



KINGS'
SCHOOL · WINCHESTER

KNOWLEDGE ORGANISER 2024
YEAR 7 | SUMMER





PUPIL DETAILS

Name	
Tutor Group	
Tutor Room	
House	
Library No.	
Locker No.	
At Kings', there are people that I can go to if anything is worrying me.	My Trusted Adults are: 1. _____ 2. _____

What I need for PE:	
---------------------	--

My Passwords	
Platform	Password

TIMETABLE

	Monday	Tuesday	Wednesday	Thursday	Friday
1					
2					
3					
Lunch					
4					
5					
After School					



KINGS'

SCHOOL • WINCHESTER

OUR SCHOOL VALUES

At Kings' our Values are at the heart of our school culture. They underpin our mission that we are **Working Together to Achieve Inspiring Futures, Exceptional Character, and Academic Excellence.**

We are reminded of our mission by our motto, Una Laborantes (Working Together), and our core values – developed and agreed by the Kings' community of pupils, staff, parents, and carers – help to guide every child, employee, and volunteer towards attaining that goal.

These values act as our inspiration and navigation in our learning, our work, and our life at school as we work together so that you achieve personal growth and future academic success.

Our school values are to:

DISCOVER
BRILLIANCE IN
EVERYONE

HAVE
UNLIMITED
AMBITION

EARN SUCCESS

BE KIND,
BE HUMBLE,
AND HAVE
INTEGRITY

MAKE A
DIFFERENCE

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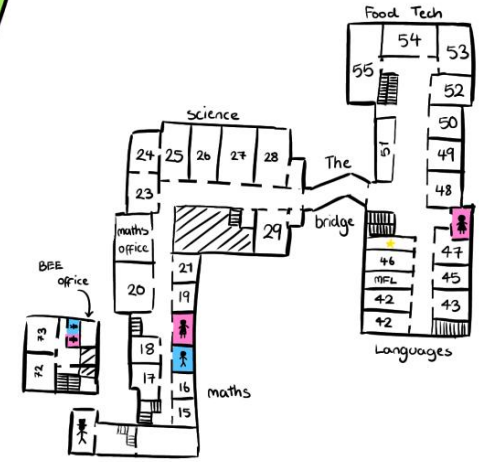


- stairs
- no floor
- path
- grass
- food
- girls toilets
- boys toilets
- changing rooms
- year office



By Chloe Beard

floor 2



THE (VERY ACCURATE)
MAP OF
KINGS' SCHOOL



HOURS OF ATTENDANCE

Pupils must arrive at school by **8.45 a.m.** and although some pupils may arrive at school earlier than this, parents are advised that there will be no staff supervising pupils before 8.30 a.m.

Pupils are considered late if they have not registered by 8.45 a.m. (unless they are late with good reason e.g.: school bus was late.) Punctuality to lessons is important. Repeated lateness is sanctioned.

If for any reason pupils are late for school, or need to leave school early, they must bring a note signed by a parent/carer. They should then 'sign in/out' at Reception.

Time	Movement
08.45 - 09.10	Tutor Time
	Movement
09.15 - 10.15	Lesson 1
	Movement
10.20 - 11.20	Lesson 2
	Movement
11.25 - 12.25	Lesson 3
12.25 - 13.05	Lunch
	Movement
13.10 - 14.10	Lesson 4
	Movement
14.15 - 15.15	Lesson 5

BULLYING HAS NO PLACE AT KINGS'

At Kings, we firmly believe in fostering an inclusive and supportive environment for every individual within our community. Bullying in any form is completely unacceptable. Our school must be a safe space where everyone is able to thrive.

Our values of kindness, humility and integrity mean that we tackle negative behaviour proactively:

- Recognise the signs:** It's important to be able to identify bullying behaviours. Bullying can manifest in various forms, such as physical, verbal, social, or online. Look out for signs like repeated teasing, name-calling, exclusion, spreading rumours, physical aggression, or cyberbullying.
- Report:** Don't face bullying alone. Reach out to your trusted adult, trusted friends, family members, or other teachers who can provide guidance and support. This can be done face to face or on the safeguarding tile.

Remember, nobody deserves to be bullied, and you have the right to feel safe and respected. If you witness bullying, ensure that you report it so that we can keep every member of our school community safe.



Safeguarding Concern



HOMWORK

Homework at Kings' is central to our mission of helping you have an inspiring future and building your exceptional character and achieving academic excellence.

It also embodies our values:

- **Earn Success:** Homework reinforces learning, and a strong work ethic.
- **Discovering Brilliance:** Homework encourages critical thinking and problem-solving, helping students discover their brilliance and unique abilities.
- **Unlimited Ambition:** Engaging in homework fuels intellectual curiosity and a desire for lifelong learning, going beyond the boundaries of formal education.

Homework should enable you to learn, or practise what you have been taught in school. To consolidate your learning, you can also practise learning from your knowledge organiser.

Key Stage 3	For how long?	Set	Type of homework
Core			
Science	30 minutes	Once a week	Educake Knowledge Organiser
Maths	30 minutes	Once a week	Sparx
English	30 minutes	Once a week	Variable
Languages	20 minutes	Once a week	Variable
Innovation Subjects			
Tech	20 minutes	Once a week	Variable
Computing	20 minutes	Once a week	Variable
Humanities			
Geography	20 minutes	Once a week	Variable
History	20 minutes	Once a week	Variable
RE	20 minutes	Once a week	Variable
Creative Arts			
Drama	20 minutes	Once a week	Variable
Music	20 minutes	Once a week	Variable
Art	20 minutes	Once a week	Variable
Reading	20 minutes	Every day	

Have you learned it?

Your Knowledge Organiser contains the core knowledge that you need to know and learn.

Use your Knowledge Organiser to see if you can complete the following activities. If you can do these things, you know something well. How many can you do?

1. Answer a question about it, under a time pressure.
2. Explain it in your own words.
3. Teach it to someone else.
4. Apply what you know in a new context.
5. Remember it a week, a month or a year later?

Some things that may help you remember information:

1. Well-designed flashcards that you have made with key information.
2. Mnemonics, such as *“Richard of York Gave Battle In Vain”* (visible light spectrum – the rainbow)
3. Mind maps (keep the paper landscape)
4. Timelines (dates of key events, in order)
5. A grid of key quotes according to characters and themes.
6. Creating a story that includes all the information.
7. Answering practice questions
8. Re-create a section of your Knowledge Organiser from memory.



Name _____
 Subject _____
 Class/Group _____
 Classroom _____



Pupils must keep all of their equipment in a clear plastic pencil case, suitable for exam use.

The minimum stationery needed is on the back cover of this Knowledge Organiser.

<u>Date</u>	
<u>Presentation Guidelines</u>	
	Neat presentation of your work is important. It shows that you care about your learning.
1.	The lesson title should be written and underlined with a ruler.
2.	The date should be written on the top, right-hand side of the page and underlined.
3.	Pupils should write in blue or black ink. Key words can be highlighted or underlined.
4.	Pencils should be used for drawings, diagrams and graphs.
5.	All underlining must be done using a ruler.
6.	All loose sheets must be stuck into exercise books.
7.	Feedback work should be clearly indicated – green (or another coloured) pen should be used for all improvement tasks.
8.	A line should be used to rule off after every piece of work. <hr/>



KINGS'

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HOW TO USE YOUR KNOWLEDGE ORGANISER

You are given a Knowledge Organiser at the beginning of the term. You are responsible for it and need to take care of it. Please do not lose it, or doodle on it. We will ask you to replace any lost/defaced Knowledge Organisers, as they are a tool that you and your teachers will use in lessons and for homework.

Your teachers have created Knowledge Organisers to support each unit of learning across Key Stage 3. These are then compiled into a booklet for you. Knowledge Organisers are a simple tool that provides the foundational knowledge required for each particular unit across each subject. These are called your **Knowledge Base**. They are not the whole curriculum – you will be taught much more than this, but they do outline the basic knowledge that every pupil should know.

Your teachers will tell you how often you will need to learn from your knowledge organiser when it is set as homework. Working with a knowledge organiser every day helps to establish routines in home learning, developing a confident use of vocabulary and independent study skills. You will be tested on the information that you have learned from the knowledge organisers in your lessons. There are many effective ways of learning from a Knowledge Organiser. One way that your teachers may use is called: Look, Cover, Write, Check. Please do not be tempted to just copy from the Knowledge Organiser – studies have shown that this is not effective.

Subjects have also added other information for you – this is indicated in a section called a **Knowledge Builder**. This may be extension tasks, or further study that may interest you.

Please scan the QR below to watch the video for more information on what Knowledge Organisers are, and how to use them:





1. Visual elements		
1.1	line	A continual mark that joins two points together.
1.2	tone	How light or dark something is.
1.3	texture	How something feels or looks like it feels.
1.4	colour	A reaction in our eye to the light reflected.
1.5	pattern	Made from a repeated shape or motif.
1.6	shape	A 2-dimensional area with height and width.
1.7	form	A 3-dimensional object with height, width, depth.

2. Colour theory		
2.1	primary colours	Red, yellow, blue.
2.2	secondary colours	Orange, green, purple.
2.3	tertiary colours	When you mix a primary and secondary colour.
2.4	complementary colours	Colours that are opposite each other on the colour wheel.
2.5	analogous colours	Colours that are next to each other on the colour wheel and that blend well together.
2.6	hot/warm colours	Reds, oranges, yellows.
2.7	cold/cool colours	Blues, greens, purples.
2.8	colour wheel	A circle with different coloured sectors used to show the relationship between colours.

6. Painting		
6.2	paint proportions	Quantity of paint to create the correct colour.
6.3	paint application	How the paint is applied.
6.4	tint	The variation of a colour by adding white to it.
6.5	shade	The variation of a colour by adding black to it.
6.6	tone	The variation of a colour by adding grey to it.

3 Fabric Painting		
3.1	calico	Unbleached cotton fabric.
3.2	coloured inks	Transparent liquid colours used for painting on fabric.
3.3	bleeding	Allowing one colour to run into another to mix.

4. Stitching		
4.1	thread	Spun fibres used to sew fabric together.
4.2	needle	A small slender piece of metal with an eye that is used for sewing.
4.3	running stitch	The simplest stitch. Small even stitches which have a gap between that run across the cloth without overlapping.
4.4	back stitch	A double stitch that creates a solid line.
4.5	laced running stitch	A running stitch that has another colour thread woven through it.
4.6	blanket stitch	A stitch used to reinforce the edge of thick materials.
4.7	embellishment	Adding decoration to your work using beads, buttons or sequins.

5 Vincent Scarpace		
5.1	Nationality	American
5.2	Occupation	Teacher
5.3	abstract	A style of art that does not attempt to represent reality but seeks to achieve its effect using shapes, colours and textures.
5.4	His inspiration	Sea life, especially fish.
5.5	painting analysis	Describing the painting or image in great detail.



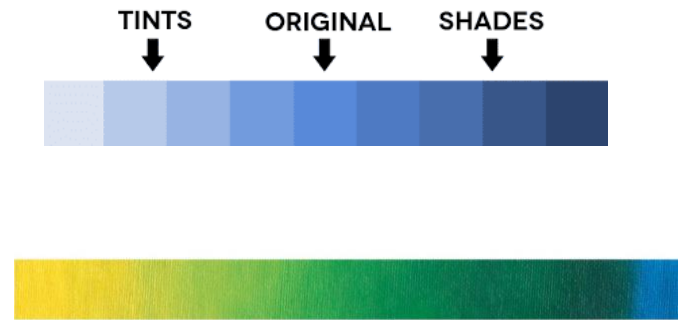
Visual elements

Line and tone 	Colour, shape and pattern 	Form and tone
Texture and colour 		
		Texture, line and tone

Watch how to paint the colour wheel.

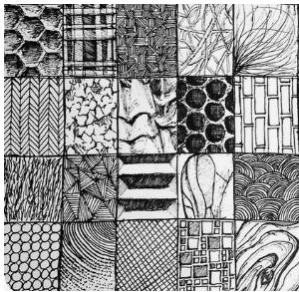


Mixing paint to create tints and shades of a colour. Add white to create tints, black to create shades.



Blending from yellow through green to blue.

Textures



Pattern



Hand Embroidery Stitches



Vincent Scarpace – Abstract Fish

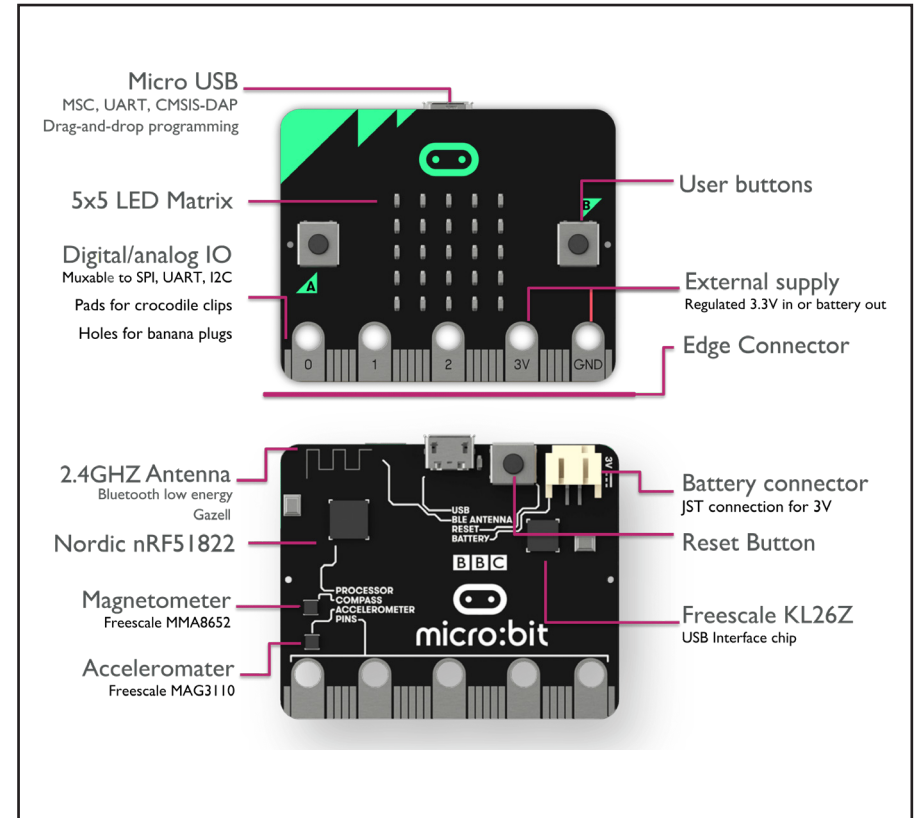




1. Computational Thinking		
1.1	computational thinking	Considering a problem in a way that a computer can help us to solve it.
1.2	decomposition	Breaking down a complex problem into smaller parts.
1.3	abstraction	Reducing unnecessary detail and focusing on the important parts of a system.
1.4	algorithms	Developing instructions to solve a problem; the steps or rules to complete a task.
1.5	evaluation	Considering If the solution is 'fit for purpose'.

2. Algorithms		
2.1	algorithm	A set of instructions, steps or rules to solve a problem or complete a task.
2.2	pseudocode	A way of writing algorithms that uses plain text English.
2.3	flowcharts	A diagram that represents an algorithm using standard symbols.
2.4	programming	The process of writing computer code to create a program; translating the steps in an algorithm into a language that the computer can understand so the problem can be solved.

3. Introduction to the Micro:Bit		
3.1	Micro:Bit	A miniature computer which is fully programmable.
3.2	compile	The process of translating our program code into machine code.
3.3	accelerometer	A component of the Micro:Bit which can sense movement.



4. Key words	
sequence	Putting instructions in a suitable order for your program to function properly.
iteration	Repeating something – either using Forever, For, While or Repeat.
pattern recognition	Looking for patterns within the problem to allow them to be solved together.
selection	A decision within a program which can either be Yes/No, True/ False. Allowing your program to take different paths. (IF statements)



Bite size - Programming



Careers in Programming

Books to Read



Your own micro bit starter kit



Micro:bit Make Code



Boost your programming skills



Make code



Crypto Club

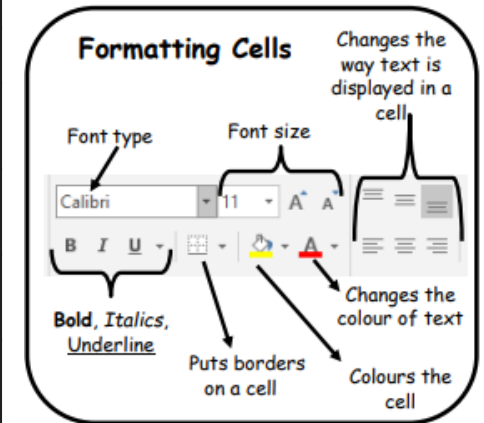
Stretch your vocabulary		
a.1	logical reasoning	Applying rules to solving problems, using existing knowledge to make predictions, explaining why something is the way it is.
a.2	cryptography	Used to send messages so they can only be read by the intended recipient.
a.3	cipher	Used to scramble and descramble messages and information.
a.4	Atbash cipher	A very old cipher used with the Hebrew alphabet.
a.4	Pigpen Cipher	A symbol substitution cipher used in 18th Century which substituted each letter of the alphabet with a symbol.
a.5	Caesar Cipher	A shift cipher first used by Julius Caesar 58BC.
a.6	Alan Turing	A mathematician, cryptographer, and a pioneer of computer science, who may best be known for his work at Bletchley Park during World War II, and his part in breaking the German Enigma code.
a.7	Enigma	An encryption device developed and used by Nazi Germany during World War II.



1. Introduction to Spreadsheets		
1.1	spreadsheets	Are used to store information and data.
1.2	uses of spreadsheets	<ul style="list-style-type: none"> Budget tracker Stock tracking of a business Money use in a business Teacher may use it to keep a record of pupils' grades.
1.3	formula	Formulas are used to work out calculations.
1.4	active cell	When you click on a cell to choose it, it becomes the active cell and has a thick black line around it.
1.5	row	The grid has rows labelled with numbers. A row goes across the grid.
1.6	columns	The grid is made up of columns that are labelled with letters. A column goes down the grid.
1.7	values	Values are the numbers we have to put into a spreadsheet so that it can do calculations for us.

2. Functions in Spreadsheets		
2.1	function	When you add a word to a formula (e.g. SUM) then it becomes a function. Each function performs a specific task.
2.2	SUM	Adds up a range of selected cells.
2.3	MIN	Finds the minimum value of selected cells.
2.4	MAX	Finds the maximum value of selected cells.
2.5	AVERAGE	Finds the average of selected cells.

2. Symbols in spreadsheet		
2.1	=	All formulas start with an equals.
2.2	+	This symbol is used to add numbers together.
2.3	-	This symbol is used to takeaway numbers.
2.4	*	This symbol is used to multiply numbers together.
2.5	/	This symbol is used to divide numbers.



4. Key words	
worksheet	A collection of cells organized in rows and columns.
cell	A box in which you can enter a single piece of data.
sort	The arrangement of data into a specific sequence. E.g. A-Z, smallest to largest.
ascending	Arranged in a series that begins with the least or smallest and ends with the greatest or largest.
descending	Arranged in a series that begins with the greatest or largest and ends with the least or smallest.
labels	Labels are pieces of text that we add to the spreadsheet to give us information about the numbers.
formatting	To change the appearance, layout or organisation of a spreadsheet.
graphs and charts	A visual representation of data from a worksheet that can bring more understanding to the data than just looking at the numbers.



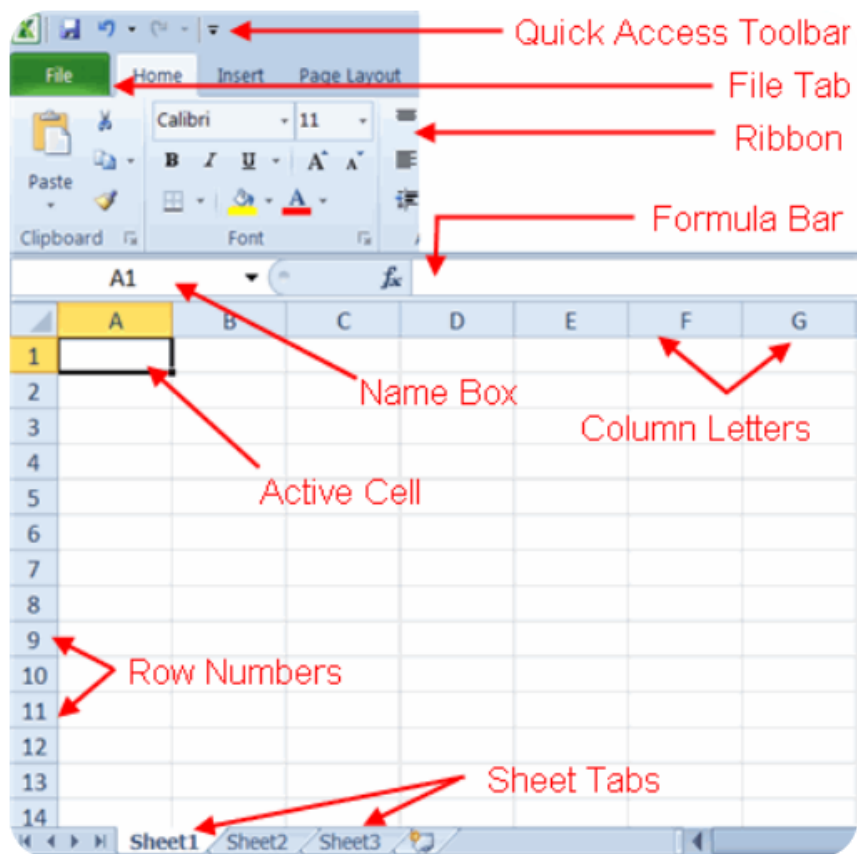
Bite size - Spreadsheets



Excel Projects



Advanced Excel projects



Stretch your vocabulary		
a.1	If statement	The Excel IF Statement tests a given condition and returns one value for a TRUE result and another value for a FALSE result.
a.2	V lookup	'Vertical Lookup'. It is a function that makes Excel search for a certain value in a column (the so called 'table array'), in order to return a value from a different column in the same row.
a.3	macro	An action or a set of actions that you can run as many times as you want. When you create a macro, you are recording your mouse clicks and keystrokes.
a.4	absolute cell reference	A cell reference that does not change when the cell is moved, copied or filled.
a.4	conditional formatting	A feature of Excel which allows you to apply a format to a cell or a range of cells based on certain criteria.
a.5	data types	A particular kind of data item, as defined by the values it can take, e.g. numbers, text, date.



Careers that use Spreadsheets

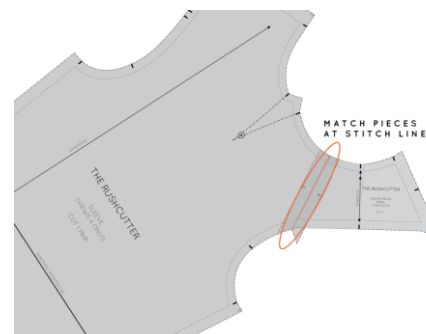


1. Core Knowledge			
1.01	T1	character	A person portrayed in a drama.
1.02	T1	genre	A style or category of drama.
1.03	T1	design	A drawing produced to show the look and function of a garment, before it is made.
1.04	T1	costume	A style of dress, including garments, accessories and hairstyle, characteristic of a particular country, period or people.
1.05	T1	annotation	A comment added to a text or diagram, to give a more detailed explanation.
1.06	T2	mood board	An arrangement of images, materials, pieces of text, intended to project a particular style or concept.
1.07	T3	stage presence	The energy, or charisma and appeal, that an artist has whilst performing.

2. Costume Terminology			
1.08	T1	toile	An early version of a finished garment made up in cheap material so that the design can be tested and perfected.
1.09	T1	fit	How clothes fit the body - e.g- tight, structured and loose.
1.10	T1	fastening	How two pieces of a garment come together e.g- hooks and eyes, self-gripping devices, buttons and buttonholes, and zippers.
1.11	T1	accessories	An item used to contribute to a costume e.g- hat, gloves, earrings.
1.12	T1	shape	The silhouette, or overall outline of a garment or other item.
1.14	T1	texture	The body and surface of fabric. Textures may be rough or smooth, coarse or fine, crisp etc.
1.15	T1	style	This reflects the class, gender, profession, context, historical period etc.

3. Costume Vocabulary			
1.16	T1	fabric	Cloth or other material produced by weaving or knitting fibres.
1.17	T1	swatches	A small sample of fabric intended to demonstrate the look of a larger piece.
1.18	T1	template	A pattern for cutting out fabric.
1.19	T1	mannequin	A person or dummy used by a designer to model clothes.

4. Unit Context	
Peter Pan	National theatre production performed in 2017 Directed by Sally Cookson Costumes by Katie Sykes This production reimagines JM Barrie's story using a mixture of costume and make up styles to give a different view of a period classic tale.



Example of a Toile used to test a costume design before making it



1. Perform Very Successfully			
Physical	1.1	body language	Non-verbal communication by movement or position, particularly facial expressions, gestures and the proxemics of actors on stage.
	1.2	facial expression	The way in which an actor's face is moved or held, in which it conveys an emotion that tells us about the character and the way they react to a situation.
	1.3	gesture	A defined movement which clearly communicates meaning.
Vocal	1.4	tone	How hard or soft an actor's voice is when delivering lines to convey meaning e.g. a hard tone to communicate frustration or anger.
	1.5	emphasis	Stress on a particular word or phrase within a sentence to indicate importance or change meaning.
	1.6	pace	The speed at which lines are delivered. Speed of speech conveys how a character is feeling.
Spatial	1.7	facings	The direction an actor faces within a scene.
	1.8	proxemics	The use of space/distance between characters on stage used to represent the relationship between them.
	1.9	levels	Can be used to suggest different locations, status and authority one character has over another.

2. Unit Key Vocabulary			
1.10	T3	forum theatre	Encourages audience interaction and explores different ways of presenting a story.
1.11	T2	still image	Actors create an image using their bodies – with no movement.
1.12	T1	montage	A sequence of images that tell a story.
1.13	T1	narration	Providing the audience with background information or commentary on the action of the play.
1.14	T2	role play	To perform a character, different from ourselves, in a way that our audience believe they are real.
1.15	T3	choral speaking	An ensemble speaking or moving together or sharing a speech.
1.16	T2	split screen	When two scenes are taking place in different time zones and in different locations.
1.17	T2	hot-seating	When an actor is asked questions to which they answer in role. This enables them to explore situations and motivations for their character.

3. Drama Key Vocabulary			
1.18	T1	characterisation	The act of changing your voice, movement, body language and gesture when in role throughout a performance
1.19	T2	improvise	To create and perform spontaneously or without preparation.
1.20	T3	Augusto Boal	Brazilian theatre practitioner who created the 'Theatre of the Oppressed'.

4. Unit Context									
Irena Sendler	Polish Holocaust hero	Malala	Political and female education hero	Rosa Parks	Civil rights hero	Marcus Rashford	Social change (and football) hero	Greta Thunberg	Climate change hero



READ - RSC



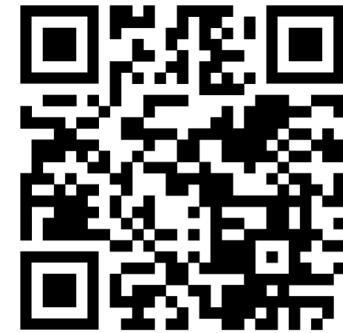
WATCH - National Theatre Costume film



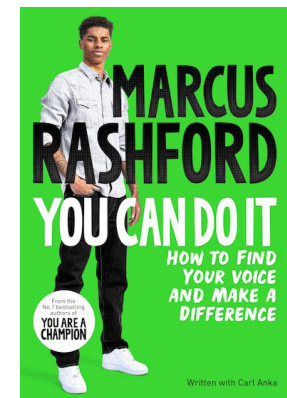
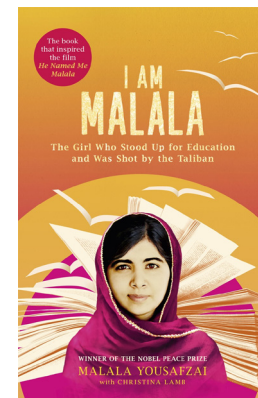
READ - Find out more about Irena Sendler



WATCH - Horrible Histories Rosa Parks clip



READ - One of these heroic books!





Texts and Resources		
1.1	Harry Potter and the Goblet of Fire	Joanne Rowling, pen name JK Rowling, a British author whose biography spans a variety of genres. She is most famous for creating the Harry Potter wizarding series.
1.2	Frankenstein, or, The Modern Prometheus	Mary Shelley, daughter of political-philosophical writer Mary Wollstonecraft, was a pioneer in the field of Gothic Literature in the 19 th century.
1.3	The Witches; Matilda	Roald Dahl, a British author whose published works span both children's and adult fiction, poetry, and playtexts.
1.4	The Lion, the Witch, and the Wardrobe	CS Lewis, a British author and theologian. His academic and literary brilliance saw him employed as a lecturer at both Oxford and Cambridge universities.
1.5	Dracula	Abraham (Bram) Stoker, an Irish author and dramaturge who is best known for his high-gothic novel Dracula.
1.6	The Hobbit	JRR Tolkien, a British author and passionate linguist. Tolkien served in the army, was a university Professor, and an author.
1.7	Alice's Adventures in Wonderland	Lewis Carroll, a British novelist, poet, and occasional mathematician.

Vocabulary		
2.1	villain	A character in a story who opposes the hero, and generally exhibits evil behaviour.
2.2	antagonist	A character opposes or is hostile to someone or something but is not necessarily evil.
2.3	protagonist	The leading character or one of the major characters in a story, generally a symbol of purity or hope.
2.4	malevolent	Demonstrating the desire or ability to harm another person.
2.5	treachery	To betray someone, to go against a promise or contract of faith.
2.6	evil	To be profoundly wicked, without morals, without empathy.

Techniques		
3.1	hyperbolic Language	Written text intended to exaggerate the reality of a situation: emotions are deeper, characteristics are grander, colours are brighter etc.,
3.2	dramatic Imagery	Emotive language used to create vivid narrative or thematic imagery, especially for a purpose or intent.
3.3	narrative voice	The perspective from which a story is told.
3.4	extended metaphor	The presence of a metaphor, developed over extended extracts of text, to reinforce a message or image.

Themes		
4.1	adversity	Unpleasant or dangerous situations or events which challenge a protagonist.
4.2	cruelty	The intention to act with harmful intent against a person or animal.
4.3	morals	How people decide what is right and wrong.
4.4	punishment	To cause someone who has done something wrong, or committed a crime, to suffer.

Context		
5.1	Jacob and Wilhelm Grimm	The Brothers Grimm are renowned for their creation of several dark, twisted fairy tales with a strong moral lesson at their centre.
5.2	Witchcraft	The practice of supernatural powers, the invocation of spirits from unearthly worlds, the study of the Occult Arts. A practitioner of witchcraft is most commonly known as a witch.
5.3	Didactic narratives	Stories which contain a moral lesson, experienced by the characters, to be learned by the reader.
5.4	Nonsense literature	Narratives of escapist nature, balancing elements which make sense, and those which defy logic.
5.5	Gothic literature	Narratives defined by a sense of dread, exaggerated emotions, death, and danger.



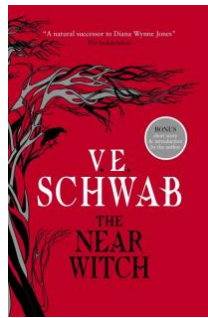
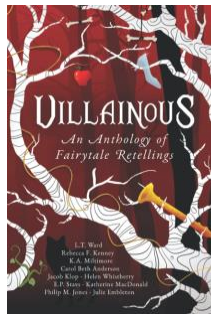
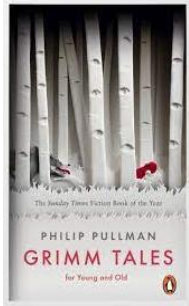
The Hound of the Baskervilles - Characters		
1.1	Sherlock Holmes	The famous private detective, who uses his powers of deduction to solve crimes.
1.2	Dr Watson	Sherlock Holmes' sidekick and assistant, he accompanies Sherlock on his cases and helps him solve them.
1.3	Inspector Lestrade	Inspector Lestrade is a detective at Scotland Yard. He often consults Sherlock Holmes on his cases. Sherlock Holmes is sometimes rude about Lestrade, thinking him uneducated and dim-witted.
Context		
2.1	Victorian England	The period of time between 1820 and 1914, so called because the monarch was Queen Victoria (for most of this time.) The time was defined by advances in science, but also for its strict class and gender hierarchy.
2.2	detective agencies	There were many private detective agencies all around the world in the 1800s and early 1900s. The police as we know it today did not exist to begin with, so many turned to private detective agencies to solve crimes.
2.3	Scotland Yard	The headquarters of the Metropolitan Police – this term is often used to refer to the London police force more widely who worked alongside Sherlock Holmes.
2.4	Gothic Fiction & the supernatural	A genre of fiction that explores fear, the supernatural & the past being at odds with the present. Anything that cannot be explained by Science. Ghosts, magic, witchcraft, prophecies or demons for example
2.5	Science & Religion	In Victorian England, most people were Christian. Advances in scientific discoveries in the Victorian era began to challenge what society believed about religion & the supernatural, for example, the Theory of Evolution. This suggested that humans evolved, and were not descended from Adam and Eve.
2.6	Social class	In Victorian society, one of the most important factors to a person's identity was their social class – this broadly means how wealthy a person was, with working class people having little money, and the upper classes being very wealthy. In The Hound of Baskervilles, the Baskerville family are upper class and the Barrymores are working class.
2.7	Gender	Gender is the contrast between men and women. In Victorian society, the second most important thing behind your social class was whether you were male or female. Women were not allowed to vote and were seen as second-class citizens. If you were working class and female, you were not seen as very important in society.

Techniques		
3.1	stage directions	The instructions to the director about how a stage should be set up <i>OR</i> the instructions given to the actors telling them how to speak and how to act. Normally these are in [square brackets]
3.2	entrances & exits	When characters come onto the stage or leave the stage. Often this is done to achieve a specific effect.
3.3	lighting	Lighting is used on stage to highlight particular characters, events or settings. The lighting is also used to help create a mood.
3.4	music & sound	Sometimes the music is used to create a mood and sometimes sounds are used to help establish setting. i.e the sound of a train station.
3.5	props	Important objects that are used to help establish character (i.e. Sherlock Holmes' violin)
3.6	monologue	A part of the play where one character is speaking, sometimes directly to the audience

Vocabulary		
4.1	erroneous	Wrong or incorrect. <i>Sherlock Holmes came to an erroneous conclusion.</i>
4.2	furtive	Secretive, attempting to avoid notice. <i>With a furtive glance, the convict crept down the corridor.</i>
4.3	deduction	Reaching a decision through thinking about the known facts. <i>The detective solves the crime through the process of deduction.</i>
4.4	amiable	Pleasant and friendly <i>He was an amiable and cheerful fellow.</i>
4.5	hard-headed	Practical and realistic, not sentimental. <i>A practical, hard-headed man of business.</i>
4.6	luminous	Giving off a steady, glowing light. <i>The moon glowed in a luminous way.</i>



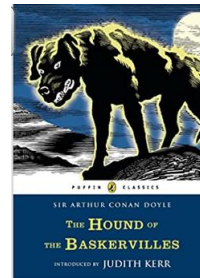
Books to read:



Learn more about the Brothers Grimm:



Books to read:



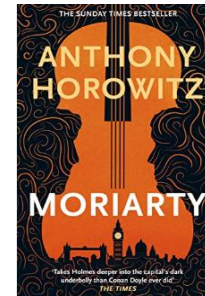
Films and Shows to watch:



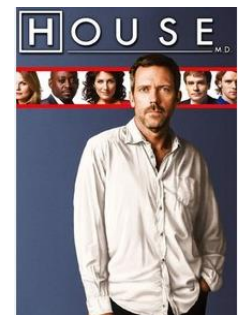
Films and Shows to watch:



Learn more about witchcraft:



Stretch your vocabulary	
adversary	An opponent in a contest, conflict, or argument.
sorcery	The use of powerful magic, especially black magic.
occult	The existence and study of mystical, supernatural, or magical powers and its practices.
macabre	The concern of, or interest in, the subject of death or decay.
spite	The desire to hurt, annoy, or offend someone due to a grudge or past slight.
deceive	The act of deliberately causing someone to believe something that is not true, especially for personal gain.
tyrannical	Forcibly exercising power over others in a cruel or paranoid fashion.

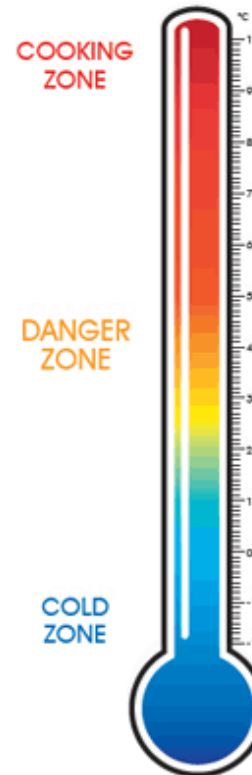




1a. Food safety and hygiene – 4 C's		
1a.1	cleaning	Wash hands and clean work surfaces and equipment before cooking to kill harmful bacteria.
1a.2	cooking	Cooking kills harmful bacteria. At 75°C kills most bacteria is killed.
1a.3	chilling	Chilling below 5°C slows down bacteria multiplying. Store in fridge (0-5°C) or freezer (0-18°C).
1a.4	cross-contamination	Bacteria is spread from one surface to another.

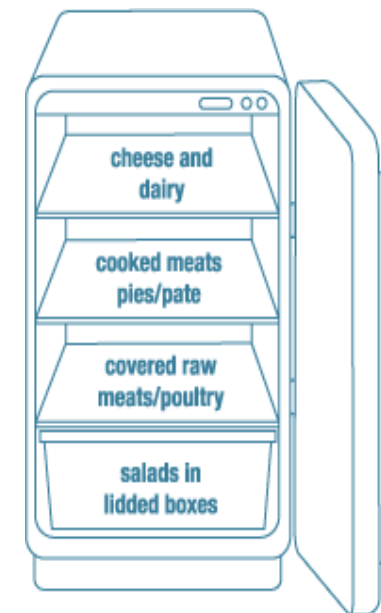
2. Allergies and food intolerances		
2.1	allergic reaction	An immune reaction that the body has to a food or substance. They can be life-threatening.
2.2	allergen	A substance that causes an allergic reaction.
2.3	food intolerance	When the body cannot break down certain foods. It can cause stomach pains, diarrhoea and vomiting.

3. Food science		
3.1	enzymic browning	Oxidation reaction that takes place on the surface of fruits and vegetables, causing the food to turn brown.
3.2	raising agent	Something that makes a mixture rise. For example, whisking, baking powder and yeast.
3.3	gluten	The protein in flour that helps make dough elastic, helping it to rise.
3.4	kneading	Movement to stretch the gluten in dough.
3.5	fermentation	The reaction where yeast releases carbon dioxide.
3.6	setting	When a mixture turns from liquid to solid.



1b. Food safety and hygiene – key temperatures	
100°C	Water boils.
75°C	All bacteria is killed. Cooked food is safe to eat at this temperature.
63°C	Hot holding temperature. Bacteria cannot multiply.
5-63°C	Danger Zone! Bacteria grow rapidly in this range.
0-5°C	Fridge temperature. Bacteria grow slowly.
0- -18°C	Freezer temperature. Bacteria are dormant (asleep).

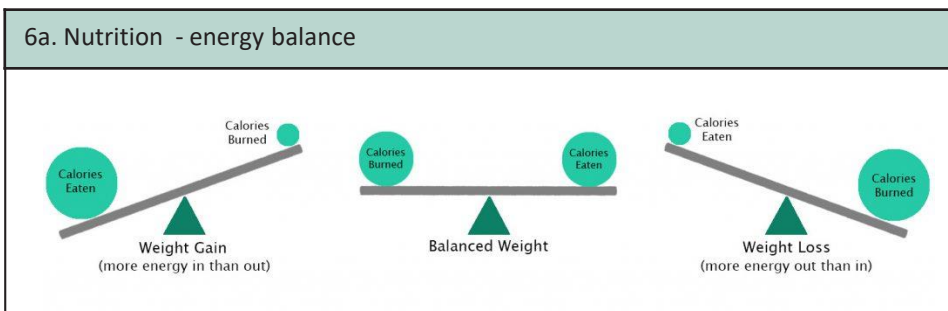
1c. Food safety and hygiene – storage and preparation



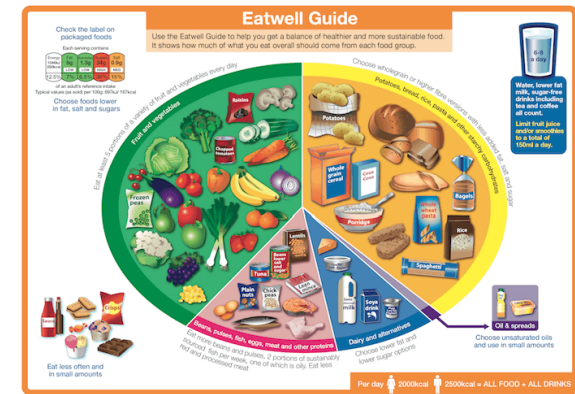


4. Practical skills		
4.1	bridge hold	Form a bridge over the ingredient with your hand and put the knife underneath.
4.2	claw grip	Curl fingers inwards and grip the food with your fingertips, keeping fingers away from the knife.
4.3	simmer	When a liquid stays below boiling point, bubbling gently.
4.4	rub-in	Coating flour grains in fat using fingertips to make breadcrumbs.
4.5	glaze	Liquid is used to form a smooth, shiny coating on food.
4.6	whisk	To beat a mixture to add air and make it light.
4.7	sifting	Passing flour through a sieve to remove lumps and add air.
4.8	knead	To massage and push a dough to stretch and develop the gluten.
4.9	prove	Allowing a bread dough to rise.
4.10	blend	Making a mixture smooth by using a blender.
4.11	reduction sauce	A sauce that uses boiling and simmering to thicken it.

5. Sensory analysis		
5.1	taste	Sweet, salty, umami (savoury), bitter, sour.
5.2	texture	Soft, crunchy, juicy, crumbly, light, thick.
5.3	appearance	Golden, colourful, rich.
5.4	aroma (smell)	Cheesy, sweet, aromatic.



6b. Nutrition - Eatwell Guide



6c. Nutrition - 8 tips for healthier eating

1. Base meals on starchy carbohydrates.
2. Eat lots of fruits and vegetables.
3. Eat more fish – including a portion of oily fish.
4. Cut down on saturated fat and sugar.
5. Eat less salt (max. 6g a day for adults).
6. Get active and be a healthy weight.
7. Don't get thirsty.
8. Don't skip breakfast.

6d. Nutrition

6d.1	macronutrients	Nutrients that we need in large amounts. Fats, carbohydrates and protein.
6d.2	fat	A macronutrient needed to give us energy.
6d.3	protein	A macronutrient needed for growth and repair.
6d.4	carbohydrate	A macronutrient needed to give us energy.
6d.5	micronutrients	Nutrients that we need in small amounts. Vitamins and minerals.
6d.6	fibre	A type of carbohydrate that keeps our gut healthy.
6d.7	water	Helps to keep us hydrated. 6-8 glasses a day required.



Find the Eatwell Guide Knowledge Organiser for more information about healthy eating The Eatwell Guide.

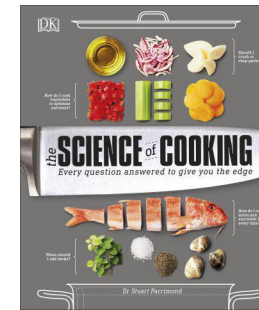


Calculate the energy and nutrients provided by a food diary for one or two days using the calculator above and reflect on the results



Explore The Grain Chain, following the processing of wheat to flour.

Books and magazines to read:



Programmes to watch:



Food Unwrapped – explores how our favourite foods are made industrially.

Stretch your vocabulary		
a1	coagulation	The setting of protein in the presence of heat and/or acid.
a2	calcium	A mineral that helps to support strong bones and teeth.
a3	iron	A mineral that helps to make red blood cells.
a4	vitamin D	A vitamin that helps to absorb calcium to support strong bones and teeth.
a4	phosphorus	A mineral that helps to support teeth and bones.



1. Là où j'habite		Where I live	
Qu'est-ce qu'il y a...?		What is there...?	
Il y a...		There is...	
un café		a café	
un centre commercial		a shopping centre	
un centre de loisirs		a leisure centre	
un château		a castle	
un cinéma		a cinema	
une église		a church	
un hôtel		a hotel	
un marché		a market	
un parc		a park	
un restaurant		a restaurant	
un stade		a stadium	
une patinoire		an ice rink	
une piscine		a swimming pool	
des magasins		shops	
des musées		museums	
Il n'y a pas de...		There isn't a... There are no	
Il n'y a pas de château / café.		There isn't a castle / a café.	
Il n'y a pas d'église.		There isn't a church.	

3. Les directions		Directions	
Pardon...		Excuse me...	
Où est...?		Where is...?	
Où sont...?		Where are...?	

2. Les opinions		Opinions	
Tu aimes ta ville / ton village?		Do you like your town / village?	
Je pense que...		I think that...	
À mon avis...		In my view...	
C'est...		It's...	
bien		good	
super		great	
joli		pretty	
intéressant		interesting	
ennuyeux		boring	
vraiment nul		really rubbish	
trop petit		too small	
J'aime ça.		I like that.	
J'adore ça.		I love that.	
Tu es d'accord?		Do you agree?	
Oui, je suis d'accord.		Yes, I agree.	
Non, je ne suis pas d'accord.		No, I disagree.	

3. Les directions		Directions	
C'est...		It's...	
à gauche		left	
à droite		right	
tout droit		straight on	
au carrefour		at the crossroads	
entre		between	
derrière		behind	
devant		in front of	

5. Frequency	
d'habitude	usually
normalement	normally
quelquefois	sometimes
tous les weekends	every weekend

6. Key words	
assez	quite
mais	but
ou	or
puis	then
très	very

4. Où vas-tu le weekend?		Where do you go at the weekend?	
Où vas-tu le weekend?		Where do you go at the weekend?	
Je vais...		I go...	
au café		to the café	
au centre commercial		to the shopping centre	
au stade		to the stadium	
à la piscine		to the swimming pool	
à la patinoire		to the ice rink	
à l'église		to the church	



7. Tu veux aller au café? Do you want to go to the café?	
Tu veux aller au café?	Do you want to go to the café?
Bonne idée!	Good idea!
Super!	Fabulous!
Génial!	Great!
D'accord.	OK.
Oui, c'est super top.	Yes, that's really great.
Oui, je veux bien.	Yes, I want to.
Non, je n'ai pas envie.	No, I don't want to.
Si tu veux.	If you want to.
Non merci.	No, thanks.

8. Qu'est-ce qu'on peut faire à...? What can you do at/in...?	
On peut...	We can...
aller au concert	go to a concert
faire du bowling	go bowling
faire du roller	go roller-skating
faire du skate	go skateboarding
faire du vélo	go cycling
faire une promenade en barque	go on a boat trip
jouer au babyfoot et au flipper au café	play table football and pinball at the café
manger au restaurant	eat at a restaurant
visiter les jardins / les monuments / les musées	visit gardens, monuments, museums

9. aller – to go	
je vais	I go
tu vas	you go (singular, informal)
il/elle/on va	he/she goes/we go
nous allons	we go
vous allez	you go (plural, formal)
ils/elles vont	they go

10. pouvoir – to be able	
je peux	I can/am able
tu peux	you can/are able (singular, informal)
il/elle/on peut	he/she can/is able; we can/are able
nous pouvons	we can/are able
vous pouvez	you can/are able (plural, formal)
ils/elles peuvent	they can/are able

11. vouloir – to want	
je veux	I want
tu veux	you want (singular, informal)
il/elle/on veut	he/she wants/we want
nous voulons	we want
vous voulez	you want (plural, formal)
ils/elles veulent	they want

Knowledge Builder:

Click on the following links to practise grammar



Modal verbs



au, à la, à l', aux



aller – to go



1. Les vacances en famille Family holidays	
Tous les ans...	Every year...
Normalement...	Normally...
nous allons...	we go...
en France	to France
en Espagne	to Spain
en Grèce	to Greece
en Italie	to Italy
aux États-Unis	to the USA
au Portugal	to Portugal
à la mer	to the seaside
à la montagne	to the mountains
à la campagne	to the countryside

3. Les verbes réfléchis Reflexive verbs	
Je me prépare.	I get myself ready.
Je me douche.	I have a shower.
Je me fais une crête.	I make my hair spiky.
Je me parfume.	I put on perfume/aftershave.
Je m'habille.	I get dressed.
Je me brosse les cheveux.	I brush my hair.
Je me lave les dents.	I clean my teeth.
Je me regarde dans la glace.	I look in the mirror.
Je me rase.	I shave.
Je me maquille.	I put on make-up.

5. Au café At the café	
J'ai faim et soif.	I'm hungry and I'm thirsty.
Vous désirez?	What would you like?
Je voudrais...	I'd like...
un café	a black coffee
un café-crème	a white coffee
un thé (au lait/au citron)	a tea (with milk/lemon)
un chocolat chaud	a hot chocolate
un coca	a cola
un jus d'orange	an orange juice
un Orangina	an Orangina
une limonade	a lemonade
un sandwich au fromage	a cheese sandwich
un sandwich au jambon	a ham sandwich
un croquemonsieur	a toasted cheese and ham sandwich
une crêpe	a pancake
une glace (à la vanille/à la fraise/ au chocolat)	a (vanilla/strawberry /chocolate) ice-cream
Tu as combien d'argent?	How much money have you got?
J'ai dix euros cinquante.	I've got ten euros fifty (cents).

2. les activités en vacances Holiday activities	
Nous allons au restaurant.	We go to a restaurant.
Nous visitons des monuments.	We visit monuments.
Nous faisons du camping.	We go camping.
Nous faisons de la rando.	We go hiking.
Nous faisons de la natation.	We go swimming.
Nous faisons des activités sportives.	We do sports activities.
Nous restons en France.	We stay in France.

4. Les nombres Numbers	
quarante	40
quarante-cinq	45
cinquante	50
cinquante-cinq	55
soixante	60
soixante-cinq	65
soixante-dix	70
soixante-quinze	75
quatre-vingts	80
quatre-vingt-cinq	85
quatre-vingt-dix	90
quatre-vingt-quinze	95



6. Qu'est-ce que tu vas faire? What are you going to do?	
Pendant les vacances...	During the holidays...
je vais...	I'm going to...
aller à la pêche	go fishing
danser	dance
faire de l'accrobranche	do treetop adventures
faire du karaoké	do karaoke
faire de la voile	go sailing
faire de la planche à voile	go windsurfing
nager dans la mer	swim in the sea
rester au lit	stay in bed
retrouver mes copains/copines	get together with my mates

7. Quels sont tes rêves? What are your dreams?	
Je voudrais aller...	I'd like to go...
à Paris	to Paris
en Australie	to Australia
au Canada	to Canada
aux États-Unis	to the USA
Je voudrais...	I'd like...
être footballeur professionnel	to be a professional football player (masculine)
être danseuse professionnelle	to be a professional dancer (feminine)
habiter dans une grande maison	to live in a big house
avoir une voiture très cool	to have a really cool car
faire le tour du monde	to travel around the world
rencontrer mon acteur/mon actrice préféré(e)	to meet my favourite actor/actress

9. The near future tense

You use the near future tense to talk about what **is going to** happen in the future.
 It is formed with part of the verb **aller** + an **infinitive**
 Je **vais nager** dans la mer.
 I **am going to swim** in the sea.
 Elle **va rester** au lit.
 She **is going to stay** in bed.

10. faire – to do

je fais	I do
tu fais	you do (singular, informal)
il/elle/on fait	he/she does/we do
nous faisons	we do
vous faites	you do (plural, formal)
ils/elles font	they do

Knowledge Builder:

Click on the following links to practise grammar

8. Key words

d'abord	first
ensuite	then
puis	next
finaleme nt	finally
quelquefois	sometimes



faire = to do



-er verbs



Higher numbers



The near future tense



Reflexive verbs

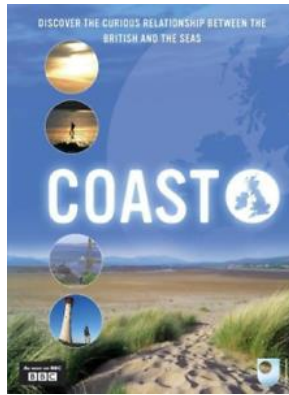
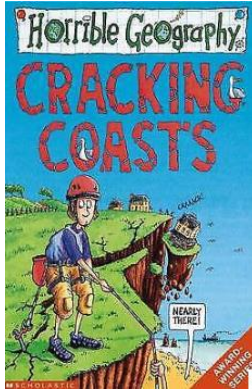
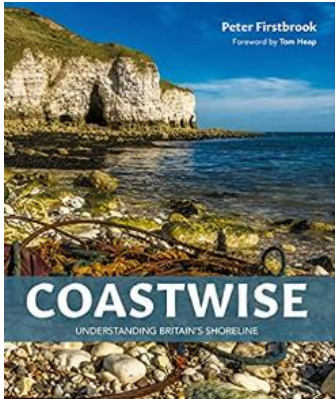


1. Features		
1.1	beach	An area of sand or small pebbles deposited by waves.
1.2	bay	A smooth curve of coast between two headlands.
1.3	headland	Land that juts out into the sea.
1.4	cave	An area of cliff that has been eroded.
1.5	arch	The curved structure left behind when a cave is eroded through a headland
1.6	stack	A pillar left behind when an arch collapses.
1.7	stump	The remains of an eroded stack.
1.8	wave-cut platform	The flat rocky area left by the action of waves.
1.9	spit	A strip of sand or shingle in the sea.
1.10	salt marsh	A low-laying marshy area by the sea, with salty water from the tides.
1.11	bar	Where a spit grows across a bay, a bar can eventually enclose the bay to create a lagoon.

4. Coastal Defences		
4.1	sea wall	A wall to keep the sea out. They are often curved to reflect the waves away.
4.2	groynes	These trap sand and stop it being carried away. Sand also absorbs some of the wave's energy.
4.3	rip-rap (rock armour)	These are big rocks (sometimes in a cage). They soak up the wave's energy. They can be used to protect sea walls and cliffs.
4.4	managed retreat	This is when the shore line is allowed to erode with the sea. But in a controlled way.
4.5	beach nourishment	This is when extra sand is added to the beach to build it up.

3. Processes		
3.1	erode	The wearing away of rocks, soil and stones by waves, rivers, wind and glaciers.
3.2	transport	The carrying of material by rivers, sea and glaciers.
3.3	deposit	To drop material that has been eroded.
3.4	longshore drift	How sand and other materials is moved parallel to the coast.
3.5	attrition	Rocks being carried by the river smash together and break into smaller, smoother and rounder particles.
3.6	abrasion	Rocks carried along a river wear down the river bed and banks.
3.7	hydraulic action	The process where breaking waves compress pockets of air in cracks in a cliff; the pressure may cause the crack to widen, breaking off rock.
3.8	solution	Chemical erosion caused by the dissolving of rocks and minerals by sea water.
3.9	backwash	Water that flows back towards the sea after the swash has moved up the beach.
3.10	swash	The forward movement of a wave up a beach.

4. Coastal Management		
4.1	constructive wave	A wave which deposits material on a coast line.
4.2	destructive wave	A wave that removes material from a coast line.
4.3	coastal management	The way that the coastline is managed to protect the land behind it.

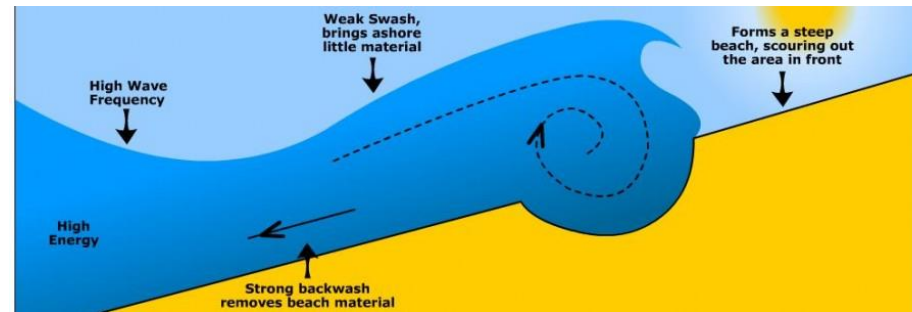


Stretch your vocabulary		
a	Hard engineering	The construction of something artificial to protect a coastline from erosion
b	Soft engineering	Making use of the natural processes in order to protect the coastline from erosion.
c	Wave refraction	Wave energy is reduced in bays as the water gets shallower
d	Rockfall	A fragment of rock breaks away from the cliff face, often due to freeze-thaw weathering

Coastal management



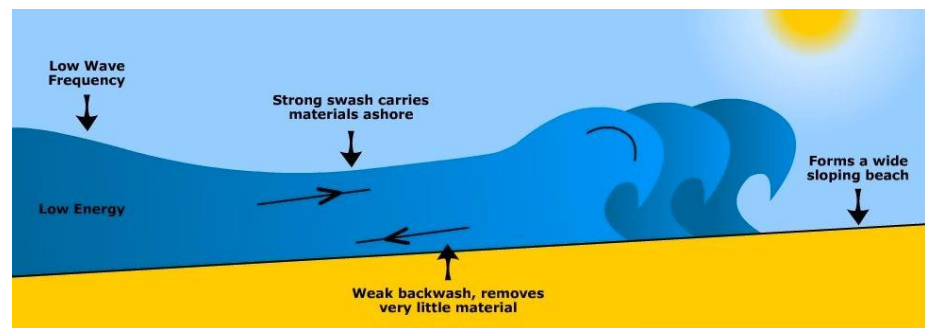
Destructive waves



Coastal processes and landforms



Constructive waves







1.0 Musikarten	1.0 Music types
Was für Musik hörst du gern?	What music do you like to listen to?
die Musik	music
die Musikart	type of music
die elektronische Musik	electronic dance music
der Hip-Hop	hip-hop
der Indie	indie music
die klassische Musik	classical music
der Pop	pop music
der Rap	rap
der Rock	rock music
der Schlager	German pop
der Techno	techno

2.0 How to express preferences	
Ich höre gar nicht gern Rock.	I don't like listening to rock at all.
Ich höre gern Pop.	I like listening to pop music.
Ich höre lieber Rap.	I prefer listening to rap.
Ich höre am liebsten Hip-Hop.	Most of all I like listening to hip-hop.
You can also start with "am liebsten"	
Am liebsten spiele ich Tennis.	Most of all I like playing tennis.
Am liebsten esse ich Pizza.	Most of all I like eating pizza.

3.0 Other words to do with music	
der Fan	fan
der Komponist	composer (male)
die Komponistin	composer (female)
das Lieblingsstück	favourite piece (of music)
das Lied	song
Liedtexte	song lyrics
die Melodie	melody
der Rapper	male rapper
die Rapperin	female rapper
der Sänger	male singer
die Sängerin	female singer
singen	to sing
der Song	song
die Stimme	voice
aggressiv	aggressive
hart	harsh
inspirierend	inspiring
schön	beautiful

Knowledge builder: Find out more about Helene Fischer, Germany's most famous "Schlager" singer [here](#) And listen to one of her [songs](#) Like it? Here are [more](#)



4.0 Instrumente	Instruments
Spielst du ein Instrument?	Do you play an instrument?
Ich bin nicht musikalisch.	I am not musical.
Ich spiele...	I play...
die Geige	violin
die Gitarre	guitar
das Klavier	piano
das Musikinstrument	musical instrument
das Schlagzeug	drums
die Trompete	trumpet

5.0 Stars und Trends	Stars and trends
Abonneenten (pl)	subscribers
Videoproduzent(in)	video producer (m/f)
Kurzfilme	short films
Videos	videos
beliebt	popular
berühmt	famous
Bilder teilen	to share photos
Fotos liken	to like photos
ein Handy haben	to have a mobile phone
online sein	to be online
Selfies machen	to take selfies
Videoclips sehen	to watch video clips
soziale Medien	social media



6.0 die Kunst - art	
malen	To paint
Der/die Künstler/in	Artist
Was siehst du auf dem Bild?	What do you see in the picture?
Auf dem Bild sehe ich...	In the picture, I see
Ich finde das Bild...	I find that picture...
interessant	interesting
toll	great
kindlich	childish
langweilig	boring
Es gefällt mir	I like it
Ich mag...	I like...
Die Farben	The colours
Die coolen Formen	The cool shapes
Es ist inspirierend	It is inspiring
Es gefällt mir gar nicht	I don't like it at all
Es ist hart/aggressiv	It is severe/aggressive
modern/altmodisch	Modern/old fashioned

Learn more about the present tense here:



Learn more about the perfect tense here:



7.1 Regular present tense verbs	
arbeiten	To work
machen	To make/do
gehen	To go
finden	To find
kommen	To come
sagen	To say
trinken	To drink
verstehen	To understand
lernen	To learn

7.2 Forming the present tense	
Verb – en + ending = present conjugation	
ich lerne	I learn
du lernst	You learn
er/sie/es lernt	He/she/it learns
wir lernen	We learn
ihr lernt	You (group) learn
Sie/sie lernen	You (polite)/they learn

7.3 In German, the verb always comes second

e.g. Ich spiele Rugby.
Manchmal spiele ich Rugby.

In the past tense, the part of haben or sein comes second

e.g. Ich habe Rugby gespielt.
Gestern habe ich Rugby gespielt.

8.1 The past (perfect) tense
<ol style="list-style-type: none"> 1. Subject 2. Present tense form of haben or sein (the auxiliary) 3. Other info 4. Past participle at the end of the sentence <p>Regular (weak) past participles:</p> <ul style="list-style-type: none"> • Take the -en off the end • Put 'ge' at the start • Replace the -en with a -t <p>e.g. spielen -> gespielt</p> <p>Strong past participles:</p> <ul style="list-style-type: none"> • Add 'ge' at the start of the verb • Ending stays the same <p>e.g. essen -> gegessen</p>

8.2 Forming the past (perfect) tense		
Subject + auxiliary + past participle		
ich	habe	gespielt
du	hast	gespielt
er/sie/es	hat	gespielt
wir	haben	gespielt
ihr	habt	gespielt
Sie/sie	haben	gespielt



9.0 Schule	School
das Fach	subject
das Schulfach	school subject
lernen	to learn / study
die (Mittags)pause	(lunch) break
die Stunde	lesson
der Stundenplan	timetable
Was hast du am Montag?	What do you have on Monday?
Ich gehe in die siebte Klasse	I am in Year 7

11.0 Schulfächer	School subjects
Mathe(matik)	maths
Englisch	English
Naturwissenschaften	Science
Biologie	Biology
Chemie	Chemistry
Physik	Physics
Erdkunde	Geography
Geschichte	History
Religion	Religious Studies
Informatik	Computing
Theater	Drama
Kunst	Art
Musik	Music
Sport	PE
Deutsch	German
Französisch	French
Italienisch	Italian
Spanisch	Spanish
Latein	Latin
Fremdsprachen	foreign languages
Versammlung	Assembly
Sozialkunde	PSHE
Kochen	Cookery
Werken	Technology

12.0 Es macht Spaß!	It is fun!
Ich bin stark in	I am good at
Ich bin schwach in	I am bad at
Deutsch interessiert mich.	German interests me.
Fremdsprachen interessieren mich.	Languages interest me.
Mir gefällt Mathe.	I like Maths.
Mir gefallen Kunst und Sport.	I like Art and PE

10.0 Wie spät ist es?	What time is it?
-----------------------	------------------

Wie spät ist es?

(TO the next hour)

13.0 Adjektive	adjectives
total	totally
voll	really
anstrengend	tiring
ätzend	awful
bescheuert	stupid
einfach	easy
interessant	interesting
langweilig	boring
nervig	annoying
nützlich	useful
praktisch	practical
prima	great
schrecklich	awful
schwierig	difficult
spannend	exciting
unwichtig	(un)important

Knowledge builder: here is a video to help you tell the time in more detail



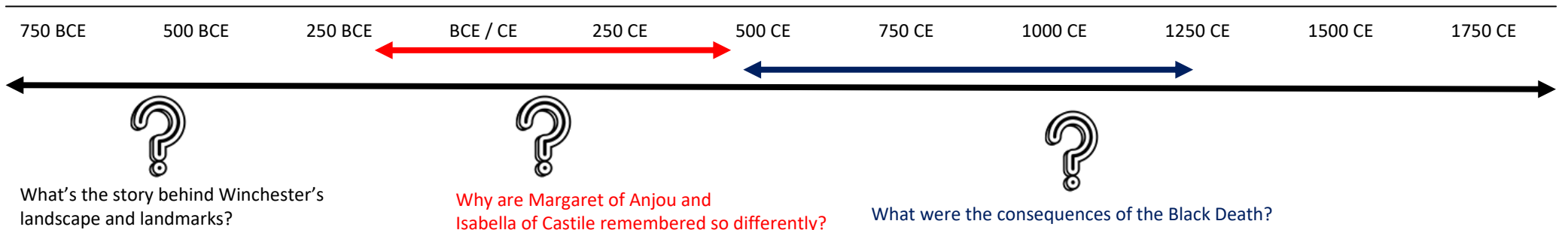
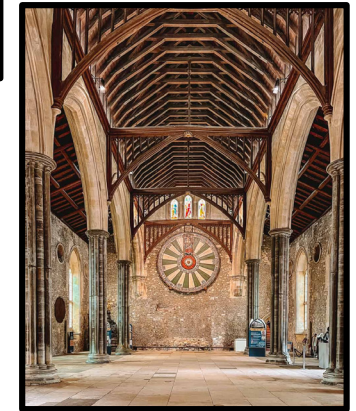
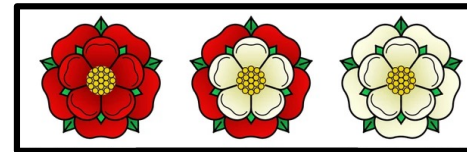
Knowledge builder: Watch or read the new on



1. Core knowledge: Substantive (what happened in the past)		
1.1	Dynasty	A royal house (ruling family) who pass down power through the generations.
1.2	Propaganda	Choosing what information to share your audience in order to persuade people.
1.3	Golden Age	A period of time when a country or society goes through exciting and rapid changes.
1.4	Queenship	Being a queen. This could be as a consort to the husband (king), or a ruler in her own right.
1.5	Minster	A cathedral that is part of a monastery, a closed religious community for monks and nuns.
1.6	Cathedral	A large and important church with a bishop's throne (a cathedra).
1.7	Great Hall	13 th century building and all that is left of Winchester Castle, with King Arthur's Round Table.
1.8	Statue	A sculpture of a person, such as King Alfred the Great of Wessex.

2. Core knowledge: Disciplinary (how historians think)		
2.1	Causes	Reasons (sometimes called factors) that made something happen in the past.
2.2	Significance	When an event or person from the past is seen as important and making a difference.
2.3	Chronology	The sequence of dates and events in the past, in the order that they happened.
2.4	Middle Ages	The medieval period (The Tudors called it the Middle Ages to make themselves look good).

3. This Term's Enquiry Questions	
1485 CE – 1509 CE	Why did a Welsh nobleman use histories to establish a royal dynasty in England?
1430 CE – 1504 CE	Why are Margaret of Anjou and Isabella of Castile remembered so differently?
c.750 BCE – today	What's the story behind Winchester's landscape and landmarks?





British History's Biggest Fibs With Lucy Worsley
Episode 1 War of the Roses (BBC Documentary)



History Extra Podcast:
Everything you wanted to know about the Wars of the Roses



This Term's Enquiry Questions	
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Character features in:



Relevant Philippa Gregory books featuring Margaret of Anjou



<https://www.medievalwomen.org/isabella-i-of-castile.html>
Website run by academics designed to highlight untold stories of Medieval women





Luoghi in città		Places in town
1.1	cosa c'è nella tua città?	what is there in your town?
1.2	nella mia città	in my town
1.3	there is	c'è
1.4	there are	ci sono
1.5	un bar	a bar
1.6	un ristorante	a restaurant
1.7	un duomo	a cathedral
1.8	un ospedale	a hospital
1.9	un mercato	a market
1.10	un cinema	a cinema
1.11	un parcheggio	a car-park
1.12	un parco	a park
1.13	un semaforo	a traffic-light
1.14	uno stadio	a stadium
1.15	una stazione	a (train) station
1.16	una piscina	a swimming pool
1.17	una scuola	a school
1.18	una chiesa	a church
1.19	una palestra	a gym
1.20	una banca	a bank
1.21	una piazza	a square

Conversazione		Conversation
2.1	dove vai?	where are you going?
2.2	vado	I go
2.3	al parco	to the park
2.4	alla stazione	to the station
2.5	allo stadio	to the stadium
2.6	ai negozi	to the shops
2.7	a casa	home
2.8	e tu?	and you?

Le direzioni		Directions
3.1	scusi, dov'è ...?	excuse me, where is ..?
3.2	il parco	the park
3.3	la stazione	the station
3.4	lo stadio	the stadium
3.5	è	is/it is/he is/she is
3.6	a destra	to the right
3.7	a sinistra	to the left
3.8	tutto dritto	straight ahead
3.9	la prima a destra	the first on the right
3.10	la seconda	the second
3.11	deve andare	you must go
3.12	deve girare	you must turn
3.13	deve attraversare	you must cross

verbi ERE		ERE verbs
4.1	chiedere	to ask
4.2	chiudere	to close
4.3	leggere	to read
4.4	prendere	to take
4.5	ricevere	to receive
4.6	ridere	to laugh
4.7	scrivere	to write
4.8	vedere	to see
4.9	vivere	to live
4.10	piangere	to cry
4.11	scegliere	to choose
4.12	perdere	to lose
4.13	bere	to drink
4.14	promettere	to promise

Il presente		Forming the present
5.1	vivo	I live
5.2	vivo	you live
5.3	vive	he/she lives
5.4	viviamo	we live
5.5	vivete	you lot live
5.6	vivono	they live
5.7	dove vivi?	where do you live?





Mangiare e bere		Eating and drinking
1.1	mangio	I eat
1.2	bevo	I drink
1.3	la prima colazione	breakfast
1.4	Il pranzo	lunch
1.5	la cena	dinner
1.6	Il dolce	pudding
1.7	la merenda	snack
1.8	dolce	sweet
1.9	salato	savoury

Al mercato			At the market
3.1	un chilo do		a kg of
3.2	mezzo chilo di		½ Kg of
3.3	un etto di		100 g of
3.4	due chili di		2 kg of
3.5	un pacchetto di		a packet of
3.6	un vaso di		a jar of
3.7	una bottiglia di		a bottle of
3.8	un pezzo di		a piece of
3.9	una fetta di		a slice of
3.10	una scatola di		a box of

Le taglie		Sizes
5.1	di taglia piccola	small size
5.2	di taglia media	medium size
5.3	di taglia grande	large size

Le bibite		Drinks
2.1	un espresso	a small black coffee
2.2	un cappuccino	a milky coffee
2.3	un té	tea
2.4	un succo di frutta	a fruit juice
2.5	un bicchiere di latte	a glass of milk
2.6	un'aranciata	a fizzy orange juice
2.7	un'acqua minerale	a mineral water
2.8	una cioccolata calda	a hot chocolate
2.9	una limonata	a lemonade
2.10	un frullato	a milkshake

La frutta			Fruit
4.1	le pere		pears
4.2	le mele		apples
4.3	le banane		bananas
4.4	le pesche		peaches
4.5	l'uva		grapes
4.6	Il melone		melon
4.7	l'anguria		watermelon
4.8	le arance		oranges
4.9	le fragole		strawberries

La verdura			Vegetables
6.1	i pomodori		tomatoes
6.2	le cipolle		onions
6.3	le carote		carrots
6.4	gli zucchini		courgettes
6.5	le patate		potatoes
6.6	i piselli		peas
6.7	l'insalata		salad
6.8	i funghi		mushrooms
6.9	le melanzane		aubergines
6.10	i peperoni		peppers

Al supermercato			At the supermarket
7.1	Il formaggio		cheese
7.2	la carne		meat
7.3	i biscotti		biscuits
7.4	la zuppa		soup
7.5	Il pane		bread
7.6	Il burro		butter
7.7	le uova		eggs



Get some help
with ERE verbs



Learn some new vocab. Write it in your
vocab book and revise it...



Using Quizlet is a great way
to learn vocabulary.



Listen to the Italian and look at the
subtitles and note interesting
vocabulary



More directions
Watch this video for more help on how
to ask for understand directions in
Italian. Practise saying the words with
the video so that you can improve your
pronunciation



Vocab revision



Si mangia
Have a look at this page and find out
lots more info about eating in Italy



Using Quizlet is a great way to learn
vocabulary



More amazing words about food to
copy up into your vocab book




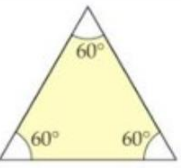
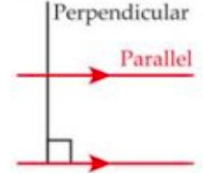


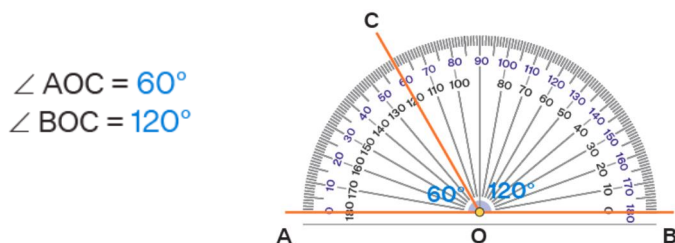
By the end of this module you should be able to:-

- Recognise and name the different types of angle
- Measure and draw angles to the nearest degree
- Accurately draw shapes with a ruler and protractor
- Use angle facts
- Know the different types of triangle and their angles
- Name the different types of quadrilateral
- Know the properties of quadrilaterals

Important things to remember:-

- 1) A full turn is 360°
- 2) A half turn or straight line is 180°
- 3) A quarter turn or right angle is 90°
- 4) The angles in a triangle always add to 180°
- 5) The angles in a quadrilateral always add to 360°
- 6) Use the right scale on your protractor (see below)

Language	Meaning	Example
angle	A measure of turn, given in degrees	90° is a quarter turn or right angle
acute obtuse reflex	Less than 90° from 90° to 180° From 180° to 360°	 This triangle contains two acute angle and one obtuse angle
triangle	A 2D shape with 3 straight sides and 3 angles	 A triangle with all angles of 60° is equilateral
equilateral isosceles scalene	All equal angles 2 equal angles No equal angles	
parallel	Lines which are always the same distance apart	
perpendicular	Lines which meet at right angles	 Perpendicular Parallel
quadrilateral	A 2D shape with 4 straight sides and 4 angles	Rectangle, square, rhombus, parallelogram, trapezium, kite, arrowhead
polygon	A 2D shape with 3 or more sides	Pentagons (5), hexagons (6) and octagons (8) are all examples



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Year 7 Mathematics Curriculum Overview and Revision Support



Links, Lessons and Practice Questions for this topic



By the end of this module you should be able to:-

- Write a proportion as a fraction or a percentage
- Increase or decrease 2 quantities using direct proportion
- Solve problems using direct proportion
- The unitary method of proportion
- Simplify a ratio
- Understand and use the relationship between ratio and proportion

Important things to remember:-

- 1) **Ratio** compares the size of the parts
- 2) **Proportion** compares the size of a part with the whole

This is the national flag of Nigeria.



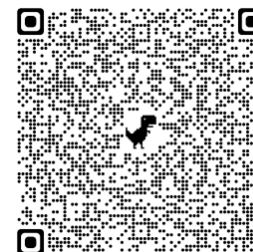
The ratio green : white = 2 : 1
 The proportion of green = $\frac{2}{3}$
 The proportion of white = $\frac{1}{3}$



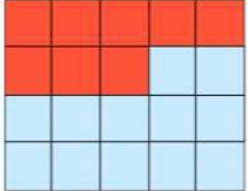
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Links, Lessons and Practice Questions for this topic

Language	Meaning	Example
proportion	Compares a part to the whole and can be written as a fraction	 Proportion of red is $\frac{8}{20} = \frac{2}{5}$ Ratio of red to blue is 8 : 12 = 2 : 3
ratio	Compares 2 or more parts. You write a ratio using a colon :	
direct proportion	Two quantities that increase or decrease by the same proportion	7 music downloads cost £6.23. To work out the cost of 5 downloads $\div 7 \left\{ \begin{array}{l} 7 \text{ downloads} = \text{£}6.23 \\ 1 \text{ download} = \text{£}0.89 \end{array} \right. \div 7$ $\times 5 \left\{ \begin{array}{l} 1 \text{ download} = \text{£}0.89 \\ 5 \text{ downloads} = \text{£}4.45 \end{array} \right. \times 5$
unitary method	The method of dividing into a given ratio or proportion using the value of one equal share	150g of cereal is £2.25 1g is £0.015 (divide by 150) 700g is £10.50 (multiply by 700)



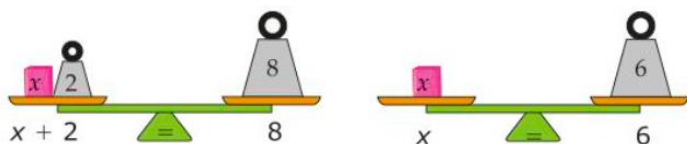
By the end of this module you should be able to:-

- Simplify an expression
- Use a formula
- Write a formula
- Work with real world formulae
- Solve an equation by adding or subtracting

Important things to remember:-

- 1) E and e are not the same! Use the letters you have been given in a formula
- 2) You can often check if your answer is correct by substituting back into the original equation of formula
- 3) The inverse of addition is subtraction
- 4) The inverse of multiplication is division
- 5) The inverse of square is square root

Language	Meaning	Example
expression	Made from numbers, letters and operations but not including an equal's sign	$2x + 3y$
term	Part of an expression between plus or minus signs	In the example above $2x$ and $3y$ are terms
formula	An algebraic statement that connects things (plural formulae)	$d = s \times t$ Distance = speed \times time
equation	An expression equal to a number or another expression	$x + 3 = 11$ $2x - 6 = x + 3$
solve	To find the value of an unknown in equation that makes it true	If $x = 5 = 12$ Then $x = 7$
solution	The value(s) of the unknown that the equation is true for	$x = 7$ is the only solution in the above equation
substitution	A method for checking if your solution to an equation is correct by replacing the unknown with the solution	Substituting $x = 3$ Into $2x + 1$ Gives $2 \times 3 + 1 = 7$
inverse operation	The mathematical operation that undoes an operation	Multiplying and dividing are inverse operations. When you multiply by 5 you can undo this by dividing by 5



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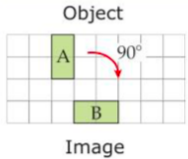
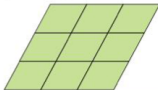


By the end of this module you should be able to:-

- Find the order of rotational symmetry
- Reflect a shape
- Find the line of reflection
- Rotate a shape
- Translate a shape
- Know why shapes tessellate
- Tessellate a shape

Important things to remember:-

- 1) Don't say 'mirrored' say **reflected**. Provide the equation of the line of reflection
- 2) Don't say 'turned' say **rotated** and provide the angle, direction and centre of rotation
- 3) Don't say 'moved' say **translated** and provide the vector

Language	Meaning	Example
object image	The object is the shape before the transformation The image is the shape after the transformation	
vertex	A corner of a 2 dimensional shape	A square has 4 vertices
transformation	A change in the position or size of a shape that follows set rules	Reflections, rotations and translations are all transformations
rotation	A transformation that turns an object through a given angle about a given centre of rotation	Turning this page through 90° clockwise about its bottom right corner is a rotation
reflection	A transformation which flips an object over a mirror line	Looking at this page in a mirror is a reflection
translation	A transformation which slides/moves an object	Sliding this page across the table is a translation
reflective symmetry	Another name for a power such as 'squared' or 'to the power of 5'	A rectangle has reflective symmetry in both the horizontal and vertical lines through its centre
rotation symmetry	To replace a letter in an algebraic expression with a number	A rectangle has rotational symmetry of order 2 about its centre
tessellation	A tiling pattern that doesn't have any gaps	A tessellation made from parallelograms 



Link to Kings' Maths Resources



Year 7 Mathematics Curriculum Overview and Revision Support



Links, Lessons and Practice Questions for this topic



Year 7 focuses on how Music uses **patterns, textures and structures.**

1. Elements of Music		
1.1	pitch	The position of a single sound in the complete range of sound. <i>High / low</i>
1.2	tempo	The pace of the music. <i>Fast / Slow</i>
1.3	texture	Describes how layers of sound within a piece of music interact. <i>Thick / thin</i>
1.4	timbre	The quality of tone distinctive to a particular voice or instrument. <i>Example: bright, mellow</i>
1.5	dynamics	The variation in loudness between notes or phrases. <i>Loud / Soft (piano, forte, crescendo, diminuendo)</i>
1.6	duration	The length of a note or series of notes. <i>Long / Short</i>
1.7	silence	No noise. This can create tension in music.
1.8	melody	A melody is a succession of pitches in rhythm.
1.9	rhythm	A rhythm is a pattern of sounds of different lengths.


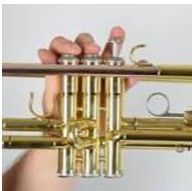
2. Notes on the keyboard

3. Note lengths







ITEM	NOTE	REST	VALUE (number of beats)
Whole note/rest			4
Half note/rest			2
Quarter note/rest			1
Eighth note/rest			1/2
Sixteenth note/rest			1/4

4. Notes on the staff



5. Fanfares		
5.1	Fanfare	A short ceremonial melody or flourish played on brass instruments, typically to introduce something or someone important.
5.2	Triplets	A three-note pattern that fills the duration of a typical two-note pattern. Each note in a triplet has equal rhythmic value. 
5.3	Harmonic Series	Early trumpets and other brass instruments were only able to play certain notes - these notes were known as the 'Harmonic Series'. Trumpets then had valves added so that they could play all the notes of a scale and not just those in the harmonic series.
5.4	Valves	The trumpet has 3 valves that alter the pitch within a harmonic series of the instrument.  This is due to each valve having a different length of tubing.
5.5	Dotted rhythms	A rhythm using longer notes alternating with shorter notes. $\text{dotted quarter} = \text{quarter} + \text{eighth}$ $\text{dotted eighth} = \text{eighth} + \text{quarter}$ $\text{dotted half} = \text{half} + \text{quarter}$



7. Early Musical Periods		
7.1	Renaissance Period 1400-1600	Composers: <i>Thomas Tallis, William Byrd, Claudio Monteverdi</i>  Instruments: Lutes, Virginals 
7.2	Baroque Period 1600 - 1750	Composers: <i>Vivaldi, Bach, Handel</i>  Instruments: Baroque trumpet, Organ, String instruments 
7.3	Classical Period 1750 - 1830	Composers: <i>Mozart, Haydn, Beethoven</i>  Instruments: Piano, Clarinet, growth of orchestra 



Listen



Listen to Reveille & The Royal Fanfare at the Queen's Funeral (2022)



Read



Jameela Jamil on "Fanfare for the Common Man", by Aaron Copland.



Watch



What is a Fanfare? Introduction to Fanfares



Watch



Renaissance



Introduction to the Renaissance Period



Watch



Baroque



Introduction to the Baroque Period



Watch



Classical



Introduction to the Classical Period



TASK: In Bandlab, compose a Fanfare for multiple trumpets that uses dotted rhythms, triplets and straight rhythmic patterns (e.g. straight quavers and semiquavers). Compose with a range of textures.



TASK: Create a presentation about the changes that took place musically between each musical period.



1. Being Safe		
1.1	permission	Allowing someone to do a particular thing: giving consent.
1.2	inappropriate	Not suitable to do or say something.
1.3	abuse	To wilfully treat someone/something cruelly: including mentally or physically.
1.4	safe	Being protected from danger or risk.
1.5	responsible adult	An adult you can trust. Possibly a parent, teacher, grandparent, police or welfare officer.
1.6	personal boundaries	Limits that we set ourselves, that make us feel safe. Each person has a different set of boundaries, depending on our relationships.

3. Local Government		
3.1	community	People living in and/or sharing the same space.
3.2	local councillor	Responsible for a specific community in which people live. They address their needs and highlight these to the City Council or Borough Council.
3.3	national government	A group of people who govern/run/look after the whole country.
3.4	public services	Services available which include healthcare, schools, waste management, police and recreational spaces.
3.5	taxes	Paying money to the government, in order to contribute to the needs of the country. Local councils also collect taxes, to fund the needs of its community.
3.6	democracy	A form of government, invested in the people. In the UK, those over 18 years old can have a say in how the government is run. They do this by voting.

2. Questions about being safe	
2.1	Who do I speak to if I don't feel safe?
	Speak to a trusted adult as soon as you can. This could be at school or at home. They will listen to you and offer some help. It is not OK to feel unsafe. You can also phone ChildLine 0800 1111 or the police.
2.2	What do I do if I am worried about a friend?
	Speak to your friend. They might want someone to talk to. Speak to a trusted adult if you are worried about their well-being or safety.
2.3	What words could I use to show someone I am uncomfortable in a situation?
	No! Stop! Please don't....., I'm going to tell....., I don't want to. That makes me feel.....



ChildLine.



Winchester Council

4. Questions about your community	
4.1	How could I help my local community?
	Think what your community is missing. This could be a safer footpath, some better recreational facilities or tidier streets. You could write to your local councillor with some suggestions or form a petition to prove that it is what your community needs.
4.2	How do people pay taxes?
	Most tax is paid to HMRC (His Majesty's Revenues and Customs). Tax is collected each time a person gets paid by their workplace, each time you buy goods and by businesses paying a percentage of the money they make.
4.3	Who can vote in elections?
	To be able to vote in the United Kingdom, you have to be aged 18 years or older, be registered to vote; be either a British citizen or, qualifying Commonwealth citizen or a citizen of the Republic of Ireland; and not be subject to any legal incapacity to vote.



1. What is the Jewish identity?		
1.1	identity	Characteristics a person has that distinguishes them from others
1.2	Haredi	Strictly Orthodox Jews
1.3	Orthodox	The more strict Jewish belief, following the “letter of the law”. Haredi Jews are a particularly strict denomination of Orthodox Jews
1.4	Reform Jews	The more modern and liberal Jewish belief, following the “spirit of the law
1.5	secular Jews	A secular Jew is someone who identifies as Jewish on the basis of parentage, culture, heritage, or ethnicity rather than through the practice of Judaism as a religion
1.6	parentage	Who your parents are. Jewish identity traditionally passed through the mother’s line
1.7	heritage	Handed down from the past including history and traditions
1.8	religion	Beliefs and practices lived out in communities
1.9	culture	The way people live and express themselves such as customs, beliefs and values
1.10	ethnicity	A social group with a shared culture, ancestry, language or traditions

3. How do Jews keep the covenant?		
3.1	monotheism	The belief in one God – Yahweh/Adonai/Elohim
3.2	the Shema	The statement of belief in the One God found in Jewish religious texts – the Tanakh, Torah and Talmud
3.3	keeping the covenant	The main requirement for all Jews since Abraham and Moses, built into their religious laws and beliefs
3.4	Torah	The first 5 books of the Tanakh-the Jewish Bible. The books of the law
3.5	mitzvot	Laws, commandments (singular mitzvah)
3.6	tefillin	Two boxes worn during prayer, which contain verses from the Torah
3.7	kippah	A head covering worn during prayer
3.8	tallit	A symbolic shawl worn during prayer
3.9	mezuzah	A box attached to doorposts in Jewish homes, containing the Shema
3.10	circumcision	The physical sign for males to show they are part of the covenant. Brit Milah is the ceremony for circumcision for 6 day old baby boys

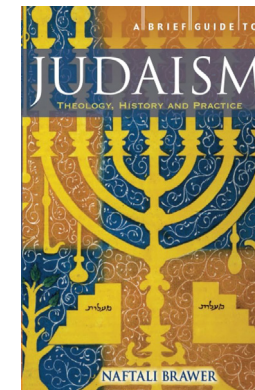
2. What is the story of the Jews?		
2.1	Abraham	One of the Patriarchs, founders of Judaism
2.2	Promised Land	The homeland promised to Abraham and his followers
2.3	covenant	The agreement between God and Abraham, and then Moses, to found and establish Judaism
2.4	empire	A group of countries controlled by one ruler or government. In the case of Israel this happened several times most noticeably the Babylonians and the Romans
2.5	exile	To expel or bar someone from their country
2.6	persecution	Being punished or discriminated against for what you believe
2.7	diaspora	The dispersion of the Jewish people beyond Israel, particularly during the times of the Romans.
2.8	Sephardim	The group of Jews taken in exile to Babylon, 586BCE and who eventually settled in Spain and Portugal
2.9	Ashkenazim	Jews who stayed behind after the first Exile and then left Israel when the Romans exiled all Jews in 130CE. They settled in Eastern Europe. They make up 80% of the Jews in the world

4. How do different Jews interpret the mitzvot?		
4.1	Sabbath	Shabbat/Rest day, remembering God’s day of rest after 6 days of creation
4.2	kashrut	The food laws, written out in the Torah
4.3	kosher	Fit for purpose, acceptable, allowed
4.4	parve/pareve	Neutral foods, can be eaten with anything
4.5	treif	Forbidden foods under the terms of the Kashrut
4.6	shechitah	Kosher slaughter, ensuring the meat is fit for consumption
4.7	meat and dairy	“You shall not boil a young goat in its mother’s milk.” Exodus
4.8	Leviticus 11	Verses from the Torah to explain kosher and non-kosher food



5. Did the Jews lose their identity during the Holocaust?		
5.1	tradition	Customs or beliefs passed down through the generations
5.2	antisemitism	Hatred of Jews
5.3	prejudice	Pre-judging people, disliking someone for what they believe in, or what "race" they are, stereotyping them
5.4	scapegoat	Blaming someone or a group of people for something they did not do
5.5	Holocaust / "Shoah"	The murder in Europe of 10m people from 1933-45/"Catastrophe"
5.6	Nuremberg laws	Laws enacted by the Nazi state to take away the identity of the Jews and their citizenship

Books to read



What is the Shema?



Judaism today

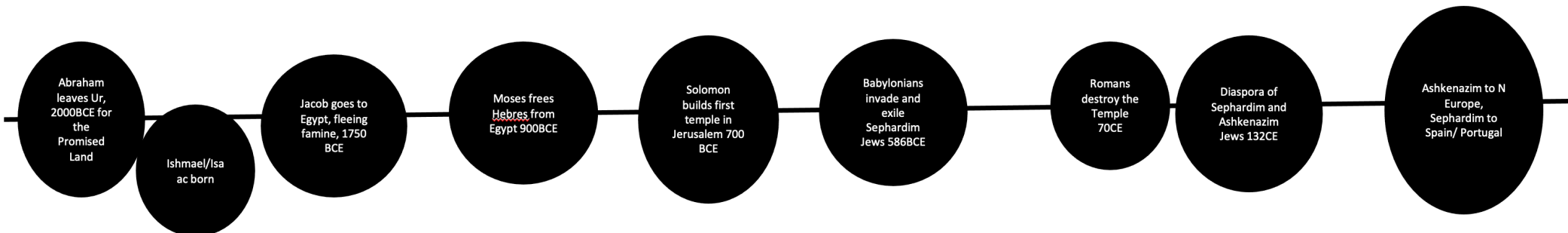


How did the Covenant first come about?










The Sabbath from a young person's perspective

Argument words	
using evidence	for example, indicated by
developing arguments	additionally, furthermore, moreover, as well, thus, due to this, therefore
contrasting	nevertheless, conversely, however
showing limitation	although, yet
most important	crucial, vital, fundamental
making judgements	In conclusion, overall, in summation



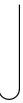

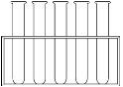



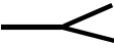




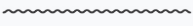







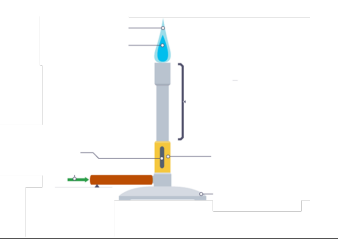
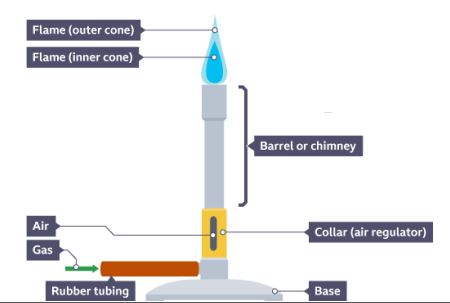
1. Safety in the Lab		
1.1	What is a hazard?	Something that can cause you harm
1.2	What is risk?	How likely a hazard will cause harm
1.3	What is a precaution?	A control measure we can put in place either to reduce the risk or the severity of the hazard
1.4	Give three examples of precautions that can be taken in the lab	Use safety goggles, ensure bags are clear from the floor, tie hair back
1.5	What is the name for a label on a bottle that tells us a substance could cause harm?	Hazard symbol
Give the meaning and typical hazard associated with the following hazard symbols		
1.6		Moderate health hazard – causes skin irritation
1.7		Serious health hazard – causes breathing difficulties
1.8		Toxic – could cause death if swallowed or inhaled
1.9		Corrosive – damages skin and clothing
1.10		Flammable – catches fire easily
1.11		Oxidising – makes flammable substances burn more fiercely
1.12		Harmful to the environment – could cause damage to animal and plant life

2. Safety in the Lab		
2.1	What are the 10 basic rules of working in a Science lab?	<ol style="list-style-type: none"> 1. Do not enter the lab without permission 2. Dress for practical work (hair tied back and ties tucked in) 3. Follow instructions from the person in charge 4. Make sure your working area is safe (bags and coats tucked under benches) 5. Never run in the lab 6. Don't eat or drink in the lab 7. Do not taste or sniff chemicals 8. Never leave an unattended Bunsen burner on a blue flame 9. Do not touch the electrical sockets without permission 10. In the case of accidents, tell an adult



Scientific Equipment					
What is the drawing and purpose for the following pieces of scientific equipment?					
Equipment	Drawing	Purpose	Equipment	Drawing	Purpose
test tube		Mixing chemicals to observe chemical reactions	thermometer		Measuring the temperature in °C
boiling tube		Heating chemicals to observe chemical reactions	stirring rod		Stirring chemicals to speed up dissolving or a chemical reaction
test tube rack		For safely holding test tubes and boiling tubes	pipette		For transferring very small volumes of liquid from one container to another
clamp stand		To support other pieces of equipment and glassware	tripod		Safely supporting objects above a Bunsen burner
clamp		To support other pieces of equipment and glassware	evaporating dish		For the evaporation of solutions
beaker		For holding larger volumes of liquid	Bunsen burner		To heat up substances or objects
conical flask		To contain or mix liquids	gauze		Safely supporting objects above a Bunsen burner and to spread the heat
spatula		For transferring small quantities of solid from one container to another	measuring cylinder		For accurately measuring volumes of liquid
			heatproof mat		Protecting the bench and safely storing hot objects



3. Bunsen Burner		
3.1	What are the missing labels from the Bunsen burner? 	
3.2	What are the five steps for safely lighting a Bunsen burner?	<ol style="list-style-type: none"> 1. Place a Bunsen burner on a heat-resistant mat 2. Turn the collar to ensure the air hole of the Bunsen burner is closed. 3. Hold a lit splint 1-2 cm above the top of the barrel of the burner. 4. Turn on the gas at the gas tap, and the Bunsen burner will burn with a yellow flame. 5. Extinguish the splint by placing it on the heat-resistant mat (do not blow it)
3.3	Name three safety precautions that should be taken when using a Bunsen burner	Tie your hair back, tuck your tie in, wear safety goggles
3.4	What colour will the of the Bunsen burner be when it is first lit?	Yellow
3.5	Why is the yellow flame of the Bunsen burner referred to as the safety flame?	It is easier to see and less hot than the blue flame
3.6	How can you change the colour of the flamer on a Bunsen burner?	By twisting the collar which opens and closes the air hole
3.7	Which flame of the Bunsen burner should be used for heating?	The blue flame as it is much hotter

4. Scientific Experiments		
4.1	What is the aim of a scientific investigation?	To answer a Scientific question
4.2	What is a variable?	Anything that can change during a Scientific investigation
4.3	What is the independent variable in an investigation?	The factor that you change
4.4	What is the dependent variable in an investigation?	The factor that you measure (as a result of marking the change)
4.5	What are the control variables in an investigation?	The factors you keep the same to ensure a fair test
4.6	What is a fair test?	An investigation in which only one factor is changed and all other factors are kept the same
4.7	What is data?	The measurements you make in an investigation
4.8	What is meant by accurate data?	Data that is close to the true value of what you are trying to measure
4.9	What is meant by precise data?	Data which gives similar results if you repeat the measurement, the spread of data is small
4.10	How can data be recorded?	In a table
4.11	When should a mean be calculated?	If repeats of measurements are taken
4.12	How do you calculate the mean?	By adding all the numbers together and dividing by the number of repeats you took



1		2												3	4	5	6	7	0
		Key relative atomic mass atomic symbol name atomic (proton) number										1 H hydrogen 1						4 He helium 2	
7 Li lithium 3	9 Be beryllium 4											11 B boron 5	12 C carbon 6	14 N nitrogen 7	16 O oxygen 8	19 F fluorine 9	20 Ne neon 10		
23 Na sodium 11	24 Mg magnesium 12											27 Al aluminium 13	28 Si silicon 14	31 P phosphorus 15	32 S sulfur 16	35.5 Cl chlorine 17	40 Ar argon 18		
39 K potassium 19	40 Ca calcium 20	45 Sc scandium 21	48 Ti titanium 22	51 V vanadium 23	52 Cr chromium 24	55 Mn manganese 25	56 Fe iron 26	59 Co cobalt 27	59 Ni nickel 28	63.5 Cu copper 29	65 Zn zinc 30	70 Ga gallium 31	73 Ge germanium 32	75 As arsenic 33	79 Se selenium 34	80 Br bromine 35	84 Kr krypton 36		
85 Rb rubidium 37	88 Sr strontium 38	89 Y yttrium 39	91 Zr zirconium 40	93 Nb niobium 41	96 Mo molybdenum 42	[98] Tc technetium 43	101 Ru ruthenium 44	103 Rh rhodium 45	106 Pd palladium 46	108 Ag silver 47	112 Cd cadmium 48	115 In indium 49	119 Sn tin 50	122 Sb antimony 51	128 Te tellurium 52	127 I iodine 53	131 Xe xenon 54		
133 Cs caesium 55	137 Ba barium 56	139 La* lanthanum 57	178 Hf hafnium 72	181 Ta tantalum 73	184 W tungsten 74	186 Re rhenium 75	190 Os osmium 76	192 Ir iridium 77	195 Pt platinum 78	197 Au gold 79	201 Hg mercury 80	204 Tl thallium 81	207 Pb lead 82	209 Bi bismuth 83	[209] Po polonium 84	[210] At astatine 85	[222] Rn radon 86		
[223] Fr francium 87	[226] Ra radium 88	[227] Ac* actinium 89	[261] Rf rutherfordium 104	[262] Db dubnium 105	[266] Sg seaborgium 106	[264] Bh bohrium 107	[277] Hs hassium 108	[268] Mt meitnerium 109	[271] Ds darmstadtium 110	[272] Rg roentgenium 111	Elements with atomic numbers 112 – 116 have been reported but not fully authenticated								

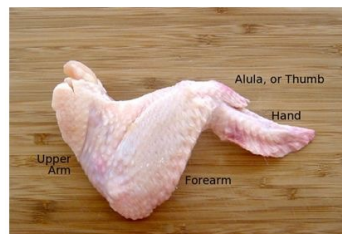
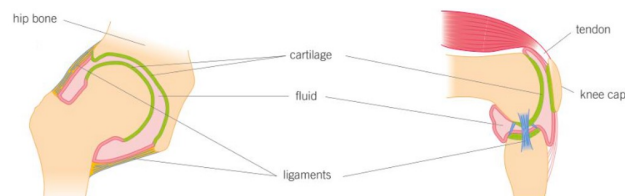
* The Lanthanides (atomic numbers 58 – 71) and the Actinides (atomic numbers 90 – 103) have been omitted.

Relative atomic masses for **Cu** and **Cl** have not been rounded to the nearest whole number.



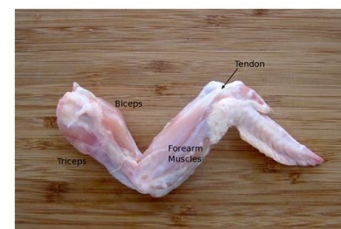
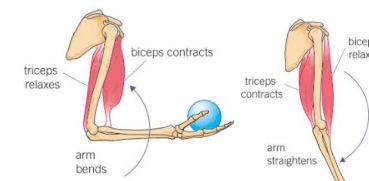
1. Skeleton		
1.1	What is the skeleton composed of?	Bones
1.2	Is bone an example of a cell, tissue or organ?	Tissue
1.3	What makes bones strong but slightly flexible?	Calcium and other minerals
1.4	What is important, to keep bones healthy?	Exercise and a balanced diet
1.5	How many bones does the average human skeleton consist of?	Around 200
1.6	What are the four main functions of the skeleton?	<ul style="list-style-type: none"> • Support the body • Protect the vital organs • Movement • Make blood cells

2. Joints		
2.1	What is a joint?	Where two or more bones join together
2.2	What are the three types of joint?	Hinge, ball and socket, fixed
2.3	Give an example of each type of joint	<ul style="list-style-type: none"> • Hinge – knee or elbow • Ball and socket – hip or shoulder • Fixed – skull
2.4	Why are bones covered in cartilage at a joint?	To prevent the bones from rubbing against each other
2.5	What is the purpose of ligaments at the joint?	To connect the bones together
2.6	What is the purpose of tendons at the joint?	To connect muscles to bones



3. Muscles		
3.1	How do muscles allow the skeleton to move?	They contract (get shorter)
3.2	What name is given to a pair of muscles that work together to cause movement?	Antagonistic muscles
3.3	Why must some muscles work in pairs?	Because they can only pull not push
3.4	How do bicep and triceps muscles cause your arm to bend?	The bicep muscle contracts, the triceps muscle relaxes
3.5	How do bicep and triceps muscles cause your arm to straighten?	The triceps muscle contracts, the bicep muscle relaxes

4. Chicken Wing		
4.1	What precautions should you take to minimise the risk of bacteria when dissecting a chicken wing?	Wear gloves, wash hands after handling chicken, disinfect desks
4.2	What precautions should you take to minimise the risk of sharps when dissecting a chicken wing?	Keep equipment in the dissection tray, hold equipment as demonstrated



5. Biomechanics		
5.1	How can you measure the strength of a muscle?	By measuring the how much force it exerts
5.2	What piece of equipment can be used to measure the strength of a muscle?	A Newton meter



1. Electrical Conductor and Insulators		
1.1	What is an electrical conductor?	A material that allows charge to pass through it easily
1.2	What is a charge carrier?	Particles that carry the charge through a circuit
1.3	Why are metals good electrical conductors?	They have lots of charge carriers that are free to move
1.4	Give two examples of conductors used in circuits	Copper in wiring, metal filament in a light bulb
1.5	What is an electrical insulator?	A material that does not allow charge to pass through it
1.6	Give four examples of materials which are electrical insulators	Plastic, wood, glass, rubber

2. Circuits		
2.1	Draw the circuit symbols for the following electrical components: Switch, cell, battery, lamp, voltmeter, ammeter, resistor, variable resistor, motor	
2.2	What is electric current?	The flow of charge
2.3	What is potential difference?	A measure of how much energy is given to the charge carriers in a circuit

2.4	What is required for current to flow in a circuit?	A complete circuit, a potential difference
2.5	What provides the potential difference in a circuit?	A battery or cell
2.6	What store of energy is stored in a battery or cell?	Chemical
2.7	What is the unit for current?	Amps (A)
2.8	What is the unit for potential difference?	Volts (V)
2.9	What piece of equipment can be used to measure the current in a circuit?	An ammeter
2.10	What piece of equipment can be used to measure the potential difference in a circuit?	A voltmeter

3. Series Circuits		
3.1	How are components arranged in a series circuit?	In a single loop
3.2	Draw a series circuit with two bulbs and a cell	
3.3	How does current behave in a series circuit?	Current is the same throughout the circuit



4. Parallel Circuits		
4.1	How are components arranged in a parallel circuit?	In more than one branch
4.2	Draw a parallel circuit with two bulbs and a cell	
4.3	How does current behave in a parallel circuit?	Current in each branch of a parallel circuit is equal to the total current in the entire circuit

5. Resistance		
5.1	What is meant by electrical resistance?	A measure of how much a material reduces the flow of charge (the current)
5.2	What is the unit of resistance?	Ohms (Ω)
5.3	What effect will adding more components to a circuit have on the resistance and current in the circuit?	The resistance will increase The current will decrease

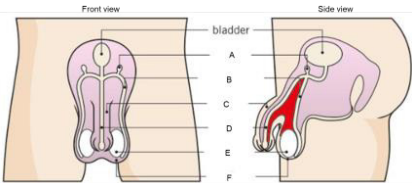
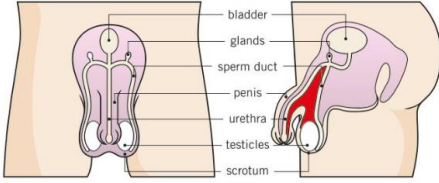
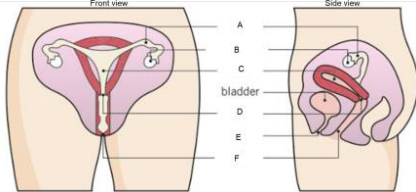
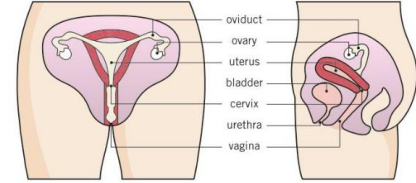
6. Circuit Problems		
5.1	What is the missing reading in this diagram? Why? 	0.3A as current is the same throughout the series circuit
5.2	What is the missing reading in this diagram? Why? 	0.6A as current in all the branches of a parallel circuit add up to make the total current

7. Power and Electricity Costs		
7.1	What is electrical power?	The rate at which energy is transferred by a circuit
7.2	How is electrical power calculated?	Power = energy transferred \div time (s)
7.3	What is the unit for power?	Watts (W)
7.4	What is 1kW?	1000W
7.5	What is the purpose of an electrical metre in your home?	For energy companies to monitor the amount of energy transferred to our homes to generate a bill
7.6	If an electrical appliance has a large power rating what does this mean?	It is able to transfer energy quickly
7.7	What unit is used by energy companies for 'energy transferred' instead of joules?	kWh (kilowatt hour)
7.8	What is 1kWh?	The amount of energy transferred to a 1kW appliance in an hour
7.9	How is the amount of energy transferred calculated?	Energy transferred = power x time (h)

Want to make your own circuits online?





1. Reproductive Organs (<i>in humans</i>)		
1.1	What is the function of male and female reproductive systems in humans?	To allow reproduction (the production of offspring/children)
1.2	What is fertilisation?	The joining of sperm and egg cells to form an embryo
1.3	What is the function of the male reproductive system?	To produce sperm cells and release them inside a female
1.4	What are the main parts of the male reproductive system? 	
1.5	What is the function of the testes?	To produce sperm cells and the male sex hormones
1.6	What is the function of the scrotum?	To contain the two testes
1.7	What is the function of the glands?	To produce nutrients that help keep sperm alive
1.8	What is semen?	The mixture of sperm and nutrient-rich fluid produced by the glands
1.9	What is the function of the sperm ducts?	To carry sperm from the testes to the penis
1.10	What is the function of the urethra?	To carry urine from the bladder or sperm from the sperm duct
1.11	What is the function of the penis?	To carry urine or semen out of the body
1.12	What is the function of the female reproductive system?	To produce egg cells and support the growth of an unborn baby (foetus) before birth
1.13	What are the main parts of the female reproductive system? 	
1.14	What is the function of the ovaries?	To store and release egg cells
1.15	What is the function of the oviducts?	To carry an egg to the uterus
1.16	What is the function of the uterus?	The place where the foetus (unborn baby) develops
1.17	What is the function of the cervix?	To separate the vagina from the uterus (it is a ring of muscle)
1.18	What is the function of the vagina?	To receive sperm during sexual intercourse
2. Fertilisation		
2.1	What are gametes?	Reproductive cells (e.g. sperm and egg cells)
2.2	What are the main steps in the process of fertilisation?	<ol style="list-style-type: none"> 1. An egg is released from the ovary and travels through the oviduct towards the uterus 2. During sexual intercourse, ejaculation occurs in which semen (containing sperm) is released from the penis into the vagina 3. Sperm cells swim from the vagina through the cervix 4. Sperm cells then travel to the oviduct 5. If a sperm cell meets an egg cell, fertilisation occurs



2.3	Where does fertilisation take place?	In the oviduct
2.4	What is a foetus?	An unborn baby
2.5	How does a fertilised egg develop into a foetus?	<ul style="list-style-type: none"> The fertilised egg divides several times to form an embryo The embryo attaches to the lining of the uterus and develops into a foetus
2.6	What is the purpose of contraception?	To prevent pregnancy occurring
2.7	Name three ways contraception can work	<ol style="list-style-type: none"> Preventing the sperm meeting the egg Stopping egg production Stopping the fertilised egg implanting into the lining of the uterus
2.8	Name two methods of contraception	<ol style="list-style-type: none"> Condom Contraceptive pill

3. Adolescence

3.1	What is puberty?	The physical changes to the body that occur during adolescence
3.2	Where are sex hormones that cause puberty produced?	Females – in the ovaries Males – in the testes
3.3	What is the purpose of puberty?	To cause the reproductive system to develop which allows reproduction to occur as an adult
3.4	State four changes that takes place in both males and females during adolescence	<ol style="list-style-type: none"> Pubic hair and underarm hair grows Body smell becomes stronger Experience emotional changes Growth spurt
3.5	State four changes that take place during adolescence that only occur in females	<ol style="list-style-type: none"> Breasts develop Ovaries start to release egg cells Periods start Hips widen
3.6	State four changes that take place during adolescence that only occur in males	<ol style="list-style-type: none"> Voice breaks Testes and penis get bigger Testes start to produce sperm Hair grows on the face and chest

4. Menstrual Cycle

4.1	What is the menstrual cycle?	A recurring process that occurs in females to prepare an egg for fertilisation
4.2	When does the menstrual cycle begin in females?	During puberty (which will cause periods to begin)
4.3	On average, how long does the menstrual cycle take?	28 days
4.4	What controls the menstrual cycle?	Reproductive hormones
4.5	What is menstrual bleeding?	When blood from the lining of the uterus leaves the body through the vagina
4.6	What is ovulation?	The release of an egg from the ovaries
4.7	What are the main events that occur in the menstrual cycle?	<ol style="list-style-type: none"> Lining of the uterus builds up in preparation for a fertilised egg Ovulation Break down of the uterus lining (if fertilisation does not occur)

5. Gestation and Birth

5.1	What is gestation?	The time from fertilisation until birth (pregnancy)
5.2	What is the gestation period in humans?	9 months (40 weeks)

Questions 2.4 and 2.5 should be revisited here

5.3	How is the growth of the foetus supported during gestation?	The foetus receives nutrients and oxygen from it's mother through the blood
5.4	What is the function of the placenta in gestation?	To allow substances to pass between the mother's blood and the foetus' blood



5.5	What is the function of the umbilical cord?	To connect the foetus to the placenta?
5.6	What is the purpose of the amniotic fluid?	To act as a shock absorber, protecting the foetus from bumps
5.7	How do substances move into and out of the placenta?	Substances in the blood diffuse in and out the placenta from the mother's blood (the blood does not mix)
5.8	Name an example of a substance which moves out of the foetus' blood into the placenta	Carbon dioxide
5.9	What changes occur to the mother during birth?	<ul style="list-style-type: none"> The cervix relaxes and dilates (gets wider) The muscles in the wall of the uterus contract
5.10	What are the names of the structures in the diagram below?	

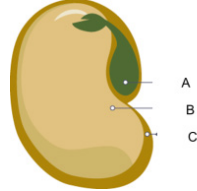
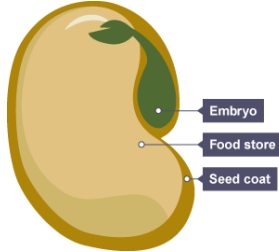
6. Flower Structure (<i>plant reproduction</i>)		
6.1	What is the purpose of a flower?	To allow plants to sexually reproduce through a process called pollination
6.2	What is the name of the female part of a flower?	Carpel
6.3	What is the name of the male part of a flower?	Stamen
6.4	What is the name of the male gamete in plants?	Pollen
6.5	What is the name of the female gamete in plants?	Egg
6.6	What are the main structures found in a flower?	

7. Pollination		
7.1	What is pollination?	The process of the pollen transferring to the stigma
7.2	What is self-pollination?	When the pollen is transferred to the stigma of the same plant
7.3	What is cross pollination?	When the pollen is transferred to the stigma of a different plant
7.4	Name two methods of pollination	Insect and wind



7.5	State five features common to insect-pollinated flowers	<ol style="list-style-type: none"> Brightly coloured and sweet-smelling petals Small amounts of pollen production Sticky or spiky pollen Sticky stigma Nectar-secreting cells
7.6	What is nectar?	A sugar-rich liquid which insects use as food
7.7	State four features common to wind-pollinate flowers	<ol style="list-style-type: none"> Small petals, often brown or dull green Large amounts of pollen production Pollen which has a low mass No nectar-secreting cells
7.8	How does insect pollination occur?	<ol style="list-style-type: none"> An insect visits a flower and pollen sticks to it The insect moves to the flower of another plant (or same plant) The pollen rubs off on to the stigma
7.9	How does wind pollination occur?	The pollen from the flower of one plant is blown by the wind and lands on the stigma of another plant's flower

9. Seeds and Fruits

9.1	What happens to the ovary of a flower following fertilisation?	It develops into a fruit
9.2	What is a fruit?	A developed ovary containing seeds
9.3	What are the three main structures found in a seed?	A seed coat, an embryo, a food store
9.4	What is function of each structure found in the seed?	<ul style="list-style-type: none"> Seed coat – for protection Embryo – to contain the young root and shoot Food store – for the young plant to use before it can photosynthesise
9.5	What are the names of the structures labelled in this diagram?	 
9.6	What is germination?	When a seed starts to grow
9.7	Name three factors required for germination	Water, oxygen, warmth

10. Seed Dispersal

10.1	What is seed dispersal?	The movement of seeds away from the parent plant
10.2	What is the purpose of seed dispersal?	To allow a seed to germinate away from other plants to reduce competition for water and sunlight
10.3	What are the four main methods of seed dispersal?	Wind, animal, water, explosive

8. Fertilisation in Flowering Plants

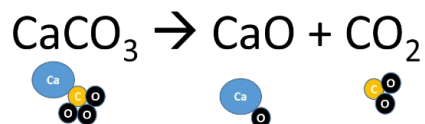
8.1	What occurs for fertilisation to take place in flowering plants?	The nucleus of a pollen joins with the nucleus of an egg to make a seed
8.2	What are the main steps involved in fertilisation?	<ol style="list-style-type: none"> A pollen grain is transferred to the stigma A pollen tube grows from the stigma to the ovary through the style The nucleus of the pollen grain passes through the pollen tube It then joins with the egg cell inside an ovule of the ovary The fertilised egg will develop into a seed



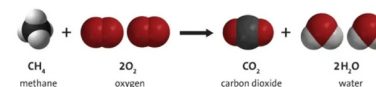
1. Chemical and Physical Changes		
1.1	In a chemical reaction, what happens to the atoms?	They are rearranged
1.2	How could you tell if a chemical reaction has taken place?	Temperature change, colour change, gas formed, solid formed
1.3	Give an example of a physical change	Melting, Boiling, Condensing, Freezing
1.4	What is the difference between a physical and a chemical change?	A chemical change results in the formation of new products. A physical change no new chemicals are formed

2. Law of Conservation of Mass		
2.1	What is the law of conservation of mass?	Atoms are neither created or destroyed during a reaction, they are simply rearranged
2.2	If mass appears to be lost in a reaction, what has happened?	A gas has been produced which escapes
2.3	If mass appears to be gained in a reaction, what has happened?	Atoms of a gas from the air have been added
2.4	If you react 7g of reactant A with 4g of reactant B, what mass of product C will you have (A + B → C)?	7g + 4g = 11g

3. Thermal Decomposition		
3.1	When copper carbonate is heated, it forms copper oxide and carbon dioxide. What is the name of this type of reaction?	Thermal decomposition
3.2	Write the general word equation for a thermal decomposition reaction	Metal Carbonate → Metal Oxide + Carbon Dioxide
3.3	Write the word equation for the thermal decomposition of Calcium Carbonate	Calcium Carbonate → Calcium Oxide + Carbon Dioxide
3.4	Draw a particle diagram to represent the thermal decomposition of calcium carbonate which shows that no atoms have been created or destroyed during the chemical reaction. Use the symbol equation to help you.	



4. Combustion		
4.1	What gas must be present for burning to happen?	Oxygen
4.2	What is the scientific term for a chemical reaction where burning happens?	Combustion
4.3	Burning fuels is useful because it releases light and it causes which store of energy to increase?	Thermal store
4.4	What two things are produced when a fuel is burnt?	Carbon Dioxide and Water
4.5	Write the word equation for the combustion of methane	Methane + Oxygen → Carbon Dioxide + Water
4.6	Balance the symbol equation for the combustion of methane and draw a particle diagram so show that no atoms have been lost or created during the reaction $\text{CH}_4 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$	



5. Gas Tests		
5.1	What is the test for carbon dioxide?	Turns limewater cloudy
5.2	What is the test for oxygen?	Relights a glowing splint
5.3	What is the test for hydrogen?	Makes a squeaky pop with a lit splint

6. Temperature Changes		
5.1	What is the name given to chemical reactions which cause an increase in the temperature of the surroundings?	Exothermic reactions
5.2	What is the name given to chemical reactions which cause a decrease in the temperature of the surroundings?	Endothermic reactions
5.3	Why do reactions cause a change in the temperature of the surroundings?	When the atoms rearrange energy may be absorbed or released

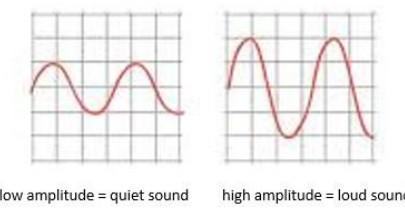
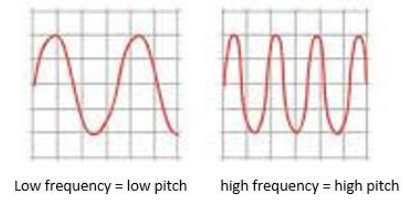


1. Vibrations and Waves		
1.1	What do waves do?	Transfer energy from one place to another.
1.2	What type of wave is a water wave?	A transverse wave.
1.3	What is a transverse wave?	A wave where the oscillations (vibrations) are perpendicular (at a 90° angle) to the direction the wave is travelling.
1.4	Draw and label a transverse wave.	
1.5	What is the unit for amplitude?	Metres.
1.6	What is the unit for wavelength?	Metres.
1.7	What is the highest point of the wave called?	Peak or crest.
1.8	What is the lowest point of the wave called?	Trough.
1.9	What is the amplitude of a wave?	The maximum height of the wave from its resting position.
1.10	What is the wavelength of a wave?	The distance from any point on one wave to the same point on the next wave along.
1.11	What are the two types of waves?	Transverse and longitudinal.
1.12	What is a longitudinal wave?	A wave where the oscillations (vibrations) are parallel (in the same direction as) the direction that the wave is travelling.

1.13	Draw and label a longitudinal wave.	
1.14	What is an area of compression?	When the vibrations are close together.
1.15	What is an area of rarefaction?	When the vibrations are further apart.



2. Sound and Energy Transfer		
2.1	Give an example of a longitudinal wave.	Sound.
2.2	How does an object produce sound?	The object vibrates, this causes the air particles around it to vibrate. The air particles bump into each other, transferring the vibrations through the air.
2.3	Can sound travel through a vacuum?	No, it needs particles to travel through.
2.4	Why does sound travel fastest in a solid?	In a solid, the particles are close together.
2.5	Why does light travel faster than sound?	Light does not rely on particles to transfer vibrations.

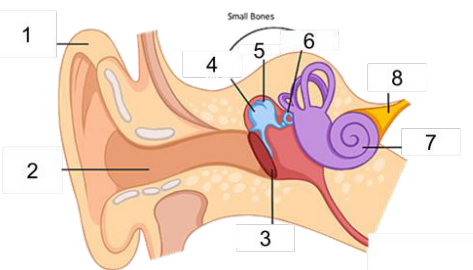
3. Loudness and Pitch		
3.1	What two pieces of equipment can we use to see sound?	An oscilloscope and a microphone.
3.2	What does the amplitude of a sound wave show?	The loudness of the sound wave.
3.3	Draw the oscilloscope trace for a loud sound and quiet sound.	
3.4	What does the frequency of a sound wave show?	The pitch of the sound wave.
3.5	What is frequency measured in?	Hertz (Hz)
3.6	Draw the oscilloscope trace for a high and a low pitch sound.	
3.7	What is the human auditory range?	20 – 20,000Hz

4. Speed of Sound		
4.1	What equation can be used to calculate the speed of sound?	speed = distance ÷ time
4.2	What is the unit for speed?	Metres per second (m/s)
4.3	What is the unit for distance?	Metres (m)
4.4	What is the unit for time?	Seconds (s)
4.5	How many metres are in one kilometre?	1000m
4.6	How many seconds are in one minute?	60 seconds
Worked example question:		
Calculate the speed of a sound wave that travels 3400m in 10s. $s = d \div t$ $s = 3400 \div 10$ $s = \underline{\underline{340\text{m/s}}}$		
Calculate the time it takes for sound to travel 1200m. $s = d \div t$ $340 = 1200 \div t$ $t = 1200 \div 340$ $t = \underline{\underline{3.5\text{s}}}$		



5. Echoes		
5.1	What is an echo?	An echo is produced when sound is reflected off a surface.
5.2	What is the speed of sound at normal room temperature?	340m/s.
5.3	Give an example of an animal that can use echoes to map their surroundings.	Bats.
Worked example question:		
Calculate how far away a wall is from you if it takes 20 seconds to hear an echo.		
$s = d \div t$ $340 = d \div 20$ $340 \times 20 = d$ $d = 6,800m$ <p>This is an echo so</p> $d = 6800 \div 2$ $d = \underline{3400m}$		

6.4	What does the ear drum do when a sound wave hits it?	It vibrates.
6.5	What is the cochlea?	A snail-like structure filled with tiny hairs and liquid.
6.6	What is the function of the specialised cells at the bottom of the hairs inside the cochlea?	They transfer the movement to electrical signals which can then be sent via the auditory nerve to the brain.
6.7	What part of the human ear is similar to the diaphragm of a microphone?	The ear drum.
6.8	Vibrations of the diaphragm of a microphone are turned into electrical signals. What part of the human ear is this similar to?	The hairs in the cochlea.

6. Detecting Sound		
6.1	What part of the human body is used to detect sound?	The ear.
6.2	What are the labels for 1-8? 	1 – pinna 2 – ear canal 3 – ear drum 4 – hammer 5 – anvil 6 – stirrup 7 – cochlea 8 – auditory nerve
6.3	Which two parts of the ear make up the outer ear?	The pinna and the ear canal.

7. Ultrasound		
7.1	What is ultrasound?	A sound with a frequency of over 20,000Hz.
7.2	Why can humans not detect this sound?	Because it is above the range of human hearing.
7.3	Name two ways in which we can use ultrasound for detection.	1. To make images of an unborn baby. 2. To look at shipwrecks at the bottom of the sea.
7.4	Why is it safe to use ultrasound on an unborn baby?	Because it is a sound wave and these are not harmful.



¿Cuándo?	When?
este fin de semana	this weekend
el sábado por la mañana	on Saturday morning
el domingo por la tarde	On Sunday afternoon/evening
primero	first
luego	then
finalmente	finally

En la ciudad	In the city
Hay...	There is...
un castillo	a castle
un centro comercial	a shopping centre
un estadio	a stadium
un mercado	a market
un museo	a museum
un parque	a park
una piscina	a swimming pool
una plaza	a square
un polideportivo	a sports centre
un restaurant	a restaurant
una tienda	a shop
una universidad	a university
mi barrio	my neighbourhood
mi ciudad	my city
mi pueblo	my town/village

La hora	The time
Es la una	it's one o'clock
Son las dos	It's two o'clock
y media	half past
y cuarto	quarter past
menos cuarto	quarter to

¿Qué haces en la ciudad? What do you do in town?	
Voy...	I go...
al cine	to the cinema
al parque	to the park
a la bolera	to the bowling alley
a la cafetería	to the cafeteria
a la playa	to the beach
de compras	shopping
de paseo	for a walk
Salgo con mis amigos.	I go out with my friends.
No hago nada.	I do nothing.

En la cafetería	In the cafe
bebidas	drinks
un batido de chocolate/fresa	a chocolate/strawberry milkshake
un café	a coffee
un granizado de limón	an iced lemon drink
un té	a tea
raciones	snacks
calamares	squid
croquetas	croquettes
gambas	prawns
jamón	ham
pan con tomate	tomato bread
patatas bravas	spicy potatoes
tortilla	Spanish omelette



Youtube is a great source of learning for Spanish. Watch the documentary below and design a poster for San Fermín running of the bulls.



San Fermín documentary.



Use Quizlet to practice learned and new more challenging vocabulary.



Shopping vocabulary.



At the train station.



Research information about “La Tomatina” a festival which happens in August in Spain. Write a fictional account in English as if you had attended it last year.



1. Health and Safety in the Workshop		
1.1	Workshop P.P.E. What to wear?	Personal Protective Equipment- Goggles, Face Mask, Overall, Footwear, Hair tied back, NO jewellery.
1.2	The workshop in action	Move sensibly, do not talk/distract others when using machinery, tool handling and storage.
1.3	Using tools and machinery	Listen carefully during demonstrations, follow all safety instructions, ask if unsure how to proceed.
1.4	Safety in action	Emergency Stop Button, Report breakages, First- Aid.

4. Packaging Design/ Commercial Graphics		
4.1	commercial graphics	Real world graphic product design- max 2-3 Contrasting colours, TEXT created and positioned to attract target users.
4.2	development/net	The 2D layout outline drawing of a 3D Graphic Product.
4.3	3D drawing techniques	Isometric drawings and perspective drawings are commonly used to show an item in 3D
4.4	typeface/font	The name for a TEXT style e.g Arial whilst the FONT is the variation of the TYPEFACE e.g BOLD, ITALIC, WEIGHT of text.

2. CAD/CAM		
2.1	Computer Aided Design (CAD)	TechSoft Design V3- Computer software used for designing and creating CAD files at Kings'.
2.2	Computer Aided Manufacturing (CAM)	Laser cutter/vinyl cutter/3D printer – CNC Equipment used for manufacturing CAD files.
2.3	Computer Numerical Control (CNC)	The manufacturing method that automates the control, movement and precision of machine tools through the use of preprogrammed computer software.
2.4	metric- millimetres (mm)/centimetres (cm)	The measuring system used in the UK- 10mm =1cm.
2.5	bitmap	Bitmaps consist of many tiny dots called pixels. Bitmap graphics lose quality when resized.
2.6	vector	Vector graphics are based on mathematical relationships and do not lose quality when resized.
2.7	grid lock/step lock	CAD tool that restricts drawing to GRID or STEP increments e.g 10 or 1 mm (like Grid Paper).

Tools:

Try Square



Tenon Saw

Pillar Drill



Graphic Products

3. Materials knowledge: Timber and Manmade Boards		
3.1	coniferous trees	Fast growing family of trees that have needles/firs/pine leaves. Evergreen- no leaf drop. Wider grain distance.
3.2	deciduous trees	Slow growing family of trees that have broad/ flat leaves. Bear fruit. Autumn leaf drop. Closer grain distance.
3.3	softwood	Category of trees- types include Pine, Larch, Spruce.
3.4	hardwood	Emergency Stop Button, Report breakages, First- Aid.
3.5	manmade boards	Plywood/MDF- manufactured sheets using timber fibre.
3.6	woodworking hand/ power tools	Pillar drill, machine vice, power sander, tenon saw, bench hook, sandpaper- sanding block. pva glue.

5. Materials knowledge: Polymers		
5.1	thermoplastics	Polymers that can be melted and recast almost indefinitely e.g. Acrylic, HIPS High Impact Polystyrene Sheet.
5.2	thermosetting	Polymers that form irreversible chemical bonds during the curing process e.g Epoxy/Urea formaldehyde.
5.3	line bending	Heating and shaping acrylic using a bending jig.
5.4	marking out	Measurement, try square, steel rule, chinagraph pencil.
5.5	cutting	Junior hacksaw/abrafile/coping/Hegner FretSaw.
5.6	filing/finishing	Cross filing, draw filing, wet and dry abrasive sheet.



QR codes links to scan:



BBC Bitesize –
Ks3 & Ks4 AQA

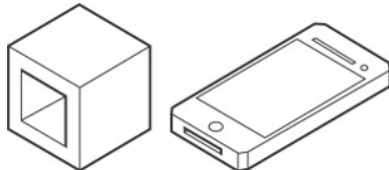


Technologystudent.com
Excellent D&T teacher
designed website



TechSoft.co.uk
CAD Software
Downloadable DEMO

Isometric drawing



Books to read:



TV programs to watch:



Places to visit:



Winchester
Science Museum



Legoland



BMW Mini
Factory - Oxford



CNC Milling & Routing

The 6 R's



RETHINK



REFUSE



REPAIR



REDUCE



REUSE

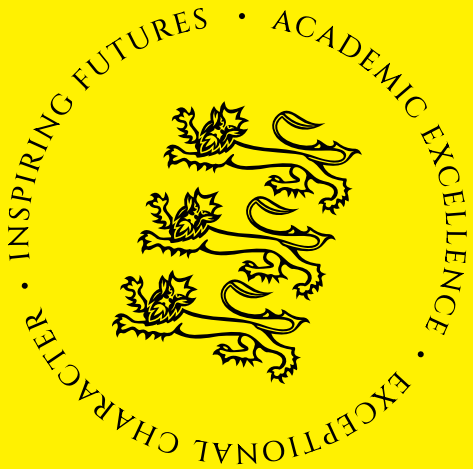


RECYCLE

Stretch your vocabulary

1	target user	The intended client – consider their age/interest/tastes
2	sustainability	Maintaining something at a certain rate or level.
3	the 6 R's	Recycle, Re-Use, Repair, Reduce, Refuse, Rethink
4	smart materials	Materials that respond to their environment e.g. temperature/moisture etc.
5	stock forms	Standard sizes of materials e.g 50mm x 25 mm softwood.
6	wasting	Removing material from a solid material to form a useful product.
7	quality control	A method to ensure products are checked for accuracy during manufacturing and are fit for purpose.







Notes

Notes



Minimum Stationery Requirements



Ruler

**3 Blue/
Black Pens**

**2 Green
Pens**

Pencil

**Whiteboard
Pen**

Eraser

Highlighter Pen

Calculator

Protractor