piece of         data by each frequency.</li> </ul>	427 - 429

#### Key Vocabulary

Numerator - the top number in a fraction. 
 Denominator - the bottom number in a fraction.
 Mixed number - a number consisting of an integer and a proper fraction.
 Improper fraction - an improper fraction is a fraction where the top number (numerator) is greater than or equal to the bottom number (denominator): it is top-heavy.

Direct proportion - one quantity increases at the same rate as the other quantity increases.
 Inverse proportion - one quantity increases at the same rate as the other quantity decreases.
 Rate - a price or charge set according to a scale or standard hotel rates.

 $\circ$  Quantity – the amount of something.  $\circ$  Expand – to multiply the term before bracket by the terms in the bracket.  $\circ$  Expression – collection of terms. E.g 4x + 8p.

• Gradient – the steepness of a curve

 $\circ$  Linear Graph – straight line graph  $y=mx+c\circ$  Y-intercept – where the graph crosses the y axis

Mean, Median,	Mean: Add up all the numbers and then divide by the number of	404 -410
Mode and Range	items.	And
(recap averages)	Median: Put in order and then find the middle. If two middle values then add the two middle numbers and divide by 2. Mode: The number that appears the most. There can be more than one mode. Range: The difference between the largest and smallest numbers.	419 – 421

# **UNIT 16** Talking about my daily routine

Vors laround 1		ie me brosse les dents	onsuito
		[I brush my teeth]	
<b>A</b> [at]			[then]
		ia ma asiffa [] da mu hain]	
cina heures [5]		Je me come [1 do my null]	
meniq neuros [5]			
six houros [6]		je me couche [I go to bed]	
		•	après
sont hourse [7]			[after]
sept neures [/]		<b>je déjeune</b> [I have lunch]	
huit hours sing [8.05]			
nun neures cinq [8.05]		<b>ie dîne</b> [I have dinner]	
		<b>Je une</b> [1 nave anner]	
nuit neures dix [8.10]			
		je fais mes devoirs	finalement
huit heures et quart [8.15]	du matin [in	[I do my homework]	[finally]
	the morning]		
huit heures vingt [8.20]			
		je m <sup>r</sup> habille [1 get aressea]	
huit heures vingt-cinq [8.25]			
	de l'après-	ie ioue sur l'ordinateur	
huit heures et demie [8.30]	midi [in the	[I play on the computer]	
	afternoon1		
neuf heures moins vingt-cinq	ajiernoonj		
[8.35]		je me lève [I get up]	
neuf heures moins vingt [8,40]	du soir [in	ie prends le petit-déjeuner	
	the overing l	<i>[I have breakfast]</i>	
neuf heures moins le quart	ine eveningj		
18 <i>A</i> 51			
[8.45]		je regarde la télé	
		[I watch telly]	
neur neures moins dix [8.30]			
		je rentre à la maison	
neut heures moins cinq [8.55]		[I go back home]	
		- 0 -	
<b>A midi</b> [12 pm]			
		<b>je me repose</b> [I rest]	
A minuit [12 am]			
		ie sors de chez moi	
		[I leave mv house]	
		[	
		je vais au collège en bus	
		[I go to school by bus]	

# Unit 15 Talking about weather and free time

Quand j'ai le temps [when I have time] Quand le ciel est dégagé [when the sky is clear] Quand il y a des nuages [when it is cloudy]	<b>je joue</b> [I play] <b>mon amie Marie</b> <b>joue</b> [my friend Marie plays]	au basket [basketball] au foot [football] au tennis [tennis] aux cartes [cards] aux échecs [chess] avec mes amis [with my friends] avec ses amis [with her friends]
Quand il fait beau		
[when the weather is good]		du footing [jogging]
	je fais [I do]	du ski [skiing]
Quand il fait mauvais		du sport [sport]
[when the weather is bad]	mon ami Lionel	du vélo [cycling]
	fait	de l'equitation [horse riding]
Quand II fait chaud [when it is hot]	[my friend Lionel	de la natation [swimming]
<b>Quand il fait froid</b> [when it is cold]	does]	de la randonnée [hiking]
	-	<b>mes/ses devoirs</b> [my/his homework]
Quand il y a du soleil		
[when it is sunny]		au contro commondial (to the mall)
Quand il y a du vent		au centre commerciai [10 me mail]
		[to the sports centre]
[when it is winay]	io vois [1 an]	au gymnase [to the gym]
Quand il y a du brouillard	je vais [1 g0]	au parc [to the park]
[when it is foggy]		à la campagne [to the countryside]
		à la montagne [to the mountain]
Quand il y a de l'orage	mon amie Anna va	a la pèche [fishing]
[when it is stormy]	Imy friend Anna	a la piscine [to the pool]
	goesj	<b>chez mon ami</b> [to mv friend's house]
Quand il pleut [when it rains]		chez son ami [to her friend's house]
Quand il neige [when it snows]		en boîte [clubbing]
Parfois [sometimes]		
	io posto [1 stan]	aboz moj (at my hornal
<b>Pendant la semaine</b> [during the week]	je teste [1 stay]	dans ma chambre [in my room]
Le week-end	mon ami Philippe	chez lui [at his home]
[at the weekend]	<b>reste</b> [my friend	dans sa chambre [in his room]
	Philippe stays]	

# UNIT 14 Saying what I (and others) do in our free time

	au basket [basketball]	
ie ioue [I play]	au foot [football]	
	au tennis [tennis]	
<b>Je Joure</b> [1 plus]	aux cartes [cards]	de temps en temps
	aux échecs [chess]	[from time to time]
	avec des amis [with some friends]	
		deux fois par semaine
	du footing [jogging]	[twice a week]
	<b>du ski</b> [skiing]	
	du sport [sport]	pendant le week-end
	du vélo [cycling]	[during the weekend]
je fais [I do]	de l'équitation [horse riding]	
	de l'escalade [rock climbing]	tous les jours
	de la natation [swimming]	[every day]
	de la randonnée [hiking]	
		tous les samedis
	au centre commerciai [to the mail]	[every Saturday]
	au centre sportif [to the sports centre]	
	au gymnase [to the gym]	tous les soirs
	au parc [to the park]	[every evening]
ie vais [1 go]	<b>à la campagne</b> [to the countryside]	
<b>je</b> ( <b>ui</b> ) [1 80]	à la montagne [to the mountain]	tous les week-ends
	à la pêche [fishing]	[every weekend]
	à la piscine [to the pool]	
	à la plage [to the beach]	une fois par mois
	chez des amis [to my friends' house -	[once a month]
	plural]	
	en boîte [clubbing]	

# Year 8 - Nutrients

100°C

— 75°C

0°C

- -18°C



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



https://www.voutube.com/watch?v=8aWgZd9RScQ



- The main function is to **provide** energy to the body.
- 2 main types = starchy (complex) and sugary (simple)
- **Complex** = long lasting energy; **Simple** = short burst of energy

https://www.youtube.com/watch?v=PByM12M1n3A https://www.youtube.com/watch?v=Xto8ZgCYDvY

#### **Key vocabulary**

safety / hygiene nutrients / sources / function carbohydrates / protein / amino acids HBV / LBV / protein complementation fibre / vitamins / minerals / fat / water deficiency / excess convection / conduction / radiation



Proteins are macronutrients.

They're used by the body for growth, repair and maintenance of **muscle and tissue**.

2 main types = HBV (high biological value) and **LBV** (low biological value)

HBV = contain all 9 essential amino acids:

**LBV** = contain some but

not all 9 essential amino acids

https://www.youtube.com/watch?v=61Lelea02ao https://www.youtube.com/watch?v=KSKPgaSGSYA



NUTRITION.

and minerals are micronutrients. They have a wide range of health benefits.



https://www.youtube.com/watch?v=K5pW7rpMTQw https://www.youtube.com/watch?v=kteZneJm1EI https://www.youtube.com/watch?v=1u5HOURg7kQ



# Year 8 - Cooking skills



#### **Skills and Processes**

Bridge hold and Claw grip



**Used in**: fruit salad, pasta salad, sausage rolls, Spanish omelette, potato wedges and salsa

#### Kneading



**Used in**: bread rolls, pizza wheels, Chelsea buns

#### **Rubbing in technique**



**Used in**: jam tarts, bread rolls, Chelsea buns, cheese and onion pasties

#### Creaming



Used in: Dutch apple cake

Key word	Meaning
Gluten	The protein found in wheat, which is responsible for the elastic texture of dough.
Kneading	Working bread dough with the hands to stretch the gluten so it is elastic (helps the yeast to make bread rise).
Gelatinisation	When liquid is added to starch grains making them swell. Used to thicken sauces eg. cheese.
Simmering	When water or food in a saucepan bubbles gently (stays below boiling point).
Vegan	Don't eat or use ANY animal products.

#### Independent skills I need to learn in Year 8

Use the bridge hold and claw grip to cut food safely and accurately.

**Use a range of other preparation techniques** eg. peeling, chopping, slicing, dicing, grating etc.

Organise all my ingredients and follow a recipe.

Use the cooker (eg. hob and oven) safely.

Temperature control know when to turn heat up and down accordingly.

#### Food safety

Using colour coded chopping boards and equipment prevents bacteria spreading and causing food poisoning.

#### PREVENT CROSS CONTAMINATION

USE CORRECT COLOUR CODED CHOPPING BOARDS & KNIVES RAW MEAT RAW FISH COOKED MEATS SALAD & FRUITS VEGETABLES

# DAIRY PRODUCTS



### Romantics

Context		Key Poets		
World changing events in the late 18th century from the French Revolution to t Scientific Revolution of the Victorian era inspired a new movement in art, litera	he Industrial Revolution to the ture and thinking: The Romantics.	Wordsworth: William Wordsworth was not without his share of loss. In fact, he lost his mother when he was seven, and his father when he was thirteen. As if that were not enough loss for one person, three of his children preceded		
The late 18 <sup>th</sup> Century was a time of violent rebellion in parts of Europe and the events across the English Channel, the British government feared similar outbre tended to be supporters of the French Revolution, hoping that it would bring at However, the bloody events in France shocked them deeply and affected their gradually became disappointed with the Revolutionaries due to the violence the	New World. Conscious of the violent eaks. The early Romantic poets bout political change in England. views. Poets like Wordsworth ey were causing.	him in death. This background gives his poems greater meaning. Wordsworth explores the ideas that people find comfort in and are connected to nature, feeling more at home in the great outdoors than in his house. He reveals a sense of longing for what comes after life, and suggests a sense of disappointment in earthly life, hoping for better things to come.		
Romantic poets - such as Wordsworth - believed that poetry should be accessib 'the language really spoken by men' and should be relevant to ordinary people. voice to those who tended to be marginalised and oppressed by society: the run insane; and, often, children.	le; that it should be composed in For this reason, he tried to give a ral poor; discharged soldiers; the	Blake: William Blake was wrote poems of social protest. He believed that the working class were innocent victims of the cruellest exploitation. He explored ideas of industrialisation, with vivid descriptions of the smoke of the factories and the grey environments of London, reflecting the dull and hopeless lives of the poor. Blake focusses on two major Romantic preoccupations: childhood; and the impact of the Industrial Revolution on the natural world. Blake frequently addressed social issues in his poems and express his concerns about the way society was organised and ruled. His poem 'London' draws attention to the suffering of chimney-sweeps, soldiers and the poor while criticising the established church.		
To create a better world, the Romantics said that it was necessary to start all ow They believed that children were special because they were innocent and uncon filled with reverence for the natural world.	ver again with a childlike perspective. rrupted. Romantic verse was also			
The Romantics highlighted the healing power of the <b>imagination</b> , because they people to transcend (rise above) their troubles and their circumstances. They fe illuminate the world and regenerate mankind spiritually.	truly believed that it could enable elt their creative talents could	Keats: Keats is most famous for his collections of odes, in which he explores extreme emotion through his hyperbolic descriptions of natural imagery and sensual language. Keats died of tuberculosis at 25.		
As technology and science was developing at such a speed, the Romantics want simplicity and natural order, taking preference in spending time in the rural, rat simplicity and predictability of nature and the seasons; taking time to be at one world that was becoming more fast-paced by the day.	ted to revert back to a time of ther than urban spaces; enjoying the with their own thoughts amongst a	Shelley: A well known Romantic (along with his wife, Mary Shelley, who wrote Frankenstein), was radical in his poetry and his political and social beliefs. His life was troubled with illness, family crises and tumult due to his atheism and defiance of social conventions. He died in a boating accident at the age of 29.		
Vocabulary				
Liberty: the state of being free from oppression in society	Ode: a poem that expresses strong fe	eelings for something/someone	Radical (n): a person who advocates complete change	
Oppress: to treat cruelly/unfairly	Ballad: a poem that tells a story		lambic pentameter: 5 stressed and 5 unstressed syllables in a line	
ogma: principles/ideas set by those in authority Sonnet: a 14 line poem, often explo		ing the theme of love	of poetry, creating a de-dum rhythm (5 times). These 10 syllables are likened to a heartbeat.	
Marginalise: to put or keep someone in a powerless/unimportant position Rural: relating to characteristics of t		e countryside	Equality: the state of being equal	
Tempestuous: full of strong emotions/affected by a storm	Urban: relating to characteristics of a	town or city	Magnum Opus: the masterpiece, or greatest piece of work from	
Adherence: Attachment/commitment to rules Endure: suffer for an extended period		d of time, with patience.	a writer.	
Conscience: sense of right and wrong	Fortitude: courage in the face of pain	or adversity	equally	
Incontrovertible: not able to be denied/disputed	Judicious: having or showing good ju	dgement or sense	Critic: a person who expresses disapproval of something	



Students will develop their **annotation** skills during this module, making small notes and references in order to revise and recall information and ideas discussed in lesson.

A good knowledge of key poetic terms along with being able to explain why the poet has used them is crucial to developing their work in this area of Literature, in preparation for applying these skills at GCSE level.

Simile – comparing two things using like or as.
Metaphor – saying another idea IS the thing you're comparing it to.
Repetition – repeating words or phrases for effect.
Caesura – a harsh stop in the middle of a line.
Enjambment – when the line does not stop at the end but flows

**Enjambment** – when the line does not stop at the end but flows into the next line or even stanza.

**Hyperbole** – extreme exaggeration.

**Imagery** – providing a clear image for the reader through vivid descriptions.

**Onomatopoeia** – words that sound like thing itself.

**Noun** – a name, thing or idea.

Verb – a doing or action word.

Adjective – describing word (describes a noun).

Adverb – describes how an action word is done.

# Year 8 Knowledge Organiser: Networks

#### Networks

LAN – Local Area Network, connects devices together over a small geographical location e.g. a building. They connect computers using a combination of Ethernet cables and switches and require a Network Interface Card.

WAN – Wide Area Network A computer network where devices are connected over a large geographical area (e.g. the internet). They require access to the internet via a router / modem.

WPAN – Wireless Personal Area Network used to connect devices to your personal computer system without the use of wires. Most commonly uses Bluetooth. E.g. connecting a peripheral device to your laptop, connecting a mobile phone to a car, wireless headphones to your phone etc.



Malware combines the words 'malicious' (meaning 'harmful') and 'software'. It is a program designed to cause damage to a computer or a computer network.

#### Viruses

A virus embeds itself within computer software. When the software is run it creates copies of itself using software as a host. A virus is capable of slowing down your digital device, can stop it running or even steal your data.

#### Spyware

Spyware is a type of program that secretly records what you do on a computer. Spyware can be used to steal personal information such as capture passwords, email addresses or banking information. They can even control your webcam.

#### Worms

Worms attack systems connected to the internet. Like a virus, a worm is capable of copying itself, causing similar damage to a virus. However, worms are standalone software and don't require existing software to host them.

#### Trojan

A **Trojan** is a harmful piece of software, **pretending to be useful**. Commonly spread through **email attachments**, a user is typically tricked into loading it onto their computer. Attacks can vary from deleting files and stealing data to creating access points for hackers.

# 10010 01101101 0110000 01100110 01101111 10010 01101101 01100001 01110100 00100000

# **Computing:**

# **Data Representation**

Representing information with sequences of symbols is necessary for storing, exchanging and processing information. Information in computers must be represented in a form convenient for processing.



Humans have invented lots of different ways to code information using different sounds, symbols or even lights!

Computers represent all data, including numbers, letters, symbols, images, videos and sounds using binary numbers. All binary numbers are made up of the digits 0 and 1.

Os and 1s are called binary digits, or bits. All characters are represented using sequences of bits.

Computers only use the two symbols 0 and 1 because all computers are built out of electrical switched which can only be on (1) or off (0).

Binary digits are like letters; they are the symbols that computers 'write' with.

Multipliers or weights are the amount each digit in a sequence is worth e.g the number 314 contains three 100s, one 10s and four 1s . 100, 10 and 1 are the multipliers or weights. Binary numbers use different multipliers or weights.

Multipliers	128	64	32	16	8	4	2	1
Example binary number	0	0	0	1	0	1	1	1

To convert from binary to decimal (also known as denary) multiply each binary digit with its multiplier, then add up the products to work out the decimal number.

For example in the binary number above:  $1 \times 16 = 16 \times 12 \times 12 = 2$  and  $1 \times 12 = 1$  and 16 + 4 + 2 + 1 = 23

To convert from decimal to binary go through the multipliers from left to right . If a multiplier needs to be included in the sum, set the corresponding binary digits to 1 and proceed with the number that remains

1101100 00100000 01100110 0110

Decimal number	<ul> <li>Binary number</li> </ul>					
	_	16	8	4	2	1
13			1	1	0	1

Key Words				
1 bit (b)	The smallest unit of data—a 0 or 1.			
1 nibble (N)	4 bits			
1 Byte (B)	8 bits (note the difference between b and B)			
1 Kilobyte (KB)	1000 bytes. Note KB is different from Kb			
1 megabyte (MB)	1000 KB			
1 gigabyte (GB)	1000 MB			
1 terabyte (TB)	1000 GB			
1 petabyte (PB)	1000 TB			
Base 2 number system	A number system where there are only 2 digits to select from, that is 0 or 1; also known as the binary number system.			
Data types	In computing there can be different data types, including integers, characters and boolean (yes/no)			
Base 10 number system	The number system that humans use. It contains 10 unique digits, that is 0 to 9. Also known as the decimal or denary number systems.			
Multiplier (also known as place value)	The value of the place, or position, of a digit in a number			

YELLOW WARM COLOURS COLOURS FLLOW - GREEN **Symmetry** is when an object

**Complementary** colours are opposite each other on the colour wheel.



star

campfire

sitting

looks the exact same on one side as the other. A **boomerang** is a curved flat piece of wood that can be thrown so that it will return to the thrower,

traditionally used by Australian Aborigines as a hunting weapon.

Symbols are used to tell the stories of the Dreamtime.

noise.

waterhole

Composition is the placement or arrangement of visual elements in a piece of work.

rainbow

smoke

Cla	oping sticks are a
	traditional
	percussion
	instrument
	used during
M	ceremonies and
14	conge

a long deep



The Bull-roarer is a sacred object used in Aboriginal religious ceremonies, consisting of a piece of wood attached to a string, whirled round to produce a roaring



	Media	Best practice				
	Coloured Pencils	Apply using a soft circular motion				
		Start with the lightest colours and build up colour/tone				
		Harmonious colours add depth				
9		Complimentary colours add definition				
		A sharp pencil will create a crisp finish				
		Avoid applying a thick stripy line of tone around the edge of				
)		shapes, blur it by applying soft pressure on the edge				
t	Watercolour	• Mix your own variations of colour instead of using them straight				
ŗ		out of the palette to make your work look more individual				
í		• Avoid adding too much water to your paint or the paper will start				
		to bobble/wave				
•		Apply colour in layers to build up tone				
		• To blend colours on the page work quickly and place wet next to				
		wet				
		• When you want colour to stay separate make sure you don't apply				
		wet next to wet				
		Consider layering mark-making on top of dry layers to add interest				
		Change your water regularly to avoid cross contamination				
	Pen / Biro	<ul> <li>Work from left to right (or right to left if you are left handed) to</li> </ul>				
		avoid smudging				
		<ul> <li>Use a paper towel to blot any excess ink of the nib</li> </ul>				
		Work quickly to avoid letting too much ink collect on the page				
		Experiment with thickness of line and mark-making techniques				

#### The **Dreamtime** is the Aborigines belief of how the world and its creation began. Aboriginal culture includes ceremonies, body art, music, art and story telling.



Aborigines are the original inhabitants of Australia.

**Monochromatic** means

from light to dark.

varying tones of **ONE** colour

D ESIGN KNOWLEDGE RGANISE

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Harmonious colours are next to each other on the colour wheel.

The didgeridoo is a long wooden wind instrument played by Australian Aborigines to produce sound.

ment uring and songs.