BRISTOL METROPOLITAN ACADEMY

Knowledge Organisers 2021-22

Year 8 – Term 5

25th April 2022	Week A
2nd May 2022	Week B
9th May 2022	Week A
16th May 2022	Week B
23rd May 2022	Week A

Complete your homework on the night stated e.g. if it is a Monday week A you will complete DT and English homework.

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

How to use your knowledge organiser

Top tips:
1. Focus on the information you are most unsure of first
2. Follow the timetable in your homework book to make sure you are revisiting subjects equally
3. Don't panic if you don't remember all the information first time, keep revisiting it
4. You can ask your parents/carers to test you/check your work

Look

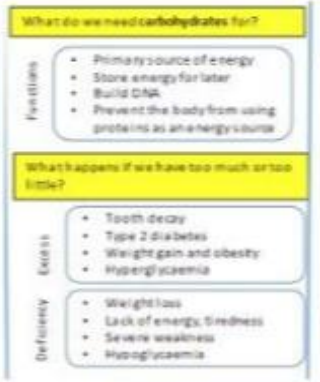
What topic/subject are you focusing on?

What task have you been set?

Self quizzing

You need to create 5 questions (with their answers) about the content on the knowledge organisers.

Top tip! Use subject specific language e.g. function. If you aren't sure what they mean, look it up, ask an adult or ask your teacher.



Questions you might consider:

1. What is a key function of carbohydrates?

It is our primary source of energy.

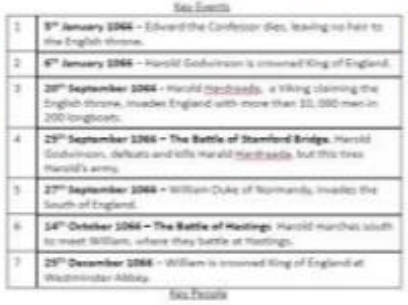
Write

Complete the task in your homework book.

Make sure to write the date, subject and topic you are focusing on (and underline them).

Revision

Here you are recording key facts/concepts to help you remember them.



You might write these key events out like a timeline.

Key events

5th January 1066 Edward the Confessor dies, leaving no heir to the English throne.

6th January 1066 Harold Godwinson is crowned King of England

Keyword/theme development

Here you are focusing on keywords/ themes and practising memorising them.

Key Terms	Definitions
State of matter	Matter is divided into three states: solid, liquid, and gas
Melting	Change of state from solid to liquid
Freezing	Change of state from liquid to solid
Evaporation	Change of state from liquid to gas
Condensation	Change of state from gas to liquid

Copying these words into your book can help you to remember them.

Check

Once you have finished go back and check your work against the knowledge organiser. Make any corrections crossing out mistakes with a single line.

Why not ask someone at home to check your work with you?

Contents:

Year 8 Our Environment

Keywords:

Climate Change

Graffiti

Extinction

Environment

Habitat

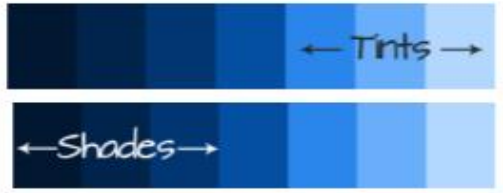
Street Art

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

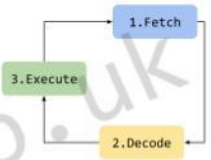
NeverCrew are a Swiss based street artist duo; Christian Rebecchi and Pablo Togni. The mural above 'Exhausting Machine' was created for the Vancouver Mural Festival in 2016. Nevercrew's art work explores the issues of climate change and pollution and the effect it is having on nature. You can find more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

Year 8 - Hardware



Year 7 - Knowledge

Hardware
Any physical component of a computer system.
Internal Hardware: Found inside the computer
External Hardware: Found outside the computer
Peripheral Device
Addition hardware connected externally.
Input Device
Hardware used to put data into a system.
Output Device
Hardware used to present data to a user.
RAM
Primary Memory - Memory accessed directly by the CPU
Volatile memory (lost when the power is off) used to store data in current use. The CPU fetches data from the RAM.
Storage Devices
Secondary Storage - Long term data store
Non-volatile memory (not lost when the power is off)
Magnetic - Data on magnetic disks
+ Relatively cheap
- Can be damaged easily
Solid State - Data on ROM chips
+ Fast, shockproof, energy usage
- Expensive
Optical - Data on disks, read by laser
+ Cheap and portable
- Easily damaged
CPU - ***Hardware component that processes data***
Stands for Central Processing Unit. The processor works by using the "Fetch Decode Execute Cycle".
Embedded System
A computer inside of a larger system
Example: Microwave, Dishwasher, Fridge

Year 8 - Knowledge

CPU

CPU is a component that processes data
The processor works by using the "Fetch Decode Execute Cycle".
- Instructions are fetched from memory.
- Instructions are then decoded to find out what processing needs to be done.
- Instructions are the executed.

Factors that affect speed
- **Clock Speed -** How fast data is processed in a second
- **Cores -** How many instructions can be processed at once
- **Cache -** Amount of data that can be stored close to the CPU.

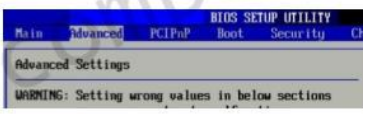
Factors affecting choice
- Cost
- Storage Size
- Physical Size
- Performance
- Reliability

Boolean Logic

Logic Gates - Elements that take inputs and produce outputs
Truth Tables - A table that shows all the input and output combinations of a logic circuit or gate

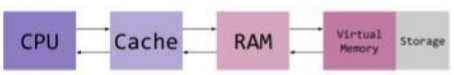
ROM

Non volatile memory used to data to operate a system e.g. **BIOS**



Virtual Memory

Created as temporary RAM on the storage when the RAM is full.



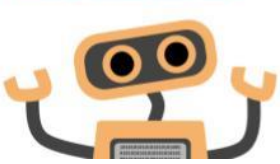
Year 8 - Networks

Year 7 - Knowledge

Strong Passwords
Prevents unauthorised access to a computer system. A strong password contains: *Uppercase letters, Lowercase letters, Numbers, Symbols, 8 or more characters*
Saving Files
It is important to regularly save files/work so that you do not lose your work.
How to save a file?
1. Save in your documents
2. Save with a relevant file name
3. Saved in an appropriate folder structure
4. Save the file in a folder that is relevant to the topic

Save and Save As
- "Save" updates a file
- "Save As" creates another version of the file

Networks
Computers connected together that share data and resources.
Cloud Storage
Cloud computing is storage that you can access through the Internet
+ Files can be accessed from anywhere
+ You have unlimited storage space and can store for free
+ Allows you to create more local storage
+ Good form of a backup storage
+ Does not require expensive hardware
- You need internet access
- Has the potential to get hacked
- Data could be seen by a third party
- Can be expensive long term



Year 8 - Knowledge

Networks Types

Two or more computers connected together that share data and resources
LAN (Local Area Network)
Network in a small geographical area
Example: Small Office, School
WAN (Wide Area Network)
Network in a large geographical area
Example:The Internet
WPAN (Personal Area Network)
Network centred around a single user
Example: Bluetooth Headset, Hotspot
Advantages of Networks:
+ Sharing files is easier
+ Share hardware (printers)
+ Updates are central
+ User accounts can be stored centrally

Disadvantages of Network:
- Set up could be expensive
- Vulnerable to hacking
- Need specific hardware
- Might need a network manager

Bluetooth

Short range wireless connection
+ Very common connection type **and** Low power usage
- Low bandwidth **and** Short range

Wired and Wireless

Wired Networks
Computers connected together using wires.
+ Fast connection
+ More secure than wireless
- Set up could be expensive
- Wires are trip hazards
- Difficult to connect new devices

Wireless Networks
Computers connected together using wireless connections (Wi-Fi).
+ Freedom to move around
- Less secure
- Connection can be interrupted by walls and other electronic devices

Cyber Security

Malware - Any hostile or intrusive softwares
Hacking - People that gain unauthorised access to a computer
Prevention - Passwords, Antivirus, Firewall, Encryption

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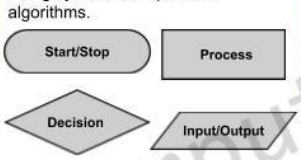
Year 8 - Computational Thinking

Year 7 - Knowledge

Flowcharts
Using symbols to represent algorithms.



Computational Thinking

Algorithm
Step by step list of instructions to complete a task

Abstraction
Process of removing unnecessary details

Decomposition
Process of breaking down tasks into smaller sub tasks

Pattern Recognition
Finding the similarities or patterns among small, decomposed problems

Pseudocode
Representing algorithms using a common language.

```
1.  Get name
2.  IF name = "Mr Ahmed":
3.      Display "You are
    cool"
4.  ELSE:
5.      Display "You are
    kind of cool"
```

Year 8 - Knowledge

Variables
Memory in code that changes

```
1.  name ← USERINPUT
2.  OUTPUT name
```

Programming Constructs

Sequence - More than 1 line of code outside Selection and Iteration structures.

```
1.  age ← USERINPUT
2.  age < 17 THEN
3.  OUTPUT "You can not drive"
```

Selection - IF Statement (decisions)

```
1.  age ← USERINPUT
2.  IF age < 17 THEN
3.      OUTPUT "You can not drive"
4.  ELSE
5.      OUTPUT "You can drive"
```

Iteration - Repetition in instructions

```
1.  OUTPUT "Want to hear a joke?"
2.  joke ← USERINPUT
3.  WHILE joke != "Yes"  THEN
4.      OUTPUT "Want to hear a joke?"
5.      joke ← USERINPUT
6.  OUTPUT "A fish swam into a wall"
7.  OUTPUT "Damn"
```

Data Types

Character - An individual letter e.g. "A"
String - A group of characters e.g. apple12
Integer - A whole number e.g. 58
Real/Float - A decimal number e.g. 4.58
Boolean - True or False

Operators

Operator	Meaning
+	Addition
-	Subtraction
*	Multiplication
/	Divide
=	Equal

Operator	Meaning
≠	Not Equal
<	Less Than
≤	Less/Equal
>	More Than
≥	More/Equal

Errors

Logic Error - Occurs when there is a fault in the logic or structure of the problem.
Syntax Error - Syntax is the spelling and grammar of a programming language. An error occurs when you type in the code incorrectly.

Debugging
The process of identifying errors (bugs) and fixing them

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Year 789 - Data Representation

Number Bases

Denary
Base 10 Numbers - 23, 5

Binary
Base 2 Numbers - 01010101

128	64	32	16	8	4	2	1		
0	0	0	0	1	0	1	0	=	10
0	0	1	1	1	1	1	0	=	62
1	0	0	0	1	1	1	1	=	143
0	0	0	0	0	0	0	1	=	1
1	1	1	1	1	1	1	1	=	255

Binary Arithmetic

Rules of Addition
0 + 0 = 0
0 + 1 = 1
1 + 0 = 1
1 + 1 = 0 Carry 1
1 + 1 + 1 = 1 Carry 1

					1	1	1		
	0	0	0	0	1	1	1	0	
+	1	0	1	0	0	0	1	0	
	1	0	1	1	0	0	0	0	

			1	1	1	1		
	1	1	0	1	0	0	1	1
+	0	0	0	0	1	1	1	0
	1	1	1	0	0	0	0	1

1			1	1	1			
	1	1	0	0	1	1	0	0
+	1	0	0	1	1	1	0	1
1	0	1	1	0	1	0	0	1

OVERFLOW ERROR
When and extra bit is created to represent a number

Storage Units
The more bits of Binary you use, the higher the file size.

+8	↓	Bit	
+1000	↓	Byte	↑ x8
+1000	↓	Kilobyte	↑ x1000
+1000	↓	Megabyte	↑ x1000
+1000	↓	Gigabyte	↑ x1000
		Terabyte	↑ x1000

2Mb to Bits

2	x	1	0	0	0	=		
2	0	0	0					
2	0	0	0	x	1	0	0	0
2	0	0	0	0	0	0		
2	0	0	0	0	0	0	x	8
1	0	0	0	0	0	0	0	

2Mb = 10000000 Bits

ASCII and Unicode

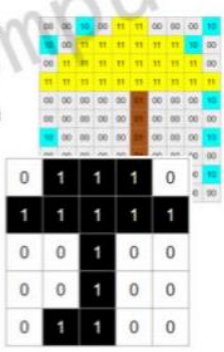
ASCII
7 bit ASCII used to represent 128 characters in binary. Only enough for English language.

Unicode
Created to extend binary values for other languages using 16 bit numbers. This allows for 65,536 characters to be encoded.

	A	S	C	I	I														
	C	=	67	=	0	1	0	0	0	0	1	1	=	8	bits		8	x	4	
	A	=	65	=	0	1	0	0	0	0	0	1	=	8	bits		=	32	bits	
	T	=	84	=	0	1	0	1	0	1	0	0	=	8	bits		32	/	8	
	!	=	33	=	0	0	1	0	0	0	0	1	=	8	bits		=	4	bytes	
	U	N	I	C	O	D	E													
	ぐ	=	0	0	0	0	1	0	0	1	1	1	1	1	1	0	1	0	(2554)	
	稙	=	0	0	0	1	0	0	0	0	0	1	0	0	0	1	1	1	(4167)	

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



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.

Other ideas to try out might include:

- changing the order of events to make the **structure** more interesting
- trying out **monologues** for different characters
- using music and devising a short section of **mime** to accompany this
- experimenting with your use of space and **levels** within the performance space
- doing something at the same time in **synchronisation** to emphasise the scene

It is important to be willing to let go of things, make changes and keep on researching. It could help to listen to others, step out of the scene and watch it with the eye of a critical friend. Other ideas include:

- Trying some **off-text improvisation**, placing the **characters** in a different situation, eg what would they be like in ten years time, at work or on holiday?
- Trying the play in reverse or swapping characters over to see them through another pair of eyes.
- Re-enacting the **sub-text** only - what is it that's not said and how can this be emphasised?
- **Hot-seating** the characters - if this is done while walking around the space, it places less pressure on the person being asked the questions and gives less time to overthink answers.
- Filming and watching it back to make improvements - can everything be heard and seen, does it make sense and can the audience understand what is taking place?
- Trying out alternative endings - what difference do they make and could two or more be included to really make the audience think?

Working as a team

Everyone in a production has a clear role, and with that clear **responsibility**. Everyone needs to know what they should be doing, as well as how their role fits in with the rest of the team and the whole production. For this, good communication is essential. In the early stages of the production cycle, research can be done into particular roles, which could include watching videos or reading about a specific topic, going to live theatre performances, or developing a particular skill. Each member of the production also needs to be aware of all **health and safety considerations** to ensure that everyone, including the audience, is kept safe.

Also, try out other subtleties, such as:

- pause
- silence
- emphasis
- chanting
- rapping
- whispering
- rhymes

How can a piece be enhanced with extra voice work?

- experiment with **narration**
- narrate actions in the **third person**
- **choral speaking** can be very effective when it's done well
- experiment with **soundscapes** to create atmosphere, repeati different sounds or words in unison

Blocking

The performance can then be worked through scene by scene to establish where actors should be on the stage and when, known as **blocking**. The main focus should be:

- the use of space
- the set
- how to establish mood and atmosphere

Drama Year 8 Term 5 & 6 Knowledge organiser

MET

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!

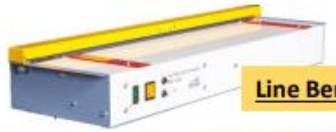
Pillar Drill

File

Fret Saw

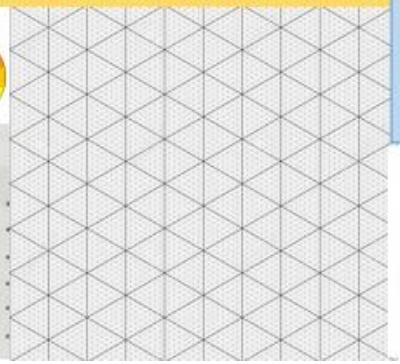
Soldering Iron

Line Bender



Practice your tonal drawing skill here

Practice your isometric drawing here



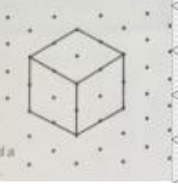
Develop Ideas with Sketches

1) 'Freehand' means drawing without using any equipment (except a pencil or pen).
2) You can combine 2D and 3D sketches to explain details.
3) And you can annotate your sketches (add notes) to explain details further, e.g. describing the materials and processes you'd use.

Isometric Drawing Shows Objects at 30°

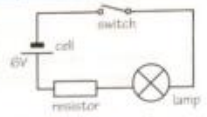
1) Isometric drawing can be used to show a 3D picture of an object.
2) It doesn't show perspective (things don't get smaller in the distance), but it's easy to get dimensions right.
3) There are three main rules when drawing in isometric:
   - Vertical edges are drawn as vertical lines.
   - Horizontal edges are drawn at 30°.
   - Parallel edges appear as parallel lines.

This drawing's been done on isometric dot paper. You could use plain paper and a 30°/60° set square instead.



Electrical Systems Involve Circuits

1) All electrical systems need to have a complete circuit to make them work. Here's a simple circuit:



The circuit isn't complete yet — there's a gap at the switch. When you press the switch down you make a complete circuit. An electric current flows and the lamp comes on.

You can draw diagrams of electrical circuits using symbols to represent the components.

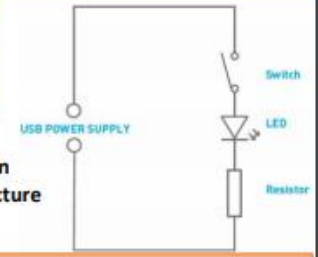
2) The materials you use in a circuit have to be conductors — they need to let electricity flow through. E.g. copper is used for the wire that joins the components because it's a good conductor and is ductile.
3) Insulators (e.g. PVC) don't let electricity through, so they're used to coat the outside of wires.
4) Voltage from a power cell (a battery) or the mains pushes the electric current around a circuit.
   - Mains power is used for non-portable products like fridges and televisions.
   - Batteries are used in portable products. There are disposable batteries and rechargeable ones.
   - Rechargeable batteries are more expensive than disposable batteries, but can be cheaper in the long run as you don't need to keep replacing them. They're built in to some products, e.g. mobile phones.
5) Resistors are used to reduce the current in a circuit so you don't damage delicate components (e.g. the lamp in the circuit above). Resistance is measured in ohms (Ω). A larger resistance means less cu

Colour-coded stripes show the

Acrylic

polymethyl methacrylate (PMMA) is available in a variety of colours. It is a hard, rigid material that weathers well.

Night Light Circuit Diagram



CAD = Computer Aided Design
CAM = Computer Aided Manufacture

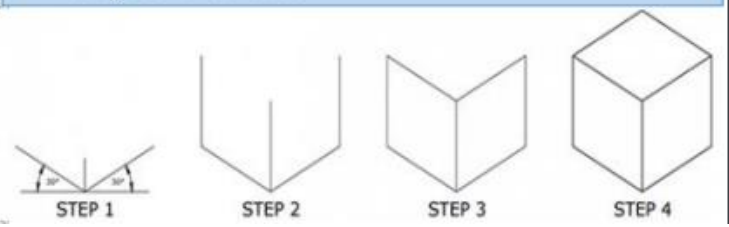
Use modelling to improve your design

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

Themes

Oppressor and oppressed - Men were the oppressors. This meant they were tyrannical and controlling. Women were oppressed. This meant that they were submissive and controlled by the men.	**Isolation** - characters are often **isolated** either physically, emotionally, or mentally in order to create an atmosphere of fear.
Supernatural - a force beyond scientific reasoning.	**Imprisonment** - Often linked with the submissive female who would be trapped against her will.
Love - Many Gothic novels have an element of romance. Many relationships, however, become broken and are filled with cruelty and sadness. There are few fairy-tale endings.	**Family** - often the families in Gothic novels become splintered because of the discovery of sin, betrayal, or perhaps even due to an ancestral curse.

Context

Enlightenment period	A movement of the 18th century that stressed the belief that science and logic give people more knowledge and understanding than tradition and religion. This overtook the belief in religion.
Romantic period	Romanticism is a reaction to the Enlightenment movement, a period that sought to revolutionize scientific thought. The Romantics recognised that we could also learn from Nature and they celebrated the power of the imagination and supernatural.
Victorian era	Many Gothic novels were written during this time. It was a period of industrialisation. Up until now the Victorian novel was seen as a way of promoting virtue and moral behaviour; many Victorians believed that the Gothic would corrupt innocent minds because it was full of sin. They even feared a revolution.
Horror Vs Gothic	Gothic is the predecessor (grandfather) to horror. Whilst they share lots of similar themes, the Horror is known for explicitly showing violence and gore, terrifying its reader; the Gothic is more subtle in its treatment of violence and relies more on atmosphere to build tension.

Symbolism

Candle light - links to dark subterranean passages. Creates tension and suspense	**Weather** - pathetic fallacy (when the weather reflects the mood) is used to reflect the mood.
Ravens - a bad/ill omen. These birds symbolise death.	**Remote places** -Gothic novels are often set in distant places, increasing the protagonist's sense of vulnerability to the supernatural and evil forces.

Gothic characters

Submissive female	Women are often portrayed as weak, helpless and innocent in Gothic Literature. They were subjected to male oppression. They could be forced to marry someone they do not love or subjected to a form of aggression.
Tyrannical males	Men are often portrayed as powerful in Gothic Literature. They use their strength to manipulate. Men are portrayed as controlling and as the oppressors.
Persecuted heroines	Women who are courageous are often persecuted (oppressed/inflicted with pain and suffering) by an evil male.
Ambitious Scientists	Scientists in Gothic reflect Victorian society's fascination with science and their fear that scientific knowledge would lead to the destruction of society..
Supernatural characters	Vampires, ghosts and demons appear in Gothic fiction to build tension and suspense.
Naïve narrators	An innocent narrator who lacks experience.

Gothic Settings

Possible Gothic settings	**Dark subterranean passages** - Passages which are underground. They are concealed and secret which can create a sinister feel.
	Decaying abbeys - The abbeys/churches would usually have vaults, arches, pillars. This would create a spooky, desolate atmosphere. Architecture was and important part of Gothic.
	Jagged mountains - Isolated areas away from civilization. They can invoke horror and awe.
	Remote inhospitable places - A harsh environment to live in away from any life to create a feeling of isolation and abandonment - I.e. The Artic.
	The wilderness - A neglected, abandoned area.

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.

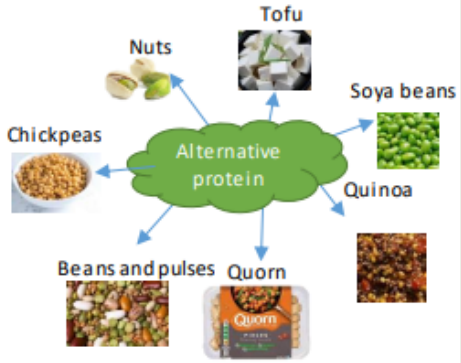
Water-soluble vitamins
Water-soluble vitamins (vitamin C, the B vitamins and folic acid) are mainly found in:
fruit and vegetables, grains, milk and dairy foods
These vitamins aren't stored in the body, so you need to have them more frequently.
If you have more than you need, your body gets rid of the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

Food poisoning is a disease caused by eating a spoiled or contaminated food. Such food may contain certain microorganisms, toxins or enzymes.
Symptoms of food poisoning:
- Stomach pains and cramps
- Nausea and vomiting
- Diarrhoea
- Fever
- Shivers

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; lentil 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

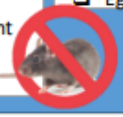
Setting and thickening (coagulation): Eggs will set when cooked. This is shown when you make a quiche or an egg custard.
Enriching: Eggs add nutritional value to a dish. This is shown when you make egg fried rice.
Raising agent: When whisked, eggs can hold air and become a raising agent. They can make 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 transferred 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.

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My Holiday experiences! Year 8 French ARE 3 Vocab list

les participes passés irréguliers?	Irregular past participles ?
Faire → fait	To do → did
Prendre → pris	To take → took
Boire → bu	To drink → drank
Voir → vu	To see → saw
Lire → lu	To read → read
Vouloir → voulu	To want → wanted
Dire → dit	To say → said
Devenir → devenu	To become → became
Avoir → eu	To have → had
Écrire → écrit	To write → wrote

Les opinions	Opinions
C'était	It was ...
Génial	Great
Fantastique	Fantastic
Intéressant	Interesting
Touchant	Moving (emotionally)
Inoubliable	Unforgetable
Incroyable	Incredible
Trop court	Too short
Ennuyeux/barbant	Boring
Trop long	Trop long
Passionnant	Exciting
Émouvante	Emotional
Triste	sad

Quand?	When?
Aujourd'hui	Today
Normalement	Normally
D'habitude	Usually
Parfois/quelquefois	Sometimes
Pendant la pause/ le trajet	During breaktime/the journey
Le week-end	On the weekend
Après le collège	After school
deux fois par semaine	Twice a week
souvent	Often
Toujours	Always
Rarement	Rarely
De temps en temps	From time to time
Le lundi	On Monday
Hier	Yesterday
Récemment	Recently
Le week-end dernier	Last weekend
La semaine dernière	Last week
L'année dernière	Last year
Il y a un mois	A month ago
Demain	Tomorrow
Bientôt	Soon
A l'avenir	In the future
Le week-end prochain	Next weekend
La semaine prochaine	Next week
L'année prochaine	Next year
Dans un mois	In a month

Qu'est-ce que tu fais normalement?	What do you do on holidays?
Se reposer (je me repose)	To relax
Se relaxer (je me relaxe)	To relax
S'amuser (je m'amuse)	To have fun
Se baigner (je me baigne)	To bathe
S'habiller (je m'habille)	To get dressed
Se lever (je me lève)	To get up
Se laver (je me lave)	To wash
Se réveiller (je me réveille)	To wake up
S'entendre avec (je m'entends avec)	To get on with
Se brosser les dents/ les cheveux (je me brosse)	To brush teeth/hair
Se doucher (je me douche)	To shower
Se maquiller (je me maquille)	To put on make-up

Il faisait quel temps?	What was the weather like?
il faisait beau	The weather was nice
il faisait mauvais	The weather was bad
il faisait chaud	It was hot
il faisait froid	It was cold
il faisait gris	It was grey / overcast
il faisait nuageux	It was cloudy
il y avait du soleil	It was sunny
il y avait du vent	It was windy
il y avait du brouillard	It was foggy
il y avait de l'orage	It was stormy
il pleuvait	It was raining
il neigeait	It was snowing
il geleait	It was icy

My holiday experiences Year 8 French ARE 3
Knowledge Organiser

Reflexive verbs, the perfect tense (past tense)

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A **verb** is a doing, being or having word. e.g. to speak, to eat, to be.
Reflexive verbs in French are verbs which usually mean an action done to yourself (e.g. straighten your hair, brush your teeth, etc.). Many are regular -er verbs and they need an extra **reflexive pronoun**.

Subject pronouns	Reflexive pronoun
je (I)	**me**
tu (you)	**te**
il (he), **elle** (she), **on** (we)	**se**
nous (we)	**nous**
vous (you) (pl)	**vous**
ils/elles (they)	**se**

Examples:
Se lisser les cheveux - to straighten one's hair
Je **me** lisse les cheveux > I straighten my hair
Se brosser les dents – to brush one's teeth
On **se** brosse les dents > we brush our teeth
Se doucher - to shower
Tu **te** douches le matin ou le soir? Do you shower in the morning or in the evening?

The perfect tense:
You can talk about the past by using the **perfect** tense (*le passé composé*). The perfect tense has 3 parts:
1. The subject pronoun (eg. Je,nous)
2. The auxiliary (*avoir* or *être*)
3. The past participle
To form the past participle, take off the infinitive endings (**–er**, **-ir** or **–re**) and add the following endings instead:
-ER verbs > - é
-IR verbs> - i
-RE verbs > - u
Examples:
J'**ai** acheté des baskets au centre commercial. *I **have bought** trainers at the shopping mall.*
Hier il **a** joué au foot dans le parc. *Yesterday he play**ed** football in the park.*
Tu **es** allé en ville hier? *You **went** to town yesterday?*

The 2 auxiliary verbs are AVOIR or ÊTRE.
- **Use AVOIR with most verbs.**
- **Use ÊTRE with reflexive verbs and DR. MRS VANDERTRAMP verbs. [*Devenir* (to become), *Revenir* (to come back), *Monter* (to go up), *Retourner* (to return), *Sortir* (to go out), *Venir* (to come), *Aller* (to go), *Naître* (to be born), *Descendre* (to go down), *Entrer* (to enter), *Rentrer* (to go home/to return), *Tomber* (to fall), *Rester* (to remain), *Arriver* (to arrive), *Mourir* (to die), *Partir* (to leave).]**

AVOIR	ÊTRE
J'**ai**	Je **suis**
Tu **as**	Tu **es**
Il /elle **a**	Il /elle **est**
Nous **avons**	Nous **sommes**
Vous **avez**	Vous **êtes**
Ils /elles **ont**	Ils /elles **sont**

Remember!
When using être to form the perfect tense your past participle must agree with the subject pronoun.

Add –e if feminine e.g. elle est allé**e**

Add –s if plural e.g. ils sont allé**s**

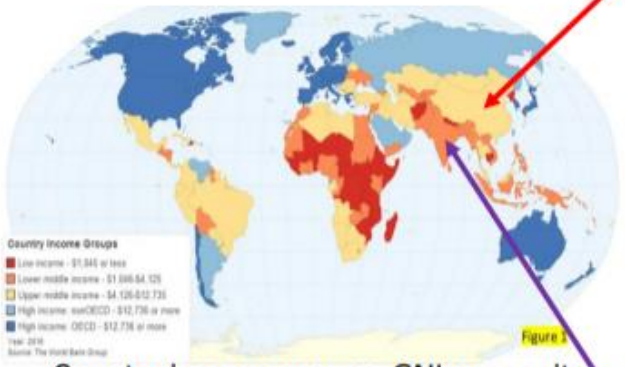
Add –es if feminine plural eg. elles sont allé**es**

Keywords	
Development	A process of change that improves the standards of living of people in a country
NEE	Newly emerging economy (not yet fully developed but making progress at a rapid rate)
Global	The world
Globalisation	The process by which the world is becoming increasingly interconnected
Transnational Corporation (TNC)	A huge company that does business in several countries
Urbanisation	An increase in the proportion of people living in urban areas in a country
Human Development Index (HDI)	Combines three measures of development: life expectancy, average number of school years and GNI per capita. This produces a number between 0-1, where 1 is the highest HDI score.
GNI per capita	The value of a country's goods and services, divided by the number of people living in that country
BRICs	5 economies working together to develop and grow their economies - Brazil, Russia, India, China, South Africa
Push factor	Negative things that make people want to move to a new area e.g. war
Pull factor	Positive aspects that attract people to move to a place e.g. employment opportunities

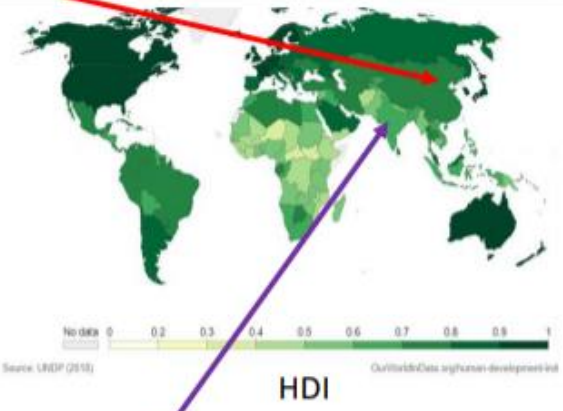
Year 8 Geography

How is Asia changing?

How has China developed?	Advantages of China's growing industry	Problems with China's growing industry
A huge population = large workforce	Factories offer lots of jobs which reduces unemployment	Factory smoke harming the rural industry
Has 12% of the world's mineral resources	Workers pay tax which helps the government to provide other services	People work long days and sometimes in poor conditions



Country income groups: GNI per capita



HDI

Rapid development in India has led to urbanisation.
This has had positive and negative impacts:

Positive	Negative:
More people have access to clean water and medical care in cities	Air pollution has increased from industry and transport developments
Wages have increased and TNCs employ thousands of people	Poor working conditions and claims of exploitation

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8.7 German Present tense holidays 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

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	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 à 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	Take the first / second road
über die Brücke	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

Year 8.7 KO Present tense Holidays

Present tense and Future tense.

gehen = to go
ich gehe = I go
du gehst = you go (familiar)
er/sie/es geht = he/she/it goes
wir gehen = we go
ihr geht = you go
Sie gehen = you go (polite)
sie gehen = they go

fahren = to go/drive/travel
ich fahre = I go
du fährst = you go (familiar)
er/sie/es fährt = he/she/it goes
wir fahren = we go
ihr fahrt = you go
Sie fahren = you go (polite)
sie fahren = they go

Phrases that use **infinitives**.
An infinitive is the basic form of the verb. In English it starts with to_ to run, to jump, to swim.
In German, the verb ends in –**en** or **n.** The infinitive goes to the end of the sentence
e.g., I will eat – ich werde essen

Man kann =You can
Ich werde = I will
Ich muss = I must

These are followed by an infinitive.

Man kann in die Stadt gehen– You can go to the town
Ich werde in einem Restaurant essen– I am going to/will eat in a restaurant.
Ich muss einkaufen gehen= I must go shopping

Pronoun	werden – to become (need to form future tense)
I	ich werde
you	du wirst
he/she/it	er/sie/es wird
we	wir werden
you (pl)	ihr werdet/Sie werden (polite + pl)
they	sie werden

ins Einkaufszentrum gehen to go to the shopping centre
radfahren to cycle
mit meinen Freunden aussgehen to go out with friends
ins Kino gehen to go to the cinema
die Museen besuchen to visit museums
einkaufen gehen to go shopping

um...zu + infinitive = in order to

Ich gehe ins Einkaufszentrum, um einkaufen zu gehen – I go to the shopping centre to go shopping.

Ich gehe zum Park, um Fußball zu spielen – I go to the park, in order to play football.

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.

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**.

History – Year 8 Knowledge Organiser Topic 4

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

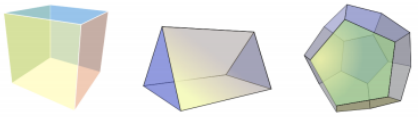
Solid Geometry is the geometry of three-dimensional space, the kind of space we live in.

There are two main types of solids, "**Polyhedra**", and "**Non-Polyhedra**"

Polyhedra

A **polyhedron** is a solid with flat faces
Each face is a polygon (a flat shape with straight sides)

Examples of Polyhedra:



So **no curved surfaces**: cones, spheres and cylinders are **not** polyhedrons.

Euler's Formula

For any polyhedron *that doesn't intersect itself,* then the number of faces (F), edges (E) and vertices (V) are linked using **Euler's Formula**

This can be written: **F + V – E = 2**

Example: Cube

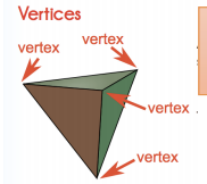
A cube has:

- 6 Faces
- 8 Vertices (corner points)
- 12 Edges

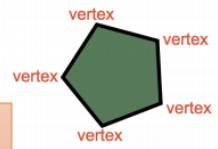
F + V – E = 6 + 8 – 12 = **2**

Vertices, Edges and Faces

A **vertex** (plural: **vertices**) is a point where two or more line segments meet. This is often called a corner.



This tetrahedron has 4 vertices.

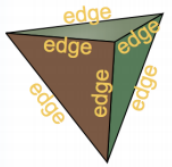


This pentagon has 5 vertices.

An **edge** is a line segment between faces.

For a **polygon** an edge is a line segment **on the boundary** joining one vertex (corner point) to another.

This Pentagon Has 5 Edges



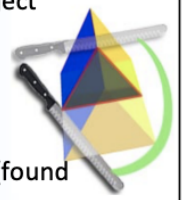
This Tetrahedron Has 6 Edges

For a **polyhedron** an edge is a line segment where **two faces meet**.

A **face** is any of the individual flat surfaces of a solid object.

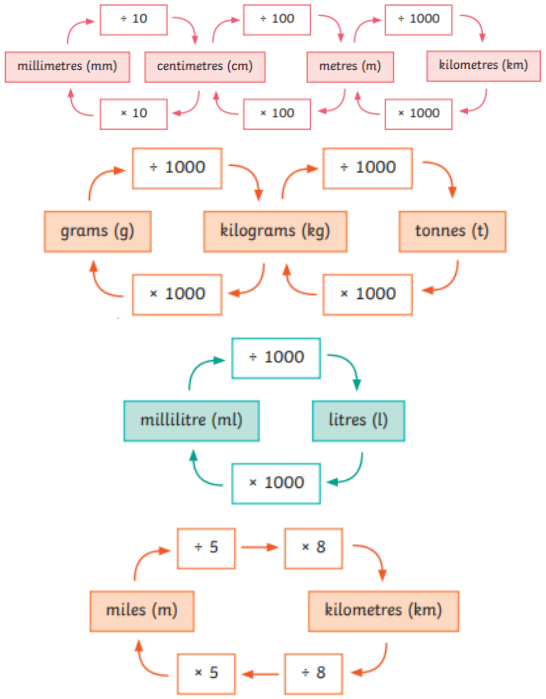
This tetrahedron has 4 faces (there is one face you can't see)

Prisms: A prism is a solid object with:



- Identical ends
- Flat faces
- The same cross section (found by cutting straight across an object) throughout

Units of Measurement



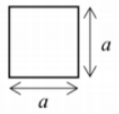
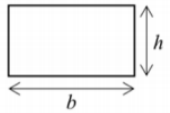
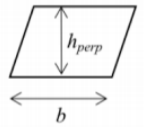
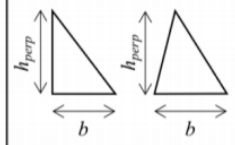
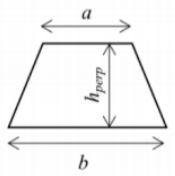
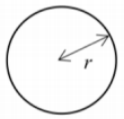
Minute 1 minute = 60 seconds
Hour 1 hour = 60 minutes
Day 1 day = 24 hours
Week 1 week = 7 days

metric (new)	imperial (old)
2.5 centimetres	1 inch
1 kilogram	2.2 pounds
4.5 litres	1 gallon

Area recap

The **area** of a shape is a measure of the two dimensional space that it covers.

Units include: cm^2, mm^2, m^2

Shape	Dimensions	Area formula
Square		a^2
Rectangle		bh
Parallelogram		bh_{perp}
Triangle		$\frac{bh_{perp}}{2}$
Trapezium		$\frac{(a+b)h_{perp}}{2}$
Circle		πr^2

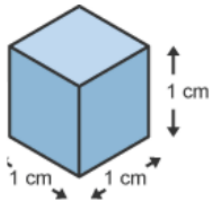
Volume

Volume is the amount of 3-dimensional space something takes up. You can imagine how much water would fit into a container.

Units include: litres, cm^3, mm^3, m^3

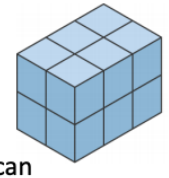
Volume is measured in **cubes**.

A cubic centimeter is the volume within a cube that has sides of length 1cm. It has a volume of $1cm^3$ (1cm cubed).



Cubes and Cuboids

This cuboid is made up of 12 cubes. Each cube is $1cm^3$ so the volume of this cuboid is $12cm^3$

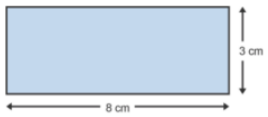


To find out how many cubes are in a cuboid, we can multiply the width by the length by the height

V = w × l × h

In the cuboid above, we would do 2 × 2 × 3 = $12cm^3$

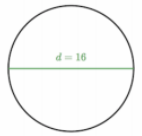
Example (Area)



Area = b × h

= 3 × 8

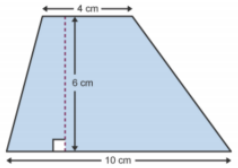
= 24 cm^2



Area = πr^2

= $\pi \times 8^2$

= 64π= 201.1cm^2



Area = $\frac{(a+b) \times h}{2}$

= $\frac{(4+10) \times 6}{2}$

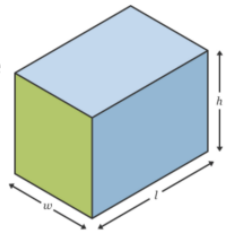
= $\frac{84}{2}$ = 41cm^2

Volume of a prism

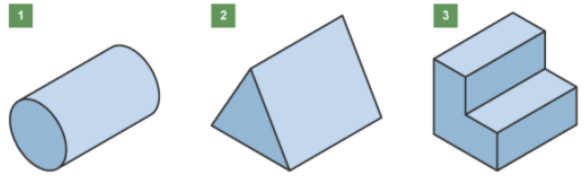
The volume of a cuboid is width × length × height (V = w × l × h).

We can also think of this as the area of the cross section (in green, which is w × h) × length

So the Volume = area of the cross section × length



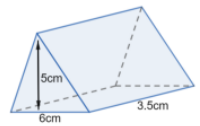
This formula works for all prisms:



1. *volume of a cylinder = area of circle × length*
2. *volume of triangular prism = area of triangle × length*
3. *volume of L-shaped prism = area of L-shape × length*

Example

Here is a triangular prism



The area of the cross section (triangle) is $\frac{b \times h}{2}$

Area = $\frac{5 \times 6}{2} = 15cm^2$

Volume = area of cross section x length

= 15 × 3.5 = 52.5 cm^3

Useful Links https://www.mathsisfun.com/geometry/index.html https://www.bbc.co.uk/bitesize/topics/zrf3cdm https://www.bbc.co.uk/bitesize/guides/zc9wxnb/revision/3

The Blues – A genre of music that was born in America in the 1930s

Year 8 – Topic 2

12 Bar Blues – A chord sequence used in most blues Music

Improvisation – Making up music on the spot

Walking Bassline– A bass line that moves up and down in pitch taking small, regular steps

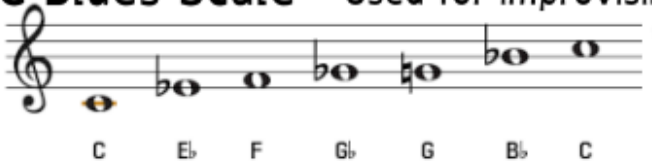
The Deep South

The Blues was created in an area of America called the Deep South where there was a large population of African Slaves working on cotton, tobacco and sugar plantations.

Harmonica

Used for improvising

C Blues Scale – Used for improvising



Acoustic Guitar

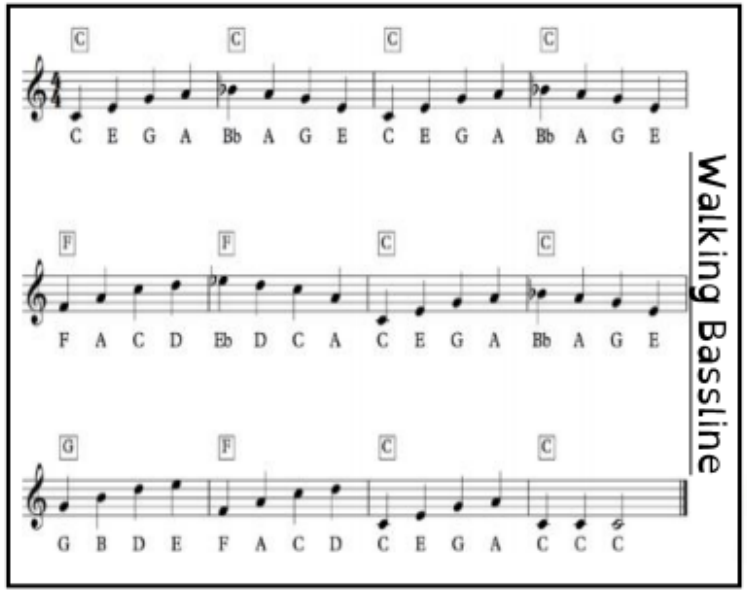
Used for Chords

Chord Sequence

Play each chord 4 times per box. The order of your notes in your chords doesn't matter, just the combination of correct pitches.

F

C



Walking Bassline

Upright Bass

Used for basslines

G

'AAB' Lyrics

'A' lines are the same, 'B' line is different but rhymes with 'A'

A .....

A .....

B .....

12 Bar Blues

C	C	C	C
F	F	C	C
G	F	C	C

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	

Afterlife?

Key Concept	Definition
Resurrection	**Coming back to life after death**, like Jesus did 3 days after the crucifixion.
Reincarnation	**A spirit starting life after death in a new body**, your karma will affect whether your next life in a new body will be better or worse.
Afterlife	**Human existence after biological death**, this might your soul living on in Heaven or Hell
Rituals	**Actions that take place with religious or symbolic meaning**, for example cremating a body to ashes to show that the body goes back to the earth.
Karma	**Every action has a positive or negative effect on your next life**, charity will be rewarded.
Judgement Day	**The idea that the present world will end and all souls will be judged**, Muslims believe your good and bad deeds will be measured so Allah can judge where you go.

Humanist views of life and death

- Humanists do not believe in God or superstition.
- They believe that life ends when the body dies.
- There is no reward or punishment for the way we have lived and no one is watching us.
- They should live to help more people be happy.
- They should believe things that are supported by scientific research and evidence.
- That schools, hospitals and laws should be **secular**, so they can be run in a way that doesn't favour one belief system over another.

Humanists do not have a set of rules that they share, each person can decide how to live using a mixture of, their own experience, the wisdom of others, evidence and research from science and empathy with others people.
-They want to make the most of their lives as they dis they only believe they will 'live on' in the memories of people who knew them, the evidence they leave behind like art or writing, and their genes passed down to family members.

Humanist Funerals

These can be anywhere to suit the person's individual taste – for example someone who enjoyed walks in the woods might have their funeral service in a woodland.
They are about remembering the person who has died and being thankful for their life.
They can include the persons' favourite songs or poems.
There are eulogies – where people share memories of the person and how they were inspired by them.

They show respect for the dead person, and help the family and friends come to terms with their death, but there is NO mention of 'a better place' or God.

Muslim Beliefs

Judgement Day
Muslims believe that the souls of people who have died will remain in the grave until Judgement Day. Judgement Day will happen at the end of the world but only Allah knows when it will be. ON this day Allah will judge every person on how they have lived their lives and their intentions. The Quran says that Allah is fair and merciful. He will reward more easily then punish. In the end: Some will go to Paradise (Jannah) which is described as a beautiful garden. Others will go to Hell (Jahanam) which is described as a place of fire, although they may not have to stay here for ever.

Angels
Muslims believe we each have two angels that are recording our actions and intentions all the time. They are called Raqib and Atid. On Judgement day the information in the books will help Allah decide where we go.
Other angels are involved on Judgement day –
Israfil – will blow a trumpet and all the people who have ever lived will be resurrected from their graves.
Munkar and Nakir – will ask each person some questions, such as "What is your religion?".

Christian Beliefs

All Christians agree that **we will be resurrected** after we die, they believe this because **Jesus was resurrected** and they think this is a sign of what will happen to them
Some Christians believe they will be resurrected with **physical** bodies. Others think they will have spiritual bodies.
All Christians agree that Heaven is the idea of a **perfect** place, the Bible describes Heaven as being a place where God will 'wipe every tear from your eye' and there is **no more death**, mourning, **crying** or **pain** there.
Some Christians think only faith in Jesus will allow you to get into Heaven. Other Christians think you will also be allowed in if you have treated people well by 'loving your neighbour'.

Sikh Beliefs

Sikhs believe in **reincarnation**. This means that a person's soul may be reborn many times as a human or an animal. Therefore, for Sikhs, death is not the end. The Sikh sacred text, the Guru Granth Sahib says that the body is just clothing for the soul and is discarded at death.
Sikhs believe that everything that happens is hukam – the will of Waheguru They also believe each person has a divine spark, which is part of Waheguru, in them. This will be taken back to join Waheguru when a person is finally released from the cycle of rebirth.
Sikhs believe that there are 8,400,000 forms of life and that many souls have to travel though a number of these before they can reach Waheguru.
When something dies their soul is reborn. Only humans know the difference between right and wrong and so it is only when the soul is in a human being that there is a chance of the cycle being broken.
As Sikhs believe in karma, their actions and the consequences of these actions decide whether a soul can be set loose from the cycle.

Muslim Funerals

- The body is very gently washed 3 times in the same way as is for daily prayer (**wudu**).
- The body is wrapped in sheets of simple white cloth to represent purity and equality.
- Burial should happen as quickly as possible, this is hygienic in hot countries, but also shows acceptance of Allah's plan to end the person's life.
- The funeral itself is simple and inexpensive, Muslims believe that they should spend money on the poor rather than expensive coffins or flowers.
- Mourning should last no more than 3 days, as it was Allah's plan for the person to die at that time. (Exceptions are made for very close family)

Christian Funerals

Last rites are given to the dying person by a priest if possible.	This sacrament is believed to give final forgiveness for all the person's sins.
There is a funeral arranged, usually in a Church.	The Church symbolises being in God's presence.
Words of Jesus are read such as 'I am the resurrection and the life'.	This reminds people of the Christian belief that believers will be resurrected as Jesus was.
Psalm 23 is read: The Lord is my Shepherd.	This Psalm reminds the friends and family of the dead person that God is looking after them.
Christians who believe in a physical resurrection are usually buried.	This is so their body can be raised to life on Judgement day.
Christians who believe in a spiritual resurrection can be cremated.	This is because these Christians believe the soul can be resurrected without the body.
The priest says a final prayer for the person, using words from the Bible like' ashes to ashes, dust to dust'	This should remind people that we are all mortal (will die) and that dying is a natural part of life.

Sikh Funerals

- Sikhs cremate people, because the body is just clothing for the soul. There is no need to keep it.
- When someone is dying they try to make their last word 'Waheguru' which means the wonderful teacher that will lead me from darkness into light.
- The body is then washed and placed in a coffin, with the 5Ks which represent Sikhism.
- The coffin is taken in a coffin to the Gurdwara(temple) and placed in front to the holy book, the Guru Granth Sahib.
- Then the body is carried to be cremated.
- The Kirtan Sohalia is said, which says that a funeral is actually a wedding to God. Sikhs hope that this will be their last life before they are released from the cycle of rebirth and reach moksha. If they do not have good enough Karma, they will be born into another body.
- Prayers are sung at the Gurdwara and Langar (food) is shared.
- Families mourn for 10 days and read the Guru Granth Sahib.

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)

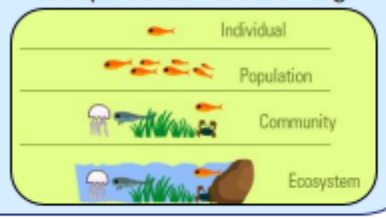
3. Measuring the effect of light intensity on photosynthesis

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.

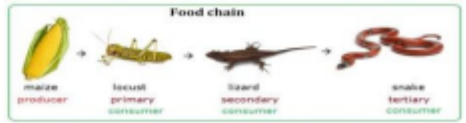


5. Sampling Techniques

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

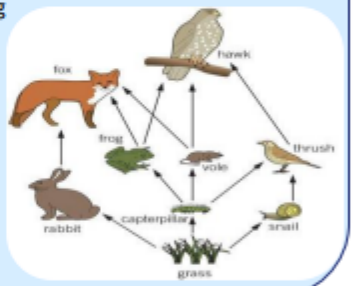
A food chain shows the different species of an organism in an ecosystem, and what eats what. Organisms at each level have different terms:



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.

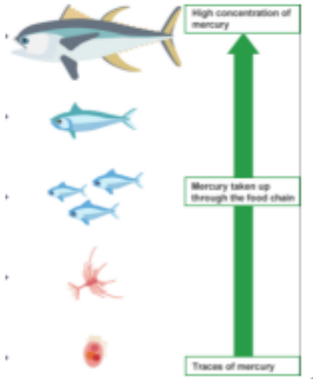
7. Food Webs

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.



KS3 Science
Earth & Atmosphere

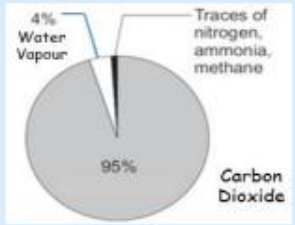
1. Composition of the Earth

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)

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.



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.

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.

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.

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.

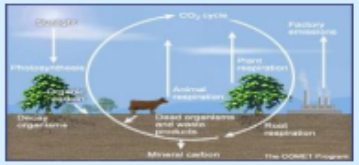
These are energy sources that will not run out or produce carbon dioxide and other greenhouse gases. They are 'cleaner' and more sustainable although they do come with advantages and disadvantages.

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

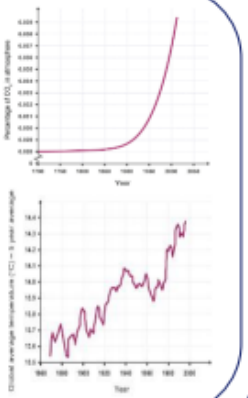
Step 3: Passing carbon from one organism to next
When an animal eats a plant, carbon from the plant becomes part of the fats and proteins in the animal. Microorganisms and some animals feed on waste material from animals, and the remains of dead animals and plants. The carbon then becomes part of these 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

Science

Year 8 Block 4 Biology Knowledge Organiser Ecosystems

Revision guide Pgs: 23-24 + 28

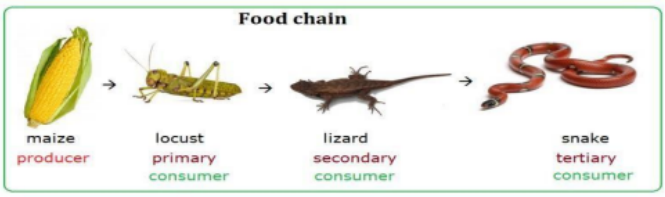
https://www.bbc.com/bitesize/subjects/z4882hv

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



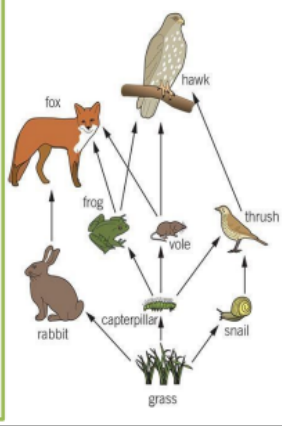
The first eater in a food chain is called the **primary consumer** and is a herbivore.

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.

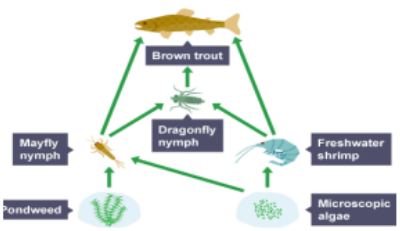
All of the energy used in these ways returns to the environment, and is not available for the next stage.

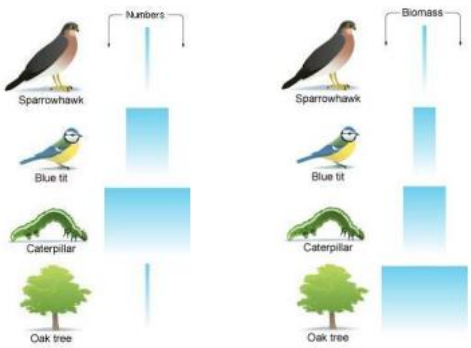
Key Terms	Function
Herbivore	Organism eats plant only, prey organisms
Carnivore	Organism eats other organisms, they hunt prey for their dinner
Omnivore	Organism eats both plant and animals
Primary consumer	The first eater in a food chain
Secondary consumer	The second eater in a food chain
Tertiary consumer	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.





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.

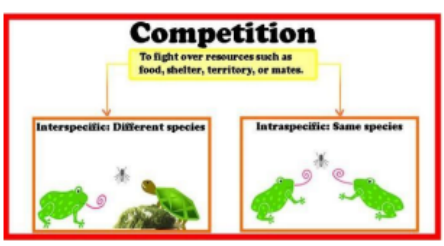
Pyramids of number can end up odd shapes when 1 producer is large in size e.g one tree that supports lots of tiny organisms e.g aphids.

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.

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.

<u>Variation</u>

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 e.g. height
Discontinuous variation	This type of variation has set categories or a limited set of values e.g. eye colour and is caused by genetic factors
Natural selection	The process whereby organisms better adapted to their environment tend to survive and produce more offspring

<u>Natural selection</u>

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.

Cabot Learning Federation

8.7 Present tense holidays Year 8 Spanish vocab. list

¿Dónde viajas?	Where do you travel?
Viajo …	I travel…
Voy…	I go …
a París / a Londres	to Paris / to London
a Francia	to France
a España	to Spain
a Inglaterra	to England
a Escocia	to Scotland
a Irlanda	to Ireland
a Gales	to Wales
a Portugal	to Portugal
a Pakistán	to Pakistan
a Polonia	to Poland
a Somalia	to Somalia
al Caribe	to the Caribbean
al Reino Unido	to the UK
a los Estados-Unidos	to the States
a los Países Bajos	to the Netherlands

¿Cómo viajas?	How do you travel?
a pie	by foot
en bici	by pushbike
en moto	by motorbike
en coche	by car
en tren	by train
en barco	by boat
en metro	by tube
en autocar	by coach
en autobús	by bus
en avión	by plane

¿Dónde te alojas?	Where do you stay?
Me alojo en…	I stay in..
un hotel (de cinco estrellas)	A (five star) hotel
un camping	A campsite
un apartamento	An appartment
una caravana	A caravan
una tienda	A tent
un albergue juvenil	A youth hostel
una caravana estática	A static caravan
en casa de mis abuelos	At my grand-parents'
un parador	A state-owned luxury hotel
una pensión	A B&B

¿Qué visitas?	Where do you visit?
Visito…	I visit…
Visitamos…	We visit…
la playa	The beach
la piscina	The swimming pool
la pista de hielo	The ice rink
el centro	The town centre
el cine	The cinema
el museo	The museum
el teatro	The theatre
el centro comercial	The shopping centre
el polideportivo	The leisure centre
el mercado	The market
el estadio	The stadium
el parque de atracciones	The theme park
el hospital	The hospital
los monumentos	The monuments
las tiendas	The shops
los cafés	The cafés
los restaurantes	The restaurants
la oficina de turismo	The tourist information office

¿Qué haces de vacaciones?	What do you do on holidays?
Descansar	To rest
Divertirse (me divierto)	To have fun (I have fun)
Tomar el sol	To sunbathe
Visitar monumentos	To visit monuments
Ir a la playa	To go to the beach
Ir al restaurante	To go to the restaurant
Ir de compras	To go shopping
Dar un paseo	To go for walks
Sacar/tomar fotos	To take photos
Comprar recuerdos	To buy souvenirs
Hacer deporte	To do (play) sports
Hacer deportes acuáticos	To do water sports
Bailar en la discoteca	To dance in the disco

¿Dónde está…?	Where is…?
Está lejos	It's far
Está cerca	It's nearby
Está a cinco minutos	It's 5 minutes away
Está a 300 metros	It's 300 metres away
Siga todo recto	Go straight on
En el semáforo siga todo recto	At the traffic lights go straight on
En la rotonda gira a la derecha	At the roundabout turn right
Gira a la izquierda	Turn left
Gira a la derecha	Turn right
Tome la primera / la segunda	Take the first / second
Cruza el puente	Cross the bridge

¿Qúe tiempo hace?	What is the weather like?
Hace buen tiempo	It is good weather
Hace calor/frío	It is hot/cold
Hace sol	It is sunny
Hace 25 grados	It is 25 degrees
Hace mal tiempo	It is bad weather
Llueve	It is raining
Nieva	It is snowing
Hay viento	It is windy
Hay nubes	There are clouds

8.7 Present tense holidays
Year 8 Spanish Knowledge Organiser

The present and future tenses

Cabot Learning Federation

There are three types of verbs in Spanish and in their infinitive form they end in:
-ar -er -ir

The present tense : Depending on the pronoun, we change the ending of the verb using the table below :

Pronouns	**-ar**	**-er**	**-ir**
yo (I)	-o	-o	-o
tú (you)	-as	-es	-es
él (he), **ella** (she)	-a	-e	-e
Nosotros/nosotras (we)	-amos	-emos	-imos
Vosotros/vosotras (you) (pl)	-áis	-éis	-ís
ellos/ellas (they)	-an	-en	-en

Example:

Descans**ar** = **to** rest Com**er** = **to** eat viv**ir** = **to** live
Descans**o** = **I** rest Com**emos** = **we** eat viv**en** = **they** live

The Near Future :
The near future **tense** is used to express something that will be happening in the very near future. It is formed by conjugating the verb **ir** (to go) in the present tense + a + an infinitive.
Example: I'm going to travel by plane > Voy a viajar en avión.

English	To go (present)	"a"	Infinitive
I am going to go	Voy	a	ir
You are going to play	Vas	a	jugar
He/she is going to visit	Va	a	visitar
We are going to swim	Vamos	a	nadar
You (pl.) are going to read	Vaís	a	leer
They are going to do	Van	a	hacer

Time markers tell us when something happens and help us work out which tense is being used. The following can be used with the future tense.
Mañana - tomorrow
La semana próxima- next week
El fin de semana que viene – next weekend
El próximo mes - next month
El año que viene – next year
En dos años – In two years

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, equipment, iron, 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

Questions and activities – hints and tips

Summarising a lesson:

Answer the following questions to help you summarise your learning in a lesson. This will help you recap and think again about your learning, and will be useful to look back on in the future.

- What key words did you use in the lesson?
- Can you define those key words and use them in a sentence?
- What new content did you cover?
- How does this link to your previous learning?
- Can you summarise your learning into one sentence?

Revision:

If you have an assessment approaching, you could create some revision material based on your knowledge organiser.

Can you get down the key information in a spider diagram?

Can you use diagrams, pictures, symbols etc to recall your knowledge?

Knowledge quizzes:

Create a set of questions using the information from your knowledge organiser, or from your lesson.

You could make them about key words, and maybe even give multiple choice answers.

Go over the questions you keep getting wrong.

Try the questions out with those at home, or maybe your teacher could use them for their starter quiz in class.

Keyword Development:

Practise the spellings of key words. Use the look-cover-write-check method to help you.

Can you explain what the key words mean?

Can you link the key words together?

Copy out the key words with their definitions.

What might it look like?

Geography — Thursday 1st October

Topic: Our Place in the World

Lesson Summary:

Longitude - the distance, in degrees, E or W of the Prime Meridian.

Latitude - the distance, in degrees, N or S of the Equator.

Today we learnt about how the world is divided up using lines of latitude + longitude. The Equator is an 0° latitude, and the poles are 90° N +S.

This links to our previous learning because now I can say where the continents are using longitude + latitude to find them on a map

Lesson summary:

Knowledge Quiz:

Science

Topic: Cells — Monday 28th September

Knowledge Quiz:

1.) What is the name of the part of the microscope where the specimen is placed?
A= Stage

2.) How many cells are there in a 'unicellular' organism?
A= one

3.) What does the 'cell membrane' do?
A= controls movement of substances in + out of the cell

4.) Where does photosynthesis take place in a cell?
A= Chloroplast

5.) What is the function of the red blood cells?
A= to carry oxygen

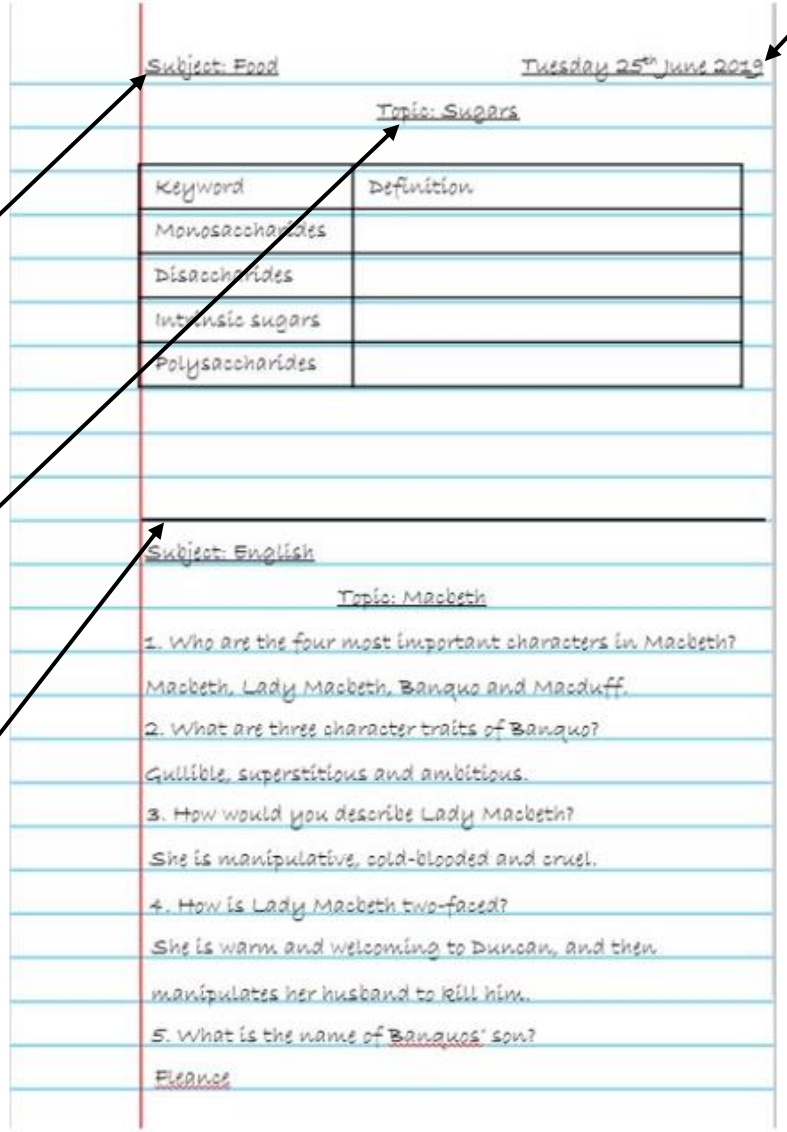
How to present your homework:

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

Notes