BRISTOL METROPOLITAN ACADEMY

Knowledge Organisers 2024-25

Year 8 – Term 5

Monday 21st April	Week A
Monday 28th April	Week B
Monday 5th May	Week A
Monday 12th May	Week B
Monday 19th May	Week A

Complete your homework on the night stated e.g. if it is a Monday Week A you will complete ICT/DT

	Week A	Week B
Monday	ICT/DT	MFL
Tuesday	English	English
Wednesday	Science	Science
Thursday	History	Geography
Friday	RS	Music/Art

Please note: Maths homework will be on an online platform for this term. It will be set and checked weekly separately from the timetable.

Contents

This Knowledge Organiser is to help you see the key information for each subject for this term. You can use this to help you both with homework and with revision, supporting your learning at home. In the table below you will find the instructions for each subject to be completed on the correct day.

Subject	Tasks
Maths	Homework question tasks/sets will be set weekly on an online platform. You will have one week to complete this online, before it is checked for competition and the next set is published.
Science	For term 1 this will be directed by your classroom teacher. It could involve an online platform too.
English	Using the separate question booklet, divide your homework book page in half length ways, write the questions out on the left hand side. First, attempt to answer the questions from memory/your own knowledge. Then use your knowledge organiser booklets to check your answers and fill in the missing ones.
MFL	Find the correct date in the KO and the question booklet. With the list of 10 key words for that week, complete the look – say - cover – write – check method in your homework book. Complete this process for each word/phrase 4 times each.
Geog/Hist/RS/ DT/Computing	Same process as outlined for English above. DT and ICT/Computing have 5 questions and not 10.
Music/Art	For music and art, you will have two practical tasks to complete each term for each subject. These will be found in the question booklets and will be checked by you classroom teacher.

At the back of this booklet, you will find: Sentence starters, a history chronology, DT sentence starters, a periodic table, maps of the world, subject websites, a RAG sheet and a timetable.

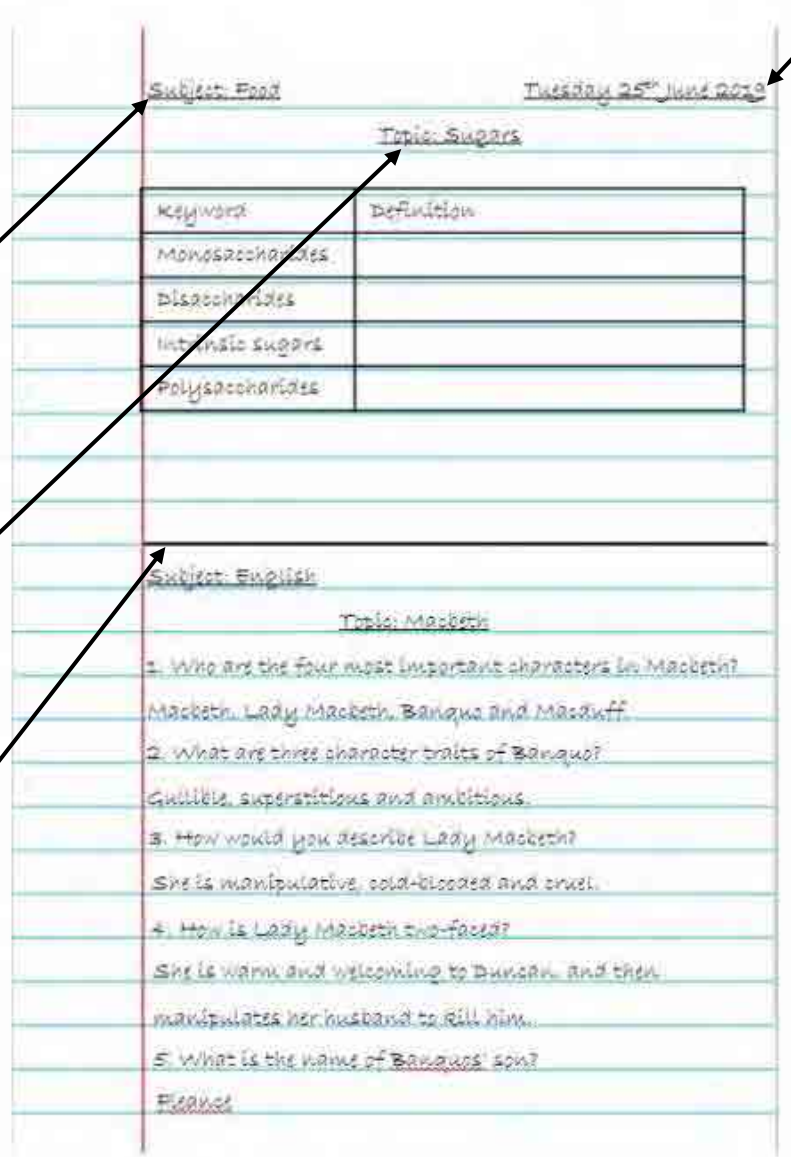
How to present your homework:

Date written fully on the right-hand side of the page and underlined. This should be the day you complete the homework.

Subject written on the left-hand side of the page and underlined.
For example: <u>Food</u>

Topic written on the centre of the page and underlined.
For example: <u>Sugars</u>

One single straight line between both pieces of homework.



Subject: Food — Tuesday 25th June 2019

Topic: Sugars

Keyword	Definition
Monosaccharides	
Disaccharides	
Intrinsic sugars	
Polysaccharides	

Subject: English

Topic: Macbeth

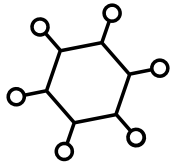
1. Who are the four most important characters in Macbeth?
Macbeth, Lady Macbeth, Banquo and Macduff.
2. What are three character traits of Banquo?
Gullible, superstitious and ambitious.
3. How would you describe Lady Macbeth?
She is manipulative, cold-blooded and cruel.
4. How is Lady Macbeth two-faced?
She is warm and welcoming to Duncan, and then manipulates her husband to kill him.
5. What is the name of Banquos' son?
Fleance

Home Learning Strategies to help you revise

Brain Dump

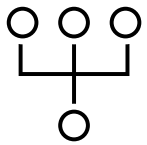
Write down everything you know about o certain topic on a page. Use your KO to add extra notes in a different colour.

Mind Map



Condense a topic showing the important links and connectors between key parts. Use your KO to add in extra notes.

Diagram



Draw a clear diagram for a subject including labels and key features. Make sure you use correct vocabulary and spellings.

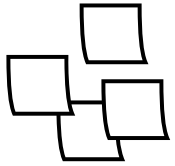
Vocabulary

Learn the key words associated with a topic and commit the word and spelling to memory. Test yourself or ask someone else to test you.

Retrieval Quiz

Write key questions about a topic as well as the answers. Use the content of the KO to help you. Check to see if you can remember the answers without looking.

Compare



Complete a comparison table showing two different sides of a topic. Can you use it to create an argument for one viewpoint?

Year 8 Our Environment

Keywords:

Climate Change

Graffiti

Extinction

Environment

Habitat

Street Art

Content: In this project you will develop knowledge of environmental issues.

Understand-what inspired artists to create their work and how to critically analyse their work.

Develop skills- in observational drawing, colour theory, painting and visual communication.

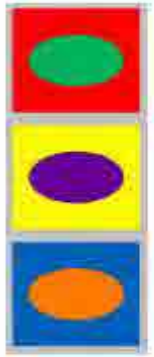
Outcomes- Art works inspired by environmental issues and the Artists you have studied.

Andy Warhol's "Endangered Species" series includes 10 silkscreen prints. The animals where listed on the endangered at the time they were made in 1983. Andy Warhol made these prints to raise awareness about the endangered species. Andy Warhol is a famous artist from the Pop Art movement. He used images found in popular culture and used an industrial printing method to make his work .

ARTISTS

NeverCrew are a Swiss based street artist duo; Christian Rebecchi and Pablo Togni. The mural above 'Exhausting Machine' was created for the Vancouver Mural Festival in 2016. Nevercrew's art work explores the issues of climate change and pollution and the effect it is having on nature. You can find more information about their work at their website. https://nevercrew.com/about

In colour theory, a **tint** is a mixture of a colour with white, which reduces darkness, while a **shade** is a mixture with black, which increases darkness.



Complementary colours are pairs of colours that contrast with each other more than any other colour, and when placed side-by-side make each other look brighter.

Computing: Y8 Term 5 – Binary data representation

Binary

Binary is a counting system that only uses two digits – 0 and 1

Why do computers use binary?

Computers are made up of billions of tiny digital switches called "transistors", which can be on (1) or off (0).

What is binary used for?

Everything a computer does! Storing text, images, files and programs.

Converting binary to decimal (denary)

Step 1

Write out the binary number (e.g. 00011010), leaving space above each digit.

Step 2

Start writing the "binary place values": start by writing a 1 over the right-most digit. To the left of this, write a 2. To the left of this, write a 4. Carry on, doubling the number each time until you get to 128. E.g.:

128	64	32	16	8	4	2	1
0	0	0	1	1	0	1	0

Step 3

For every column that has a 1 written in it, add up the numbers **above** the number 1.

E.g. 16 + 8 + 2 = 26 (for the binary number 00011010)

Converting decimal (denary) to binary

Step 1

Write out the table above, but without the 0s and 1s.

Step 2

For your denary number (e.g. 68), go through each column (starting at the 128 column), and ask, "does this number go into my number?" – if the answer is yes, write a 1 in that column and change *your* number to be the *remainder*.

Step 3

Continue until you reach the final column. E.g. for 68, you cannot fit 128 into 68, so write a 0 underneath 128. You can fit 64 into it, so write a 1, and you are left with a remainder of 4. Continue writing 0s until you get to the 4 column, where you write a 1.

Representing Images

Pixel - Small dot on of colour on an image
Resolution - Amount of pixels on an image
Colour/Bit Depth - Amount of bits in each pixel (amounts of colours available)

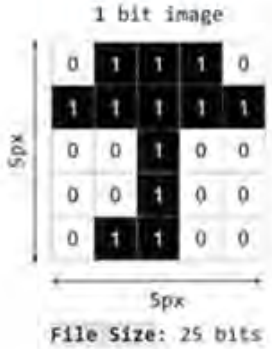
Factors that affect the quality and file size:

Increasing resolution and colour depth means the quality will improve. It also means the file size will increase.

Working out file size:

File size (bits) = Resolution x Bit Depth

```
.jpeg - Image File
.png  - Image File
.tiff - Image File
.pdf  - Image File
.mp3  - Sound File
.acc  - Sound File
.mp4  - Video File
.mov  - Video File
.doc  - Text File
.txt  - Text File
```



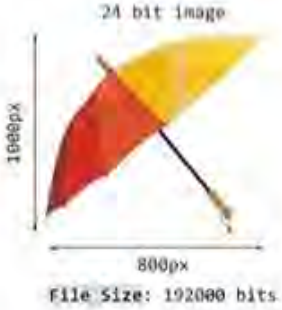


Image Resolution & Colour Depth

Advantages	Disadvantages
Increasing resolution = Better quality	**Increasing resolution** = Larger file size
Decreasing resolution = Smaller file size	**Decreasing resolution** = Lower quality

Recap:

Primary storage

Main memory – accessed directly by the CPU

RAM

Volatile memory used to store data currently in use.

ROM

Stores the instructions to boot/load a computer.

Secondary storage

Stores data long term/permanently

E.g. Hard drive or USB stick.

Storage Units

×4	↓	Bit	
×2	↓	Nibble	↑ x4
×1000	↓	Byte	↑ x2
×1000	↓	Kilobyte	↑ x1000
×1000	↓	Megabyte	↑ x1000
×1000	↓	Gigabyte	↑ x1000
×1000	↓	Terabyte	↑ x1000
		Petabyte	↑ x1000

Data Compression

Why:

Used to reduce data file sizes.
Compression methods can be used with text, sound, images and videos.

Lossy - Loses quality
Lossless - DOES NOT lose quality

Using stimuli to develop ideas

There are a wide range of **stimuli** to choose from, from which a **devised** work can be created. These include:

- pictures
- poems
- music
- articles
- artefacts
- paintings

It is important to allow a limited time frame to discuss responses to the **starting point** or stimulus. Ask:

- Who are the **target audience**?
- What should be **said** to them?
- What should be **shown** to them?
- How should they **feel** by the end of the drama?

From the very start of the process, ideas should be tried out practically. For example:

- create six **tableaux** immediately – this could lead to other ideas
- write spontaneously for two minutes in response to the starting point
- share ideas
- **improvise** a two-minute scene without thinking or planning – this could generate new ideas
- set tasks
- research the topic – get images, facts, statistics, interviews, etc
- explore real-life events and use spoken or written stories from people – this may lift practical work to a higher standard.

When thinking about character and body, consider the following points:

- What is the style of the piece being created?
- How might the character stand and move?
- What **gestures** and **mannerisms** do they employ?
- How can they use **posture** and body language to physically tell the narrative?
- How will they walk around the space?
- Experiment with levels, lifts and **proxemics**.

Ideas to consider might include:

- experimenting with time frames through use of **flashback** and **flashforward**
- performing a range of roles through **multi-role play**
- trying out **choral speaking** as a group to get across important messages
- **direct address** and **narration** to your audience so you create an extra impact on them
- trying a moment in **slow motion** or at high speed to contrast with other parts of the piece

Do not underestimate the importance and impact of stillness and silence – the inclusion of these can have varying effects on an audience and work especially well to add tension or impact.

Teamwork

It is important to work together as a team and commit clearly to that group:

- turn up on time
- be positive
- say yes to ideas
- respect other opinions
- take it in turns to lead a warm-up or direct a section of the piece

At the very beginning of the devising, things will not be perfect. Remember the bigger picture and be positive, knowing that details can be fine-tuned later on. Groups that are always evolving and experimenting with their ideas can experience more success with their work.

Year 8 D&T – Night Light Project

A is for **Aesthetics**

C is for **Cost**

C is for **Customer**

E is for **Environment**

S is for **Size**

S is for **Safety**

F is for **Function**

M is for **Material**

Analyse the Dinosaur Night Light by using ACCESS FM

You can use ACCESS FM to analyse existing products, write a specification, annotate designs and to evaluate the final outcome!

Remember to consider the sustainability of your design – try using the 6 R's!

Pillar Drill

File

Fret Saw

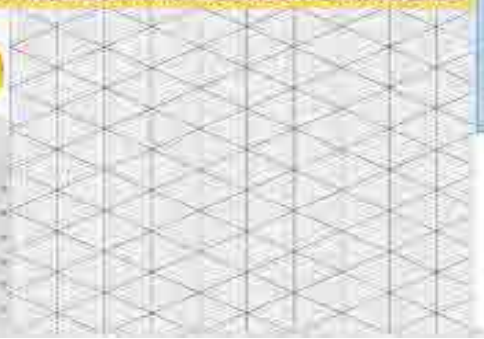
Soldering Iron

Line Bender

Practice your tonal drawing skill here

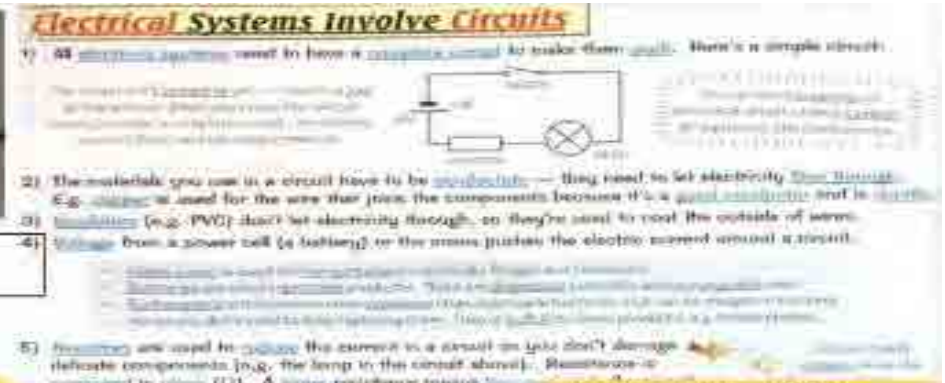
Develop Ideas with Sketches

Practice your isometric drawing here



Isometric Drawing Shows Objects at 30°

Electrical Systems Involve Circuits



Acrylic

Night Light Circuit Diagram

CAD = Computer Aided Design
CAM = Computer Aided Manufacture

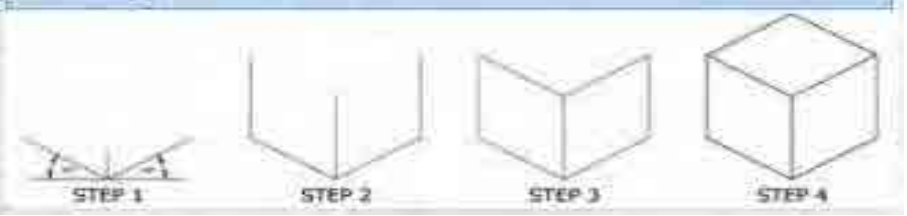
Use modelling to improve your design

Modelling is a good way to solve problems with your design. You can make models using card as it's cheap and easy to work with.
When modelling, try out different aspects of your design. For example, you could model just one part of the product separately, to check it works, before going on to the rest.

Test and evaluate each model

After you've made each model, do some tests to check that it's how it should be. Get some potential customers to try it out and give you feedback too.

1. You'll probably find there are some things that don't work out quite how you'd hoped. Write down what he problem is, suggest how to fix it and try out another model.
2. Record how the design develops – take photos of your models.
3. You should evaluate each model, against the design by considering the strengths and weaknesses.



English

Face Knowledge Organiser

Writer's Methods		Big Ideas		Context	
Acts	Acts are large portions of a play.	Friendship	the emotions or conduct of friends; the state of being friends.	Modern	relating to the present or recent times as opposed to the remote past.
Scenes	Scenes are smaller sections of a play. Scenes usually change when the play's setting changes or the focus of the story changes to a new set of characters.	Love	an intense feeling of deep affection.	Urban environment	area is the region surrounding a city.
Prologue	a preface or introduction to a literary work. In a dramatic work, the term describes a speech, often, in verse addressed to the audience by one or more of the actors at the opening of a play	Fate	the development of events outside a person's control, regarded as predetermined by a supernatural power.	School setting	When something i.e. a story is set in a school
Epilogue	Is the final speech in a play.	Freewill	the power of acting without the constraint of necessity or fate; the ability to act at one's own discretion.	Teenage experience	The common occurrences and events that most teenagers experience
Stage directions	provide instructions for the technical aspects of a production, including descriptions of characters' appearances and their movements onstage as well as lighting, sound, scenery, and props.	Justice	just behaviour or treatment.		
Chorus	a group of actors who described and commented upon the main action of a play with song, dance, and recitation.	Crime	an action which constitutes an offence and is punishable by law.	Language	
Characterisation	Is the representation of characters (persons, creature, or other beings) in narrative or dramatic works.	Responsibility	the state or fact of having a duty to deal with something or of having control over someone.	Playscript	is the story that has been written for actors to perform,
Plot	The narrative or story in a literary piece.	Resilience	the capacity to withstand or to recover quickly from difficulties; toughness.	narrators	a person who narrates something, especially a character who recounts the events of a novel or narrative poem.
Rhetoric (ethos, pathos, logos)	the art of effective or persuasive speaking or writing, especially the exploitation of figures of speech and other compositional techniques.	Identity	the fact of being who or what a person or thing is.	Verse	writing arranged with a metrical rhythm, typically having a rhyme.
Rhyme	correspondence of sound between words or the endings of words, especially when these are used at the ends of lines of poetry.	Prejudice	Preconceived opinion that is not based on reason or actual experience.	Setting	The place that a story is set or based.
Rhythm	a strong, regular repeated pattern of movement or sound.	Vanity	excessive pride in or admiration of one's own appearance or achievements.	address to the audience (4th wall)	an invisible, imaginary wall separates actors from the audience.
Imagery	An image created by words so a reader can picture something in their head	Appearances	the way that someone or something looks or is perceived	Poetics	the art of writing poetry.
Sonnet	Traditionally, the sonnet is a fourteen-line poem written in iambic pentameter, employing one of several rhyme schemes, and adhering to a tightly structured thematic organization.	Beauty	a combination of qualities, such as shape, colour, or form, that pleases the aesthetic senses	Connotations	The ideas and feelings linked or associated with words or images.
Speech	a formal address or discourse delivered to an audience.	Peer pressure	influence from members of one's peer (one that is of equal standing with another) group.	Dialogue	Speech in a piece of literature.
Article	a piece of writing included with others in a newspaper, magazine, or other print or online publication.	Register	The tone a writer uses by word choices		
Blog	Is as frequently updated and used like a diary.		.		
Tone	Feelings or emotions conveyed.				

Why do we cook food?

The application of heat in the preparation of a food or mixture may:
improve digestibility;
improve appearance, flavour, odour and texture;
increase the availability of nutrients;
prevent spoilage;
increase keeping qualities.

Heat Exchange
As a food is heated, its molecules absorb energy and vibrate more vigorously. The faster they move, the more the temperature of the food rises. If heat is removed, the molecules become less active, reducing the foods temperature.

Heat can be exchanged in three ways:
- conduction;
- convection;
- radiation

Factors that affect food choice

Coeliac – cannot eat products containing gluten.
Lactose intolerance – the body can't digest the sugar lactose in dairy products.
Vegetarian: No meat in the diet
Vegan: No products from animals in the diet e.g. meat, milk or honey.
Religion :
Islam: Requires Halal meat, no alcohol, no pork
Judaism: Requires Kosher food, no meat and dairy together, no pork
Hinduism: No beef

Micro-nutrients

Vitamins and minerals are essential nutrients that your body needs in small amounts to work properly.

Fat-soluble vitamins
Fat-soluble vitamins (vitamin A, D, E and K) are mainly found in:
animal fats, vegetable oils, dairy foods, liver and oily fish
While your body needs these vitamins to work properly, you don't need to eat foods containing them every day.

Water-soluble vitamins
Water-soluble vitamins (vitamin C, the B vitamins and folic acid) are mainly found in:
fruit and vegetables, grains, milk and dairy foods
These vitamins aren't stored in the body, so you need to have them more frequently.
If you have more than you need, your body gets rid of the extra vitamins when you urinate.

Minerals
Minerals include calcium and iron amongst many others and are found in:
Meat, cereals, nuts, fish, milk and dairy foods, fruit and vegetables

Minerals are necessary for 3 main reasons:
Building strong bones and teeth
Controlling body fluids inside and outside cells
Turning the food you eat into energy

Alternative protein

Proteins are known as the building blocks of life. In the body, they break down into amino acids that promote cell growth and repair. (They also take longer to digest than carbohydrates, helping you feel fuller for longer and on fewer calories—a plus for anyone trying to lose weight.) You probably know that animal products—meat, eggs, and dairy—are a good source of protein.

Food Poisoning

Vegetarians and **vegans** don't consume meat so instead they use protein alternative products which are manufactured in order to provide protein in a diet and protein rich foods.

Protein complementation is when two LBV **proteins** are eaten together. Examples of protein complementation's are: hummus with pitta bread; nut roast made from a variety of nuts and seeds; vegetable curry and rice; lentils soup and wholemeal bread; baked beans on toast.

LBV proteins- : Foods that are deficient in one or more of the essential amino acids are said to have a **low biological value (LBV)**. Foods originating from plants (cereals, nuts, seeds, lentils, beans, pulses)

Functions of Eggs

Setting and thickening (coagulation): Eggs will set when cooked. This is shown when you make a quiche or an egg custard.
Enriching: Eggs add nutritional value to a dish. This is shown when you make egg fried rice.
Raising agent: When whisked, eggs can hold air and become a raising agent. They can make a mixture light in texture, e.g. Chocolate éclairs.
As a glaze and to add colour: Beaten egg can be used as a glaze which turns golden brown on heating. An example is glazing sausage rolls with egg before cooking to give a golden brown finish.
Aeration: Eggs can be whisked to hold air and form a foam. The protein in the egg white becomes stretched and holds the air bubbles. This is shown in making meringues or a whisked sponge. When the meringues or whisked sponge are cooked the protein sets and hardens.

Food Spoilage

Cross- contamination

Cross-contamination means that bacteria, toxins or food particles were transfered to a food product.
Cross-contamination can cause food poisoning and allergic reactions.
Anaphylactic shock is a life-threatening reaction of the immune system to an allergen.

Food can become contaminated from:
- ❑ Waste food and rubbish
- ❑ Pest and rodents
- ❑ The cook's hand
- ❑ Work surfaces and equipment
- ❑ Other contaminated foods, including high risk foods.

Most common allergens:
- ❑ Nuts
- ❑ Fish and seafood
- ❑ Milk
- ❑ Eggs

Signs of Food Spoilage- Many species of microorganism and some enzymes can cause food spoilage.

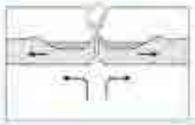
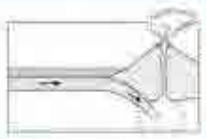
	Bacteria	Yeast	Mould	Enzymes
Food Spoilage	The bacteria Clostridium botulinum produces a toxin which causes meat preserves to bulge. Bacteria can also make meat products look slimy and green in colour.	Ferments sugar in juices and beverages, making them sour, fizzy and foamy. 	Create green, white or black coat on food products such as bread, grapes, tomatoes and jams. 	Turns bananas, apples, potatoes and other foods brown. 

Key words
Microorganism- a very small living bacteria.
Toxins- poison of plant or animal origin, especially one produced by or derived from microorganisms
Preserves – something in its original state
Ferments – The process in which yeast produces the gas carbon dioxide and alcohol.

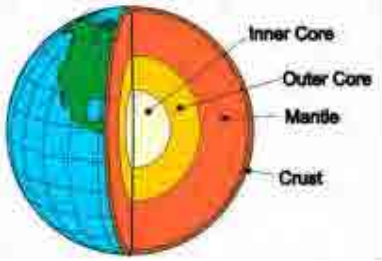
Year 8 Geography

Why do people live in the danger zone?

Keywords	
Natural hazard	A natural process that poses a threat to people and property
Tectonic hazard	A hazard caused by tectonic plate movement
Atmospheric hazard	A hazard in the atmosphere (hurricane, thunder and lightning, drought)
Tropical storm	A very powerful, low-pressure weather storm (e.g. hurricanes, typhoons and cyclones)
Multi hazard zone	A location where two or more hazards can occur
Plate boundary	The line between two plates, also known as a fault line

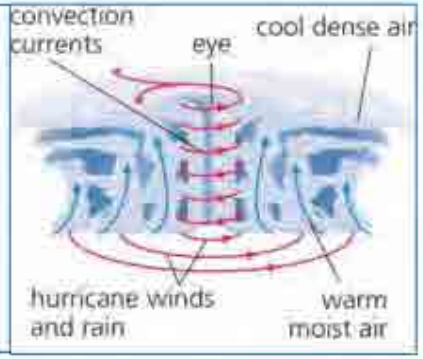
Name of plate margin	Movement of plates	Hazards that occur
Constructive		Volcanoes, earthquakes
Destructive		Volcanoes, earthquakes
Conservative		Earthquakes

Earth's structure



Typhoons

- Large storms that can have winds up to 320mp/h
- Form in the tropics where the ocean is over 27°C.=
- Warm air rises and the Earth's spin causes the swirling pattern of clouds



Hazard	**Japan 2011**: an earthquake created a tsunami with waves up to 39 metres high	**Philippines 2013 – Typhoon Haiyan:** category 5 storm with winds up to 275km/h
	15,000 people killed and 6000 injured	6,300 people and 600,000 people homeless
	Radioactive water leaked into the ocean from the Tokyo Electric Power Company	Flooding caused landslides
	Total damage cost $300 billion	6 million people lost their source of income
Immediate	A tsunami warning was issued 3 minutes after the earthquake Search and rescue experts flew out	Warnings broadcast 2 days before meant 750,000 people evaucated Charities provided emergency aid such as food, water and medicine
Long term	Installed a new tsunami warning system	Damaged buildings upgraded to withstand future disasters

Typical holidays Year 8 German Term 4 vocab. list

Wohin fährst du	Where do you travel?
Ich reise ...	I travel...
Ich fahre...	I go ...
nach Berlin/ London	To Paris / to London
nach Frankreich	To France
nach Spanien	To Spain
nach England	To England
nach Schottland	To Scotland
nach Irland	To Ireland
nach Polen	To Poland
nach Deutschland	To Germany
nach Österreich	To Austria
nach Wales	To Wales
nach Italien	To Italy
in die Schweiz	To Switzerland
in die Türkei	To Turkey
in die Karibik	To the Caribbean
nach Amerika	To the States
In die USA	To the States
nach Europa	To Europe
ins Ausland	abroad

Wie fährst/reist du?	How do you travel?
zu Fuß	On foot
mit dem Fahrrad	By pushbike
mit dem Motorrad	By motorbike
mit dem Auto/Wagen	By car
mit dem Zug	By train
mit dem Schiff	By boat
mit der U-Bahn	By tube/underground
mit dem Reisebus	By coach
mit dem Bus	By bus
mit dem Flugzeug	By plane

mit der Straßenbahn = by tram
mit der Fähre = by ferry

Wo bleibst du?	Where do you stay?
Ich bleibe in.....	I stay in..
einem Hotel	A hotel
einer Ferienwohnung	A holiday flat
auf einem Campingplatz	A campsite
einer Jurte	A yurt
einem Wohnwagen	A caravan
einem Zelt	A tent
einer Jugendherberge	A youth hostel
einem Mobilheim	A static caravan
bei meinen Großeltern	At my grand-parents'

In der Stadt	In the town
Ich besuche	I visit...
Wir besuchen	We visit...
der Supermarkt	The supermarket
die Brücke	The bridge
das Schwimmbad	The swimming pool
das Eisstadion	The ice rink
die Stadtmitte	The town centre
das Kino	The cinema
das Museum	The museum
das Theater	The theatre
das Verkehrsamt	The tourist information office
das Einkaufszentrum	The shopping centre
das Freizeitzentrum	The leisure centre
der Markt	The market
das Stadion	The stadium
der Freizeitpark	The theme park
das Krankenhaus	The hospital
die Monumente	The monuments
die Geschäfte	The shops
die Kirche	The church
der Bahnhof	The train station

Was machst du in den Ferien?	What do you do on holidays?
Sich entspannen (ich entspanne mich)	To relax (I relax)
Spaß haben/es macht Spaß	To have fun (it is fun)
sich sonnen (ich sonne mich)	To sunbathe
Denkmäler besuchen	To visit monuments
zum Strand gehen	To go to the beach
ins Restaurant gehen	To go to the restaurant
einkaufen gehen	To go shopping
spazieren gehen	To go for walks
Fotos machen	To take photos
Souvenirs kaufen	To buy souvenirs
Wassersport machen	To do water sports

Wo ist...?	Where is...?
Es ist weit	It's far
Es ist in der Nähe	It's nearby
Es ist 5 Minuten von hier entfernt	It's 5 minutes away
Es ist 300 Meter entfernt	It's 300 metres away
Gehen Sie geradeaus	Go straight on
An der Ampel	At the traffic lights
Zum Kreisverkehr	To the roundabout
Gehen Sie links	Go left
Gehen Sie rechts	Go right
Nehmen Sie die erste/zweite Straße über die Brücke	Take the first / second road over the bridge

Wie ist das Wetter?	What is the weather like?
Es ist schön	It is good weather
Es ist heiß	It is hot
Es ist sonnig	It is sunny
Es ist kalt	It is cold
Es ist 25 Grad	It is 25 degrees
Es ist schlecht	It is bad weather
Es regnet	It is raining
Es schneit	It is snowing
Es ist windig	It is windy
Es ist wolkig	It is cloudy
Es gibt einen Regenbogen	There is a rainbow

Enquiry: How and why has democracy in Britain changed 1215-1928?

Today, in the United Kingdom, we live in a democracy, where laws are made by a Parliament that we have elected. However, this hasn't always been the case, we are going to be exploring how people in the UK have protested for their right to vote.

History – Year 8 Knowledge Organiser Topic 4

Key Events

1	15 June 1215 – The **Magna Carta** was signed by **King John** at Runnymede.
2	22 August 1642 – 3 September 1651 – The **English Civil War** between the **Parliamentarians** and the **Royalists** over how England should be ruled.
3	1688 - **Glorious revolution** ends absolute power of the monarch.
4	16th August 1819 - **Peterloo Massacre** – Cavalry charged at protesters wanted electoral reform.
5	1832 – **The Great Reform Act** – Gave 40,000 extra men the vote, mostly just the middle classes.
6	**1838-1848** – The **Chartists Movement** – a series of petitions demanding equal voting rights for all men.
7	**1918 – Representation of the People Act** was passed **extending voting rights** to all **men** over 21 and some **women** over 30.
8	**1928 – Representation of the People Act** was passed **extending voting rights** to **women** over 21 bringing **electoral equality**.

Historical Skills Focus

interpretation	A viewpoint or opinion.
change	What aspects of democracy changed and why. Considering rates/speed of change, the amount of change and which groups of people were effected by this change.
continuity	What aspects of democracy stayed the same and why.

Further your learning

Want to find out more about our journey to democracy: https://assets.parliament.uk/education/houses-of-history/main.html

Key Terms

9	propaganda	Information, can be biased or misleading, that promotes a political cause of point of view.
10	democracy	A form of government where the people have a say in how the government is run by voting.
11	reform	To make changes.
12	Suffrage	The right to vote in political elections.
13	Cavaliers	Supporters of King Charles I in the English Civil War – Royalists.
14	Roundheads	Supporters of the English Parliament in the English Civil War – Parliamentarians.
15	MP's	Members of Parliament – they represent voters.
16	charter	A document granting rights/privileges.
17	Suffragists	NUWSS – National Union of Women's Suffrage Societies – Campaigned non-violently for votes for women.
18	Suffragettes	WSPU – Women's Social and Political Union – a militant movement campaigning for votes for women.
19	Historical Significance	To evaluate what was significant about events, people, and developments in the past that had an impact towards changing the future

Key Individuals

King John
Magna Carta

King Charles I
English Civil War

Oliver Cromwell
English Civil War

Henry Hunt
Peterloo Massacre

William Lovett
Chartist

John Frost
Chartist

William Cuffay
Chartist

Millicent Fawcett
Suffragist

Emmeline Pankhurst
Suffragette

Emily Davison
Suffragette

RATIO AND DIRECT PROPORTION

Key Concepts

To calculate the **value** for a single item we can use the **unitary method**.

When working with best value in monetary terms we use:

$$Price\ per\ unit = \frac{price}{quantity}$$

In recipe terms we use:

$$Weight\ per\ unit = \frac{weight}{quantity}$$

If 20 apples weigh 600g. How much would 28 apples weigh?

600 ÷ 20 = 30g ⟶ weight of 1 apple

30 × 28 = **840g**

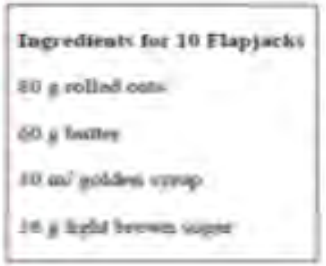
Box A has 8 fish fingers costing £1.40.
Box B has 20 fish fingers costing £ 3.40.
Which box is the better value?

$A = \frac{£1.40}{8} = £0.175$ $B = \frac{£3.40}{20} = £0.17$

Therefore Box B is better value as each fish finger costs less.

Examples

The recipe shows the ingredients needed to make 10 Flapjacks.
How much of each will be needed to make 25 flapjacks?



Method 1: Unitary

80 ÷ 10 = 8
8 × 25 = **200g**

30 ÷ 10 = 3
3 × 25 = **75g**

60 ÷ 10 = 6
6 × 25 = **150g**

36 ÷ 10 = 3.6
3.6 × 25 = **90g**

Method 2: 5 flapjacks

80 ÷ 2 = 40
40 × 5 = **200g**

30 ÷ 2 = 15
15 × 5 = **75g**

60 ÷ 2 = 30
30 × 5 = **150g**

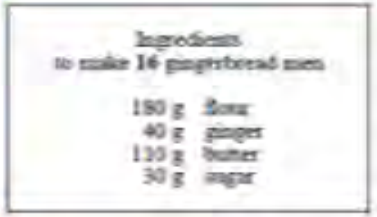
36 ÷ 2 = 18
18 × 5 = **90g**

Key Words

Unitary, Best Value, Proportion
Quantity

Useful Links

https://vle.mathswatch.co.uk/vle/
https://corbettmaths.com/contents/
https://www.bbc.co.uk/bitesize/subjects/zqhs34j



1) How much will we need to make 24 gingerbread men?

2) Packet A has 10 toilet rolls costing £3.50.
Packet B has 12 toilet rolls costing £3.60.
Which is better value for money?

3) If 15 oranges weigh 300g. What will 25 oranges weigh?

ANSWERS 1) 270g flour, 60g ginger, 165g butter, 45g sugar 2) Packet B 30p per roll 3) 500g

DIRECT AND INVERSE PROPORTION

Key Concepts

Variables are **directly proportional** when the **ratio is constant** between the quantities.

Variables are **inversely proportional** when **one quantity increases in proportion to the other decreasing.**

Examples

Direct proportion:

Value of A	32	P	56	20	72
Value of B	20	30	35	R	45

Ratio constant: $20 \div 32 = \frac{5}{8}$

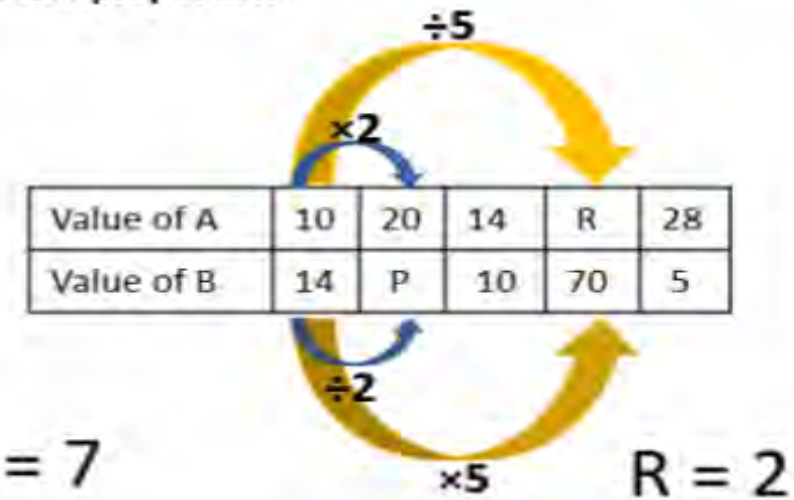
From A to B, we will multiply by $\frac{5}{8}$.

From B to A, we will divide by $\frac{5}{8}$.

$P = 30 \div \frac{5}{8} = 48$

$R = 20 \times \frac{5}{8} = 12.5$

Inverse proportion:



P = 7

R = 2

Key Words

Direct, Inverse, Proportion
Divide, Multiply, Constant

Useful Links

https://vle.mathswatch.co.uk/vle/
https://corbettmaths.com/contents/
https://www.bbc.co.uk/bitesize/subjects/zqhs34j

Complete each table:

1) Direct proportion

Value of A	5	P	22
Value of B	9	28.8	Q

2) Inverse proportion

Value of A	4	P	18
Value of B	9	3	Q

ANSWERS 1) P = 16, Q = 39.6 2) P = 12, Q = 2

SIMILARITY - LENGTHS

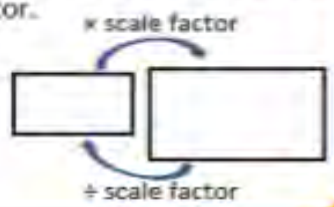
Key Concepts

Similar shapes are an enlargement of one another.

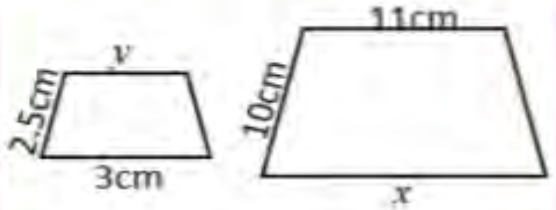
A **scale factor** is used, whereby all lengths are multiplied by the same number.

When finding a missing length on the larger shape we **multiply** by the scale factor.

When finding a missing length on the smaller shape we **divide** by the scale factor.

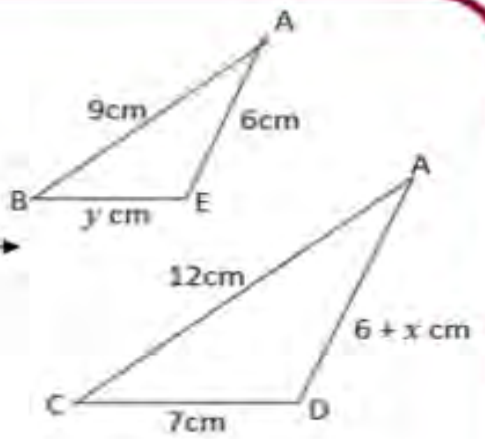


Examples



$$Scale\ factor = \frac{10}{2.5}$$
$$= 4$$
$$x = 3 \times 4$$
$$= 12cm$$
$$y = 11 \div 4$$
$$= 2.75cm$$

Split the diagram



$$Scale\ factor = \frac{12}{9}$$
$$= \frac{4}{3}$$

$$x + 6 = 6 \times \frac{4}{3}$$
$$x + 6 = 8$$
$$x = 8 - 6$$
$$x = 2cm$$

$$y = 7 \div \frac{4}{3}$$
$$= 5.25cm$$

Key Words

Similar, Scale factor, Enlarge, Length

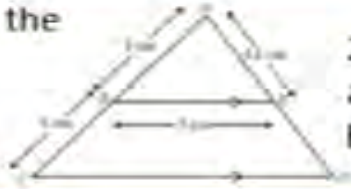
Useful Links

https://vle.mathswatch.co.uk/vle/

https://corbettmaths.com/contents/

https://www.bbc.co.uk/bitesize/subjects/zqhs34j

1) Calculate the length of:
a) PR
b) BC



2) Calculate the length of:
a) CD
b) ED

ANSWERS 1a) 39cm b) 30cm 2a) 12.5cm b) 7.2cm

PYTHAGORAS

Key Concepts

Pythagoras' theorem and basic trigonometry both only work with **right angled triangles**.

Pythagoras' Theorem – used to find a missing length when two sides are known

$$a^2 + b^2 = c^2$$

c is always the hypotenuse (longest side)

Key Words

Right angled triangle, Hypotenuse, Opposite, Adjacent, Sine, Cosine Tangent

Useful Links

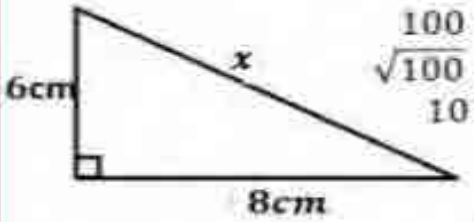
https://vle.mathswatch.co.uk/vle/

https://corbettmaths.com/contents/

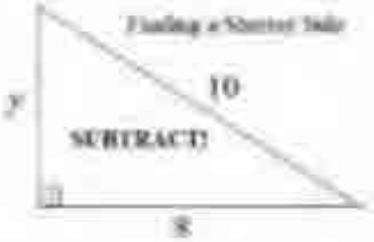
https://www.bbc.co.uk/bitesize/subjects/zqhs34j

Example

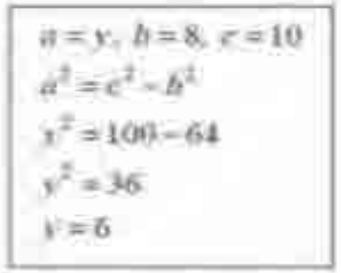
Pythagoras' Theorem



$$a^2 + b^2 = c^2$$
$$6^2 + 8^2 = x^2$$
$$100 = x^2$$
$$\sqrt{100} = x$$
$$10 = x$$



Example:



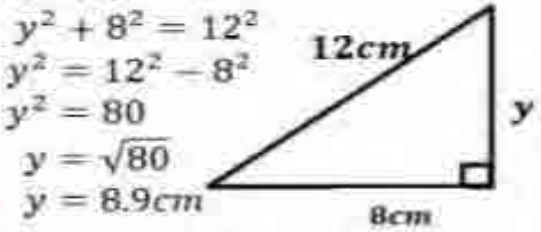
$a = y,\ b = 8,\ c = 10$

$a^2 = c^2 - b^2$

$y^2 = 100 - 64$

$y^2 = 36$

$y = 6$



$$a^2 + b^2 = c^2$$
$$y^2 + 8^2 = 12^2$$
$$y^2 = 12^2 - 8^2$$
$$y^2 = 80$$
$$y = \sqrt{80}$$
$$y = 8.9cm$$

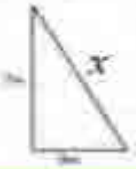
More Skills needed for Topic

1. To be able to recognise the longest side in a right-angled triangle.
2. To be able to apply correctly Pythagoras's theorem.
3. To be able to square and square root whole numbers.
4. To be able to label correctly a right-angle triangle (hypotenuse, adjacent, opposite)
5. To be able to apply Pythagoras's in 3D shapes

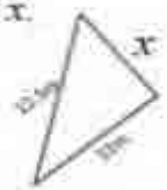
Questions

Find the value of x.

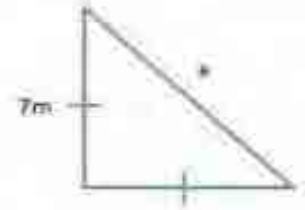
a)



b)



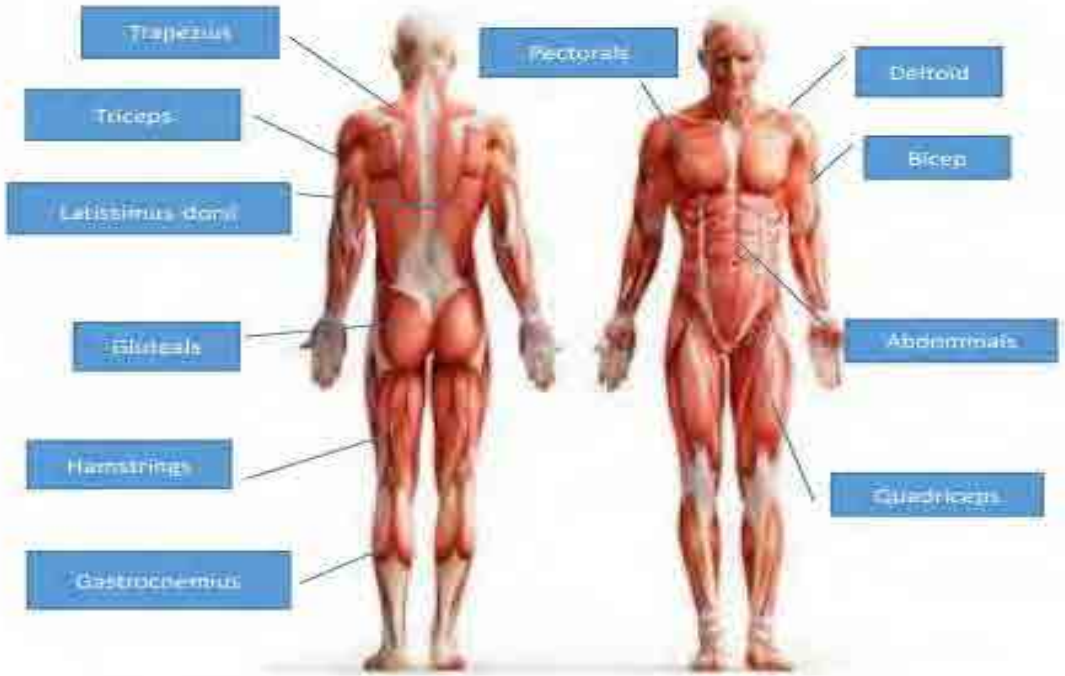
c) Here is a right-angled isosceles triangle. Calculate the length x.



ANSWERS: a) 8.06m b) 5.94m c) 9.9m

Knowledge Organiser –
PE Term 5: Anatomy & Physiology

	Benefits of exercise
Physical health and well-being	Improves fitness levels, heart function and efficiency of the body systems e.g. cardio-vascular system. Reduced risk of some illness e.g. diabetes, helps to prevent obesity, enables you to carry out everyday tasks without getting tired.
Mental health (emotional) and well-being	Reduces stress, release feel-good hormones in the body such as serotonin, increases confidence, helps us to control our emotions and increase resilience.
Social health and well-being	Provides opportunities to socialise/make friends, encourages cooperation and teamwork.



Muscle	Static Stretch
Triceps	
Hamstring	
Pectorals	
Quadriceps	
Gluteals	
Biceps	
Deltoids	
Abdominals	
Gastrocnemius	
Latissimus dorsi	

Is there an afterlife? Knowledge Organiser

NEED TO KNOW WORDS

Afterlife	Meaning life after death
Akhirah	The afterlife in Islam
Azra'il	The angel of death in Islam
Barzakh	The intermediate state between death and the Day of Judgment
Heaven	A place of eternal happiness and reward
Hell	A place of punishment and suffering
Jannah	The Islamic concept of paradise/heaven
Jahannam	The Islamic concept of hell
resurrection	being brought back to life
soul	The spiritual or immaterial aspect of a human being that is believed to be immortal and eternal

Afterlife overview

Many religions hold beliefs about an afterlife and have specific ideas on what happens to the body and soul after death, including belief in heaven, hell or, in some religions, reincarnation.

Beliefs in life after death are not only held by religious people. Many people who are not religious believe in the possibility of an afterlife of some kind.

Akhirah in Islam

Akhirah is the word Muslims use to refer to life after death.

- After death, most Muslims believe that the soul will enter **Barzakh**, a state of waiting, until the Day of Judgement.
- When a person dies, their soul is taken by **Azra'il**, the **Angel of Death**.
- God sends two angels to question the waiting soul.
- If the questions are answered correctly, the good soul then sleeps during **Barzakh**.
- If the questions are not answered correctly, the soul is tormented by angels, known as punishment of the grave.

Christianity

Christians believe that the death of the physical body is not the end. After their time on Earth they believe that humans will have eternal life in the afterlife.

Heaven/Jannah

Muslims and Christians believe that good deeds on Earth will be rewarded with entrance to paradise.
In this paradise there will be no sickness, pain or sadness.

Hell/Jahannam

Those who have performed more bad deeds than good will enter Jahannam or Hell. This is a place of physical and spiritual suffering.

Judaism

Jewish scripture has very little to say on matters of life after death. This is because Judaism puts far greater focus on people's actions.

- Upon death, most Jews believe people will be separated based on their action.
- Jews who have lived a sinless life will be sent straight to Gan Eden.
- However, it is possible that souls could be sent to Sheol or Gehinnom (or Gehenna) to firey realm to be cleansed.
- Many Jewish people also believe in olam ha-ba (meaning 'the world to come'). This is a perfect version of the world that will exist at the end of days

Is there an afterlife? Knowledge Organiser

NEED TO KNOW WORDS

Burial	Placing a body in the ground/tomb
Cremation	burning a dead body to ashes
Crematorium	A place where bodies are cremated.
Day of Judgement	A belief that there will be a day we are all judged
Kaddish	A Jewish prayer for the dead
Salvation	being saved from sin or hell
Shahadah	The Islamic declaration of faith
Shiva	A Jewish mourning period
Sky burial	a body is left on a mountaintop to be consumed by birds of prey.

Funeral rites

The ways in which religious people deal with death and the funeral rites they carry out are usually very closely linked with their beliefs about life after death.

Funeral rites are very important because they show respect for the dead and, in some religions, include various ceremonies which people believe are necessary to ensure that people go on to whatever their next life will be. They also give the relatives and friends of the deceased time to mourn and show their grief formally, which some people believe helps them to get over their loss

Jewish funerals

No flowers are given at a Jewish funeral and the service is short. Orthodox Jews do not usually allow **cremation** but Progressive Jews sometimes cremate the dead.

Shiva

The family return home to sit Shiva. Shiva means 'seven', as it is a seven-day mourning ritual. For the next seven days a candle is kept burning and the mirrors in the house are covered.

Kaddish

Kaddish is a hymn praising God that is recited during Jewish prayer services. Traditionally Kaddish is said until 30 days after the funeral for all except the child who says Kaddish for their parent for 11 months or one year after the death.

Christian funerals

Practice varies widely between different Christian **denominations** and around the world. However, all believe that once a person has died their soul leaves their body.

There has been a significant decline in church funerals in the UK, with the majority of religious funerals held entirely at a **crematorium.**

Some Christians want to bury their loved one within a specific time – often within 3 days. This is time Jesus was buried for before returning back to life

Roman Catholic and Orthodox funerals tend to focus strongly on a religious structure and may not focus on the life or character of the deceased as much as praying for their **salvation.**

Islamic funerals

Islam teaches that the body resides in the coffin until the **day of Judgement.** Where possible, a dying person will repeat the **Shahada** as their last words.

Since Muslims believe in physical resurrection, cremation is not encouraged. **Burial** should take place as quickly as possible after death and preferably within 24 hours.

The person who has died is washed as quickly as possible after death and wrapped in a simple white shroud. For men, up to three pieces of cloth may be used for this purpose, for women, five. The body is positioned facing towards **Mecca.** The grave may be raised so that people do not walk on it by mistake but displays of wealth or status (for example, through elaborate gravestones) are discouraged.

Is there an afterlife? Knowledge Organiser

NEED TO KNOW WORDS	
Atman	The immortal soul
Brahman	The ultimate reality in Hinduism
Dharma	righteous and moral living
Divine spark	The belief that every human has a part of God within them
Enlightenment	The freeing from suffering
Hukam	The will of God
Karma	The idea that one's actions will determine their destiny
Moksha	Liberation from the cycle of birth and death (Hinduism)
Mukti	Liberation from the cycle of birth and death (Sikhism)
Nirvana	Liberation from suffering (Buddhism)
Rebirth	The belief that the soul is reborn into another physical body
Reincarnation	The process of rebirth
Samsara	The cycle of birth, death, and rebirth

Samsara: Cycle of rebirth

Hindus, Sikhs and Buddhists believe that all life is part of a cycle of birth, life, death and rebirth called **samsara**.

Generally the cycle has the same stages in each of these religions: Birth, Life, Death and the breaking of the cycle.

Cycle of life in Hinduism

Hindu teaching says that all life is part of a cycle of birth, life, death and rebirth called **samsara**.

- The soul (**atman**) is born into a particular place in society, with duties to fulfil (**dharma**).
- Good or bad **karma** attaches to the soul, depending on a person's choices.
- At death, the soul is released from the body.
- After death, the soul is **reincarnated**. This reincarnation is considered good or bad, depending on karma.
- **Moksha** is the ultimate goal for Hindus. They escape from being born again and enter blissful union with **Brahman**.

Cycle of life in Sikhism

Most Sikhs believe that life is a **cycle of birth, death** and **rebirth**. This is also known as **samsara**.

- Everything that happens is **Hukam**.
- During their lives, people collect **karma**.
- At death, the **divine spark** of Waheguru, or a person's soul, is released from the body and will be reborn in another life.
- The aim for all Sikhs is for their soul to escape this cycle of rebirth and to be taken back to Waheguru. This is called **mukti**.

Cycle of life in Buddhism

Buddhists believe in life after death because the Buddha taught that human beings are each born an infinite number of times, unless they achieve **Nirvana**.

- Buddhists believe in karma or 'intentional action'.
- Through good actions, such as ethical conduct Buddhists hope to either gain enlightenment.
- Being born as a human is seen by Buddhists as a rare opportunity to work towards escaping this cycle of samsara. The escape from samsara is called **Nirvana** or **enlightenment**.
- Once Nirvana is achieved Buddhists believe that all suffering and further existence for that individual itself ends.

RS

Is there an afterlife? Knowledge Organiser

NEED TO KNOW WORDS	
Burial	Placing a body in the ground/tomb
Cremation	burning a dead body to ashes
Crematorium	A place where bodies are cremated.
Day of Judgement	A belief that there will be a day we are all judged
Kaddish	A Jewish prayer for the dead
Salvation	being saved from sin or hell
Shahadah	The Islamic declaration of faith
Shiva	A Jewish mourning period
Sky burial	a body is left on a mountaintop to be consumed by birds of prey.

Hindu funerals

Hindus believe that the atman or 'self' of the person who has died will be reincarnated, or will reach moksha.

Most Hindus are cremated as is the means by which things are moved from the realm of mortals to the realm of the gods.

In the UK, most Hindus use the local crematorium. Tradition dictates, however, that the oldest son of the deceased should be the last person to touch the coffin.

Ideally, cremated remains should be placed in the Ganges river in India, although as all rivers are ultimately connected, any river or sea is acceptable.

Sikh funerals

Sikhs believe in reincarnation, with the atman passing through different births until it achieves mukti, or liberation.

When a Sikh seems near death, the family may gather with them and recite the Hymn of Peace (Sukhmani). The person who is dying will try to respond by saying the name of God (Waheguru).

The body is washed and dressed in traditional Sikh clothing as soon as possible after death. If possible cremation should take place within a day.

The body is placed in a coffin and taken to the gurdwara where it is placed in front of the Guru Granth Sahib. This is the sacred book, regarded by Sikhs as the eleventh Guru. Prayers are said and readings from the Guru Granth Sahib are recited. Cremated remains may be either buried or placed in water. In the 10 days following the funeral, Sikhs may observe a period of mourning during which they do not go to work. .

Buddhist funerals

Death is very important in Buddhism as it is central to the concept of **samsara**. Funerals are important as they provide a reminder of the **Buddha**'s teaching that nothing lasts forever. This helps Buddhists to accept that everything changes, which in turn helps them to reduce their suffering

Theravada death and mourning traditions

- believe that rebirth happens straight after a person has died.
- involve a shrine surrounded by candles, flowers and incense.
- usually cremate the dead person

Mahayana death and mourning traditions

- loved ones whisper the name of the Buddha into their ear so it is the last name they hear.
- After death, the body is usually cremated.
- rebirth believed to take up to 49 days

Tibetan death and mourning traditions

- Tibetan Book of the Dead is read to people who are dying or recently deceased
- a 'sky burial' may take place.
- remains of the body are collected and burned.

Humanist funerals

Many people do not believe a strong element of religion is desirable, especially if the deceased did not follow a particular religion. The main focus of secular death rites is to celebrate the life of the deceased, and not refer to any beliefs about what happens in the afterlife. The coffin is welcomed into the place of the service and the **celebrant** will welcome the mourners. The mourners will often listen to or join in with the favourite music of the deceased.

KS3 Science
Photosynthesis and Ecosystems

1. Photosynthesis in Plants

Animals need to eat food to get their energy. But green plants and algae do not. Instead they make their own food in a process called **photosynthesis**. Almost all life on Earth depends upon this process. Photosynthesis is also important in maintaining the levels of oxygen and carbon dioxide in the atmosphere.

Word equation

carbon dioxide + water → glucose + oxygen

from the air — from the ground — their food — released into the air

Balanced symbol equation

$6CO_2 + 6H_2O \rightarrow C_6H_{12}O_6 + 6O_2$

2. Location of photosynthesis in plants

Photosynthesis takes place inside the **chloroplasts** of the plant cells, these contain a green pigment, **chlorophyll**. This absorbs the light energy needed to make photosynthesis happen. The leaf is a plant organ adapted to carry out photosynthesis. The table describes some of its adaptations:

Thin	a short distance for CO2 to move by diffusion
Chlorophyll	Absorbs light
Stomata	Allows CO2 to move in by diffusion
Guard cells	open and close the stomata depending on the conditions
Tubes	To transport water (xylem) and glucose (phloem)

3. Measuring the effect of light intensity on photosynthesis

Method:

1. Leave for five minutes for the pondweed to acclimatise to the new
2. Count the number of bubbles given off in one minute.
3. Move the light 10 cm further back.
4. Leave for five minutes for the pondweed to acclimatise again.
5. Count the number of bubbles given off in one minute.
6. Repeat by moving the lamp away by 10 cm intervals until 50 cm is reached.

4. Habitats and Ecosystems

An **ecosystem** consists of **communities** of different living things, in single species **populations** living in their habitats. Examples of these include habitats include coral reefs, marshes and lakes. All the living things (**biotic factors**) and non-living things (**abiotic factors**) in an ecosystem depend upon each other for survival. This interdependence includes through feeding, pollination.

5. Sampling Techniques

Sampling is done to look at the organisms in a population within an ecosystem in a practical way as counting each one individually is not always feasible. This is usually done using quadrats which marks off small areas to then use to estimate the population. A quadrat is usually a square made of wire. It may contain further wires to mark off smaller areas inside, such as 5 × 5 squares or 10 × 10 squares. The organisms underneath, usually plants, can be identified and counted. Quadrats may also be used for slow-moving animals, eg slugs and snails.

6. Food Chains/Biomass

A food chain shows the different species of an organism in an ecosystem, and what eats what. Organisms at each level have different terms:

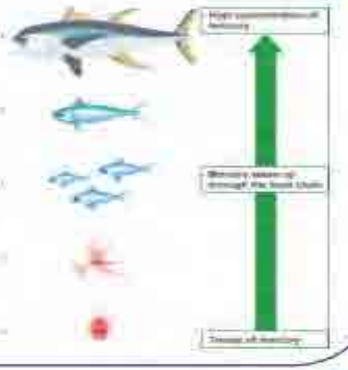
The population of each organism in a food chain can be shown in a bar chart called a pyramid of numbers or a pyramid of biomass where the bars are drawn to scale. Energy is lost to the surroundings as we go from one level to the next, so there are usually fewer organisms at each level in this food chain.

7. Food Webs

When all the food chains in an ecosystem are joined up together, they form a **food web.** Although it looks complex, it is just several food chains joined together. This leads to some interesting effects if the population in the food web decreases. Some animals can just eat more of another organism if food is in short supply, while others may starve and die. This in turn can affect the populations of other organisms in the food web.

8. Pollution and Pesticides

Some pollutants (including pesticides) quickly break down in the environment whilst others do not. These bio-accumulate in the food chain and damage the organisms in it. The predators at the end of the chain are most effected because compounds cannot be excreted and travel up the food chain.



1. Composition of the Earth

The Earth's crust, it's atmosphere and the oceans are the only sources of natural resources for human life!

The Earth has four layers:
– Crust (thin and rocky)
– Mantle (properties of solid but flows easily)
- Outer core (made from nickel and iron)
– Inner core (made from nickel and iron)

4. Composition of the Today's Atmosphere

Nitrogen is the most abundant gas in today's atmosphere at 78%. Today's atmosphere contains 21% Oxygen and 1% Argon.

5. Fossil Fuels

About three-quarters of the electricity generated in the UK comes from power stations fuelled by fossil fuels. Energy from the burning fuel is used to boil water. The steam turns turbines, and these turn electrical generators.

2. Composition of the Early Atmosphere

The Earth's early atmosphere was composed of 95% carbon dioxide, 4% water vapour and 1% of trace gases which included Nitrogen, Ammonia and Methane.

KS3 Science

Earth & Atmosphere

6. Generating Electricity

Crude oil, coal and gas are fossil fuels. They were formed over millions of years from the remains of dead organisms. Coal was formed from dead trees and plant matter. Crude oil and gas were formed from dead marine organisms.

3. Evolution of Atmosphere

In the 4.5 billion years since the Earth formed it's atmosphere has changed considerably. This has happened in three main stages:

Stage 1 – Volcanoes:
The majority of the early atmosphere was carbon dioxide and water vapour. This was produced by volcanoes. After a time the water vapour condensed and formed the oceans.

Stage 2 – Green plants:
Green plants and algae evolved and used the carbon dioxide for photosynthesis. They also produced oxygen. Basic organisms evolved that were able to use the oxygen.

Stage 3– Complex animals:
The oxygen allowed more complex organisms to form. The ozone layer formed and this allowed further evolution of complex organisms.

7. Non Renewable Energy Sources

Non renewable energy sources include fossil fuels such as coal, oil and natural gas. These sources are a finite resource, which means when they have been used up, they cannot be replaced. Worryingly, humans are using them faster than they are forming!

8. Renewable Energy Sources

Scientists are trying to find alternative methods of generating electricity using renewable energy sources.

These are energy sources that will not run out or produce carbon dioxide and other greenhouse gases. They are 'cleaner' and more sustainable although they do come with advantages and disadvantages.

9. Renewable Energy Resources

Resource	Adv.	Disadv.
Wind	no CO_2	Unsightly, not always windy
Solar	No CO_2	Expensive, not always sunny
Hydroelectric	No CO_2	Destroys habitat
Geothermal	No CO_2	Specific locations

10. Carbon Cycle

All cells - whether animal, plant or bacteria - contain carbon. Carbon is passed from the atmosphere (as carbon dioxide) to living things, passed from one organism to the next and returned to the atmosphere as carbon dioxide again. This is known as the carbon cycle.

11. Carbon Cycle

Step 1: Removing carbon dioxide from atmosphere
Green plants remove carbon dioxide from the atmosphere by photosynthesis. The carbon becomes part of complex molecules such as proteins, fats and carbohydrates in the plants.

Step 2: Returning carbon dioxide to atmosphere
Organisms return carbon dioxide to the atmosphere by respiration. It is not just animals that respire. Plants and microorganisms do, too.

12. Carbon Cycle

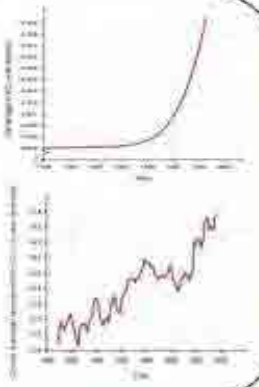
Step 3: Passing carbon from one organism to next
When an animal eats a plant, carbon from the plant becomes part of the fats and proteins in the animal. Microorganisms and some animals feed on waste material from animals, and the remains of dead animals and plants. The carbon then becomes part of these microorganisms and detritus feeders.
Step 4: Returning carbon dioxide to the atmosphere
When fossil fuels are burned (combustion) in factories or transportation, carbon is released into the atmosphere as carbon dioxide gas.

13. Greenhouse Effect

The greenhouse effect is when greenhouse gases (carbon dioxide, methane and water vapour) in the Earth's atmosphere trap radiation from the sun and heat up the planet. Without the greenhouse effect the Earth would be too cold for us to survive on it.

14. Global Warming

The extra greenhouse gases released by human activity lead to the enhanced greenhouse effect. More heat is trapped by the atmosphere, causing the planet to become warmer than it would be naturally. The increase in global temperature this causes is called global warming.



KS3 Science

Earth & Atmosphere

Year 8 Block 4 Biology Knowledge Organiser Ecosystems

Revision guide Pgs: 23-24 + 28
https://www.bbc.com/bitesize/subjects/z4882hv

KPI 8.1: Describe feeding relationships and food webs, and explain how a changing environment may affect them.

All food chains start with a green plant, producers. Arrows point to the eater and show the flow of energy in a food chain. Each stage is called a trophic level.

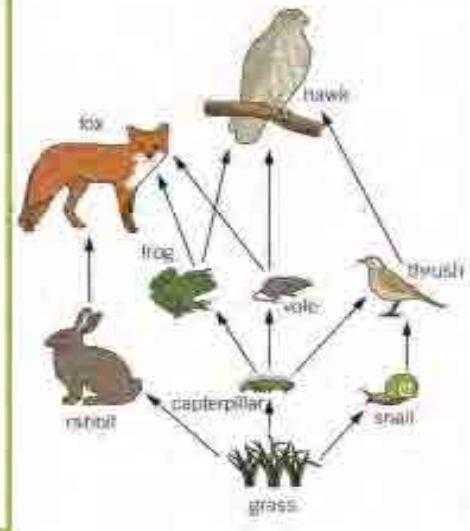
mahogany tree → caterpillar → song bird → hawk
maize → locust → lizard → snake

The first eater in a food chain is called the **primary consumer** and is a herbivore.
The next organism is the **secondary consumer** and the next is the **tertiary consumer** and this is usually the **top carnivore**.

Food chains do not go on indefinitely as energy is lost at each stage of the food chain. Some of the available energy goes into growth and the production of offspring. This energy becomes available to the next stage, but most of the available energy is used up in other ways: in respiration, keeping warm, movement and waste materials, such as faeces.

All of the energy used in these ways returns to the environment, and is not available for the next stage.

Key Terms	Function
Herbivore	Organism eats plant only, prey organisms
Carnivore	Organism eats other organisms, they hunt prey for their dinner
Omnivore	Organism eats both plant and animals
Primary consumer	The first eater in a food chain
Secondary consumer	The second eater in a food chain
Tertiary consumer	The 3rd organism feeding in the food chain, usually the top carnivore
Trophic level	Stages in the food chain e.g producers, or primary consumers
Bioaccumulation	The build up of toxic substances in the food chain, affecting organisms at the top of food chains
Ecosystem	A community of interacting organisms and their physical environment



Food chains show a simplistic view of who's eating who in an **ecosystem**. Organisms eat more than 1 food so food chains link together to make **food webs.**
Removing an organism or adding an organism to a food chain can have big implications on other organisms.

Year 8 Block 4 Biology Knowledge Organiser Ecosystems

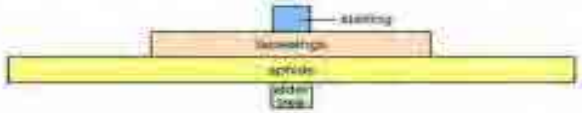
Revision guide Pgs: 23-24 + 28

https://www.bbc.com/bitesize/subjects/z4882hv

KPI8.1: Describe feeding relationships and food webs, and explain how a changing environment may affect them.

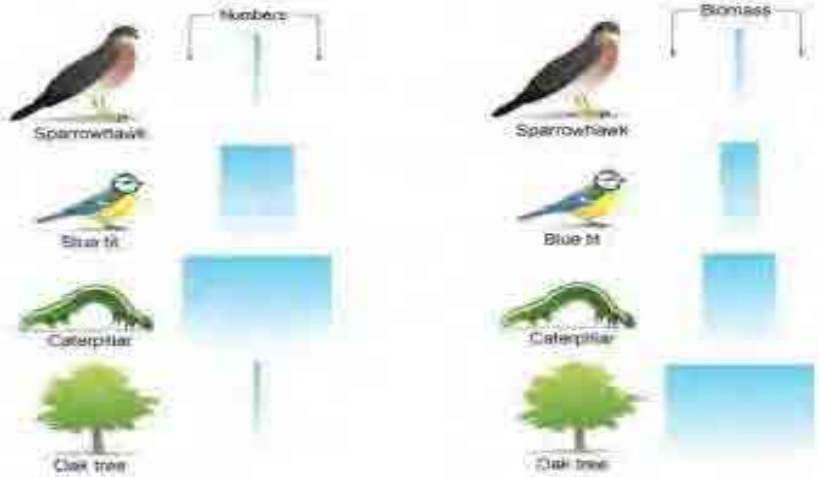
Pyramids of numbers and biomass

Pyramids of numbers show how many organisms are at each **trophic level.** The width of each box represents the number of organisms.



Pyramids of number can end up odd shapes when 1 producer is large in size e.g one tree that supports lots of tiny organisms e.g aphids.

Pyramids of biomass show more accurately what is happening to the energy in a food chain than pyramids of number do. Pyramids of biomass are always pyramid shaped.



Key Terms	Function
Herbivore	Organism eats plant only, prey organisms
Carnivore	Organism eats other organisms, they hunt prey for their dinner
Omnivore	Organism eats both plant and animals
Primary consumer	The first eater in a food chain
Secondary consumer	The second eater in a food chain
Tertiary consumer	The 3rd organism feeding in the food chain, usually the top carnivore
Trophic level	Stages in the food chain e.g. producers, or primary consumers
Bioaccumulation	The build up of toxic substances in the food chain, affecting organisms at the top of food chains

Some toxic substances like pesticides can pass up food chains.

Organisms near the bottom of the food chain absorb them in small amounts. The concentration in these organisms is too low to cause significant harm. However, as these organisms cannot excrete these substances, when they are eaten by others higher up the food chain, the concentration becomes more toxic and eventually causes harm. DDT is an example of a pesticide that was used and built up in the food chain.

Year 8 Block 4 Biology Knowledge Organiser Ecosystems

Revision guide Pgs: 23-24 + 28

https://www.bbc.com/bitesize/subjects/z4882hv

KPI 8.2: Explain how variation allow organisms to compete, and the way this drives natural selection

Organisms compete for resources like food, water, mates, space, light, and minerals.

There are 2 types of competition. **Interspecific competition** is between individuals of different species and **Intraspecific competition** is between individuals of the <u>same</u> species.

Organisms have special features known as **adaptations** to help them survive in their environment. For example polar bears are white so they are camouflaged in the snow.

Variation

Variation can be caused by genes e.g. eye colour and your blood group. It can also be caused by environment which means the food you eat, the chemicals you're exposed to , the way you're brought up. Often variation is a combination of genes and environment e.g. intelligence and weight.

Genetic variation always gives rise to **discontinuous data** where there is a limited set of data e.g. tongue roller or non roller.

Continuous data can be of any value and is caused by genetic and environmental factors.

Key Terms	Definition
Interspecific competition	Competition between individuals of different species
Intraspecific competition	Competition between individuals of the <u>same</u> species
Camouflaged	When an organisms blends in to their environment
Variation	Differences between organisms caused by genetics, environment or both
Continuous variation	This variation has no limit on the value eg. height
Discontinuous variation	This type of variation has set categories or a limited set of values eg. eye colour and is caused by genetic factors
Natural selection	The process where by organisms better adapted to their environment tend to survive and produce more offspring

Natural selection

Natural selection states that there is variation within a species.

Some adaptations are better than others. Those with the best adaptations **survive**, and the others die.

The survivors can **reproduce** and have **offspring**.

Their offspring **inherit** the **genes** for the best adaptations, so the organisms **population** changes over time. This is survival of the fittest. Charles Darwin came up with this theory in the 1800's.

Past tense holidays 8.8 Spanish Knowledge Organiser

A **verb** is a doing, being or having word. e.g. to speak, to eat, to be. **Reflexive verbs** in Spanish are verbs which usually mean an action done to yourself (e.g. wash yourself, shower etc.). Many are regular -ar verbs and they need an extra **reflexive pronoun**. We know a Spanish verb is reflexive because it will have «se » on the end of its infinitive eg. lavarse (to wash) and levantarse (to get yourself up).

Subject pronouns	Reflexive pronouns
yo (I)	**me**
tú (you)	**te**
él (he), **ella** (she)	**se**
nosotros/as (we)	**nos**
vosotros/as (you) (pl)	**os**
ellos/ellas (they)	**se**

Examples:
lavarse - to wash
me lavo > I wash
levantarse– to get up
nos levantamos > we get up
Ducharse- to shower
Te duchas > you shower

Reflexive verbs, the preterite (past tense)

The **preterite** is the past tense used in Spanish to describe a completed action at a specific time in the past (e.g. ayer (yesterday), el año pasado (last year)). For regular we take off –ar, -er – ir and add the below endings :

	-AR	-ER / -IR
I	é	í
You (sg)	aste	iste
He/she/it	ó	ió
We	amos	imos
You (pl)	asteis	isteis
They	aron	ieron

Examples:

Tomar = to take
To form " I took"

TOMAR > tom > tomé

Hablar = to speak
To form "she spoke"

HABLAR > habl > habló

Careful! Not all verbs are regular in the preterite. Some key irregulars are :

Hacer (to do)	hice, hiciste, hizo, hicimos, hicisteis, hicieron
Ir (to go)	fui, fuiste, fue, fuimos, fuisteis, fueron
Ser (to be)	fui, fuiste, fue, fuimos, fuisteis, fueron
Tener (to have)	tuve, tuviste, tuvo, tuvimos, tuvisteis, tuvieron

8.8 Past holidays
SPANISH

Cabot Learning Federation

Las opiniones	Opinions
Fue genial	It was great
Fue fantástico	It was fantastic
Fue interesante	It was interesting
Fue emocionante	It was exciting
Fue inolvidable	It was unforgettable
Fue increíble	It was incredible
Fue demasiado corto	It was too long
Fue demasiado largo	It was too short

¿Qué tiempo hacía?	What was the weather like?
Hacía buen tiempo	It was nice weather
Hacía mal tiempo	It was bad weather
Hacía sol	It was sunny
Hacía calor	It was hot
Hacía frío	It was cold
Hacía viento	It was windy
Llovía	It was raining

¿Qué hiciste durante las vacaciones?	What did you do on holidays?
Fui a la playa	I went to the beach
fui al restaurante	I went to the restaurant
fui de compras	I went shopping
Me quedé	I stayed
Comí	I ate
Bebí	I drank
Vi	I saw
Probé	I tried (food)
Hice deportes acuáticos	I did watersports
Descansé	I rested
Me relajé	I relaxed
Me divertí	I had fun
Visité monumentos	I visited monuments
Di paseos	I went walking
Saqué fotos	I took photos
Compré recuerdos	I bought souvenirs
Tomé el sol	I sunbathed

La vida cotidiana	Daily life
La gente	People
Los habitantes	Inhabitants
Hablar	To speak
Vivir	To live
Celebrar	To celebrate
Preparar	To prepare
Ir a trabajo	To go to work
Ir al instituto	To go to school
Volver a casa	To go back home
Ver la tele	To watch TV
Cenar	To have dinner
Bañarse	To have a bath
Ducharse	To have a shower

¿Cuando?	When?
Ayer	Yesterday
La semana pasada	Last week
El fin de semana pasado	Last weekend
El mes pasado	Last month
El año pasado	Last year
Hace dos días	Two days ago
El otro día	The other day

REMEMBER!
Any practical work you do at home, take photos and this can be classed as homework if there is evidence in your homework book!

Decorative Textile Techniques

Applique is the method of sewing pieces of fabric onto other fabric bases in beautiful designs. You can stitch the applique pieces by hand as well as by sewing machine.

Spray dying creates a speckled, graffiti effect on fabric. Try not to spray too close as it will not have the same effect on the fabric.

Dyeing involves adding colour to the fabric by way of soaking it in a solution of dye. You can dye a fabric fully or partially ; Batik, tie and dye, shibori dyeing are all variations of dyeing fabric to bring about beautiful patterns on fabric surface.

Rubbings use natural textures to create interesting designs on to fabric, layer different colours to make your design more original.

Shaving foam marbling is a method of creating a marble effect, using shaving foam and acrylic paints. You can mix colours together to create a colourful design. Be careful not to overmix as this could result in to getting an all over brown colour.

Decorative stitches are created by selecting different stitch settings on a sewing machine, these are good to use in different colours to match your creative work. They can be sewn in a curved line as well as just sewing straight.

Year 8 Textiles Knowledge Organiser

The 4 Rs of sustainability

The UK wastes around £1 billion of clothing each year, which effects the environment we live in. A way to support the environment is to follow the four Rs of sustainability at home.

Recycle – Making unwanted clothing in to something new i.e. Jeans in to shorts.
Reduce – Buy high quality clothing which will last for longer.
Repair – If there is a rip or hole in your clothing, fix it by hand sewing it or adding a patch.
Reuse – If you no long want your clothing, donate it to a sibling or local charity shop.

Textiles Hierarchy of Key words

Tier 3 'Academic' keywords.
Plain seam, analyse, sustainable, embellishment, Woven/ bonded/ knitted, Free machine embroidery, function, develop

Tier 2 Valuable keywords used in most lessons every lesson.
Complementary colours, contrast, environment, fastening, compare, embroidery, iron, equipment, context, appliqué, effect, improve

Tier 1 Basic keywords used in almost every lesson.
colour, design, shape, machine, pattern, line, Texture, tone, theme, Fabric, thread, sew

Use these in your writing and speaking

Use connectives to link each paragraph!	**Explain an idea:** • Although • Except • Unless • However • Therefore	**Sequencing:** • Firstly • Secondly • Next • Finally • Since
Adding to: • Furthermore • Also • As well as • Moreover	**Cause and effect:** • Thus • So • Therefore • Consequently	**Contrasting:** • Whereas • Instead of • Alternatively • Otherwise • Then again
To empathise: • Above all • Ultimately • Especially • Significantly	**To compare:** • Likewise • Equally • In the same way • Similarly	**Give examples:** • Such as • For example • In the case of • As revealed by • For instance

DESCRIBE

I believe that...

I think that...

The main idea is...

EXPLAIN

This means that...

Therefore...

This maybe because...

JUSTIFY

This is positive because...

This is negative because...

It is useful/not useful because...

ANALYSE

One strength is...

One weakness is...

One argument is...

EVALUATE

One advantage is...

One disadvantage is...

The best option is...

COMPARE AND CONTRAST

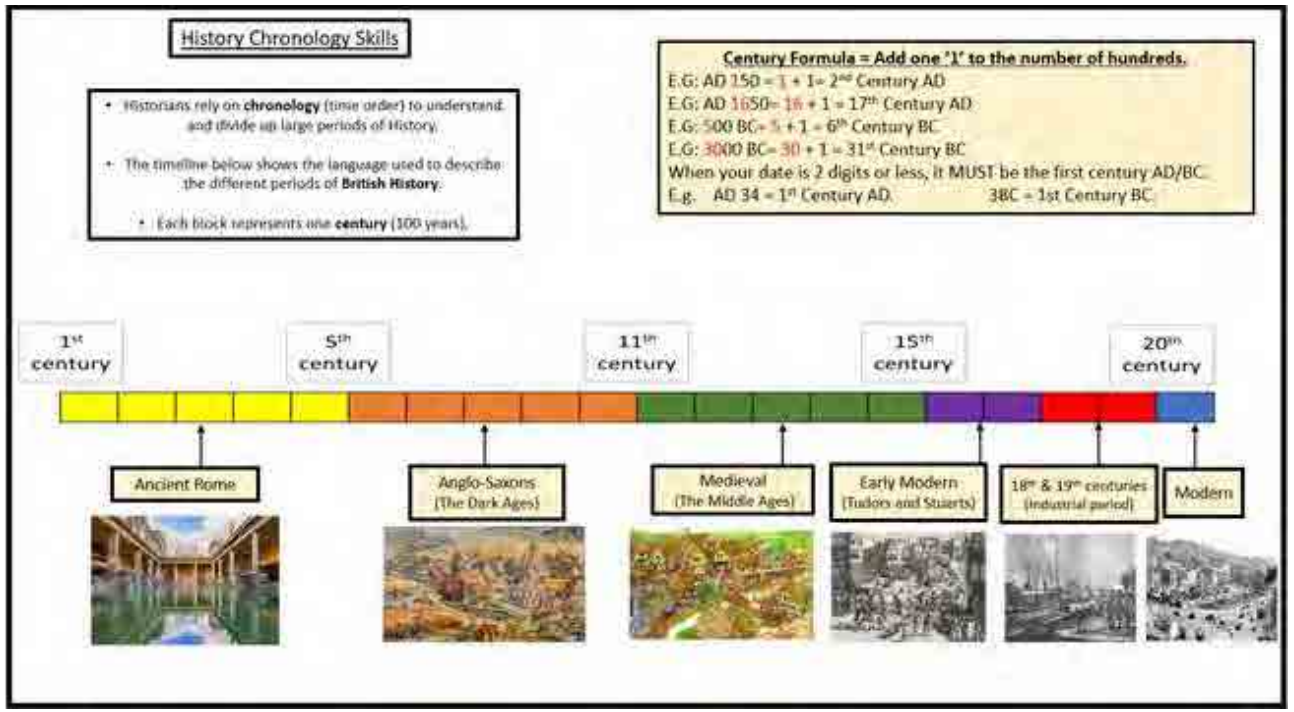
One similarity is...

One difference is...

On the other hand...

Sentence starter phrases

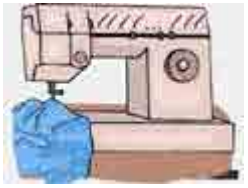
Most people would agree...
Only a fool would think...
We all know...
A sensible idea would be...
The fact is that...
Surely you would agree that...
Without a doubt...
I am certain that...
Some people might argue...
However...
Also...



Use these in your writing and speaking in DT

Design and Technology Keywords

Food and Nutrition	Design and Technology	Textiles
Caramelisation Aeration Amino acids Plasticity Shortening Denaturation Coagulation Gelatinisation Emulsification Pasteurisation	Carbon footprint Planned Obsolescence Iterative Design Tolerance Technology Push Anthropometrics Consumer Social Footprint Ergonomics Forming Processes	Plain seam analyse sustainable embellishment Woven/ bonded/ knitted Free machine function embroidery develop
Unsaturated Protein Radiation Saturated Carbohydrates Conduction Deficiency Digest Convection Cross-contamination Micro-organisms	Aesthetics Target Market Properties Deciduous Coniferous Automation Functionality Primary Source Sustainability Continuous Improvement	Complementary colours contrast environment fastening compare embroidery equipment iron context appliqué effect improve
Claw grip Flavour Texture Aroma Nutrients Energy Appearance Bridge hold Mix Smell	Cost Customer Materials Annotation Product Safety Environment Design User Prototype	colour design shape machine pattern Texture line tone theme Fabric thread sew



Sentence Starters - DT

I have designed…because
My project was about…
I found… during my research
My design is suitable for…
I have learnt how to…
The most enjoyable part of my project was….
The area I found the most challenging was…
Equipment I have used include…
I would improve my work by…
I am pleased with my finished product because…

Sentence Starters- Food and Nutrition

In order to work hygienically/safely I made sure I ….
I worked safely when in the kitchen by...
If I could improve any skill, I would improve...because...
Overall, I am happy/unhappy with my progress/dish because....
The texture of my dish is… this is because…

Sentence starters- Textiles

I have designed….
The context of my design is…
My research is useful because…
By researching, I am able to…..
By researching I have found out….
I researched into….
My design is suitable for…..
My design is based upon…
I have planned to..
The order I will work in is…
The most enjoyable part of m project was…
The area I found most challenging was…
I am most pleased with…
I am pleased with my finished project because…
Equipment I used was…

The periodic table of the elements

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

Key

relative atomic mass
atomic symbol
name
atomic (proton) number

* The elements with atomic numbers from 58 to 71 are omitted from this part of the periodic table.

The relative atomic masses of copper and chlorine have not been rounded to the nearest whole number.


UNITED KINGDOM
LOW / HILLS / MOUNTAINS
Orkney Islands
Shetland Islands
Prime Meridian
Outer Hebrides
Highlands
Scotland
North Sea
Atlantic Ocean
Inverness
Aberdeen
Ben Nevis
Edinburgh
Northern Ireland
Glasgow
Sunderland
United Kingdom (UK)
Londonderry
Belfast
Carlisle
PENNINES
Leeds
Isle of Man
Irish Sea
Dublin
Liverpool
England
Ireland
Cambrian Mts.
The Fens
Birmingham
Ipswich
Wales
Oxford
London
Bristol
Thames
Celtic Sea
130 mi
130 km
Cardiff
Portsmouth
Dover
Plymouth
Exeter
Falmouth
English Channel
Channel Tunnel
France
© WorldAtlas.com


EUROPE
©GraphicMaps.com
15° W
0°
15° E
30° E
45° E
60° E
ARCTIC CIRCLE
Barents Sea
White Sea
Norwegian Sea
Iceland
Faroe Islands (Denmark)
Norway
Finland
Russia
400 mi
400 km
60° N
Atlantic Ocean
Scotland
North Sea
Sweden
Estonia
Latvia
Lithuania
(European Russia)
Ural Mountains
Baltic Sea
Northern Ireland
Netherlands
Belarus
Ireland
UK
Belgium
Denmark
Poland
England
50° N
Wales
Germany
Czech Rep
Slovakia
Ukraine
Kazakhstan
English Channel
Luxembourg
Liechtenstein
Austria
Hungary
Romania
Moldova
Sea of Azov
Azores
Switzerland
Madeira Islands
Bay of Biscay
France
Slovenia
Croatia
Bosnia and Herzegovina
Monaco
Serbia
Bulgaria
Black Sea
Caspian Sea
Italy
San Marino
Montenegro
Macedonia
Georgia
Andorra
Vatican
Albania
Armenia
40° N
Corsica (France)
Sardinia (Italy)
Spain
Greece
European Turkey
Turkey
Azerbaijan
Portugal
Balearic Islands
Iran
0°
Sicily (Italy)
Malta
Crete (Greece)
Cyprus
Syria
Canary Islands
Algeria
Mediterranean Sea
Lebanon
ASIA
Gibraltar (UK)
PRIME MERIDIAN
Tunisia
15° E
30° E
Iraq
Morocco
Israel
Jordan
Libya
worldatlas
30° N
AFRICA
Egypt
Saudi Arabia
©GraphicMaps.com


©GraphicMaps.com
Barents Sea
Novaya Zemlya (Russia)
Kara Sea
Laptev Sea
Arctic Ocean
NORTH AMERICA
Norwegian Sea
ARCTIC CIRCLE
Ostrova Anzhu (Russia)
worldatlas
Russian Federation
Ural Mts
Bering Sea
Alaska
European Russia
Lake Baikal
Ostrov Sakhalin (Russia)
Sea of Okhotsk
Kamchatka Peninsula
Aleutian Islands
EUROPE
Aral Sea
Kazakhstan
Mongolia
North Korea
Caspian Sea
Black Sea
Uzbekistan
Kuril Islands (Russia)
INTERNATIONAL DATE LINE
MONDAY | SUNDAY
Turkey
Turkmenistan
Kyrgyzstan
Tajikistan
ASIA
Lebanon
Syria
MIDDLE EAST
Afghanistan
China
Yellow Sea
Sea of Japan (East Sea)
Japan
Pacific Ocean
Israel
Iraq
Persian Gulf
Iran
Nepal
Bhutan
South Korea
Jordan
Kuwait
Qatar
Bahrain
Pakistan
Bangladesh
Hong Kong (China)
East China Sea
Ryukyu Islands (Japan)
Bonin Islands (Japan)
Macau (China)
Gulf of Tonkin
India
TROPIC OF CANCER
Saudi Arabia
U.A.E.
Oman
Gulf of Oman
Burma
Laos
Hainan (China)
Taiwan
Okinawa (Japan)
Volcano Islands (Japan)
Red Sea
Arabian Sea
Bay of Bengal
Andaman and Nicobar Islands (India)
Thailand
Vietnam
SOUTHEAST ASIA
South China Sea
Philippines
Yemen
Gulf of Aden
Laccadive Sea
Lakshadweep Islands (India)
Andaman Sea
Philippine Sea
AFRICA
Socotra (Yemen)
Sri Lanka
Phuket (Thailand)
Cambodia
Brunei
Sulu Sea
Malaysia
Gulf of Thailand
Celebes Sea
New Guinea (Indonesia)
EQUATOR
Maldives
Borneo (Indo.)
Singapore
Sumatra (Indo.)
Java Sea
Indonesia
Banda Sea
British Indian Ocean Territory (UK)
Indian Ocean
Java (Indo.)
Bali (Indo.)
Flores Sea
Savu Sea
East Timor
Arafura Sea
OCEANIA
Coral Sea
AUSTRALIA
1000 mi
1000 km
60° E
90° E
120° E
150° E
180°
15° S
0°
15° N
30° N
45° N
60° N
worldatlas
©GraphicMaps.com


Azores (Portugal)
Portugal
Spain
EUROPE
Turkey
15° W
Algiers
Mediterranean Sea
Syria
ASIA
Madeira Is. (Portugal)
Tunisia
Israel
Iran
Iraq
MIDDLE EAST
30°N
Morocco
Cairo
Jordan
Persian Gulf
Canary Is. (Spain)
Algeria
Libya
Egypt
Kuwait
Western Sahara
TROPIC OF CANCER
Qatar
Atlantic Ocean
U.A.E.
Oman
Saudi Arabia
Mauritania
Nile River
Red Sea
Arabian Sea
Niger
Cape Verde
Senegal
Mali
Eritrea
15° N
Dakar
Chad
Sudan
Yemen
Burkina Faso
Benin
Gulf of Aden
Gambia
Lake Chad
Djibouti
Guinea
Guinea-Bissau
Togo
Djibouti
Socotra (Yemen)
Cote D'Ivoire
Nigeria
South Sudan
Ethiopia
Somalia
Sierra Leone
Central African Rep.
Accra
Uganda
Liberia
Ghana
Gulf of Guinea
Cameroon
Indian Ocean
0° EQUATOR
Rwanda
Kenya
Eq. Guinea
Nairobi
Dem. Rep. of the Congo
Sao Tome & Principe
Lake Victoria
Zanzibar (Tanzania)
800 mi
Congo
Tanzania
800 km
Gabon
Burundi
Malawi
Seychelles
AFRICA
Cabinda (Angola)
Lake Malawi
Angola
Comoros
PRIME MERIDIAN
15° S
Zambia
Lusaka
Mozambique Channel
Namibia
Zimbabwe
Mauritius
TROPIC OF CAPRICORN
Botswana
Windhoek
Reunion (France)
Madagascar
Atlantic Ocean
Mozambique
30° S
South Africa
Swaziland
worldatlas
Indian Ocean
Lesotho
Cape Town
60° E
30° W
15° W
0°
15° E
30° E
45° E
©GraphicMaps.com

Subject websites

These websites will help you with homework, reading around the subject and revision

English

https://www.sparknotes.com/ - *Macbeth, A Christmas Carol, An Inspector Calls*
https://app.senecalearning.com/ - *Macbeth, A Christmas Carol, An Inspector Calls, Power and Conflict Poetry*
https://www.bbc.com/bitesize - *Macbeth, A Christmas Carol, An Inspector Calls*

Maths

https://corbettmaths.com/
https://vle.mathswatch.co.uk/vle/
https://www.mathspad.co.uk/

Science:

https://www.bbc.com/bitesize
https://www.senecalearning.com/
https://www.memrise.com/

Geography

Time for Geography - videos (mainly focused on physical processes)
Bitesize
Cool Geography

History

Seneca Learning
BBC bitesize - use Edexcel resources for GCSE.

Art Websites

https://www.tate.org.uk/
https://www.bbc.co.uk/bitesize/subjects/z6f3cdm
https://www.incredibleart.org/

Computer Science and IT.

www.mrahmedcomputing.co.uk

Drama

https://youtu.be/VeTpob9LBM8
https://youtu.be/wISEU13mRBE
https://www.bbc.co.uk/bitesize/guides/zsf8wmn/revision/1

DT:

http://www.mr-dt.com/
http://technologystudent.com/
https://www.senecalearning.com/

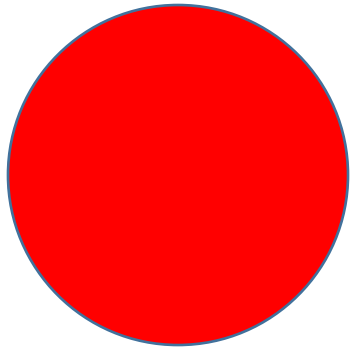
PE

https://www.bbc.com/bitesize/examspecs/ztrcg82
https://sites.google.com/view/ocrgcseperevision/home

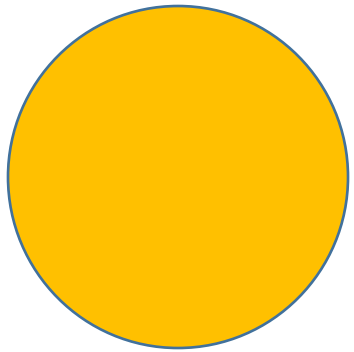
RS

KS3 https://www.bbc.co.uk/bitesize/subjects/zh3rkqt

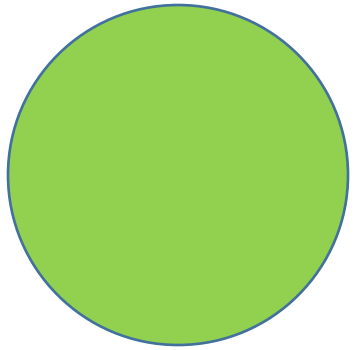
How would you describe your learning in this lesson?



I don’t understand the learning in this lesson and would like some help



I am not confident with the learning in this lesson so might need some extra help.



I am confident with the learning in this lesson and can work independently

Timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
Tutor time					
Lesson 1					
Lesson 2					
Break					
Lesson 3					
Lesson 4					
Lunch					
Lesson 5					
Lesson 6					