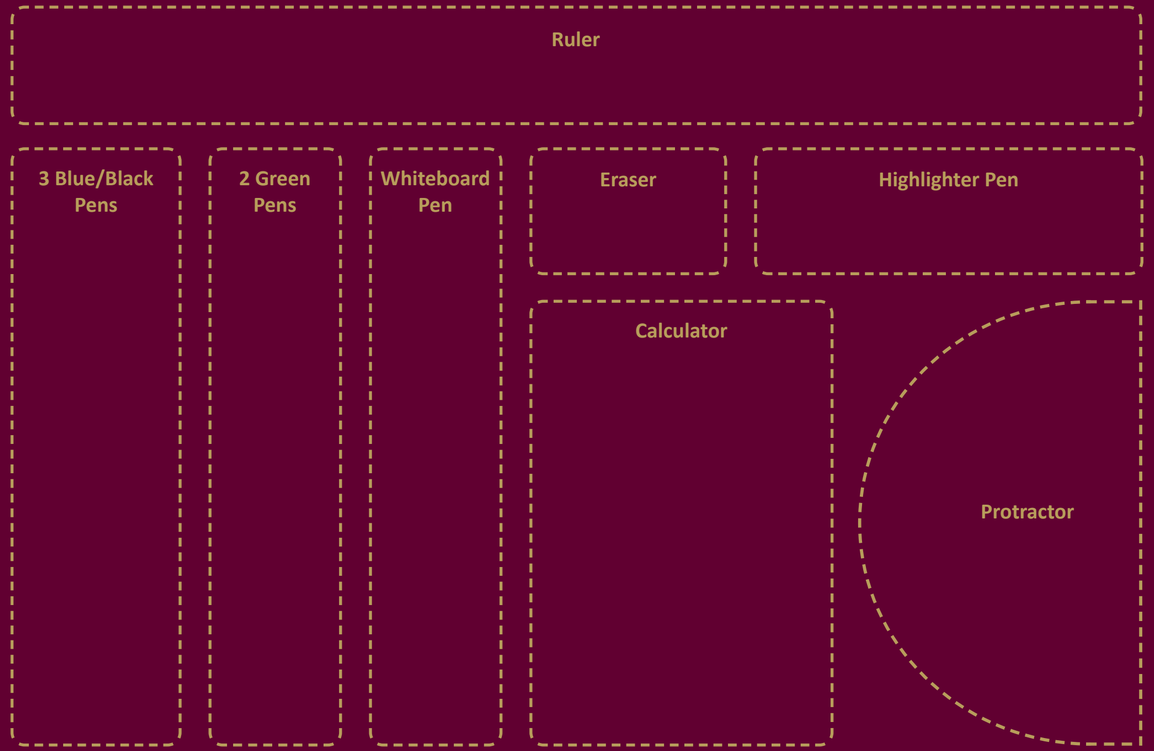
Minimum Stationery Requirements



UNA LABORANTES

KINGS'

SCHOOL · WINCHESTER

Knowledge Organiser 2023-24

Year 8 | Autumn term


INSPIRING FUTURES • ACADEMIC EXCELLENCE • EXCEPTIONAL CHARACTER •

Notes

PUPIL DETAILS

Name	
Tutor Group	
Tutor Room	
House	
Library No.	
Locker No.	
I have read and agree to the details outlined in the Home/School Agreement:	Pupil signature:
I have read and agree to the details outlined in the Home/School Agreement:	Parent/Carer signature:
At Kings', there are people that I can go to if anything is worrying me.	My Trusted Adults are: 1. _____ 2. _____

TIMETABLE

What I need for PE:

KINGS'

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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**.

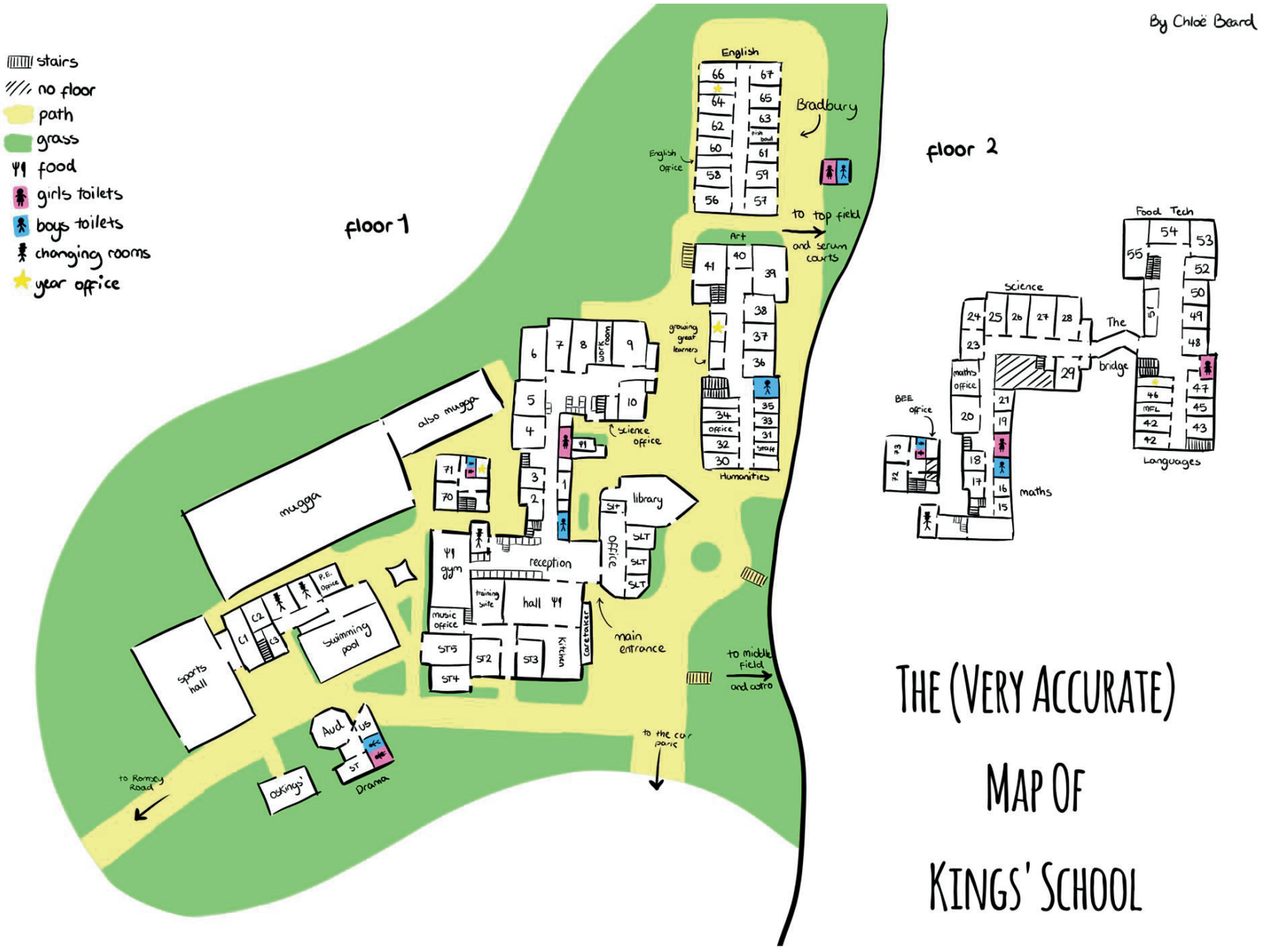
We are reminded of our mission by our motto, Una Laborantes (Working Together), and our core values – developed and agreed by the Kings' community of pupils, staff, parents, and carers – help to guide every child, employee, and volunteer towards attaining that goal.

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

CONTENTS


By Chloë Beard
stairs
no floor
path
grass
food
girls toilets
boys toilets
changing rooms
year office
floor 1
floor 2
English
Bradbury
English Office
to top field and grass courts
Art
growing great learners
work room
science office
Humanities
library
SLT
office
reception
gym
training suite
hall
music office
Kitchen
Caretaker
main entrance
to middle field and astro
to the car park
also mugga
mugga
sports hall
P.E. Office
Swimming pool
C1
C2
G3
Aud
US
ST
Drama
Oakings'
to Romsey Road
Food Tech
science
The bridge
maths office
BEE office
maths
MFL
Languages
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:

1. **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.
2. **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.

HOMEWORK

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
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 page of this Knowledge Organiser.

Date

Presentation Guidelines

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.

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.

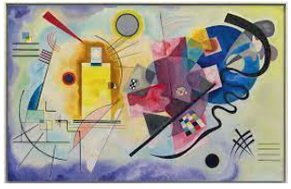
Please see these videos for more information on what Knowledge Organisers are, and how to use them:

Full Video

Look, Cover, Write, Check

1. Artist Information – Wassily Kandinsky (1866 - 1944)		
1.1	nationality	Russian.
1.2	previous occupation	Lawyer.
1.3	synaesthesia	A condition that enabled Kandinsky to see colour when he heard music.
1.4	style of art	Abstract.
1.5	inspiration	Music.

2. Kandinsky Painting Analysis		
2.1	abstract art	Art that does not represent real-world things. It uses shapes, colours, forms, textures and lines.
2.2	realism	Art that shows the world as it is.
2.3	primary colours	3 colours – red, yellow and blue. All other colours are made from these.
2.4	secondary colours	Colours that are made by mixing two primary colours together. Orange, green and purple.
2.5	tertiary colours	Colours that are made by mixing a primary and a secondary colour together.
2.6	shape	A two-dimensional, flat image.
2.7	line	A continuous mark that joins two points together.
2.8	pattern	Made from a repeated shape or motif.
2.9	composition	The arrangement of elements within a work of art.
2.10	detail	An isolated element within a work of art.



Wassily Kandinsky, Yellow-Red-Blue, 1925

3. Painting Techniques		
3.1	paint proportions	Ratio of paint to create the correct colour.
3.2	paint application	How the paint is applied.
3.3	paint consistency	How thick or thin the paint is.
3.4	colour strength	Amount of water added to change colour strength.
3.5	wet-on-wet	Wet paint into wet paint to blend.
3.6	blending	A gradual transition between a colour or tone.
3.7	gradation	A gradual transition between a colour or tone.

Pupils' Kandinsky letters

4. Card Relief Techniques		
4.1	relief	An image that is formed by minor variations in surface depth.
4.2	composition	The arrangement of elements within a work of art.
4.3	scale	The relative size of one object compared to another.
4.4	texture	How a surface feels.
4.5	papier mache	Building layers of paper and glue.
4.6	painting techniques	How to apply paint in different ways.

1. HTML to create a website		
1.1	Hyper Text Mark-up Language (HTML)	HTML can be written in specialist software, or in a simple text editor like Notepad. The document must be saved with the file extension'.html' to be opened via a web browser.
1.2	HTML tags	Most tags come in opening and closing pairs. All code that goes in between the tags is governed by the rules of the tags.
1.3	"the rule of tags"	Tags work like a light switch: the first tag turns the action on, and the second turns it off.
1.4	HTML code	HTML code displays a message on a webpage: <html> <body> Hello world This is my first webpage </body> </html>
1.5	HTML is written in 2 ways	Using a plain text editor, e.g. Notepad, Notepad++ or TextPad. Or using a **W**hat **Y**ou **S**ee **I**s **W**hat **Y**ou **G**et (WYSIWYG) editor, e.g. Dreamweaver, iWeb, SeaMonkey. Wordpress
1.6	plain text editor	An editor like Notepad offers greater control over the code when compared to a WYSIWYG editor because each and every character that forms the HTML and the resulting web page is hand typed. The disadvantage is it's a slow process.
1.7	WYSIWYG editor	The web page is designed, and the content written and styled, using a series of tools. This makes building a web page much faster because only a limited knowledge of HTML is needed as it's automatically generated.
1.8	versions of HTML	Over the years there have been several versions of HTML. Each successive version has more tags, allowing the programmer to build more advanced webpages. The latest version, released in 2012, is HTML5.
1.9	Cascading Style Sheet (CSS)	CSS code to set styles, e.g. background colour of sections of the page; size, font, colour and alignment of text.

2. Key Vocabulary		
2.1	browser	An application used to view web pages, e.g. Internet Explorer or Google Chrome.
2.2	Hyper Text Markup Language (HTML)	Hyper Text Markup Language. The language used to write and display web page documents.
2.3	hyperlink	A link in a document or webpage that connects to another location.
2.4	internet	A global network connecting millions of computers.
2.5	web browser	An application that displays web pages.
2.6	web page	A page designed for, and viewed in, a web browser.
2.7	website	A web page or group of web pages hosted on one web server and viewed in a web browser, usually maintained by a person, group or organisation.

1. Email Scam		
1.1	phishing email	An email that tricks you into handing over sensitive personal information.
1.2	trojan horse / malware	An email that offers something tempting and when opened, installs a virus onto your computer.
1.3	advance fee fraud	An email that is a long and desperate plea for help. The sender will claim they need cash from you.
1.4	virus-generated email	An email appearing to be sent from a friend, but a virus has infected their account and infects other accounts.

2. Computer Misuse Act		
2.1	browser change	Changes browser functions such as your default search engines or browser history.
2.2	file infector	Infects a particular file. May overwrite or completely destroy the file
2.3	marco virus	Embedded in templates such as Word or Excel. The virus spreads if the file is opened on a different computer.
2.4	hacking	The gaining of unauthorized access to data in a system or computer.

3. Data Protection - GDPR		
3.1	identity theft	The fraudulent practice of using another person's name and personal information.
3.2	General Data Protection Regulations. (GDPR)	Data protection legislation.

4. Copyright & Plagiarism			
		Copyright	Plagiarism
4.1	definition	Protection against unauthorised use of written or recorded content such as books, software or music.	Copying someone else's work and passing it off as your own.
	impact	Legal issue.	Moral / ethical issue.
	consequence	Imprisonment and fines can be issued. Work is removed.	Work is removed – can result in zero marks.
4.2	IP Address	The computer's fingerprint.	

5. Health and safety		
5.1	different types of health and safety issues relating to prolonged use of technology.	Headaches Eye strain Back Problems
5.2	disposing of equipment	The impact of additional pollution and waste.
5.3	the perfect work station	How to sit correctly to prevent injury

1. 45cm between eyes & screen
2. Adjustable screen at or slightly below eye level
3. Chair supports back and shoulders
4. Elbow angle between 90-120°
5. Keyboard within easy reach
6. Wrist support for mouse hand
7. Chair is height adjustable
8. Feet should touch the floor – add foot rest if too high

Advance html coding skills – theory

A brief history of the internet

Deeper Thinking – Cyber Security Lessons

BBC News - Hacking

Careers in Web Development

W3schools – HTML training

University course in Ethical Hacking

Careers in Cyber Security

Key Questions		
1	Why do people hack?	Some common reasons for hacking include basic bragging rights, curiosity, revenge, boredom, challenge, theft for financial gain, sabotage, vandalism, corporate espionage, blackmail, and extortion.
2	Is all hacking considered bad?	It is important to understand, though, that not all hackers are bad. Indeed, many hackers are helping to protect us from the untrustworthy ones.
3	How can you protect yourself from hackers?	Strong passwords – be careful on public wifi, ensure your anti-virus software is up to date.

Stretch your vocabulary – HTML		
a.1	aesthetics	Appreciative of what is pleasurable to the senses.
a.2	syntax	The structure of statements in a computer language.
a.3	<meta>	Tag defines metadata about an HTML document.
a.4	Metadata	Data (information) about data.
a.5	audience	Refers to that part of the population that is intended to reach or influence the website.

Stretch your vocabulary – Cyber Security		
b.1	fraudulent	Obtained, done by, or involving deception, especially criminal deception.
b.2	scam	A dishonest scheme; a fraud.
b.3	ethical	Morally good or correct.
b.4	protection	A legal or other formal measure intended to preserve civil liberties and rights.
b.5	firewalls	Protect (a network or system) from unauthorised access with a firewall.
b.6	data harvesting tools	Data harvesting means getting the data and information from the online resource.

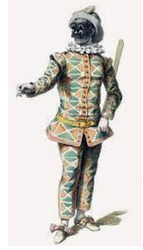
1. Perform Very Successfully			
Physical	1.1	gesture	A defined movement which clearly communicates meaning.
	1.2	gait	The way in which a character walks.
	1.3	posture	The position of a person's body when standing or sitting.
Vocal	1.4	pace	The speed at which lines are delivered. Speed of speech conveys how a character is feeling.
	1.5	pitch	How high or low an actor delivers their lines to convey meaning.
	1.6	tone	How hard or soft an actor's voice is when delivering lines to convey meaning.
Space	1.7	speed	The quality and pace of an actor's movement.
	1.8	proxemics	The way space/distance between characters on stage is used to represent the relationship between them.
	1.9	stage presence	The energy, or charisma and appeal, that an artist has whilst performing.

Watch these videos by the National Theatre, explaining Commedia dell'arte.

Pantalone

Il Dottore

Arlecchino



Brighella

2. Unit Key Vocabulary			
2.1	T2	exaggeration	When an actor over emphasises a movement/s, line/s or action/s to emphasise or entertain for dramatic effect.
2.2	T2	performance pace	The speed at which a scene or selection of scenes are moved through.
2.3	T2	timing	The moment when an actor chooses to pause, clock the audience, or deliver their line/movement for optimum effect.
2.4	T3	clocking	When an actor makes direct eye contact/interacts with the audience to emphasise/include them in a comic moment.
2.5	T2	movement	The physical way actors demonstrate characterisation.
2.6	T2	expression	The physical and facial demonstration of a character's emotions.

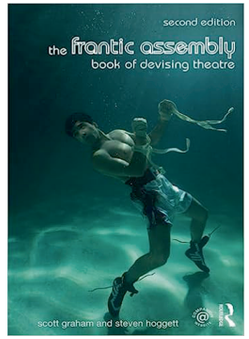
3. Drama Key Vocabulary			
3.1	T3	lazzi	Set comic routines specific to certain commedia dell'arte characters.
3.2	T3	gromolot	An imitation of language, improvised gibberish used to emphasise comedy or communicate a character without the constraint of language or specific lines.
3.3	T3	magnifico	The wealthy, high status characters within commedia dell'arte.
3.4	T3	zanni	The low status, clown characters within commedia dell'arte.

4. Unit Context								
4.1	Commedia dell'arte	• Originated in Italy • 16th Century • Troupes contained 6-12 performers	4.2	Zanni	• Arlecchino • Pulcinella • Brighella	4.3	Magnifico	• Pantalone • Il Dottore • Il Capitano

1. Unit Key Vocabulary			
1.1	T2	timing	The moment when an actor chooses to pause, clock the audience, or deliver their line/movement for optimum effect.
1.2	T2	exaggeration	When an actor over emphasises a movement/s, line/s or action/s to emphasise or entertain for dramatic effect.
1.3	T2	expression	The physical and facial demonstration of a character's emotions.
1.4	T2	dynamics	The energy, effort, force or weight applied to movement.

2. Drama Key Vocabulary			
2.1	T2	inanimate object	An object that is not alive, it does not breath.
2.2	T3	pedestrian movement	Movement that imitates everyday gestures or actions.
2.3	T3	body propping	When an actor uses their body to create an inanimate object.
2.4	T3	7 states of tension	A gradient approach to enable an actor to transition into different emotions and help them connect with their character.

Books to read:



Further key vocabulary check	
abstract	The opposite of realistic.
stylised	An attempt to enhance a scene using unnatural methods.
representational	To represent reality or an aspect of real life.
motif	A repeated use of a movement pattern that has meaning.

A sequence of movements performed by two or more actors. The control of the movement shifts between the performers and can involve leans, lifts, weight bearing and change of direction.

The National Theatre present a masterclass in physical theatre by Frantic Assembly.

An introduction to Physical Theatre with links to the work of Frantic Assembly.

4. UNIT CONTEXT								
3.1	Jacques Le Coq	Developed the 7 states of tension approach.	3.2	Frantic Assembly	International physical theatre company. Create transitions via 'round, by, through'. Create their work through devising.	3.3	DV8	Physical theatre company that combine movement and drama, taking risks to explore social and political ideas.

The Gothic: Content and Context		
1.1	Victorian era (1837-1901)	Produced some of the most well-known examples of gothic horror.
1.2	The Romantics (1798-1837)	A European movement within art and literature that sought a simpler way of life, valuing the individual, emotions and nature over rationality and industrialisation.
1.3	The Gothic	A genre of literature having a prevailing atmosphere of mystery and terror.
1.4	Set in a haunted castle or house	Settings often include bleak, deathly graveyards or abandoned buildings or castles.
1.5	A burdened male protagonist	Aristocratic, moody, solitary, and nursing a guilty secret, this conflicted male figure surfaces everywhere in Gothic fiction.
1.6	A ghost/monster or supernatural being	Supernatural or grotesque creatures, ranging from vampires, devils, ghosts, monsters and demons, to evil spirits, the “possessed”, and werewolves.

Literary and Poetic Techniques		
2.1	enjambment	The continuation of a sentence without a pause beyond the end of a line, couplet, or stanza.
2.2	caesura	A pause in a line that is formed by the rhythms of natural speech rather than meter.
2.3	assonance	Rhyme/repetition of stressed vowel sounds e.g 'patience always pays'.
2.4	pathetic fallacy	Attribution of human emotion to things found in nature (often weather) e.g. 'I wandered lonely as a cloud'.
2.5	stanza	A group of poetic lines corresponding to paragraphs in prose; the meters and rhymes are usually repeating or systematic.
2.6	rhyme	The repetition of identical concluding syllables in different words, most often at the ends of lines. Example: June--moon.
2.7	couplet	Two successive rhyming lines.
2.8	supernatural	Events or beings which are "above nature" and not explained by scientific or natural reasoning.

Vocabulary				
	Vocabulary	Definition	Morphology and etymology	Synonyms and similar words
3.1	ominous	**Adjective: giving the worrying impression that something bad is going to happen.** "there were ominous dark clouds gathering overhead"	From the Latin ‘ominous’ meaning “full of foreboding”.	threatening worrying menacing portentous
3.2	oppressive	**Adjective: inflicting harsh treatment.** "they are fighting against the oppressive laws"	The suffix ‘-ive’ changes nouns and verbs into adjectives. It adds the meaning “tending to” or “doing” or “being.”	tyrannical harsh overbearing brutal
3.3	trepidation	**Noun: a feeling of fear or anxiety about something that may happen.** "the men set off in fear and trepidation"	The suffix ‘–tion’ or ‘-ion’ means "state of", "act of" or "result of“. The suffix is used to form nouns meaning "the action of (a verb)" or "the result of (a verb)".	fear apprehensio anxiety nforeboding
3.4	inescapable	**Adjective: Unable to be avoided.** "they came to the inescapable conclusion that he was responsible"	Prefix ‘in-’ English has two prefixes ‘in-’. One means “in”; the other means “no, not”.	inevitable indisputable inexorable undeniable

The topic sentence uses words from the question to begin the answer.

Quotations are intentionally short and have deliberately been selected to answer the question.

The pupil uses ellipsis to select key information from longer quotations.

Uses analytical verbs "conveys" and "demonstrates" to indicate deeper thought is happening as the pupil explores the quotation in relation to the theme of 'confinement'.

Model example

Refer to the extract from "Rebecca" by Daphne Du Maurier

How does Du Maurier use language (words and phrases) to create a sense of **confinement** in this setting?

A sense of **confinement** is created through the **symbolism** of **darkness** and **oppressive** nature. This is demonstrated by the **imagery** of "branches…intermingled" which conveys that the trees and nature itself have grown so close and tightly together that the area around the setting is "not spacious" and confined. Because Du Maurier uses nature as an oppressive force, the reader begins to feel a sense of enclosure and discomfort at this mysterious location. Not only is nature turning against the narrator but also the use of **personification** blocks out the natural light as "even the midday sun would not penetrate the interlacing of those green leaves". Consequently, the overall sense of the setting is one of restriction, confinement and feeling trapped.

The end sentence refers back to the topic sentence. It analyses word choices and concludes the pupil's point.

Use of causal connective "because" to extend and justify an initial point.

Accurate and correct use of literary terminology.

The pupil uses phrasing such as "not only but also" to show an expansion and development of a point and includes vocabulary which is relevant to the question and the gothic genre.

The pupil impassively refers to "the reader" rather than writing in the first person "I".

Critical Writing: Some useful sentence starters

Writing a topic sentence	Use words and phrases from the question or task to write your topic sentence. Remember to write using full sentences.	
Introducing evidence	This can be seen… We learn this when… This is demonstrated by…	**Embedding quotations:** Put the quotation inside your own analysis or point rather than putting it separately and then commenting on it. The idea is that the quotation will "flow" within your sentence and you won't "hear" the quotation marks.
Making inferences	implies suggests shows	conveys illustrates demonstrates
Extending and justifying points	because but so	furthermore consequently
Writing an end sentence	The end sentence should refer back to the topic sentence of your answer. You should include similar vocabulary to ensure that you conclude your point.	

Vocabulary		
	Vocabulary	Definition
4.1	abhor (v.)	To hate, detest. (The locals abhor the litter left by tourists.)
4.2	appease (v.)	To calm, satisfy. (The city lights appease my desire for something spectacular.)
4.3	impertinent (adj.)	Rude, insolent. (The waiter's impertinent attitude spoilt the evening.)
4.4	intrepid (adj.)	Brave in the face of danger. (My intredpid explorations of the local volcano.)
4.5	meander (v.)	To go about from place to place usually without a plan or definite purpose.(As we meandered through the gardens
4.6	meticulous (adj.)	Extremely careful with details. (The staff paid meticulous attention to detail.)
4.7	myriad (adj.)	Consisting of a very great number. (The city offers a myriad of opportunities.)
4.8	plethora (n.)	An abundance, excess. (The menu had a plethora of options.)
4.9	superfluous (adj.)	Exceeding what is necessary. (The superfluous facilities of the hotel were mind-blowing.)

Stretch your vocabulary: unfamiliar words which appear in the booklet		
5.1	ziggurat	A rectangular stepped tower, sometimes surmounted by a temple.
5.2	quaint	Attractively unusual or old-fashioned.
5.3	palisade	A fence of wooden stakes or iron railings fixed in the ground, forming an enclosure or defence.
5.4	pretentious	Attempting to impress by affecting greater importance or merit than is actually possessed.
5.5	presumptuous	Failing to observe the limits of what is permitted or appropriate.
5.6	assuage	Make (an unpleasant feeling) less intense.
5.7	gaijin	Japanese slang for a foreigner, specifically someone from Western culture.
5.8	fjord	A long, narrow, deep inlet of the sea between high cliffs, as in Norway, typically formed by submergence of a glaciated valley.
5.9	glacier	A slowly moving mass or river of ice formed by the accumulation and compaction of snow on mountains or near the poles.

Varied sentence lengths to create a rhythm and reflect the tone of the writing.

Sensory description to capture the atmosphere of the scene and describe in detail.

Paragraphs flow effectively; repeating ideas, phrases and tones to create a coherent piece of writing.

Model example

Congo Square is quiet now. Traffic forms a dull drone in the distance. A lone percussionist taps out ancient tribal rhythms on a two-headed drum. An air compressor from Rampart Street road construction provides perfectly syncopated whooshes of accompaniment.

Shaded park benches are surrounded by blooming azaleas, magnolias, and massive live oaks that stretch to provide relief from the blazing midday sun. It's an oasis of solitude directly across the street from the French Quarter.

Congo Square is quiet now, but in the 18th and 19th centuries this place would swarm every Sunday with slaves. Over 500 people would gather here in fur, fringe, shells and bells to celebrate their African and Creole cultural heritage, playing music, singing and dancing, buying and selling goods in the market.

Alliteration is used throughout to vary the pace of the writing and create a rhythmical feel to the text.

Figurative language shows the writing is well crafted and adds sophistication. It provides a concrete image for the reader to imagine the scene.

Vocabulary is ambitious and varied.

Style is appropriate for the purpose and audience. The writer's voice and viewpoint are clear.

Varied Sentence Lengths

"This sentence has five words. Here are five more words. Five-word sentences are fine. But several together become monotonous. Listen to what is happening. The writing is getting boring. The sound of it drones. It's like a stuck record. The ear demands some variety."

"Now listen. I vary the sentence length, and I create music. Music. The writing sings. It has a pleasant rhythm, a lilt, a harmony. I use short sentences. And I use sentences of medium length. And sometimes, when I am certain the reader is rested, I will engage him with a sentence of considerable length, a sentence that burns with energy and builds with all the impetus of a crescendo, the roll of the drums, the crash of the cymbals–sounds that say listen to this, it is important."

Varying Sentences Starters

6.1	adverb comma	Suddenly, he was running.
6.2	simile start	Like an athlete from the starting blocks, he ran for his life.
6.3	verb beginning	Thinking quickly, the solider ran for his life.
6.4	triple noun colon	Panic, despair, surprise: the solider ran for his life.
6.5	so, so	So desperate, so afraid, the solider ran for his life.

Fluency Scale				
	1	2	3	4
Expression and volume	Reads in a quiet voice as if to get words out. The reading does not sound natural like talking to a friend.	Reads in a quiet voice. The reading sounds natural in part of the text, but the reader does not always sound like they are talking to a friend.	Reads with volume and expression. However, sometimes, the reader slips into expressionless reading and does not sound like they are talking to a friend.	Reads with varied volume and expression. The reader sounds like they are talking to a friend with their voice matching the interpretation of the passage.
Phrasing	Reads word by word in a monotone voice.	Reads in two or three word phrases, not adhering to punctuation, stress and intonation.	Reads with a mixture of run-ons, mid sentence pauses for breath and some choppiness. There is reasonable stress and intonation.	Reads with good phrasing, adhering to punctuation, stress and intonation.
Smoothness	Frequently hesitates while reading, sounds out words, and repeats words or phrases.	Reads with extended pauses or hesitations. The reading has many "rough spots".	Reads with occasional breaks in rhythm. The reader has difficulty with specific words and/or sentences structures.	Reads smoothly with some breaks, but self correct with difficult words and/or sentence structures.
Pace	Reads slowly and laboriously	Reads moderately slowly.	Reads fast and slow throughout reading.	Reads at a conversational pace throughout the reading.

Word Classes and Literary Terminology		
7.1	noun	A name, place or thing.
7.2	proper noun	A noun used to indicate a particular name (Jane, Wednesday) or place (Winchester). Proper nouns should have a capital letter.
7.3	abstract noun	A noun used to indicate an idea or feeling e.g. happiness.
7.4	concrete noun	A noun use to indicate a physical thing e.g table.
7.5	prefix	Placed at the beginning of a word to modify meaning e.g. *un*happy, *re*imagine.
7.6	suffix	Placed at the end of a word to modify meaning e.g. happil*y*. Imagine*d*.
7.7	simile	A comparison between two dissimilar things using like or as e.g. the room is like an oven.
7.8	metaphor	A comparison between two unlike things e.g. the room is an oven.
7.9	personification	Giving inanimate objects humanistic qualities e.g. the cake called my name.
7.10	onomatopoeia	Words that sound like the thing they describe.
7.11	alliteration	The occurrence of the same letter or sound at the beginning of adjacent or closely connected words.
7.12	sibilance	The repetition of soft consonants (s, sh, f) in order to create hissing-like sounds e.g. sizzling sausages.
7.13	hyperbole	Exaggerated statements or claims.
7.14	anecdote	A short amusing or interesting story about a real incident or person.

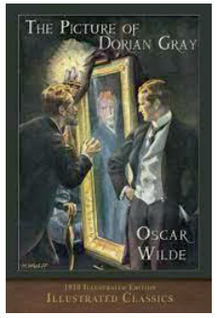
Knowledge Builder:
English Gothic Literature

Learn about the gothic genre:

Learn about Edgar Allan Poe:

Learn about The Romantics:

Books to read:



Films to watch:

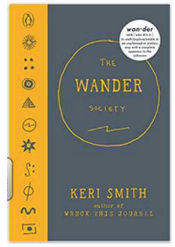
Stretch your vocabulary		
8.1	macabre	Gruesome, horrifying often dealing with or representing death
8.2	spectre	A ghost.
8.3	trepidation	A feeling of fear or anxiety about something that may happen
8.4	confinement	The state of being enclosed within bounds; limited or restricted.
8.5	shrouded	Cover or envelop so as to conceal from view.
8.6	surreptitiously	In a way that attempts to avoid notice or attention; secretively.
8.7	melancholy	A feeling of pensive sadness, typically with no obvious cause.
8.8	aghast	Filled with horror or shock.

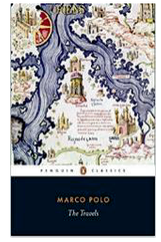
Knowledge Builder:
English Travel Writing

Michael Portillo in China :

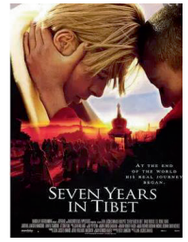
Michael Palin in North Korean:

Books to read:





Films to watch:



Context		
9.1	Communism	A theory of social organisation. All property is owned by the community and each person contributes and receives according to their ability and needs.
9.2	Korean war	Fought between North Korea and South Korea in the 1950's. North Korea was supported by China and the Soviet Union. South Korea was supported by the UN and the United States.
9.3	Socialism	A political theory of social organisation which advocates that the means of production, distribution, and exchange should be owned or regulated by the community as a whole.
9.4	Vladimir Lenin (1870 -1924)	A Russian revolutionary, politician, and political theorist. He served as the first and founding head of government of Soviet Russia.

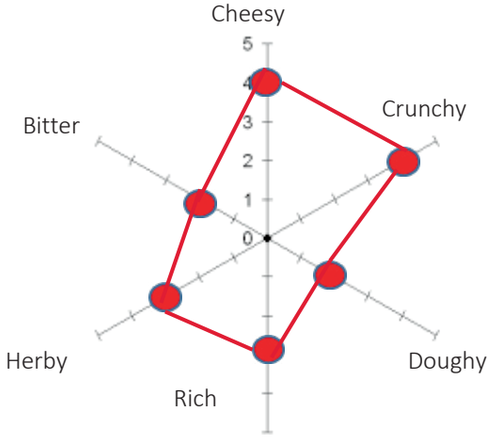
1. Core Knowledge

Food Assurance

1.1	Red Tractor	The UK's largest food and farm standards scheme. It covers areas such as: animal welfare and safety, tractability and environmental protection.
1.2	Lion eggs 	The UK's most successful food safety mark, introduced to reduce cases of salmonella and food poisoning caused by eggs.

Eat well for less – 8 tips for healthy eating on a budget:
1. Use beans and lentils to make dishes go further
2. Use dried, canned, frozen and fresh when eating your 5 a day
3. Eat seasonal fruit and vegetables
4. Buy dried staple foods like pasta and rice which last a much longer
5. Try to buy meat on the bone with skin and remove yourself at home
6. Freeze leftovers rather than throwing food away
7. Plan meals for the week ahead to avoid waste or food going out of date
8. Write a shopping list

Profiling test (star profile) - a test used to obtain a detailed description of a food product.



What does this profiling test tell you about the Pizza that was made?

2. Science

2.1	gelatinisation	The process of gelatinisation occurs when starch granules are heated in a liquid, causing them to swell and burst, which results in the liquid thickening.
2.2	gluten formation	Wheat and other related grains (including barley and rye) contain a mixture of two proteins **glutenin** and **gliadin**. When flour made from grinding these grains is mixed with water the two proteins combine and form gluten.
2.3	denature	The process of destroying the characteristic properties of a protein by heat, or acidity. For example when you fry an egg, the raw egg becomes denatured once it is heated.
2.4	enrichment	The practice of adding micronutrients back to a food product that were lost during processing.
2.5	mechanical raising agent	Adding air to a mixture by: whisking creaming sugar and fat sieving
2.6	lamination	The process of folding and rolling butter into dough over and over again, to create super-thin layers.
2.7	shortening	Defined as a fat, solid at room temperature, which can be used to give foods a crumbly and crisp texture such as pastry. Examples of fat used as "shorteners" include butter, margarine, vegetable oils and lard.
2.8	coagulation	The change in the structure of protein (from a liquid form to solid or a thicker liquid) brought about by heat, mechanical action or acids.

3. Practical Skills		
3.1	bridge	Form a bridge over the ingredient with your hand and put the knife underneath.
3.2	claw	Curl fingers inwards and grip the food with your fingertips, keeping fingers away from the knife.
3.3	creaming	The technique of softening solid fat, like butter, into a smooth mass and then blending it with other ingredients.
3.4	aeration	The process of allowing air to be combined into ingredients to make them lighter and/or create more volume.
3.5	kneading	Movement to stretch the gluten in dough.
3.6	rub in	Coating flour grains in fat using fingertips to make breadcrumbs.
3.7	reduction	To simmer a sauce until some of the water in it has evaporated, which intensifies the flavours, thickens the liquid, and causes it to take up less volume.
3.8	roux	Flour and fat cooked together and used to thicken sauces.

Where do the foods in your store cupboard at home originate from?

4. Nutrition		
4.1	DRV	**Dietary reference values.**
4.2	kilocalorie	Another word for what's commonly called a calorie, so 1,000 calories will be written as 1,000kcals.
4.3	BMR	**Basal metabolic rate** measures the minimum amount of calories that your body needs to perform necessary functions.
4.4	macronutrients	Nutrients that we need in large amounts. Fats, carbohydrates and protein.
4.5	micronutrients	Nutrients that we need in small amounts. Vitamins and minerals.
Nutrition Labels: The traffic light label is colour coded and shows that green is low in a particular nutrient, amber means medium and red is high in a nutrient.		

Front-of-pack nutrition information

Nutrition information can also be repeated on the front-of-pack. This nutrition labelling is **voluntary**. If provided, it can display at-a-glance information on the amount of energy only (calories and kilojoules per portion and per 100g/ml), or the amount of energy plus fat, saturates, sugars and salt.

Traffic light labelling

Some manufacturers and most major UK supermarkets use traffic light labeling on pre-packed foods and drinks to show whether a product is **high** (red), **medium** (amber) or **low** (green) in fat, saturates, sugars and salt.

Colour coding can be a useful tool to help choose between products - try and go for more greens and ambers, and fewer reds!

Nutritional information on labels may also be expressed as a percentage of the **reference intake (RI)**. These are a guide to the maximum amount of **fat, saturates, sugar and salt** that adults should eat each day.

Each serving (150g) contains

Energy	Fat	Saturates	Sugars	Salt
1046kJ 250kcal	3.0g	1.3g	34g	0.9g
	LOW	LOW	HIGH	MED
13%	4%	7%	38%	15%

of an adult's reference intake

Typical values (as sold) per 100g: 697kJ/ 167kcal

RIs are based on requirements for adult females.

Energy or nutrient	Reference Intake
Energy	8400kJ/2000kcal
Fat	70g
Saturates	20g
Carbohydrate	260g
Sugars	90g
Protein	50g
Salt	6g

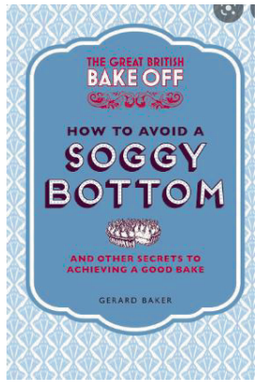
For more information about nutrition labels, watch the video using the QR code.

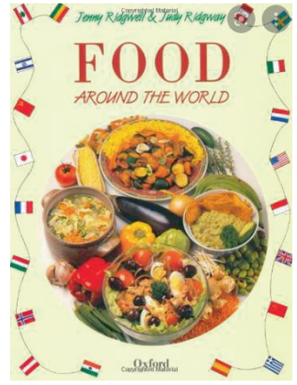
Understand more about food labelling

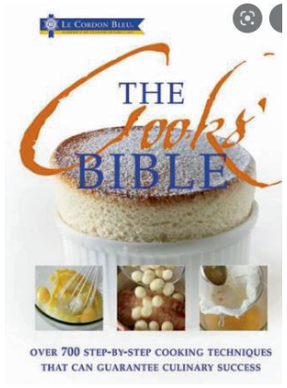
Have a go at creating your own nutrition label for one of the dishes you have cooked this term

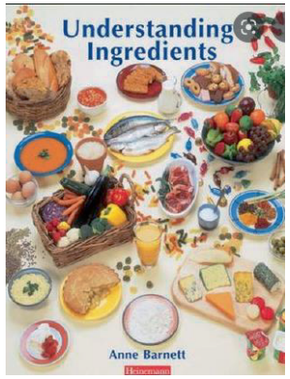
BBC documentary about the history of curry

Books to read:









Stretch your vocabulary		
S1	food assurance	In the UK, food assurance schemes help to provide consumers and businesses with guarantees that food has been produced to particular standards.
S2	provenance	Food provenance is the term we use to describe the origins of our food, such as where it has been grown, raised or caught.
S3	fermentation	A process that involves the breakdown of carbohydrates by bacteria and yeast.
S4	conduction	A common example of conduction is the process of heating a pan on a stove. The heat from the burner transfers directly to the surface of the pan.
S5	convection	Convection occurs when particles with a lot of heat energy in a liquid or gas move and take the place of particles with less heat energy. For example the water boiling in a pan.
S6	radiation	The process where heat and light waves strike and penetrate your food through electromagnetic energy, for example grilling food.

1. TV and films	
les dessins animés	cartoons
les documentaires	documentaries
les émissions de sport	sports programmes
les émissions de télé réalité	reality TV shows
les émissions musicales	music shows
les infos	the news
les jeux télévisés	game shows
la météo	the weather
les séries	series
les séries policières	police series
les séries américaines	american series
les comédies	comedies
les films d'action	action films
les films d'amour	romantic films
les films d'arts martiaux	martial arts films
les films d'aventure	adventure films
les films fantastiques	fantasy films
les films d'horreur	horror films
les films de science - fiction	science fiction films

2. Opinions and actions	
J'adore	I love
J'aime bien	I like a lot
J'aime	I like
Je n'aime pas	I don't like
Je ne regarde jamais	I never watch
Je ne rate jamais	I never miss
Je suis fan de	I'm a fan of
Je ne suis pas fan de	I am not a fan of
J'ai une passion pour les..	I have a passion for
J'ai horreur des..	I really dislike
Je déteste	I hate
Mon acteur préféré c'est...	My favourite actor is...
Mon film préféré c'est...	My favourite film is...
À mon avis c'est...	In my opinion it is...
Je pense que c'est...	I think it is...
Je trouve ça...	I find that...

3. Important adjectives	
amusant	funny
assez bien	quite good
barbant	boring
chouette	excellent
effrayant	frightening
émouvant	moving
ennuyeux	boring
génial	great
intéressant	interesting
nul	rubbish
passionnant	exciting
pratique	practical
stupide	stupid
formidable	great
idiot	stupid

4. The perfect tense of regular verbs			
J'ai discuté	I chatted	J'ai regardé la télé/clips vidéo.	I watched the TV/video clips
J'ai écouté la radio	I listened to the radio	J'ai surfé sur internet	I surfed the net
J'ai envoyé des SMS	I sent texts	J'ai tchatté	I chatted
J'ai joué à des jeux en ligne	I played games online	J'ai téléchargé des chansons	I downloaded songs
J'ai posté des photos	I posted photos		

1. Saying what you did in Paris	
j'ai gagné un concours	I won a competition
j'ai passé une semaine	I spent a week
j'ai visité la Tour Eiffel	I visited the Eiffel Tower
j'ai mangé au restaurant	I ate in a restaurant
j'ai admiré Le Louvre	I admired the Louvre
j'ai regardé le feu d'artifice	I watched the fireworks
j'ai acheté des souvenirs	I bought souvenirs
j'ai rencontré	I met
j'ai envoyé	I sent
j'ai pris des photos	I took photos
j'ai vu	I saw
j'ai attendu le bus	I waited for a bus
j'ai bien dormi	I slept well
je n'ai pas visité	I didn't visit
On a fait les magasins	we went shopping
on a bu un coca	we drank a coke
on a fait un tour	we did a tour
on a fait une balade en bateau mouche	we went on a boat trip

2. What it was like	
c'était	it was
J'ai trouvé ça	I found that
ce n'était pas mal	It wasn't bad
marrant	funny
horrible	terrible
cher	expensive
marrant	funny
fabuleux	fabulous

3. How did you travel?	
en avion	by plane
en bus	By bus
en car	by coach
en métro	by underground
en train	by train
en voiture	by car
à vélo	by bike
à pied	on foot

4. A journey	
je suis allé(e) à Paris	I went to Paris
je suis parti(e) /arrivé(e)	I left/arrived
le train est arrivé	the train arrived
je suis sorti(e)	I left
je suis resté(e)	I arrived
je suis rentré(e)	I came back
je suis monté(e)	I went up

5. HF words	
À quelle heure?	at what time?
quand?	when?
combien?	how much/many?
comment?	how?
où?	where?
qui?	who?
avec qui?	who with?
alors	so
donc	therefore
parce que	because
d'abord	firstly
ensuite	next

Knowledge Builder: French
T'es branché? | Year 8 Autumn Term 1

Click on the following link to practise the perfect tense in French:

Languagesonline: The Perfect Tense for Beginners

Click on the following links to practise vocabulary:

Quizlet: la télé

Quizlet: les films

Quizlet: les opinions

Knowledge Builder: French
Paris Je t'adore | Year 8 Autumn Term 2

Click on the following link to practise the perfect tense in French:

BBC Bitesize: the perfect tense – how to talk about the past in French

Click on the following link to practise vocabulary:

Quizlet: une semaine à Paris

1. Weather & Climate: General Concepts		
1.1	weather	The day to day state of the atmosphere.
1.2	climate	The weather conditions prevailing in an area in general or over a long period.
1.3	air pressure	The force exerted onto a surface by the weight of the air.
1.4	evaporation	The conversion of liquid water into water vapour.
1.5	condensation	The conversion of water vapour into liquid droplets in clouds.
1.6	isobars	A line drawn on a weather map through points of equal atmospheric pressure.
1.7	greenhouse effect	The trapping of the sun's warmth in a planet's lower atmosphere.
1.8	synoptic chart	A map that summarises atmospheric conditions.
1.9	prevailing wind	The most frequent wind direction.
1.10	North Atlantic Drift	The warm ocean current flowing from the Caribbean to Europe.

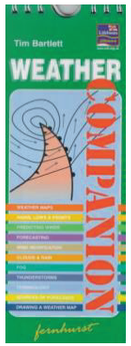
2. Precipitation		
2.1	precipitation	Water that falls from the sky (e.g. rain, hail, snow, etc)
2.2	relief rainfall	Rain caused by warm wet air rising over hills or mountains.
2.3	convectional rainfall	The type of rainfall that occurs when the land warms up, heating the air above it and therefore causing the air to expand and rise.
2.4	frontal rainfall	The type of rain that occurs when two air masses meet.
2.5	weather forecast	An analysis of the state of the weather in an area with an assessment of likely developments.
2.6	cold front	The boundary of an advancing mass of cold air.
2.7	warm front	The boundary of an advancing mass of warm air.
2.8	anticyclone	A weather system with high pressure at its centre.
2.9	depression	A weather system with low pressure at its centre.
2.10	hurricane, cyclone, typhoon	A large tropical storm system with high-powered circular winds.

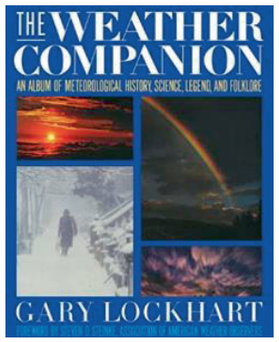
3. Effects (impacts)		
3.1	effect	What happens as a result of an event.
3.2	primary effect	The immediate effects of a hazard, caused directly by it.
3.3	secondary effect	The after effects that occur as an indirect effect of a hazard on a longer timescale.
3.4	social	Affects how people relate to each other.
3.5	economic	Affects how people make money.
3.6	environmental	Affects our physical surroundings.

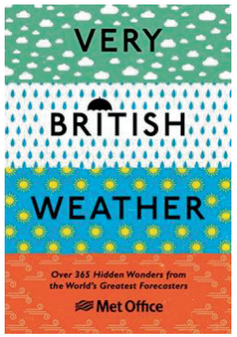
4. Responses		
4.1	response	What people do either before, during or after an event to reduce the negative effects.
4.2	immediate responses	How people react during a disaster and straight afterwards.
4.3	long term responses	Later reactions that happen in the weeks, months and years after the event.

5. Managing the risk of living with extreme weather		
5.1	preparing	How people organise themselves and their society in expectation of a hazard event.
5.2	protecting	How a people design buildings and infrastructure to be safer in the event of a hazard.
5.3	predicting	Using available evidence to try and say when and where a hazardous event will happen to reduce damage.

Books to read:







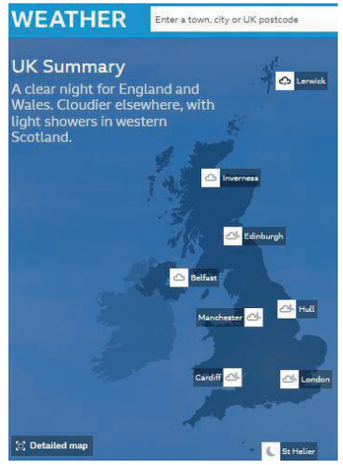
Experts say heatwaves happening earlier and more often as temperatures hit highs not normally recorded until July or August.

What does the Met office say about extreme weather events here in the UK?

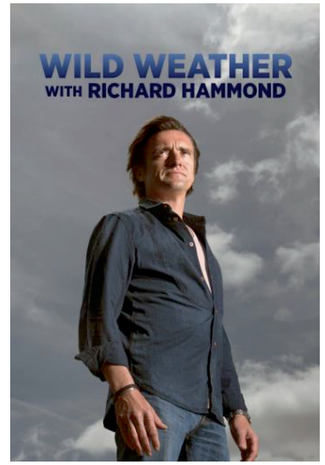
Hot air helicopters with Richard Hammond.

Want to know more about weather and see what GCSE students need to understand.

Get it live:



Series to watch:



Stretch your vocabulary		
a.1	absolute humidity	The mass of water vapor present per unit volume of space. Also considered as the density of the water vapor. It is usually expressed in grams per cubic meter.
a.2	dew point	The temperature at which dew would form assuming all other conditions remained the same. The dew point is a function of the air temperature and humidity.
a.3	hygrometer	An instrument that measures the water vapor content of the atmosphere.
a.4	wind chill factor	The perceived decrease in air temperature felt by the body on exposed skin due to the flow of air.
a.5	jet stream	A narrow band of strong winds usually found at elevations from 20000 to 50000 feet.
a.6	El Niño	The cyclical warming of East Pacific Ocean sea water temperatures off the western coast of South America that can result in significant changes in weather patterns in the United States and elsewhere.


Continents
South America
Africa
North America
Europe
Asia
Oceania
GREENLAND
CANADA
UNITED STATES
MEXICO
CUBA
VENEZUELA
COLOMBIA
ECUADOR
PERU
BRAZIL
BOLIVIA
PARAGUAY
CHILE
ARGENTINA
URUGUAY
GUYANA
SURINAME
FRENCH GUIANA
ICELAND
SWEDEN
FINLAND
NORWAY
IRELAND
GERMANY
POLAND
BELARUS
UKRAINE
FRANCE
ROMANIA
SPAIN
PORTUGAL
RUSSIA
KAZAKHSTAN
MONGOLIA
TÜRKIYE
SYRIA
IRAQ
IRAN
AFGHANISTAN
PAKISTAN
CHINA
JAPAN
INDIA
SAUDI ARABIA
YEMEN
OMAN
MOROCCO
ALGERIA
LIBYA
EGYPT
TUNISIA
WESTERN SAHARA
MAURITANIA
MALI
NIGER
CHAD
SUDAN
NIGERIA
ETHIOPIA
SOMALIA
KENYA
DR CONGO
TANZANIA
ANGOLA
ZAMBIA
NAMIBIA
BOTSWANA
SOUTH AFRICA
MADAGASCAR
PHILIPPINES
INDONESIA
PAPUA NEW GUINEA
AUSTRALIA
NEW ZEALAND

1. Lernen und Lehrer	Learning and teachers
eine gute Idee	a good idea
eine schlechte Idee	a bad idea
Fragen	questions
Hausaufgaben	homework
im Internet	online
forschen	to research
lernen	to learn/study
Vokabeln	vocabulary
der Lehrer	the teacher (male)
die Lehrerin	the teacher (female)
gute Noten	good marks
schlechte Noten	bad marks
hilfsbereit	helpful
nett	nice
streng	strict
sympathisch	kind
unfreundlich	unfriendly

2. Meine Schule	My school
In meiner Schule gibt es	In my school there is
eine Aula	a hall
einen Flur	a corridor
einen Informatikraum	a computer room
eine Kantine	a canteen
viele Klassenzimmer	many classrooms
zehn Labors	ten labs
ein Lehrerzimmer	a staffroom
einen Schulhof	a playground
eine Sporthalle	a sports hall
ein Schwimmbad	a swimming pool
eine Turnhalle	a gym
Schulregeln	school rules
ein Handy	mobile phone
benutzen	to use
Mobbing	bullying
Cybermobbing	cyberbullying
pünktlich	punctual
Schuluniform	school uniform

3. AG (Arbeitsgemeinscaft)	After school club
Was machst du nach der Schule?	What do you do after school?
Ich besuche die … -AG	I attend the … club
Ich gehe in die … - AG	I go to the … club
die Bastel-AG	the crafts club
die Film-AG	film club
die Sport-AG	sports club
die Fußball-AG	football club
die Hausaufgaben-AG	homework club
die Leichtathletik-AG	athletics club
die Schach-AG	chess club
die Theater-AG	theatre club
die Umwelt-AG	environment club
Ich gehe in den Chor	I go to choir
die Nachhilfe	extra tuition
abends/am Abend	in the evening
nachmittags/am Nachmittag	in the afternoon

Knowledge Builder:

logo!

Logo provides access to a wide range of listening and reading resources. You can watch the last seven days of news bulletins and read about anything that takes your interest.

1. Frühstück	Breakfast
das Brot	bread
die Butter	butter
Frühstücksflocken	breakfast cereal
der Joghurt	yoghurt
der Kaffee	coffee
der Käse	cheese
die Kekse	biscuits
die Marmelade	jam
die Milch	milk
das Müsli	muesli
das Obst	fruit
der Saft	juice
der Schinken	ham
der Tee	tea
das Wasser	water
die Wurst	sausage

Knowledge Builder:

Logo provides access to a wide range of listening and reading resources. You can watch the last seven days of news bulletins and read about anything that takes your interest.

2. die Mahlzeit	Mealtime
zum Frühstück	for breakfast
zum Mittagessen	for lunch
zum Abendessen	for dinner
Was isst du zum Frühstück?	What do you eat for breakfast?
Ich esse / trinke…	I eat / drink…

3. Verpackung	Packaging
eine Dose Cola	can of cola
eine Dose Marmelade	jar of jam
eine Flasche Wasser	bottle of water
100 Gramm Butter	100 grams of butter
ein Liter Milch	litre of milk
eine Packung Kekse	packet of biscuits
eine Scheibe Schinken	slice of ham
ein Stück Käse	piece of cheese
eine Tafel Schokolade	bar of chocolate
eine Tüte Gummibärchen	bag of gummy bears

gesund	healthy
ungesund	unhealthy
Ich bin Vegetarier(in)	I am a vegetarian
nie	never
selten	rarely
wenig	little, not much

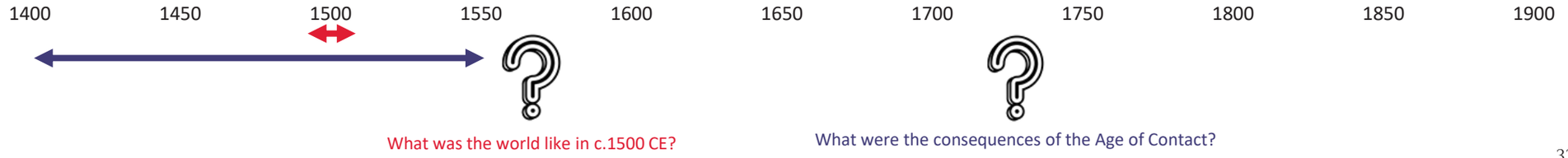
5. Anderes Essen	Other foods
das Fastfood	fast food
das Hähnchen	chicken
Kartoffeln (pl)	potatoes
Eier (pl)	eggs
das Fleisch	meat
Nudeln (pl)	pasta / noodles
der Reis	rice
der Salat	salad
die Pizza	pizza
Pommes (pl)	chips
die Bratwurst	cooked sausage
die Suppe	soup
der Fisch	fish
das Brötchen	bread roll

6. Essen bestellen	Ordering food
Was darf es sein?	What would you like?
Ich möchte	I would like
Ich hätte gern	I would like
Etwas zu trinken?	Something to drink?
Sonst noch etwas?	Anything else?
das Restaurant	restaurant
das Café	café
der Kellner / die Kellnerin	waiter (m/f)
lecker / ekelhaft	delicious / disgusting

1. Core knowledge: Substantive (what happened in the past)		
1.1	identity	Something about a person/country that helps you recognise them as different from others.
1.2	empire	A collection of diverse peoples/countries who are ruled by one leader or its strongest group.
1.3	Ottoman	An Islamic empire in Europe and the Near East ruled by a Sultan, such as Suleiman (pictured).
1.4	Mughal	An empire in South Asia (e.g., India). Its leaders were Muslims, but most people were Hindus.
1.5	Aztec	An empire in Central America. In 1500 its ruler was Montezuma, the Mexica people's leader.
1.6	contact	When someone from one people/country travels to another and meets their people.
1.7	Conquest	When one people/country takes control over another by using force (soldiers and violence).
1.8	Colonisation	When one people conquers another, takes their riches, and replaces their culture.
1.9	Columbian Exchange	When foods, medicines, and other materials were transported across the Atlantic after 1492.
1.10	indigenous peoples	People groups who have lived in a conquered/colonised place since before it was taken over.

2. Core knowledge: Disciplinary (how historians think)		
2.1	similarity	Something that two different peoples/nations have in common. 'They were both Islamic nations.'
2.2	difference	Something that one people/nation has that another does not have. 'Spain was wealthier than…'
2.3	compare	Investigate how similar two peoples/nations were by studying the key features of both.
2.4	generalise	Suggest that most cases had a similarity. For example, most Europeans were Christians.
2.5	complex	Complicated. A historian might argue that international trading was complex in the year 1500 CE.
2.6	Consequence	A result of an event or person's actions. The Columbian Exchange was a consequence of contact.
2.7	Representation	When the types of people who were involved in an event appear in the histories of it.
2.8	Agency	When people are shown in a history to be active and making decisions, they have agency.
2.9	Age of Discovery	A phrase that is traditionally used to describe European explorers 'discovering' America and Asia.
2.10	Age of Contact	A better phrase that does not ignore the role played by Indigenous peoples of America and Asia.

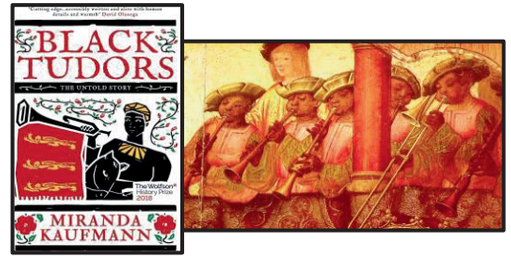
This Term's Enquiry Questions (part 1)	
c.1500 CE	What was the world like in c. 1500 CE?
1405 CE-1550 CE	What were the consequences of the Age of Contact?



3. Core knowledge: Substantive (what happened in the past)		
3.1	Christian	Someone who believes in the Holy Trinity of God the Father, the Son and the Holy Spirit.
3.2	Catholic	A Christian who accepts that the Pope, not their king, is the head of their Church on earth.
3.3	Protestant	A Christian who rejects the idea that the Pope should insist they worship God in a certain way.
3.4	Reformation	The process of change where many people and groups started to become Protestants.
3.5	Counter-Reformation	When kings of strongly Catholic countries, such as France/Spain, fought against Protestants.
3.6	absolutist monarch	A king or queen who rules alone with no limits, such as a parliament, to their powers.
3.7	Catherine of Aragón	A woman who argued for girls' education, and ruled England when the King was abroad.
3.8	black Tudors	Africans living in England during the Tudor times. Historians argue there were more than 350.
3.9	innocents	A person we would say had a learning difficulty. It was believed that they could not sin.
3.10	Norwich Spinners	A group of deaf cloth weavers in the city of Norwich. It was believed their parents had sinned.

4. Core knowledge: Disciplinary (how historians think)		
4.1	change	When something starts happening, stops happening, happens more, or happens differently.
4.2	continuity	When something carries on happening. People allow it or encourage it to carry on happening.
4.3	similarity	When two or more peoples/countries share a feature, such as the same type of political system.
4.4	difference	When a people/country has a feature, that is not shared with another, such as their religion.
4.5	chronology	The sequence of events and changes in time order (the order they happened in).
4.6	historiography	How stories about the same event or person in the past have changed over time.
4.7	Tudor Times	A label given to English history in the years 1485 to 1603, the reigns of the Tudor monarchs.
4.8	representation	When the types of people who were involved in an event appear in the histories of it.
4.9	agency	When people are shown in a history to be active and making decisions, they have agency.
4.10	bodies of knowledge	Academic (universities), Popular (TV, video games), Public (statues, museums).

This Term's Enquiry Questions (part 2)	
1517 CE-1648 CE	What type of change was the European Reformation in the years 1517 to 1648?
1485 CE-1603 CE	Why are historians now asking different questions about the Tudor times?



BITESIZE

BBC Bitesize KS3 History courses to extend your learning
The Tudors: Who was Henry VIII
The Tudors: The Reformation and its impact
The Tudors: Who was Elizabeth I?
The Tudors: Elizabethan rule
The Tudors: Africans and their lives in Tudor England
Mughal India (1526-1857)

Homeschool History Podcast episodes to extend your learning
Pocahontas
Mary, Queen of Scots

This Term's Enquiry Questions	
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iPLAYER

BBC iPlayer programme to extend your learning
Horrible Histories: Mayflower Malarkey

Timelines.tv YouTube videos to extend your learning
The Reformation (1500-1560)
Henry VIII & the Church (1528)
Plantations in Ireland (1572)
Shakespeare's World (1588)

Saluti		Basic greetings
1.0	ti piacerebbe…?	would you like to…?
1.1	ti va di…?	do you feel like…?
1.2	vuoi…?	do you want to…?
1.3	dove ci incontriamo?	where shall we meet?
1.4	a che ora ci incontriamo?	when should we meet?
1.5	ci incontriamo alle 9	let's meet at 9
1.6	ci incontriamo al cinema	let's meet at the cinema
1.7	davanti al ristorante	in front of the restaurant
1.8	dietro la piscina	behind the swimming pool
1.9	di fronte alla stazione	opposite the station
1.10	vicino alla pizzeria	near the pizza restaurant

Si e no!		Saying yes and no!
2.0	si, certo.	yes, of course
2.1	volontieri	I'd love to
2.2	che buon'idea!	what a great idea!
2.3	mi dispiace, non posso	I am sorry, I can't
2.4	devo finire i compiti	I must finish my homework
2.5	ho da fare	I have lots to do
2.6	non mi va	I don't feel like it

Quando?		When?
3.0	alle tre	at 3
3.1	alle otto e mezza	at 8.30
3.2	alle nove e venti	at 9.20
3.3	alle tre e un quarto	at 3.15
3.4	domani	tomorrow
3.5	sabato mattina	on Saturday morning
3.6	domenica pomeriggio	Sunday afternoon
3.7	fra due giorni	in 2 days

Avere		To have
4.0	ho	I have
4.1	hai	you have
4.2	ha	he/she has
4.3	abbiamo	we have
4.4	avete	you lot have
4.5	hanno	they have

Passato con verbi ARE		Past tense with ARE verbs
5.0	ho mangiato	I have eaten
5.1	ho guardato	I have watched
5.2	ho comprato	I have bought
5.3	abbiamo studiato	we have studied
5.4	ha ballato	he danced
5.5	hanno visitato	they visited
5.6	hai incontrato	you met
5.7	non ho parlato	I didn't speak
5.8	avete lavorato	you worked
5.9	hai trovato?	have you found?
5.10	ha guardato?	did he/she find?
5.11	hai studiato?	did you study?

Espressioni di tempo		Time expressions
6.0	due giorni fa	two days ago
6.1	una settimana fa	a week ago
6.2	un mese fa	a month ago
6.3	l'anno scorso	last year
6.4	due anni fa	two years ago
6.5	qualche tempo fa	some time ago
6.6	poco tempo fa	not long ago

Vestiti e colori		Clothes & Colours
1.0	indosso/porto	I wear
1.1	indossa/porta	he/she wears
1.2	una camicia bianca	a white T-shirt
1.3	una cravatta nera	a black tie
1.4	una giacca rossa	a red blazer
1.5	una gonna arancione	an orange skirt
1.6	una maglietta gialla	a yellow T-shirt
1.7	un vestito giallo	a yellow dress
1.8	un cappotto rosso	a red coat
1.9	i pantaloni neri	black trousers
1.10	i pantaloncini gialli	white shorts
1.11	le scarpe bianche	white shoes

Passato Prossimo ERE/IRE		Past Tense ERE/IRE
2.0	ho finito	I have finished
2.1	hai preferito	You have preferred
2.2	ha suggerito	He/She has suggested
2.3	abbiamo capito	We have understood
2.4	avete avuto	You lot have had
2.5	hanno venduto	They have sold

Piacere		To like
3.0	mi piace	I like (singular)
3.1	mi piacciono	I like (plural)
3.2	non mi piace	I don't like (singular)
3.3	non mi piacciono	I don't like (plural)
3.4	a Carlo piace a Maria piace	Carlo likes (singular) Maria likes (singular)
3.5	a Carlo piacciono a Maria piacciono	Carlo likes (plural) Maria likes (plural)
3.6	a mio fratello piace	my brother likes (singular)
3.7	a mio fratello piacciono	my brother likes (plural)
3.8	a mia sorella piace	my sister likes (singular)
3.9	a mia sorella piacciono	my sister likes (plural)

Le taglie		Sizes
4.0	di taglia piccola	small size
4.1	di taglia media	medium size
4.2	di taglia grande	large size

Comprare vestiti		Buying clothes
5.0	salve!	hello! (F)
5.1	vorrei	I would like
5.2	avete ….?	do you have …? (F)
5.3	si, certo!	yes, of course!
5.4	quanto costano?	how much do they cost?
5.5	quanto costa?	how much does it cost?
5.6	quanto le devo?	how much do I owe you?
5.7	sono tre euro	it's three euros
5.8	carta o contanti?	card or cash?
5.9	carta, per favore.	card, please.
5.10	contanti, per favore.	cash, please.
5.11	costa troppo	it costs too much
5.12	costano troppo	they cost too much
5.13	lo/la prendo	I'll take it

Would you like to go through topic two in more detail?
If you go to Student Resources Italian look for yr 8 and then yr 8 podcasts and listen to Podcast 1 and 2.
This will give you extra vocabulary so that you can say more about yourself.

Using Quizlet is a great way to learn vocabulary.
Go onto Student Resources Italian yr 8 Quizlet extra Autumn 2 to find a quizlet set to challenge you even further in this unit.
Remember to do quizlet little and often.

For extra help with the past tense or the passato prossimo please watch this very useful video.
Watch it several times until you start to really get to grips with this tense.

Clothes extra!
Watch this video for more vocabulary on clothes and accessories.

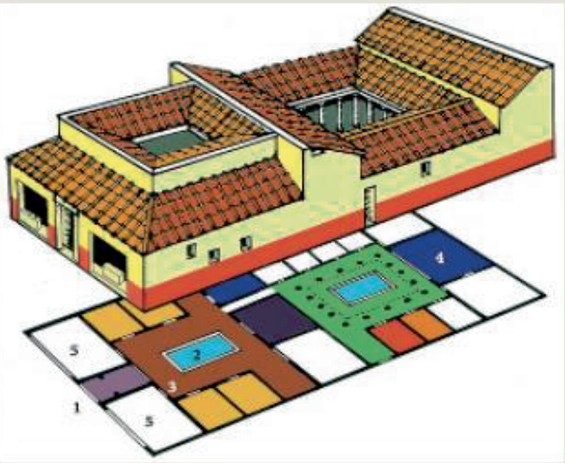
To recap how to say the time in Italian watch this very clear video and look back at your notes from last year.

Key terms		
1.1	nominative	subject of the sentence
1.2	accusative	object of the sentence
1.3	present tense	action that is happening now
1.4	derivation	word that is formed from another word
1.5	declension	the group that a noun belongs to (which determines how their endings change)

Noun endings		
2.1	nominative singular	a, us
2.2	accusative singular	am, um, em

Verb endings		
3.1	3rd person present tense singular	-t

Plan of a Pompeian house



	faucēs	*entrance hall*
	ātrium	*main room*
	cubiculum	*bedroom*
	tablīnum	*study*
	peristȳlium	*garden court*
	triclīnium	*dining-room*
	culīna	*kitchen*
	latrīna	*lavatory*
1	**iānua**	*front door*
2	**impluvium**	*pool for rain water*
3	**larārium**	*shrine of the household gods*
4	*summer triclīnium*	
5	*shops*	

Key vocabulary								
4.1	canis	dog	4.8	mater	mother	4.15	cena	dinner
4.2	coquus	cook	4.9	pater	father	4.16	cibus	food
4.3	est	is	4.10	sedet	sits, is sitting	4.17	dominus	master
4.4	filius	son	4.11	servus	slave	4.18	dormit	sleeps, is sleeping
4.5	hortus	garden	4.12	via	street	4.19	intrat	enters
4.6	mercator	merchant	4.13	amicus	friend	4.20	laetus	happy
4.7	laborat	works, is working	4.14	ancilla	slave girl	4.21	laudat	praises, is praising

1. Key terms		
1.1	declension	group that a noun belongs to (which determines how their endings change)

3. Questioning words		
3.1	cur?	why?
3.2	quis?	who?
3.3	quid?	what?

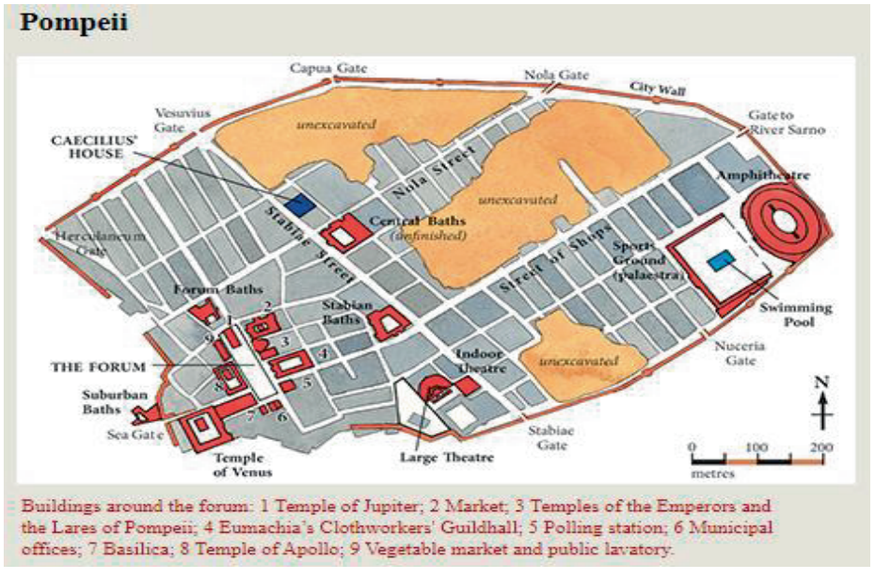
4. Pronouns		
4.1	ego	I
4.2	tu	you

2. Noun declension endings (singular)			
		nominative	accusative
2.1	1st declension	a	am
2.2	2nd declension	us	um
2.3	3rd declension		em

5. Present tense verb endings (singular)		
5.1	1st person	-o
5.2	2nd person	-s
5.3	3rd person	-t

The buildings of the forum: 1 Temple of Jupiter; 2 Market; 3 Temple of Lares; 4 Temple of the Emperors; 5 Eumachia's Clothworkers' Guildhall; 6 Polling station; 7 Municipal offices; 8 Basilica; 9 Temple of Apollo; 10 Weights and measures table.

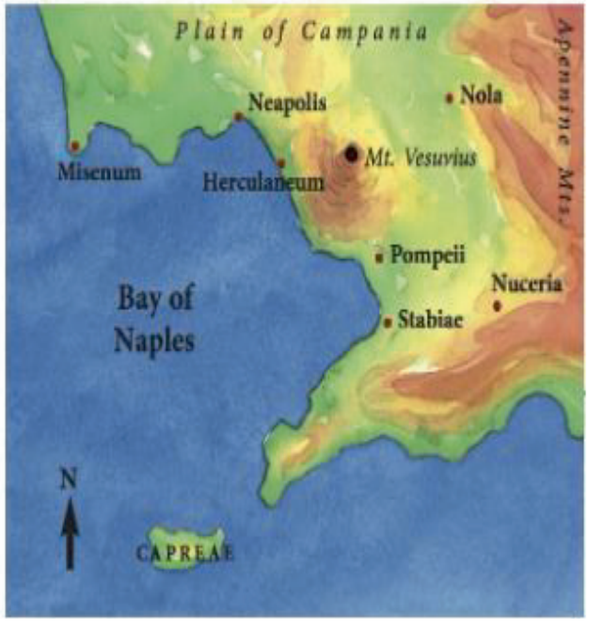
6. Key vocabulary											
6.1	ad	to	6.9	exspectat	waits for	6.17	surgit	gets up, stands up	6.25	pecunia	money
6.2	bibit	drinks	6.10	ianua	door	6.18	taberna	shop, inn	6.26	perterritus	terrified
6.3	circumspectat	looks around	6.11	iratus	angry	6.19	videt	sees	6.27	quaerit	looks for, searches for
6.4	clamat	shouts	6.12	magnus	big	6.20	vinum	wine	6.28	satis	enough
6.5	ecce!	look!	6.13	navis	ship	6.21	agit	does	6.29	sed	but
6.6	et	and	6.14	non	not	6.22	e	from, out of	6.30	vocat	calls
6.7	exit	goes out	6.15	portat	carries	6.23	habet	has	6.31	salve!	hello!
6.8	respondet	replies	6.16	ridet	laughs, smiles	6.24	inquit	says	6.32	leo	lion



Buildings around the forum: 1 Temple of Jupiter; 2 Market; 3 Temples of the Emperors and the Lares of Pompeii; 4 Eumachia's Clothworkers' Guildhall; 5 Polling station; 6 Municipal offices; 7 Basilica; 8 Temple of Apollo; 9 Vegetable market and public lavatory.

Have an understanding of the layout of Pompeii and the key buildings that it contained

Roman Daily Life and Dinner parties

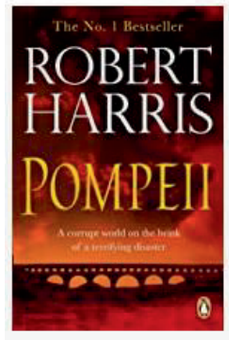


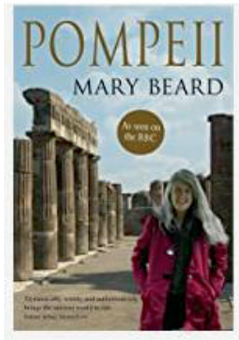
Central and southern Italy.

The Bay of Naples (Neapolis). The area covered by this map is about 60 km wide.

Stage 5 Vocabulary

Suggested reading:





https://www.clc.cambridgescp.com/web-book-1?p=9

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

- ❑ Recognise different types of data
- ❑ Create bar charts and frequency diagrams
- ❑ Create and interpret line graphs
- ❑ Understand scatter graphs and different types of correlation
- ❑ Create and interpret stem and leaf diagrams
- ❑ Interpret pie charts
- ❑ Find the mean, median, mode and range

Mean: the sum of the values divided by the number of items.

Median: the middle value when the data is put in order.

Mode: the most common value in a set of data.

	Language	Meaning	Example
1.1	Primary data	Data which you collect yourself	The results of a survey or experiment which you carried out
1.2	Secondary data	Data which you did not collect yourself	Information from a book or the internet
1.3	Discrete data	Data which is collected by counting	The number of pets or brothers and sisters that you have
1.4	Continuous data	Data which is obtained by measuring	Your height, weight or age
1.5	Categorical data	Data which is obtained by describing	The colour of your eyes
1.6	Bar chart	Used to represent categorical or discrete data	
1.7	Frequency diagram	Used to show continuous data	
1.8	Line graph	A graph that shows plotted points joined by straight lines	
1.9	Scatter diagram	A graph which allows you to see patterns in pairs of data	A graph of height versus arm-span for students in your class
1.10	Stem and leaf diagram	A diagram which allows you to see the shape of the distribution of data while retaining the actual numerical values of the data	
1.11	Pie chart	A diagram in which the data is represented in a circular graph; the proportions of the different categories are represented visually	
1.12	Average	A measure of the 'typical value' of data	The mode, median and mean are averages
1.13	Range	A measure of the spread of data	Range of -5, 1, 2, 4 and 9 is 9 – (-5) = 14

Link to Kings' Maths Resources

Year 8 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:

- ❑ Use the correct order of operations
- ❑ Round numbers (using place value and decimal places)
- ❑ Use written methods of addition and subtraction
- ❑ Add and subtract decimals
- ❑ Use mental methods for multiplication and division
- ❑ Use written methods for multiplication
- ❑ Use written methods for division
- ❑ Be able to multiply and divide with decimals

B I D M A S
Brackets
Indices
Division or **M**ultiplication
(whichever comes first)
Addition or **S**ubtraction
(whichever comes first)

	Language	Meaning	Example
1.1	Round	To write a number as a near approximation	153 = 150 to the nearest 10 153 = 200 to the nearest 100
1.2	Decimal	A number which has digits after the decimal point	3.25 and 4.13 are decimal numbers
1.3	Partitioning	Splitting a number into parts to make a mental calculation easier	27 + 18 = 27 + 10 + 8 = 37 + 8 = 45
1.4	Compensation	A mental strategy that involves rounding one of the numbers and then adjusting the final answer to your sum	27 + 18 = 27 + 20 – 2 = 47 – 2 = 45
1.5	Inverse Operation	A second operation that undoes the effect of the first operation	-5 is the inverse of +5 ÷4 is the inverse of ×4
1.6	Product	Another word for multiplication	The product of 3 and 4 is 12
1.7	Divisor	The number you divide by	In 10 ÷ 5 = 2, 2 is the divisor
1.8	Short Division	A way of setting out workings when dividing by a single digit number	
1.9	Long Division	A way of setting out workings when dividing by a multi-digit number	
1.10	Long Multiplication	A way of setting out workings when multiplying	
1.11	Rounding Errors	Errors that occur by rounding an intermediate answer in a calculation	
1.12	Remainder	The number left after a division	26 ÷ 5 = 5 remainder 1
1.13	Estimate	Work out an approximate answer	An estimate of £7.56 shared between 9 people would be 8 ÷ 10 = 0.8 or 80p

Link to Kings' Maths Resources

Year 8 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:-

- ❑ Solve one step equations.
- ❑ Solve multi-step equations.
- ❑ Solve equations with brackets.
- ❑ Solve equations with unknowns on both sides.
- ❑ Solve equations with fractions.
- ❑ Solve equations using trial and improvement.

Important things to remember
Whatever you do to one side of the equation you do to the other!

The inverse of + is –
The inverse of × is ÷
The inverse of ^{2} (square) is √ (square root)

	Language	Meaning	Example
1.1	Expression	Made from numbers, letters and operations, but not including an equals sign	2a + 3b
1.2	Term	Part of an expression between plus or minus signs	In the example above, 2a and 3b are terms.
1.3	unknown	The letter in the equation that you are trying to find the value of	In the equation 6x – 2 = 28 x is the unknown
1.4	equation	An expression equal to a number or another expression	x + 3 = 11 2x – 6 = x + 3
1.5	Solve	To find the value of an unknown in an equation that makes it true	If x + 5 = 12 Then x = 11
1.6	Solution	The value(s) of the unknown that the equation is true for	x = 11 is the solution.
1.7	Inverse	An operation that reverses the effect of a given operation	The inverse of + 5 is -5 The inverse of ×3 is ÷3
1.8	Expand	To multiply out all brackets and then collect like terms	Expanding 2(3x + 5) – 7 + 4x Gives 6x + 3
1.9	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 × (3) + 1 = 7
1.10	trial and improvement	A method for solving complex equations by making a guess, then improving on that guess until you are very close to the correct answer	The equation $x^2 + x = 245$ can be solved by trial and improvement.

Link to Kings' Maths Resources

Year 8 Mathematics Curriculum Overview and Revision Support

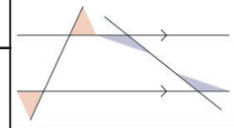
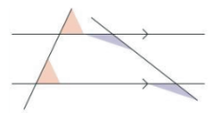
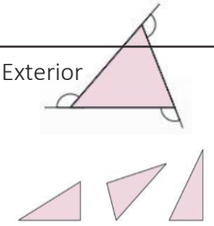
Links, Lessons and Practice Questions for this topic

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

- ❑ Use angle facts
- ❑ Find angles in triangles
- ❑ Find angles in parallel lines
- ❑ Find angles in quadrilaterals
- ❑ Recognise properties of polygons
- ❑ Find interior and exterior angles in polygons
- ❑ Complete exam questions using angle reasoning

Important things to remember

"Give reasons" means use you must explain WHY something is true, not just write out the calculation that you did.

	Language	Meaning	Example
1.1	angle	A measure of turn given in degrees.	90^o is a quarter turn or right angle.
1.2	triangle	A 2D shape with three straight sides and three angles.	Equilateral, isosceles, scalene and right angled are special types of triangle.
1.3	perpendicular	Lines which meet at right angles.	Horizontal and vertical lines are perpendicular.
1.4	parallel	Lines which are always the same difference apart.	Railway tracks are parallel.
1.5	alternate angles	When referring to parallel lines: 'Z shaped' pairs of angles.	Alternate  Corresponding 
1.6	corresponding angles	When referring to parallel lines: 'F shaped' pairs of angles.	
1.7	quadrilateral	A 2D shape with four straight sides and four angles.	Squares, rectangles, kites and parallelograms are special types of quadrilateral.
1.8	polygon	A closed 2D shape. It is a **regular** polygon when all the sides and angles are equal.	A triangle is a type of polygon. An equilateral triangle is a regular polygon.
1.9	interior angle	An angle inside a polygon.	Interior  Exterior 
1.10	exterior angle	The angle made between the side of a polygon and its extension.	
1.11	congruent	Two shapes are congruent if they are exactly the same shape and size.	These triangles are all Congruent.

Link to Kings' Maths Resources

Year 8 Mathematics Curriculum Overview and Revision Support

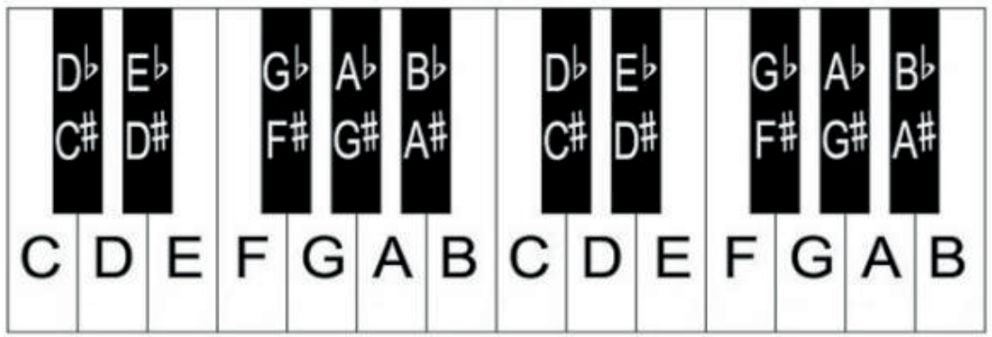
Links, Lessons and Practice Questions for this topic

Year 8 focuses on ***musical devices.***

1. Elements of Music

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

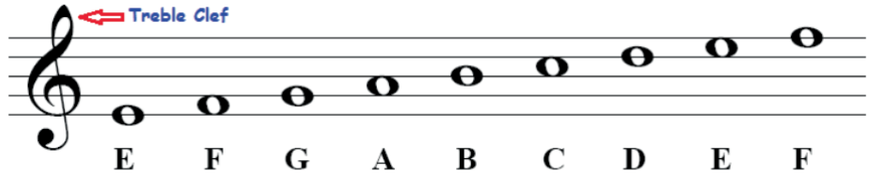
2. Notes on the keyboard



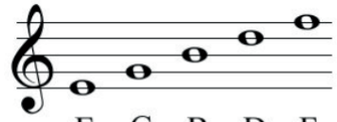
3. Note lengths

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

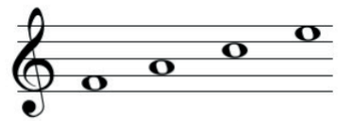
4. Notes on the Stave



Line Notes



Space Notes



Year 8 focuses on ***musical devices.***

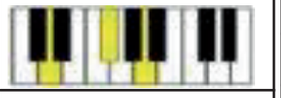
5. Gospel - key vocabulary

5.1	call & response	One person sings a line to which the group then respond.
5.2	ostinato	A repeated rhythmic pattern.
5.3	harmony	When two or more singers sing different pitches simultaneously.
5.4	unison	When two or more singers sing at the same pitch simultaneously.
5.5	backbeat	Emphasis on the 2nd and 4th beats of the bar.
5.6	syncopation	Emphasis of the off-beat.
5.7	a capella	Unaccompanied singing.
5.8	improvisation	Melodic lines made up on the spot.

6. Gospel - key questions

6.1	What are the key messages in Gospel music?	The key messages of Gospel music, which started in US churches, are love, hope and unity.
6.2	Who was Thomas A. Dorsey?	Thomas A. Dorsey saw great potential in Black American gospel music and began a publishing house dedicated to it. This helped it become more popular.

7. Gospel - 'Dig a Little Deeper' - chords

7.1	C major		F major	
7.2	G major		D major	
7.3	A minor		Example of a Dom 7	

8. Blues – 12-bar chord pattern

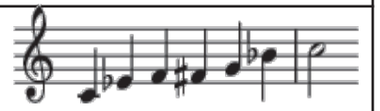
Chord pattern – triads of a major scale:

1 I	2 I	3 I	4 I
5 IV	6 IV	7 I	8 I
9 V	10 IV	11 I	12 I or V

Example using C major:

1 C	2 C	3 C	4 C
5 F	6 F	7 C	8 C
9 G	10 F	11 C	12 G

9. Blues - key vocabulary

9.1	primary chords	The 1st (I), 4th (IV) and 5th (V) chords in a key. In C major these would be **C major**, **F major** and **G major**
9.2	12 bar blues structure	The primary chords set out across 12 bars in the order **I, I, I, I, IV, IV, I, I, V, IV, I, I.**
9.3	blues scale *(starting on C)*	A scale with flattened 3rds, 5ths & 7ths 
9.4	A A B lyric structure	Many Blues songs have 3 lines in their verses; the first two share the same lyrics and melody.
9.5	improvisation	Music that is created spontaneously or without preparation.
9.6	walking bass line	A bass part in 4/4 time in which a note is played on each beat of the bar and which typically moves up and down the scale in small steps.

10. Blues - Year 8 focus – musical devices to use in your practical work

10.1	**blue notes -** flattened 3rds, 5ths & 7ths
10.2	**Improvisation -** use syncopated rhythms and blue notes
10.3	**walking bass** - use steady crotchets
10.4	**12-bar chord structure -** uses primary chords (in C, these would be C, F & G)

GOSPEL

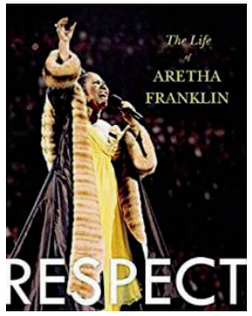
Read

Read more about Gospel from the BBC's GCSE Bitesize page

Watch

Watch this playlist of Gospel songs by "The Kingdom Choir" - identify musical devices as you listen to each song

Read



Read more about one of Gospel's influential artists – *Aretha Franklin.* Find this book in the school library

TASK: Draw a spider diagram showing which musical styles influenced Gospel, and styles that were influenced *by* Gospel. What are its close musical "relatives"? How are they similar and how do they differ? Create and upload to a new page under UNIT 1 on OneNote.

THE BLUES

Watch

Howard Goodall's Introduction to the Blues – BBC Teach

Read

Read historical information on the development of the Blues and Blues Culture

Watch

Learn to play a more advanced 12-bar chord pattern with improvised melody

TASK: Can you compose an improvised melody using the Blues scale over a syncopated 12-bar chord pattern using more complex rhythms such as dotted rhythms, triplets and semiquavers? Create and upload to a new page under UNIT 2 on OneNote.

1. Identity and diversity		
1.1	sex	The physical state of being either male or female, or intersex.
1.2	race	A group of people who share the same language, history, physical characteristics etc.
1.3	religion	Belief in and worship of a god or gods, or any such system of belief and worship.
1.4	belief	A feeling of certainty that something exists or is true.
1.5	Protected characteristics	Personal characteristics that cannot be used as a reason to discriminate against someone.
1.6	diversity	Having a range of people with different racial, ethnic, socioeconomic and cultural backgrounds with various lifestyles, experience and interests.
1.7	identity	Characteristics a person has that distinguish them from others.

2. Stereotyping and prejudice		
2.1	stereotype	Descriptions of groups of people who have something in common, such as their age, religion, sex or nationality. The description applied to everyone in the group and ignores individual differences between people.
2.2	tolerance	Allowing other people to do or say as they like even if you do not agree or approve of it.
2.3	prejudice	An opinion formed of someone before meeting them.
2.4	equality	Having the same status, rights and responsibilities as other members of society.
2.5	Equality Act 2010	An act of Parliament ensuring that all people in the UK are treated equally.

3. British Values and British Identity		
3.1	democracy	System of government in which people choose their rulers by voting for them in elections.
3.2	rule of law	The situation where people in a society obey its laws enabling it to function properly.
3.3	respect	Unbiased consideration towards and regard for the rights, values, beliefs and property of all people.
3.4	personal freedom	Being aware of your own place in the world, taking responsibility for it, and deciding for yourself how best to act.
3.5	British values	The values inherent in Britain. A part of being British: democracy, rule of law, personal freedom, tolerance of belief and mutual respect.

4. Issues around immigration and race		
4.1	migrant	A person who moves from one place or country to another, usually in search of work.
4.2	refugee	People who have been forced to leave their homes or country because of their religious, political beliefs or war.
4.3	racism	Prejudice, discrimination, or antagonism by an individual, community, or institution against a person or people, on the basis of their membership of a particular racial or ethnic group.
4.4	radicalisation	Being led to believe that drastic changes need to be made to society, often involving violence and extremism.
4.5	extremism	Wanting to bring about political change through violent and extreme methods.

Knowledge Builder: Issues/Questions		
5.1	What makes up your identity?	All of your characteristics: where you are born, what language(s) you speak, where you live, family, friends, school, interests...
5.2	How can stereotypes be negative?	Stereotypes can be negative if they form part of prejudice and discrimination, treating a person differently and not with equality.
5.3	What are the nine protected characteristics?	Age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex and sexual orientation. They are set out in the Equality Act 2010.
5.4	What is the difference between a migrant and a refugee?	A migrant is someone who has moved from their home or country voluntarily in search of a new life or job. A refugee is someone who has been forced out of their home or country because of their religious or political beliefs, or war.

Childnet Refugee Quiz

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 and conservative Jewish belief, following the "letter of the law".
1.4	Reform/ Progressive	The more modern and liberal Jewish belief, following the "spirit of the law".
1.5	parentage	Who your parents are. Jewish identity traditionally passed through the mother's line.
1.6	heritage	Handed down from the past including history and traditions.
1.7	religion	Beliefs and practices lived out in communities.
1.8	culture	The way people live and express themselves such as customs, beliefs and values.
1.9	upbringing	How you are brought up.
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.

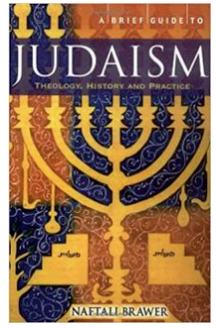
5. Did the Jews lose their identity during the Holocaust?		
5.1	tradition	Customs or beliefs passed down through the generations.
5.2	antisemitism	Hatred of Jews.
5.3	prejudice	Pre-judging people, disliking someone for what they believe in, or what "race" they are, stereotyping them.
5.4	scapegoat	Blaming 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.

What is the Shema?

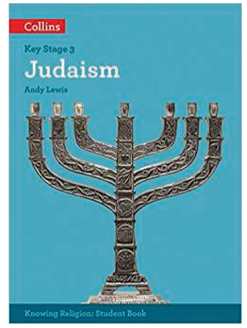
BBC Bitesize: Judaism today

How did the Covenant first come about?

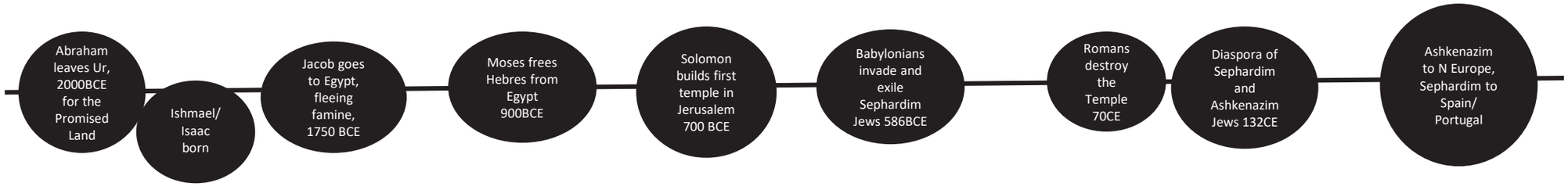
BBC Bitesize: the Sabbath from a young person's perspective



Books to read:

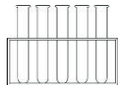


Argument words	
using evidence	for example, indicated by
developing arguments	additionally, furthermore, moreover, as well, thus, due to this, therefore
contrasting	nevertheless, conversely, however
showing limitation	although, yet
most important	crucial, vital, fundamental
making judgements	In conclusion,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



Scientific Equipment

What is the drawing and purpose for the following pieces of scientific equipment?

Equipment	Drawing	Purpose
test tube		Mixing chemicals to observe chemical reactions.
boiling tube		Heating chemicals to observe chemical reactions.
test tube rack		For safely holding test tubes and boiling tubes.
clamp stand		To support other pieces of equipment and glassware.
Clamp		To support other pieces of equipment and glassware.
beaker		For holding larger volumes of liquid.
conical flask		To contain or mix liquids.
spatula		For transferring small quantities of solid from one container to another.

Equipment	Drawing	Purpose
Thermometer		Measuring the temperature in °C.
stirring rod		Stirring chemicals to speed up dissolving or a chemical reaction.
Pipette		For transferring very small volumes of liquid from one container to another.
Tripod		Safely supporting objects above a Bunsen burner.
evaporating dish		For the evaporation of solutions.
Bunsen burner		To heat up substances or objects.
Gauze		Safely supporting objects above a Bunsen burner and to spread the heat.
measuring cylinder		For accurately measuring volumes of liquid
heatproof mat		Protecting the bench and safely storing hot objects.

Working Scientifically		
1	What is the aim of a scientific investigation?	To answer a scientific question.
2	What is a variable?	Anything that can change during a scientific investigation
3	What is the independent variable in an investigation?	The factor that you change.
4	What is the dependent variable in an investigation?	The factor that you measure (as a result of marking the change).
5	What are the control variables in an investigation?	The factors you keep the same to ensure a fair test.
6	What is a fair test?	An investigation in which only one factor is changed and all other factors are kept the same.
7	What is data?	The measurements you make in an investigation.
8	What is meant by accurate data?	Data that is close to the true value of what you are trying to measure.
9	What is meant by precise data?	Data which gives similar results if you repeat the measurement, the spread of data is small.
10	How can data be recorded?	In a table.
11	When should a mean be calculated?	If repeats of measurements are taken.
12	How do you calculate the mean?	By adding all the numbers together and dividing by the number of repeats you took.

Safety in the Lab		
1	What are the 10 basic rules of working in a science lab?	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.

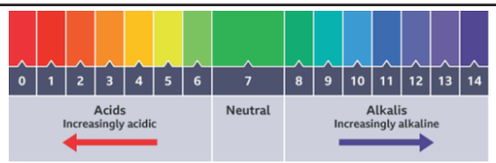
1	2											3	4	5	6	7	0
							1 **H** hydrogen 1										4 **He** helium 2
7 **Li** lithium 3	9 **Be** beryllium 4											11 **B** boron 5	12 **C** carbon 6	14 **N** nitrogen 7	16 **O** oxygen 8	19 **F** fluorine 9	20 **Ne** neon 10
23 **Na** sodium 11	24 **Mg** magnesium 12											27 **Al** 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	[285] **Cn** copernicium 112	[286] **Nh** nihonium 113	[289] **Fl** flerovium 114	[289] **Mc** moscovium 115	[293] **Lv** livermorium 116	[294] **Ts** tennessine 117	[294] **Og** oganesson 118

Key

relative atomic mass
atomic symbol
name
atomic (proton) number

* 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.

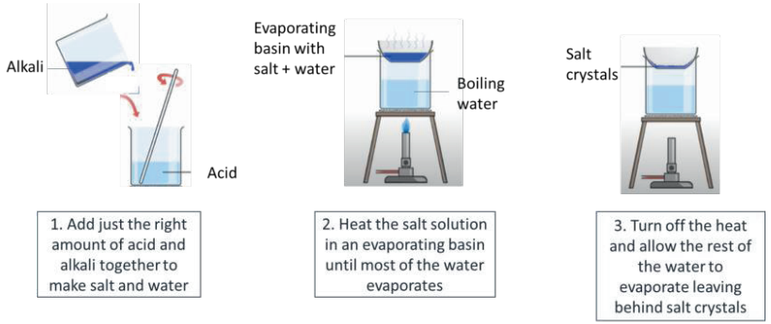
1. What is an acid and an alkali?		
1.1	What is the pH scale?	It is a number scale which shows how acidic or alkaline a solution is.
1.2	What is the pH of a neutral solution (neither acidic or alkaline)?	pH 7.
1.3	What is the pH of an acidic solution?	pH less than 7.
1.4	What is the pH of an alkaline solution?	pH more than 7.
1.5	If a solution had a pH of 6 would it be acidic or alkaline?	Acidic.
1.6	Which is more alkaline: a solution with a pH of 9 or 12?	pH 12.
1.7	Give two ways of determining the pH of a solution.	Using an indicator or a pH meter.
1.8	What colour does litmus paper go in acid solutions?	Red.
1.9	What colour does litmus paper go in alkali solutions?	Blue.
1.10	Describe the colour change with universal indicator as you move up the pH scale.	
		
1.11	A solution turns orange with universal indicator. Is it an acid or an alkaline and what is it's pH?	Acid with pH 4.
1.12	What colour would a neutral solution turn with universal indicator?	Green.
1.13	What is the advantage of using universal indicator over litmus paper?	Universal indicator can show us how strongly acidic or alkaline a solution is, not just that the solution is acidic or alkaline.
1.14	Can you determine the pH of a solid?	No, pH can only be measured for water based solutions.
1.15	What is the word used to describe water based solutions?	Aqueous.
1.16	Do soaps and cleaning products tend to be acidic or alkaline?	Alkaline.
1.17	Estimate the pH of the following solutions and whether they are acidic or alkaline: Blood / Bleach / Tomato / Stomach acid / Milk / Soap	Blood – pH 8 (slightly alkaline) / Bleach – pH 12 (alkaline) / Tomato – pH 4 (slightly acidic) / Stomach acid – pH1 (very acidic) / Milk – pH 6 (slightly acidic) / Soap – pH 8-10 (alkaline)

2. Making Indicators		
2.1	Name the 3 common laboratory acids and give their chemical symbols.	Hydrochloric Acid (HCl), Sulfuric Acid (H_2SO_4), Nitric Acid (HNO_3).
2.2	Name a common laboratory alkaline and give its symbol.	Sodium Hydroxide (NaOH).
2.3	Which vegetable can you make an indicator from and what colour does it go in acid and alkali?	Red cabbage indicator goes red in acid and yellow in alkaline.

3. How can we neutralise an acid?		
3.1	True or False: A chemical reaction happens when you mix an acid and an alkali.	True.
3.2	What is the chemical reaction between an acid and an alkali called?	A neutralisation reaction.
3.3	How can you neutralise an acid?	React it with an alkali.
3.4	How can you neutralise an alkali?	React it with an acid.

4. What is a neutralisation reaction?

4.1	What are the products of a neutralisation reaction between an acid and an alkali?	A metal salt and water.
4.2	Write a word equation for a neutralisation reaction.	Acid + Alkali → Salt + Water.
4.3	Describe how to make salt crystals from a neutralisation reaction.	



1. Add just the right amount of acid and alkali together to make salt and water

2. Heat the salt solution in an evaporating basin until most of the water evaporates

3. Turn off the heat and allow the rest of the water to evaporate leaving behind salt crystals

5. Naming Salts

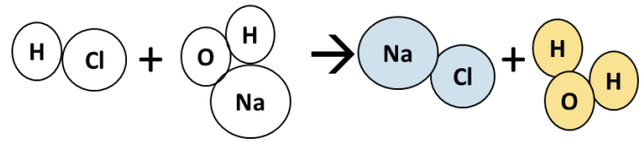
5.1	What are the rules for naming salts?	There are two parts to a salt name: 1. The first word is a metal, taken from the alkali. 2. The second word ends in ~ide or ~ate, taken from the acid.
5.2	What ending will salts made from the following acids have: a) Hydrochloric acid b) Sulfuric acid c) Nitric acid	a) A salt made from hydrochloric acid will end in chloride. b) A salt made from nitric acid will end in nitrate. c) A salt made from sulfuric acid will end in sulfate.
5.3	What is the name of the salt made from potassium hydroxide and hydrochloric acid?	Potassium chloride.

5. Naming Salts continued

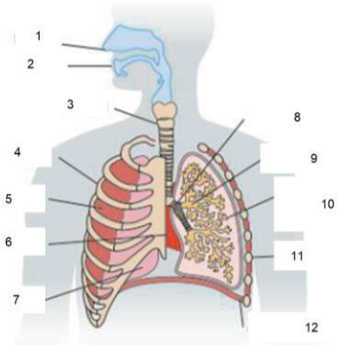
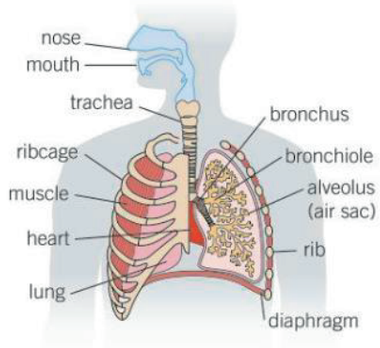
5.4	What is the name of the salt made from potassium hydroxide and hydrochloric acid?	Potassium chloride.
5.5	What is the name of the salt made from calcium hydroxide and nitric acid?	Calcium nitrate.
5.6	What is the name of the salt made from copper hydroxide and sulpfric acid?	Copper sulfate.
5.7	What acid and what alkali would you need to react together to get sodium chloride?	Sodium Hydroxide and Hydrochloric acid.
5.8	Write the word equation for the neutralisation reaction between hydrochloric acid and sodium hydroxide.	Hydrochloric Acid + Sodium Hydroxide → Sodium Chloride + Water
5.9	Write the word equation for neutralisation reaction between sulfuric acid and calcium hydroxide.	Sulfuric Acid + Calcium hydroxide → Calcium Sulphate + Water

Below is a symbol equation for a neutralisation reaction.
Colour the atoms in the reactants either blue or yellow to show how the atoms rearrange to form the products.

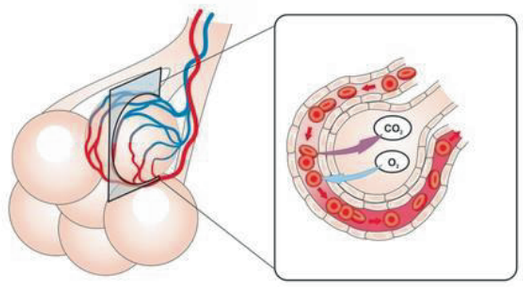
$$HCl + NaOH \rightarrow NaCl + H_2O$$



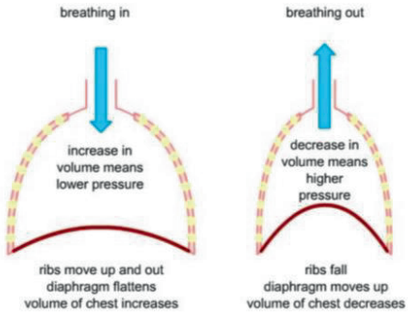
1. Aerobic Respiration		
1.1	List three things your body needs energy for	Movement, growth, keeping warm.
1.2	What is respiration?	A chemical reaction that occurs in cells to release energy.
1.3	Give the word equation for aerobic respiration	glucose + oxygen → water + carbon dioxide
1.4	Where in cells does aerobic respiration occur?	In the mitochondria.
1.5	Where does the glucose needed for aerobic respiration come from?	Our food.
1.6	Where does the oxygen needed for aerobic respiration come from?	Oxygen entering our lungs when we breathe in.
1.7	How does the glucose and the oxygen travel round our body to get to every cell?	In our blood.
1.8	Carbon dioxide is a toxic waste product of respiration. How do we get it out of our bodies?	Travels in our blood to our lungs where it is expelled when we breathe out.

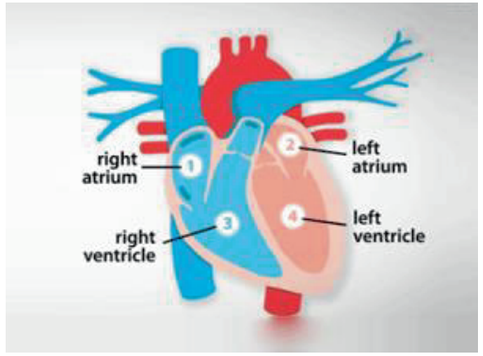
2. Respiratory System		
2.1	Label the structures of the respiratory system.	 
2.2	What is the purpose of cartilage in the trachea?	To hold the trachea open and stop it collapsing.
2.3	What does the trachea split into?	Bronchi (which lead into each lung).
2.4	What do the bronchi split into?	Thousands of smaller tubes called bronchioles.
2.5	What is found at the end of each bronchiole?	Microscopic air sacs called alveoli.
2.6	What is the function of the diaphragm?	Muscle that moves up and down to move air in and out of the lungs.

3. Gas Exchange		
3.1	Which gas diffuses into the blood from the alveoli in the lungs?	Oxygen.
3.2	Which gas diffuses out of the blood into the alveoli in the lungs?	Carbon Dioxide.
3.3	What do we mean by gas exchange in the lungs?	Oxygen diffusing into the blood and carbon dioxide diffusing out of the blood.
3.4	Where in the lungs does gas exchange take place?	In the alveoli.
3.5	What are the three features of the alveoli which makes them good at exchanging gasses?	1. They create a large surface area. 2. They have thin walls that are one cell thick. 3. They have a good blood supply.



4. Breathing		
4.1	What is breathing?	The movement of air in and out of the lungs.
4.2	What is lung volume?	The volume of air you can breathe into your lungs in a single breath.
4.3	What is the scientific term for 'breathing in'?	Inhaling.
4.4	What is the scientific term for 'breathing out'?	Exhaling.
4.5	Which muscles are used when we breath in and out?	The diaphram and the muscles between the ribs.
4.6	During inhalation, how is air drawn into the lungs?	1. The muscles between the ribs contract causing the ribcage to move up and out. 2. The diaphragm contracts and moves down. 3. The volume of the chest cavity increases, which decreases the pressure. 4. Air is drawn into the lungs.
4.7	During exhalation, how is air squeezed out of the lungs?	1. The muscles between the ribs relax pulling the ribcage down and in. 2. The diaphragm relaxes and moves up. 3. The volume inside the chest decreases, which increases the pressure. 4. Air is pushed out of the lungs.





5. Anaerobic Respiration		
5.1	How is anaerobic respiration different from aerobic respiration?	Anaerobic respiration does not require oxygen.
5.2	When does our body use anaerobic respiration to release energy?	When there is insufficient oxygen in our cells eg during high intensity exercise.
5.3	What is the word equation for anaerobic respiration?	Glucose → Lactic Acid
5.4	Why is anaerobic respiration only used by our bodies in emergencies?	It is less efficient at transferring energy from glucose and produces toxic lactic acid.
5.5	What does a build up of lactic acid in our muscles cause?	Muscle cramp.

6. The Heart		
6.1	What is the function of the heart?	To pump blood to the lungs and to the rest of the body.
6.2	Why does blood need to be pumped around the body?	To provide cells with oxygen and glucose for respiration.
6.3	Why is the heart made mostly of muscle tissue?	The muscle tissue contracts causing blood to be pumped.
6.4	How many chambers does the heart consist of?	Four.
6.5	What is the name of the chambers at the top of the heart?	Atria.
6.6	What is the name of the chambers at the bottom of the heart?	Ventricles.
6.7	What is the function of the chambers at the top of the heart?	To collect blood and pump it into the ventricles.
6.8	What is the function of the chambers at the bottom of the heart?	To pump the blood to the body and the lungs.

8.2 Breathing and Respiration

7. Exercise

7.1	What effect does exercise have on the rate of aerobic respiration in our muscle cells?	Increases to release more energy.
7.2	During exercise what do our muscle cells need more of?	Oxygen and glucose (for aerobic respiration).
7.3	During exercise what happens to our breathing and why?	We breathe: 1. More frequently. 2. More deeply (greater volume). This allows more oxygen to enter the blood and travel to our muscles.
7.4	During excerise what happens to our heart rate and why?	It increases to pump more oxygenated blood to our muscle cells.
7.5	State two effects of regular exercise.	1. Strengthens muscles between ribs and diaphragm to breath more deeply. 2. Increase the number of alveoli in the lungs to increase gas exchange.

8. Fermentation

8.1	What type of respiration occurs in plants and microorganisms in low oxygen environments?	Anaerobic respiration.
8.2	What is fermentation?	When anaerobic respiration occurs in plant or microorganisms.
8.3	What is the word equation for fermentation?	Glucose → ethanol + carbon dioxide
8.4	What can the products of fermentation be used for?	Ethanol is used to make beer and other alcohol, carbon dioxide is used to make bread rise.

8.3 Motion

1. Speed

1.1	What is speed?	A measure of how fast an object is moving.
1.2	What are the typical speeds for moving objects?	<table><tr><th>Moving Object</th><th>Average speed (m/s)</th></tr><tr><td>Human waking</td><td>1.5</td></tr><tr><td>Human running</td><td>3</td></tr><tr><td>Cycling</td><td>6</td></tr><tr><td>Aeroplane at cruising altitude</td><td>255</td></tr></table>
1.3	What two things do you need to know about an object to calculate its average speed?	1. The distance it has travelled. 2. The time it has taken to travel that distance.
1.4	What is the unit for distance?	Metres (m)
1.5	What is the unit for time?	Seconds (s)
1.6	What is the unit for speed?	Metres per second (m/s)
1.7	What is the equation used to calculate average speed?	Average speed (m/s) = distance (m) ÷ time (s)
1.8	How does a speed camera work?	The camera takes two photos of a vehicle taken at a certain time apart or a certain distance apart. They then use the average speed equation to calculate the speed of the car.

2. Measuring Speed

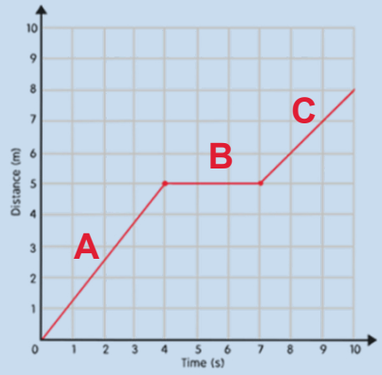
You conduct an experiment in which you measure the time taken to travel a distance of 20m. In the first condition you run, in the second you walk and in the third you hop. You measure the time taken to complete each condition three times. You then use your results to calculate your average speed.

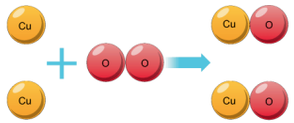
2.1	What is the independent variable in this experiment?	The method of travel: running, walking or hopping.
2.2	What is the dependent variable in this experiment?	The time taken to travel 20m. Measured in seconds.
2.3	Name one thing that you would want to control in this experiment?	The distance of 20m.
2.4	Why can we discuss the precision of the results?	Because they conducted 3 trials of each condition and calculated a mean. You can then see how close each trial result is to the mean.
2.5	What is an anomaly?	A result that does not fit the trend.

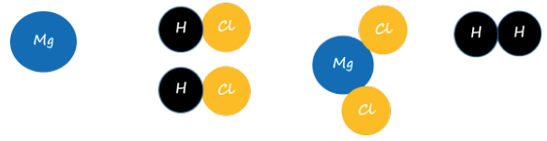
4. Relative Motion

4.1	What is relative motion?	How fast one object is travelling compared to another.
4.2	How do you calculate the relative speed of objects moving in the same direction?	relative speed = fastest speed – slowest speed
4.3	How do you calculate the relative speed of objects moving in different direction?	relative speed = speed of object 1 + speed of object 2

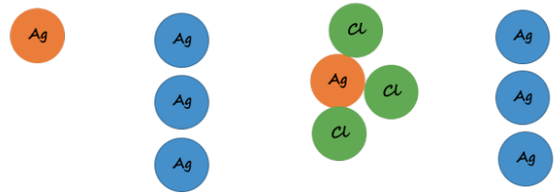
3. Distance-time Graph

3.1	What is plotted on the x axis of a distance-time graph?	Time taken (s)
3.2	What is plotted on the y axis of a distance-time graph?	Distance travelled (m)
3.3	What does a diagonal line show on a distance-time graph?	The object is moving at a constant speed.
3.4	What does a horizontal line show on a distance-time graph?	The object is stationary.
3.5	How do you calculate the gradient of a line?	gradient = change in the y axis ÷ change in x axis
3.6	What does the gradient of the line tell us on a distance-time graph?	The constant speed of the object for that stage of the journey.
3.7	If you have a steeper line in one section of a distance time graph, what does that show?	The object is travelling faster in that section.
3.8	Here is a distance time graph.  a) Calculate the constant speed of the object in the first 4 seconds of the journey (section A). b) What do you know about the motion of the object between 4-7 seconds. c) Which part of the journey did the object travel the fastest: A, B or C and how do you know?	a) Speed = distance ÷ time Speed = 5 ÷ 4 Speed = <u>1.25m/s</u> a) The line is horizontal therefore the object must be stationary. b) The gradient of the line is steepest in section A and therefore the object must be travelling faster than in section C.

1. Metals + Oxygen		
1.1	When a metal and oxygen react what do they form?	A metal oxide.
1.2	When a metal reacts with oxygen, what do we call this type of reaction?	Oxidation reaction.
1.3	Copper reacts with oxygen to form which compound?	Copper Oxide.
1.4	What is the word equation for the reaction between copper and oxygen?	
	Copper + Oxygen → Copper Oxide	
1.5	Balance the symbol equation for the oxidation of copper and draw a particle diagram so show that no atoms have been lost or created during the reaction. $Cu + O_2 \square CuO$	
	$2CU + O_2 = 2CUO$ 	
1.6	Which metal reacts more vigorously with oxygen, magnesium or iron?	Magnesium

2. Metals + Acid		
2.1	When metals react with an acid, what two products do they form?	A salt + hydrogen
2.2	Give the general word equation for the reaction of a metal and an acid.	metal + acid → salt + hydrogen
2.3	What two things would you observe in a reaction between a metal and an acid?	1. Bubbles or fizzing. 2. Metal would get smaller as it is used up.
2.4	How could you prove that hydrogen gas is released in the reaction?	Insert a lit split into the reaction test tube and a squeaky pop sound is heard.
2.5	What are the rules for naming salts?	There are two parts to a salt name: 1. The first word is the metal. 2. The second word ends in ~ide or ~ate, taken from the acid.
2.6	What ending will salts made from the following acids have: a) Hydrochloric acid b) Sulfuric acid c) Nitric acid	A salt made from: a) hydrochloric acid will end in chloride b) sulfuric acid will end in sulfate c) nitric acid will end in nitrate
2.7	Write the word equation for the reaction between calcium and hydrochloric acid.	Calcium + Hydrochloric Acid → Calcium Chloride + Hydrogen
2.8	Write the word equation for the reaction between zinc and sulphuric acid.	Zinc + Sulfuric Acid → Zinc Sulfate + Hydrogen
2.9	Balance the symbol equation for the reaction between magnesium and hydrochloric acid. Draw particle diagrams to show that no atoms have been lost or created during the reaction. $Mg + HCl \rightarrow MgCl_2 + H_2$	
	$Mg + 2HCl \rightarrow MgCl_2 + H_2$ 	

3. Reactivity Series		
3.1	Metals that easily take part in a chemical reaction are called _____	Reactive.
3.2	Metals that don't easily take part in a chemical reaction are called _____	Unreactive.
3.3	Magnesium and acid produces vigorous bubbling whereas zinc and acid produces slow bubbling. Which metal is more reactive?	Magnesium.
3.4	What is the reactivity series?	A list of metals from the most reactive down to the least reactive.
3.5	Write out the reactivity series from the most to the least reactive metal.	Potassium Sodium Calcium Magnesium Aluminium (Carbon) Zinc Iron Tin Lead (Hydrogen) Copper Silver Gold Most reactive Least reactive
3.6	Which metal would you use for jewellery – silver or zinc – and why?	Silver because it is less reactive and so will not react with the oxygen in the air.

4. Displacement Reactions		
4.1	What is a displacement reaction?	Where a more reactive metal takes the place of a less reactive metal in its compound during a chemical reaction
4.2	Give two examples of evidence that a displacement reaction is taking place.	• The reacting metal 'disappearing' • Change of colour of solution • Deposit of new metal appearing (product) • Change in temperature
4.3	Use the reactivity series to predict the products of the following reactions a) copper oxide + magnesium → b) aluminium + silver chloride → c) sodium chloride + aluminium → d) lead chloride + iron →	a) magnesium oxide + copper b) aluminium chloride + silver c) No reaction d) iron chloride + lead
4.4	Balance the symbol equation for the following displacement reaction. Draw particle diagrams to show that no atoms have been lost or created during the reaction. $Al + AgCl \rightarrow AlCl_3 + Ag$	
	$Al + 3AgCl \rightarrow AlCl_3 + 3Ag$ 	

5. Trends in the Periodic Table – Group 1		
5.1	List the first 3 elements going down group 1 and give their symbols.	Lithium (Li), Sodium (Na), Potassium (K)
5.2	Are group 1 elements metals or non-metals?	Metals.
5.3	What is the name for group 1 metals and why?	Alkali metals because they react with water to produce an alkaline solution.
5.4	How does the melting and boiling point change as you go **down** the group?	Melting and boiling point increase.
5.5	Describe the trends in reactivity as you go down group 1.	Reactivity increases as you go down the group.
5.6	Which is the most reactive metal – Lithium, Sodium or Potassium?	Potassium (K)

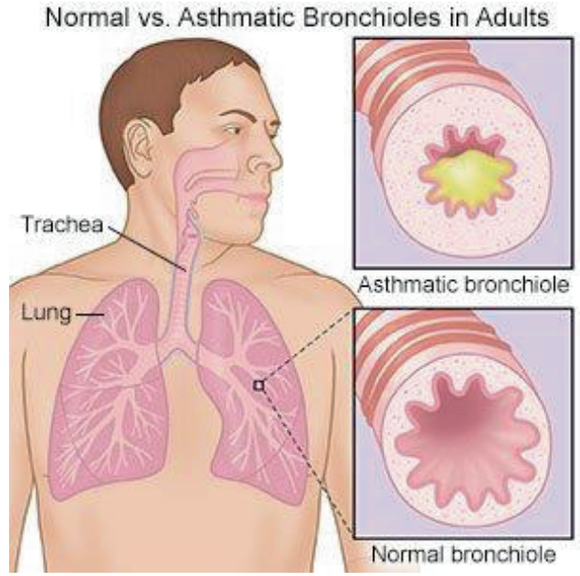
7. Trends in the Periodic Table – Group 0		
7.1	List the first 3 elements going down group 0 and give their symbols.	Helium (He), Neon (Ne), Argon (Ar).
7.2	Are group 0 elements metals or non-metals?	Non-metals.
7.3	What is the name for group 0 elements?	Noble gasses.
7.4	What state are group 0 at room temperature?	Gas.
7.5	Do noble gasses form compounds easily?	No. They are extremely unreactive.

6. Trends in the Periodic Table – Group 7		
6.1	List the first 4 elements going down group 7 and give their symbols.	Fluorine (F), Chlorine (Cl), Bromine (Br) , Iodine (I).
6.2	What is the name for the group 7 elements?	Halogens.
6.3	Are halogens metals or non-metals?	Non-metals.
6.4	When halogens form a compound their ending changes from -ine to ____	-ide
6.5	At room temperature what state are the halogens? Solid, liquid or gas?	Fluorine (F) – gas Chlorine (Cl) – gas Bromine (Br) – liquid Iodine (I) – solid
6.6	How does the melting and boiling point of the halogens change as you go **down** the group?	Melting and boiling point increases.
6.7	Describe the trends in reactivity as you go down group 7.	Reactivity decreases.
6.8	Which is the most reactive halogen?	Fluorine (F).
6.9	Is Chlorine more reactive than Bromine?	Yes.
6.10	Use your knowledge of the reactivity of halogens to predict which displacement reactions will take place and what their products will be. a) chlorine + sodium bromide → b) Bromine + potassium bromide →	a) sodium chloride + bromide b) No reaction as bromine is less reactive than potassium.

1. Unbalanced Diet		
1.1	Name four health conditions caused by an unbalanced diet.	Starvation, obesity, vitamin and mineral deficiencies.
1.2	What health problems can someone have if they are underweight?	Poor immune system, tiredness.
1.3	What is obesity?	The abnormal or excessive accumulation of fat in the body.
1.4	What health problems can someone have if they are overweight?	Heart disease, strokes, diabetes, some cancers.
1.5	What vitamin deficiency can lead to night blindness?	Vitamin A.
1.6	What vitamin deficiency can lead to scurvy?	Vitamin C.
1.7	What vitamin deficiency can lead to rickets?	Vitamin D.

2. Smoking		
2.1	Name three harmful chemicals present in cigarettes.	Tar, nicotine and carbon monoxide.
2.2	Which harmful chemical irritates and narrows the airways?	Tar.
2.3	Which harmful chemical is an addictive drug that speeds up the nervous system?	Nicotine.
2.4	Which harmful chemical is a poisonous gas that stops the blood from carrying as much oxygen?	Carbon monoxide.
2.5	How can smoking cause heart disease?	Causes the arteries to become blocked, preventing the flow of blood.
2.6	How can smoking cause emphysema?	Weakens the walls of the alveoli so they do not inflate properly and may burst during coughing.
2.7	How can smoking cause respiratory infections?	Stops the cilia from moving mucus up the trachea.

3. Asthma		
3.1	What is asthma?	A condition that affects the airways carrying air into and out of the lungs.
3.2	What effect does asthma have on lung volume?	Lung volume is decreased.
3.3	Which part of the respiratory system is affected by asthma?	Bronchioles.
3.4	What are the symptoms of asthma?	Coughing, wheezing, chest tightness, shortness of breath.
3.5	What causes the symptoms of asthma?	• Constriction – the tightening of the muscles surrounding the airways . • Inflammation – the swelling and irritation of the airways. • Build up of mucus in the trachea.
3.6	How is asthma treated?	Using drugs called relievers that help to open up the airways.

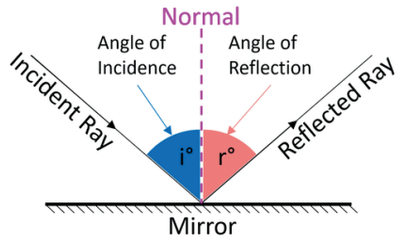


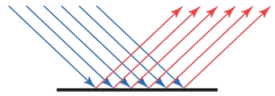
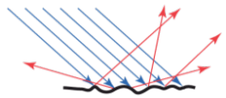
4. Alcohol		
4.1	What is the name of the drug found in alcohol?	Ethanol.
4.2	How does the drug in alcohol travel to the brain?	Through the bloodstream.
4.3	What effect does the drug in alcohol have on the body?	Acts as a depressant, slowing down the body's responses.
4.4	Name four short term effects of alcohol on the body	Sleepiness, loss of balance and muscle control, blurred vision , slurred speech, vomiting.
4.5	What is an alcoholic?	Someone who is addicted to alcohol.
4.6	What diseases can be caused from drinking too much alcohol?	Stomach ulcers, heart disease, brain damage, liver damage.

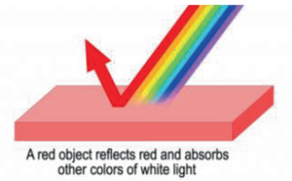
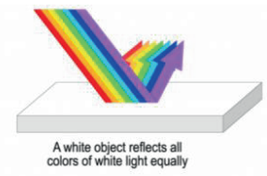
5. Drugs		
5.1	What is a drug?	A chemical substance that affect the way the body functions.
5.2	Drugs can be categorised into two groups. What are the two groups?	Medicinal (to benefit health) and recreational (used for enjoyment, relaxing or to stay awake).
5.3	Name two examples of legal recreational drugs	Alcohol (ethanol) and tobacco.
5.4	What causes addiction to a drug?	When the body becomes dependent on the drug.
5.5	What may happen is a person with a drug addiction tries to stop taking drugs?	They may experience withdrawal symptoms like headaches, anxiety or sweating.

6. Pregnancy		
6.1	What are the potential consequences of smoking during pregnancy?	Increased risk of miscarriage, low-birth-weight babies, sudden-infant-death syndrome.
6.2	What are the potential consequences of drinking alcohol during pregnancy?	Can damage the developing organs and nervous system of the foetus, can lead to foetal alcohol syndrome.

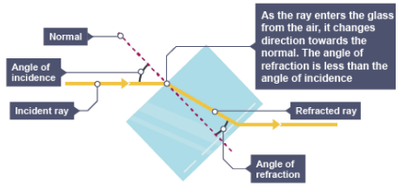
1. Light		
1.1	How does light travel?	In waves that are straight lines.
1.2	What happens if light hits a solid object?	It will cast a shadow.
1.3	How can light travel through a vacuum?	Because light is a transverse wave and waves do not need particles (a medium) to travel through.
1.4	What is the speed of light?	300,000,000 m/s.
1.5	What travels faster: light or sound?	Light.
1.6	What is a light year?	The distance light travels in one year.
1.7	What does it mean if an object is luminous?	It emits its own light.
1.8	Give an example of a source of light.	The Sun or a light bulb.
1.9	What does it mean if an object is non-luminous?	It will not produce its own light, instead it will reflect light.

2. Reflection		
2.1	What is reflection?	When light bounces off an object and into your eyes.
2.2	What is the ray of light called that leaves the light box and hits a mirror?	The incident ray.
2.3	What is the ray of light called that reflects off the mirror and into your eyes?	The reflected ray.
2.4	What is the normal?	An imaginary line drawn at 90° to the mirror.
2.5	Draw and label a diagram to show light reflecting off a mirror.	
2.6	What is the law of reflection?	The angle of incidence is equal to the angle of reflection.

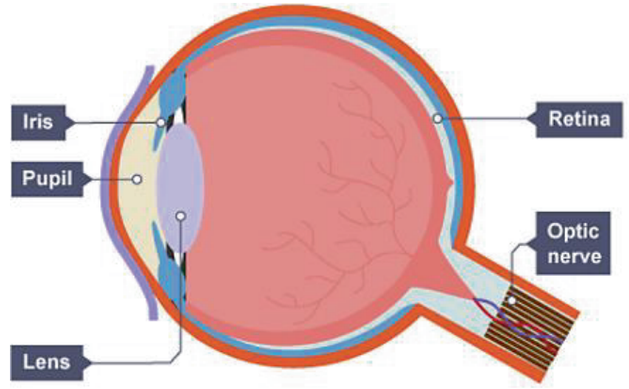
3. Shiny and Dull Materials		
3.1	What is specular reflection?	When all of the light hitting an object is reflected off a surface at the same angle.
3.2	What is diffuse reflection?	When all of the light hitting an object is reflected off a surface at different angles and is scattered.
3.3	What type of reflection is needed to see an image in the object (e.g a mirror or glass)?	Specular reflection.
3.4	Describe the surface that specular reflection occurs on.	Smooth, shiny.
3.5	Describe the surface that diffuse reflection occurs on.	Rough, dull.
3.6	Draw a diagram to show specular reflection.	 Specular reflection (smooth surfaces)
3.7	Draw a diagram to show diffuse reflection.	 Diffuse reflection (rough surfaces)

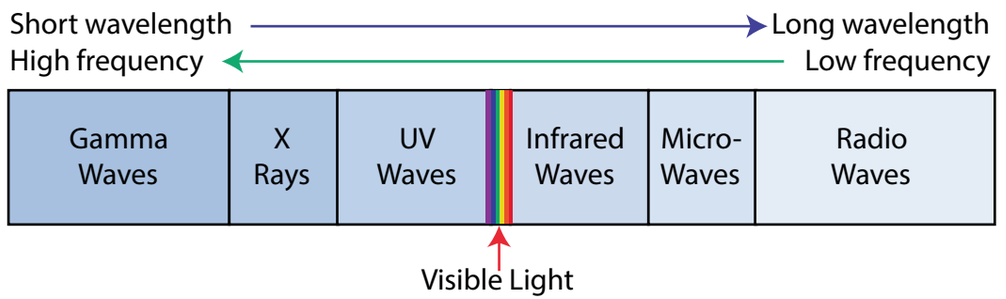
4. Colour		
4.1	What is frequency?	The number of waves that pass a point each second.
4.2	What is the unit for frequency?	Hertz (Hz).
4.3	What is a spectrum?	A series of similar waves arranged in order of wavelength or frequency.
4.4	What is the order of colours in the visible light spectrum from the lowest frequency to the highest?	Red, orange, yellow, green, blue, indigo, violet.
4.5	What is an opaque object?	An object that does not allow light to travel through it.
4.6	Describe why an object will appear red.	 A red object reflects red and absorbs other colors of white light
4.7	Describe why an object will appear white.	 A white object reflects all colors of white light equally
4.8	Describe why an object will appear black.	 An object is seen as black if it absorbs all colors of white light

5. Filters		
5.1	What is a transparent object?	An object that transmits light and allows it to pass through.
5.2	How does a coloured filter work?	They will transmit some wavelengths of light and absorb others.
5.3	Describe how a green filter works.	If a white light is shone at a green filter, it will transmit green wavelengths light, but will absorb all red and blue wavelengths of light. 

6. Refraction		
6.1	What happens to light if it travels from a less dense to a more dense medium?	It will slow down and change direction towards the normal.
6.2	What happens to light if it travels from a more dense to a less dense medium?	It will speed up and change direction away from the normal.
6.3	What is dispersion?	When light is split, allowing you to see the separate colours.
6.4	Draw and label a diagram to show refraction through a glass block.	

7. Vision		
7.1	What part of the eye refracts the light so that it focuses on the back of your eye?	The lens.
7.2	What part of your eye has lots of specialized cells that convert light into electrical signals?	The retina.
7.3	What is the hole called in the middle of your iris?	The pupil.
7.4	What part of the eye is a muscle that controls the size of your pupil?	The iris.
7.5	How can you describe the image that is formed at the back of your eye?	A real image, upside-down (inverted) and very small (diminished).
7.6	The eye is similar to what type of camera?	A pinhole camera.



8. Electromagnetic Waves		
8.1	Light is a form of what type of wave?	An electromagnetic wave.
8.2	What is the order of the electromagnetic spectrum from the wave with the longest wavelength to the shortest?	
8.3	What properties do all electromagnetic waves have in common?	All of the electromagnetic waves can be reflected and refracted, they all travel at the speed of light and they can all travel through a vacuum.

9. Using Waves	
9.1	Describe the use and hazards of the electromagnetic waves.

EM Wave	Use	Hazards
radio waves	Broadcasting and Communications.	Very small rise in temperature. Usually not harmful to humans.
microwaves	Cooking food.	Can cause internal heating of body tissues.
infrared waves	Heaters and night-vision equipment.	Burns due to heating.
visible light	Vision, photography, optical fibres.	Intense visible light (laser) can damage the retina at the back of the eye.
ultraviolet	Fluorescent lamps to check bank notes.	Can damage skin cells and lead to skin cancer, premature aging and damage to your eyes.
X-rays	Medical equipment to see bones.	Damage to cells in the body. DNA can be damaged and can lead to cancer.
gamma waves	Sterilise food/ medical equipment and treating cancer.	Damage cells inside the body. DNA can be damaged and can lead to cell death and cancer.

1. ¿1. Qué hiciste? (What did you do?)	
¿Qué hiciste en tus vacaciones de verano?	What did you do on your summer holiday?
Bailé	I danced
Compré una camiseta	I bought a T-shirt
Descansé en la playa	I relaxed on the beach
Mandé SMS	I sent texts
Monté en bicicleta	I rode my bike
Nadé en el mar	I swam in the sea
Saqué fotos	I took photos
Tomé el sol	I sunbathed
Visité monumentos	I visited monuments
No nadé en el mar	I didn't swim in the sea
El último día de tus vacaciones, ¿qué hiciste?	What did you do on the last day of your holiday?
Bebí una limonada	I drank a lemonade
Comí paella	I ate paella
Conocí a un chico guapo	I met a good-looking boy
Conocí a una chica guapa	I met a good-looking girl
Escribí SMS	I wrote texts
Salí con mi hermano/a	I went out with my brother/sister
Vi un castillo interesante	I saw an interesting castle

2. De vacaciones (On holiday)	
¿Adónde fuiste de vacaciones?	Where did you go on holiday?
el año pasado	last year
el verano pasado	last summer
Fui a…	I went to…
Escocia	Scotland
España	Spain
Francia	France
Gales	Wales
Grecia	Greece
Inglaterra	England
Irlanda	Ireland
Italia	Italy
¿Con quién fuiste?	Who did you go with?
Fui con…	I went with…
mis amigos/as	my friends
mi clase	my class
mi familia	my family
mis padres	my parents
¿Cómo fuiste?	How did you get there?
Fui/Fuimos en…	I/We went by…
autocar	coach
avión	plane
barco	boat/ferry
coche	car
tren	train
No fui de vacaciones	I didn't go on holiday

3. Exclamaciones (Exclamations)	
¡Qué bien!	How great!
¡Qué bonito!	How nice!
¡Qué divertido!	What fun!/ How funny!
¡Qué guay!	How cool!
¡Qué rico!	How delicious/ How tasty!
¡Qué suerte!	What luck/ How lucky!
¡Qué rollo!	How annoying!
¡Qué horror!	How dreadful!
¡Qué lástima!	What a shame!
¡Qué mal!	How bad!
¡Qué aburrido!	How boring!

4. ¿Cuándo? (When?)	
luego	then
más tarde	later
después	afterwards
el primer día	(on) the first day
el último día	(on) the last day
otro día	another day
por la mañana	in the morning
por la tarde	in the afternoon

5. ¿Cómo te fue? (How was it?)	
Fue divertido	It was fun/funny
Fue estupendo	It was brilliant
Fue fenomenal	It was fantastic
Fue flipante	It was awesome
Fue genial	It was great
Fue guay	It was cool
Fue regular	It was OK
Fue un desastre	It was a disaster
Fue horrible	It was horrible
Fue horroroso	It was terrible
Fue raro	It was weird
Me gustó	I liked (it)
Me encantó	I loved (it)
¿Por qué?	Why?
porque	because
Hizo buen tiempo	The weather was good
Comí algo malo y vomité	I ate something bad and vomited
Llovió	It rained
Perdí mi pasaporte/ mi móvil	I lost my passport/ my mobile

1.¿Qué haces con tu móvil? (What do you do with your mobile?)	
Chateo con mis amigos	I chat with my friends online
Comparto mis vídeos favoritos	I share my favourite videos
Descargo melodías o aplicaciones	I download ringtones or apps
Hablo por Skype	I talk on Skype
Juego	I play
Leo mis SMS	I read my texts
Mando SMS	I send texts
Saco fotos	I take photos
Veo vídeos o películas	I watch videos or films

2. ¿Qué tipo de música te gusta (What type of music do you like?)	
el rap	rap
el R'n'B	R'n'B
el rock	rock
la música clásica	classical music
la música electrónica	electronic music
la música pop	pop music
¿Qué tipo de música escuchas?	What type of music do you listen to?
Escucho rap	I listen to rap
Escucho la música de…	I listen to …'s music
Escucho de todo	I listen to everything

3. Opiniones (Opinions)	
Me gusta... (mucho)	I like… (very much)
Me encanta…	I love…
No me gusta (nada)…	I don't like… (at all)
la letra	the lyrics
la melodía	the tune
el ritmo	the rhythm
porque es guay/triste/ horrible	because it is cool/sad/ terrible
¿Te gusta la música de…?	Do you like …'s music?
Me gusta la música de…	I like …'s music
mi canción favorita	my favourite song
mi cantante favorito/a	my favourite singer
mi grupo favorito	my favourite group
En mi opinión…	In my opinion…

4. Prefiero las comedias (I prefer comedies)	
un programa de deportes	a sports programme
una comedia	a comedy
un concurso	a game show
un documental	a documentary
un reality	a reality show
una serie policíaca	a police series
el telediario	the news
una telenovela	a soap opera
más… que…	more… than…
divertido/a	funny
informativo/a	informative
interesante	interesting
aburrido/a	boring
emocionante	exciting

5. ¿Con qué frecuencia? (How often?)	
todos los días	everyday
dos o tres veces a la semana	two or three times a week
a veces	sometimes
de vez en cuando	from time to time
nunca	never

6. ¿Qué hiciste ayer? (What did you do yesterday?)	
Bailé en mi cuarto	I danced in my room
Fui al cine	I went to the cinema
Hablé por Skype	I talked on Skype
Hice gimnasia	I did gymnastics
Hice kárate	I did karate
Jugué en línea con mis amigos/as	I played online with my friends
Jugué tres horas	I played for three hours
Monté en bici	I rode my bike
Vi una película	I watched a film
Salí con mis amigos/as	I went out with my friends
No hice los deberes	I didn't do my homework
ayer	yesterday
luego	later/then
por la mañana	in the morning
por la tarde	in the afternoon
un poco más tarde	a bit later

Knowledge Builder:
Spanish Mis vacaciones | Year 8 Term Autumn 1

Youtube is a great source of learning for Spanish.
Watch the video below about the Day of The Dead in Mexico and learn how to create a skull in a traditional way.

The Day of the Dead in Mexico

Use Quizlet to practice learned and new more challenging vocabulary.

Spanish speaking countries and their capitals.

Exciting activities to do on holidays.

Find the movie "El libro de la vida" (The book of Life) and watch it in Spanish with English subtitles.

Research a Spanish speaking singer and listen to a song from him while you read the lyrics.

Knowledge Builder:
Spanish Todo sobre mi vida | Year 8 Term Autumn 2

Watch the video below and translate the lyrics from Enrique Iglesia's "Bailando". Do you like the song? Write a review in Spanish.

Bailando by Enrique Iglesias

Christmas vocabulary.

Music instruments.

1. Polymers		
1.1	polymer	The D&T terminology for all plastics.
1.2	thermoplastic	Polymers that can be recycled by reheating and reforming.
1.3	thermoset	Designed to withstand high temperatures but cannot be recycled.
1.4	vacuum forming	A deforming process, whereby a sheet of HIPS is heated and then pulled around a single mould using suction.
1.5	(HIPS) High Impact Polystyrene Sheet	A thermoplastic that is flexible and resistant. It can be food safe and is used for vacuum forming.
1.6	polypropylene	A thermoplastic that is flexible, tough and light weight. It is used in many kitchen, medical and stationery products.
1.7	epoxy resin (ER) araldite	A thermoset plastic supplied as two liquids; a resin and a hardener. It is used as glue to bond different materials together.
1.8	urea formaldehyde (UF)	A thermoset plastic that is heat resistant and commonly used in electrical fittings.

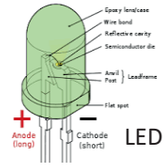
2. CAD CAM- Editing and Contouring a Bitmap image		
2.1	contour tool	Use this command to draw a contour (i.e. a parallel path) or multiple contours around a shape with a continuous (open or closed) boundary.
2.2	radial lock	This command locks the drawing cursor to given angle steps e.g. 45 degrees.
2.3	dimension tool	Use this command to dimension an object.
2.4	delete part tool	Delete part of an object between two intersections
2.5	boundary fill	Use this command to fill a closed boundary with colour.
2.6	ABC tool	Use this command to draw linear text.
2.7	edit mode toolbox	Use this command to start Edit Mode.
2.8	attach tool	Tool to attach the drawing cursor to a range of possible points, e.g, end point.

4. Electronics Fabrication		
4.1	printed circuit board (PCB)	A ceramic board used to connect electrical components together.
4.2	resistor	Reduces electrical current flow.
4.3	light emitting diode (L.E.D)	A semiconductor diode which glows when a voltage is applied.
4.4	capacitor	Stores electrical energy.
4.5	integrated circuit	Processes information.
4.6	digital signal	A Digital Signal that is either on or off (one or naught) e.g. a switch.
4.7	analogue signal	A continuous signal with an infinite range of values between minimum and maximum points.

Tools and Equipment

solder wire

soldering iron



LED

vacuum former

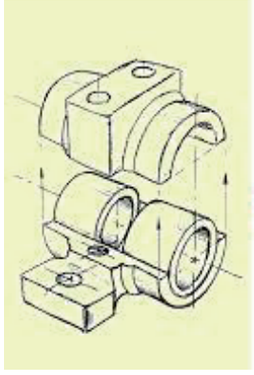
printed circuit board

Polymers- Thermosets and Thermoplastics:
YouTube video- Eggs and Ice Cubes

KS3 D&T BBC Teach:
Short film clip exploring the process of laser cutting.

Structures- Roman Catapult:
YouTube video-

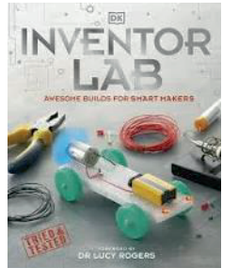
BBC Bitesize AQA D&T:
This helpful revision programme links to our D&T AQA books.



Freehand Sketching

KS3 D&T BBC Teach:
Short tutorial exploring the process of freehand sketching.

Books to read



TV programs to watch:

Places to visit:

Thorpe Park

Portsmouth Historic Dockyard

Titanic Museum

Stretch your vocabulary- STEM Challenge		
1	trebuchet	A **trebuchet** (French: trébuchet) is a type of catapult that uses a long arm to throw a projectile.
2	catapult	A **catapult** is a ballistic device used to launch a projectile a great distance without the aid of gunpowder or other propellants.
3	structural elements	Tie, Strut, Compression, Tension, Potential Energy, A-Frame.
4	Specification	A design specification is a list of criteria your product needs to address.
5	3D printing	Enables physical objects to be formed from reels of Thermoplastics.
6	product analysis	Product analysis **allows designers to understand how products work and how they could be improved**. This then helps them to produce better designs of their own.
7	biodegradable	The term used to describe materials or substances that will naturally break down over time.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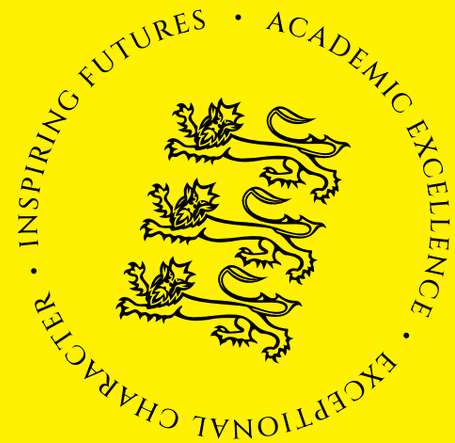
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Notes

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