

Year 8

Booklet 1 Knowledge Organiser 2022/2023

Independent Study

Name & LF:



How to do your independent study

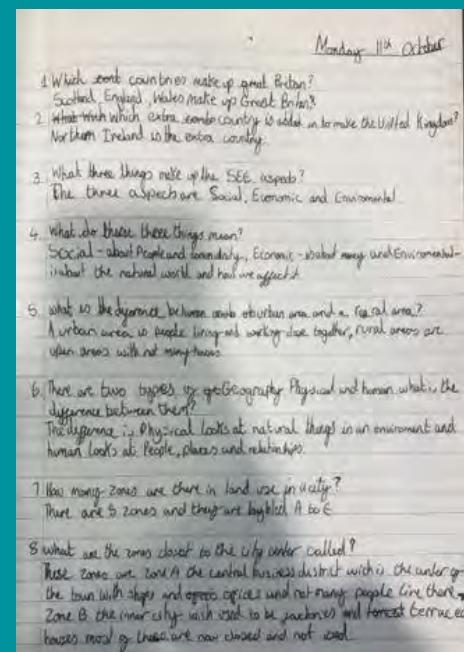
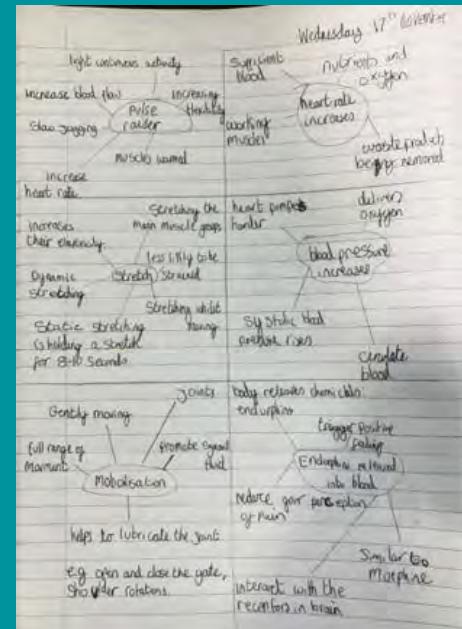
For all subjects except Maths, Knowledge Organisers are used for IS tasks. You will have five pieces of IS due every week, which will be checked by your teacher of the subject due. You can attend IS club at 3pm in the Art Barn to get your IS done or complete it at home.

1. Check the IS schedule for the week so that you can see which Knowledge Organisers you need to be learning and what the deadline date is.
2. Carefully study the sections of the Knowledge Organiser that you are learning.
3. Write between 10 and 20 self-quizzing questions, a detailed mind-map or flash card style notes using the whole page.
4. Write your IS in your IS book. Put the deadline date at the top of the page, so that you can clearly see when the work will be checked.
5. On the next page there's some guidance on how to revise using your Knowledge Organisers.

Contents:

Page Number	
1	Revision Techniques
2	Using Your Knowledge Organiser
3	Maths
4-9	English
10-16	Science
17-18	Computing
19	Drama
20	Art
21	Music
22-23	DT
24-25	History
26-27	Geography
28	RE
29-32	French
33-36	Spanish
37	PE
38	Space and Careers
39-40	Hand in Schedule

Examples of Good IS:



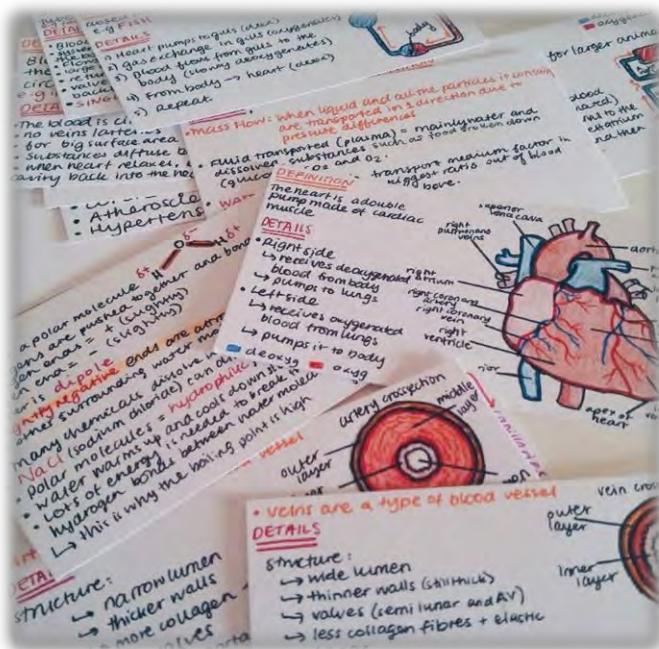
Revision Techniques

Flash Cards

Great for revising key terms and remembering definitions, dates, facts etc.

Split the page of your I.S textbook into four using a ruler or use flash cards which you can collect from the LRC and keep in your I.S folder.

Make brief notes on the information in the knowledge organiser, use colour coding and diagrams where you can to highlight key information.



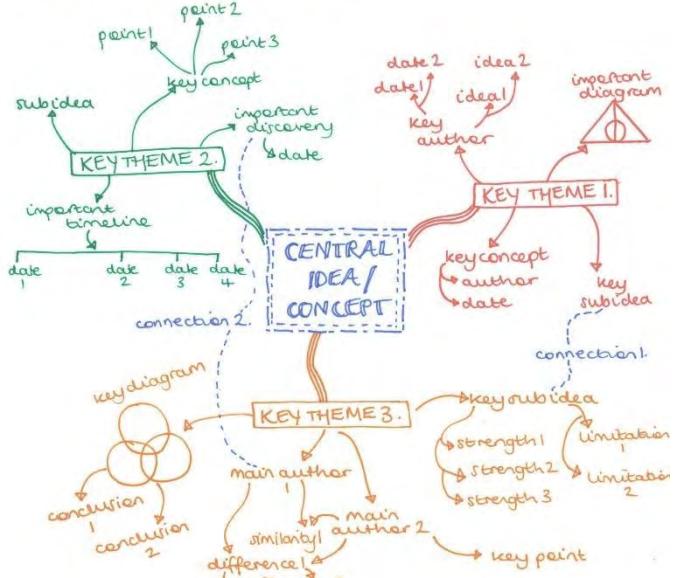
Mind Map

Great for revising if you are a visual learner, allowing you to select and link key information.

Use a full page to add as much detail as you can to your mind map, starting with a key concept or topic at the centre. Use the knowledge organisers and your own ideas.

You can use colour coding, diagrams and connections to support your learning.

MINDMAPPING GUIDE



Self-quizzing Questions

Here is a section of a Science Knowledge Organiser. You could test your grasp of this knowledge by asking yourself,

"What ions are found in acids? Acids contain hydrogen ions."

"What does corrosive mean? A corrosive acid can destroy skin cells and cause burns."

These are examples of self-quizzing questions. Write 10-20 self-quizzing questions and answers based on the subject knowledge organiser and focusing on the areas where you need to strengthen your knowledge.

2. Acids (pH 1-6)



- Acids are a family of chemicals, examples are lemon juice, vinegar and Coca Cola. There is also acid in our stomach.
- Acids contain Hydrogen (H^+) ions.
- Strong acids like hydrochloric acid are very corrosive this means they destroy skin cells and cause burns.
- Weak acids like vinegar are safe to eat but are still irritant to sensitive parts of the body.

How else can I use my Knowledge Organiser?

The Knowledge Organisers in this booklet will help you learn a wide range of knowledge to prepare you for your lessons as well as the multiple-choice tests at the end of this block of learning.

To get the most out of your Knowledge Organisers, you should be learning sections and then testing yourself. There will be set tasks each week based on the Knowledge Organisers, and there are some optional ideas below that you could try in addition to this if you wish.

Key vocabulary:

- Highlight key terms for a subject and look up the definitions
- Write a sentence using the key terms you have highlighted
- Practice spellings – cover, write and check to learn the correct spellings of key terms

Quizzes/questions:

- Write some self-quizzing questions based on the information read
- Test your friends and family on their knowledge of a subject
- Get your parents/carers to ask you some questions
- Create exam style questions and then swap with a friend

Reflection:

- Before a topic – rank order your confidence and then revisit at the end of the topic, rank again and consider where you have improved
- Add more detail to the Knowledge Organiser after you have been taught that topic
- Traffic light (red, amber, green) each box based on how confident you are

Revision:

- Create 2-3 flashcards each week based on each box
- Create a mind map showing the key information from the Knowledge Organiser
- Read ahead to develop skills, knowledge and understanding so you feel more confident before lessons

General use:

- 50 words, 30 words, 10 words – summarise the information on the Knowledge Organiser from 50 words to 30 words to 10 words
- Pictionary – learn the definitions then draw it for your friends/family to guess
- Elevator pitch – summarise the information in a box/whole Knowledge Organiser for a 30 second presentation
- Generation game – like the famous conveyor belt – look at the Knowledge Organiser and then try to remember as many items as possible
- Key term stories – write a short story using 6 key words that are found on the Knowledge Organiser
- Scavenger hunt – read through the Knowledge Organiser with a friend/family member and see who can find specific information/facts first
- Read, cover, check – read the box, write out what you can remember, check what you have missed (then add in purple pen)

“Education is the passport to the future, for tomorrow belongs to those who prepare for it today.”

Malcolm X

“Success is no accident. It is hard work, perseverance, learning, studying, sacrifice and most of all, love of what you are doing or learning to do.”

Pele

“Sticking to good habits can be hard work, and mistakes are part of the process. Don't declare failure simply because you messed up or because you're having trouble reaching your goals. Instead, use your mistakes as opportunities to grow stronger and become better.”

Amy Morin

Hans Price Maths Department

All Independent Study in the Maths department is set using the following online platforms



You need to log in to your SPARX account, where there are 3 types of homework:

- Compulsory
- XP Boost
- Target

Every student needs to get **100%** of their compulsory homework completed every week. Students need to write out the bookwork codes of each of the questions in their homework book and complete the bookwork checks online.

XP boost and Target sections are additional resources that the students can complete if they wish. They will support the students to make greater progress in Maths, but do not form part of the compulsory Independent Study.

If students get stuck on any question, they should watch the associated video to help them complete the task.

We also subscribe to Times Tables Rock Stars. We encourage students to engage with this program to ensure their foundation of knowledge is solid. We will run College competitions and award prizes to those students with the most coins.



These homework platforms are designed to consolidate your knowledge, and students at KS3 can expect this to take up to 1 hour per week.

KS3 English I.S

Your task each week is to prove you understand the meaning of the 5 words. It is important that when you read a text in front of you, you are able to pick up the language when reading through the text.

Each week you can complete your I.S in two different ways:

Option 1:

Create two different sentences showing your understanding of the word. E.G.: hierarchy:

- 1. Hierarchy is shown in A View From the Bridge through the character of Eddie.**
- 2. In Romeo and Juliet, women were lower than men in hierarchy.**

N.B.: You can change the tense of your word to suit your sentences - you just need to make sure you are spelling it correctly and using the correct context. For example: absolve - absolving - absolved.

Option 2:

Create flashcards which display the words and their definitions written in your own words.



Due Date	Word	Definition
Week 1	Dream	A series of events or images that happen in your mind when you are sleeping.
	Imagine	To form or have a mental picture or idea of something.
	Character	A person in a narrative.
	Persuasive	Making you want to do or believe in a particular thing.
	Political	This relates to the politics of a government who makes the law and tries to influence the way a country is governed.
Week 2	Revolution	A change in the way a country is governed, usually to a different political system and often using violence or war.
	Power	The ability to control people and events.
	Control	To order, limit or rule something, or someone's actions or behaviour.
	Conflict	An active disagreement between people with opposing opinions or principles.
	Justice	The quality of being fair and reasonable.
Week 3	Equity	The situation in which everyone is treated fairly according to their needs.
	Rhetoric	Speech or writing intended to be effective and influence people.
	Persuasion	The action of convincing someone.
	Perspective	A particular way of considering something.
	Interpretation	An explanation or opinion of what something means.

Week 4	Abstract	An idea, feeling or quality, not a material or physical object.
	Acknowledge	To accept, admit or recognise something, or the truth about something.
	Adequacy	The fact of being enough or satisfactory for a particular purpose.
	Fiction	A type of book that is written about imaginary characters.
	Amend	To change the words of something written.
Week 5	Propaganda	Information or ideas that are spread by an organisation/government to influence people's opinions.
	Representation	The way that someone or something is shown or described.
	Context	The situation within which something exists or happens.
	Climax	The highest or most intense point in a narrative.
	Brief	Used to express how quickly time goes past.
Week 6	Corruption	Dishonest or illegal behaviour involving a person in a position of power.
	Tyranny	A situation in which someone or something controls how you live in an unfair way.
	Rebellion	A violent action organised by a group of people who are trying to change a political system.
	Manipulation	Controlling someone or something to your own advantage.
	Oppression	A situation in which people are governed in an unfair and cruel way and prevented from having opportunities and freedom.

Due Date	Word	Definition
Week 7	Hierarchy Democracy Capacity Rebuttal Sophisticated	A system in which people or things are arranged according to their importance. A country/organisation where power is held by elected representatives or by the people. The total amount that can be contained or produced. A statement that says that something is not true. Demonstrating good understanding of the way people behave and good knowledge/intelligence.
Week 8	Symbolism Consult Confer Dialogue Extension	When a thing or image represents an idea or concept. To get information or advice from a person or resource. Exchange ideas on a particular subject in order to reach a decision on what action to take. Conversation between two or more persons. The amount by which something is increased.
Week 9	Motif Satire Rhyme Metaphor Repetition	A literary technique that consists of a repeated element that recurs throughout the text. A way of criticising people or ideas in a humorous way in order to make a point. A word that has the same last sound as another word. A comparison used to describe, not using 'like' or 'as': describing something by saying it is something other than itself. When something occurs more than once.

Week 10	Alliteration	The use of the same sound, especially at the beginning of several words that are close together.
	Imperative	Extremely important or urgent.
	Plot	The story of a book, film, play, etc.
	Structure	The relationship of the component parts of a work of art or literature; the way something is organised.
	Pronouns	A word used instead of a noun to refer to a person or thing that has already been mentioned, e.g: I, you, he, this, it, who, what.
Week 11	Contrast	An obvious difference between two or more things.
	Tone	The general mood of something or someone.
	Eloquence	The quality of delivering a clear and strong message which is used with fluency.
	Verb	A word or phrase that describes an action or experience.
	Vengeance	Violent revenge: to 'get someone back' for an insult or injury.
Week 12	Decline	To refuse an offer or to gradually become less or lower.
	Verse	One of the parts that a poem or song is divided into.
	Fraternal	Relating to brothers or to be friendly like brothers.
	Platonic	A relationship that is affectionate but not sexual.
	Romantic	To love or have a close loving relationship.

Week 13	Diverse	Varied or different qualities about a person, place or thing.
	Motif	A pattern or design.
	Sonnet	A poem that has 14 lines and a particular pattern of rhyme.
	Tragedy	A very sad event or situation, especially one involving death or suffering.
	Prologue	A part at the beginning of a story that gives information about events that happen before the time when the story begins.
Week 14	Loyalty	Always giving help, support and encouragement to someone.
	Honour	A title or reward that publicly expresses respect or admiration for someone.
	Fate	Something positive or negative that happens to a person or thing.
	Masculinity	The characteristics that are traditionally thought to be typical of or suitable for men.
	Domain	An area of interest or an area over which a person has control.

1. Forces

A force is a **push** or a **pull** that changes the **shape**, **speed** or **direction** of an object. You cannot see forces but you can see the effects of them.



The unit of force is the **Newton (N)** named after Sir Isaac Newton. He came up with many theories including those to do with gravity and the **three laws of motion**. We measure force using a piece of equipment called a Newton metre.



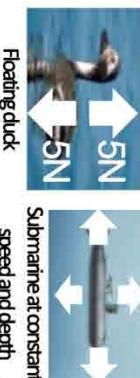
3. Balanced Forces

When we talk about the total force acting on an object we call this the **resultant force**. When the forces acting in opposite directions are the **same magnitude** (size) we say the forces are **balanced**.

This means one of two things:

1. The object is stationary (not moving)
2. The object is moving at a constant speed

For example, the vertical resultant force acting on the duck is $5\text{N} - 5\text{N} = 0\text{N}$



5. Speed, Distance and Time

How do you find the average speed of an object?

- 1) Measure the distance travelled
- 2) Measure the time taken to travel that distance

Average speed = distance / time

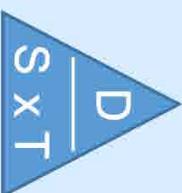
Worked example:

Q) A car travels 2 km in 100 s.

Calculate its average speed.

$$2 \text{ km} = 2000 \text{ m}$$

$$2000 \text{ m} / 100 \text{ s} = 20 \text{ m/s}$$



8. Investigating Forces

Scientific Question: Does wing length affect the time taken to land?

Independent variable:

wing length (cm)

Dependent variable:

time taken to land (seconds)

Control variable:

height dropped from (cm)

mass of helicopter (g)

Conclusion: The longer the wings, the greater the force of air resistance.

2. Types of Force

Forces can be divided into two types: contact and non-contact.

1. Contact forces for example friction, are caused when two objects are in contact.
2. Other forces for example gravity, are non contact forces. The two objects do not need to be in contact for the force to occur.

Examples of forces include **push**, **pull**, **friction**, **air resistance**, **water resistance**, **thrust**, **upthrust**, **reaction**, **weight**, **magnetism**, **gravity**, **lift** and **tension**.

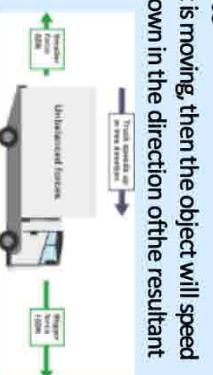
4. Unbalanced Forces

If the forces are unbalanced on an object there are two things that could happen:

1. If the object is stationary then it will move in the direction of the resultant force

2. If the object is moving, then the object will speed up or slow down in the direction of the resultant force

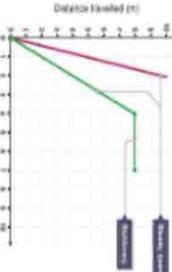
$$\begin{aligned} &100\text{N} - 60\text{N} \\ &= 40\text{N} (\text{to the right}) \end{aligned}$$



6. Distance Time Graphs

In a distance-time graph, the gradient of the line is equal to the speed of the object. The greater the gradient (and the steeper the line) the faster the object is moving.

You can calculate the speed of an object by calculating the gradient of the line (distance travelled / time taken). The speed of the object shown by the green line is $8\text{m}/4\text{s} = 2\text{m/s}$. Is the purple line travelling faster or slower?



7. Reducing forces for the better

Friction opposes the direction of motion, making it more difficult to move.

This can be helpful:

- Your shoes and the floor to stop you slipping
- Tyres and the road to prevent skidding
- Brakes and the wheel to slow you down



This can be unhelpful:
If you do not lubricate your bike chain using oils, friction between the chain and the axles make it difficult to pedal.

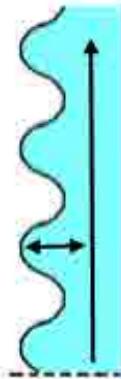
Like friction, air resistance and water resistance forces can also be reduced. This is known as streamlining.



1. Water waves

If you throw a pebble into a pond, ripples spread out from where it went in. These ripples are waves travelling through the water. The waves move with a transverse motion. The undulations (up and down movement) are at 90° to the direction of travel.

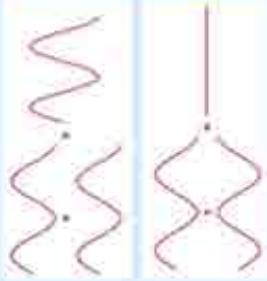
For example, if you stand still in the sea, the water rises and falls as the waves move past you.



2. Superposition

When two waves meet, they affect each other; this is called superposition. If waves meet 'in step' they will add together, increasing the amplitude.

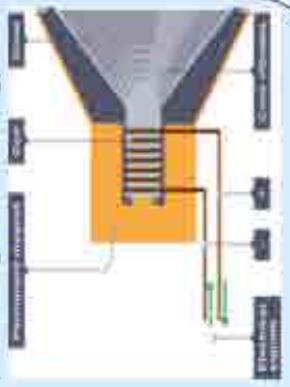
If waves meet 'out of step' they subtract, cancelling each other out.



4. Loudspeakers

Sound waves are produced by all vibrating objects. Loudspeakers work by converting electrical energy into kinetic energy.

This moves the cone which creates the sound waves



6. Microphones

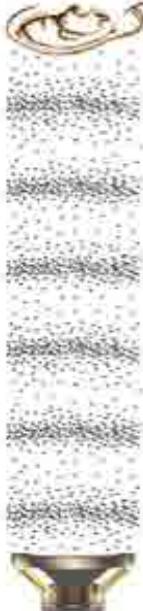
Mobile phones and telephones contain microphones. These devices contain a diaphragm, which does a similar job to an ear drum. The vibrations in air make the diaphragm vibrate, and these vibrations are changed to electrical impulses. In the lab, the electrical impulses can be sent to an oscilloscope, which represents them as a graph on a screen



3. Sound waves

Sound waves are longitudinal waves - the vibrations are in the same direction as the direction of travel. If waves meet 'in step' they will add together, increasing the amplitude.

If waves meet 'out of step' they subtract, cancelling each other out.



Sound travels fastest in a solid. Particles can pass energy on quickly because they are arranged in a regular pattern and are tightly packed

KS3 Science Waves 1: Sound

Hans Price
<https://futurphotonix.com>

7. Oscilloscope traces

Amplitude is the height of the wave from its resting position – the greater the amplitude, the louder the sound

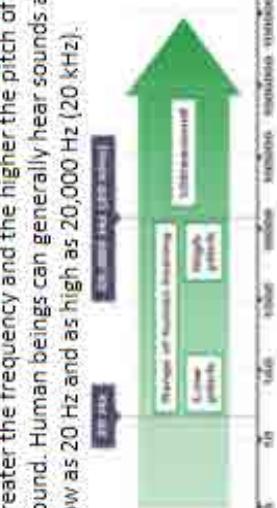
Wavelength is the distance between the crests (tops) of two waves

Frequency is the number of waves per second – the higher the frequency, the closer together the waves are and the higher the pitch



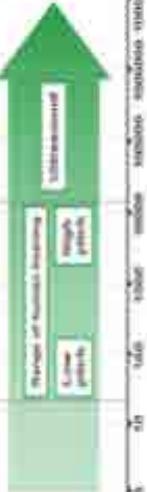
5. Detecting sounds

The frequency of sound waves is measured in hertz, which has the symbol Hz. The bigger the number, the greater the frequency and the higher the pitch of the sound. Human beings can generally hear sounds as low as 20 Hz and as high as 20,000 Hz (20 kHz).



8. Human Hearing range

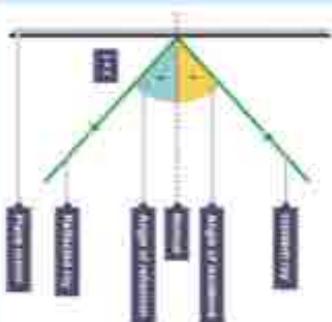
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1. Sound and Light

Light travels at 300,000,000 m/s, much faster than sound, which travels at 343 m/s. This is why you see lightning before you hear it.

	Light waves	Sound waves
Type of wave	Transverse	Longitudinal
Can they travel through matter (solids, liquids and gases)?	Yes (if transparent or translucent)	Yes
Can they travel through a vacuum?	Yes	No
How are they detected?	Eyes, cameras	Ears, microphones
Can they be reflected?	Yes	Yes
Can they be refracted?	Yes	Yes



2. Reflection
When light reaches a mirror, it reflects off the surface of the mirror.

The incident ray is the light going towards the mirror.
the reflected ray is the light coming away from the mirror.

3. The law of reflection

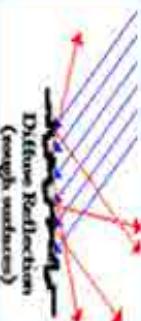
The law of reflection states that the angle of incidence equals the angle of reflection, $i = r$. For example, if the angle of reflection is 30° then the angle of incidence is 30° .

If a light ray travelling along the normal hits a mirror, it is reflected straight back the way it came. The reflection of light from a flat surface such as a mirror is called **specular reflection** – light meeting the surface in one direction is all reflected in one direction.



Waves 2: Light

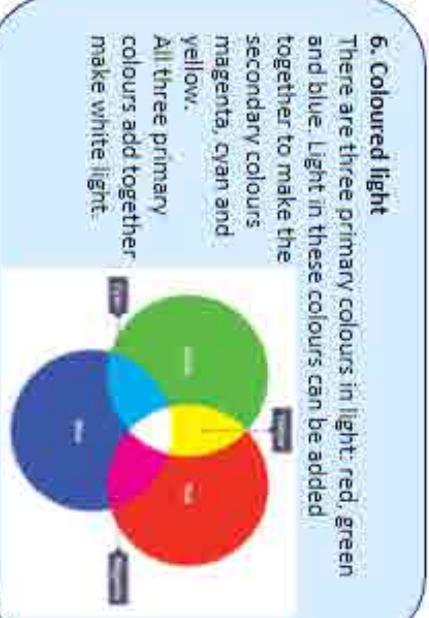
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4. Scattering
If light meets a rough surface, each ray obeys the law of reflection. However, the different parts of the rough surface point in different directions, so the light is not all reflected in one direction. Instead, the light is reflected in all directions. This is called **diffuse scattering**. It explains why you can see a clear image of yourself in a shiny flat mirror, but not in a dull, rough wall.



7. Seeing in colour
Any coloured object reflects the colour that it is and absorbs the rest.
Black objects absorb all colours.
White objects absorb no colours and reflect all the light.

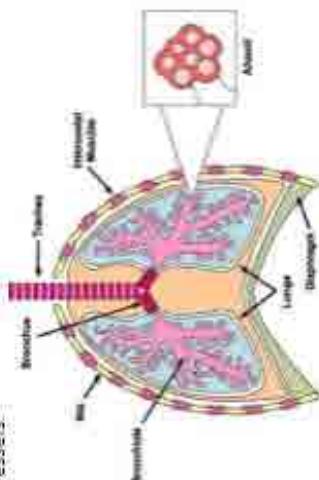


5. Refraction

Light waves change speed when they pass across the boundary between two substances with a different density, such as air and glass. This causes them to change direction, an effect called **refraction**.



The Respiratory System
The respiratory system consists of the lungs, heart and blood vessels.



Aerobic Respiration

Respiration is the process of breaking down glucose to make energy. The energy is used to processes such as: growth, repair and movement. This process happens in the mitochondria of cells. Aerobic respiration needs oxygen in order to work.

The equation for aerobic respiration is:

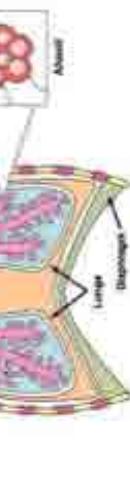


Respiration and Exercise

When our bodies undergo exercise several changes happen in our bodies. Our breathing rate increases and so does our heart rate.

Breathing rate increases in order to draw more oxygen into our bodies which is needed for respiration. This also removes the carbon dioxide which is being produced quickly through respiration.

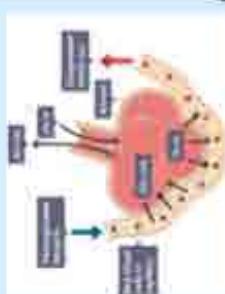
Our heart rate increases in order to pump oxygen around the body faster to the muscles. This oxygen is needed for the increase in respiration. The increased heart rate also waste carbon dioxide to be removed from the muscles and taken back the lungs to be exhaled.



Adaptations of the Alveoli

Alveoli are the small air sacs in the lungs are the site of gas exchange. There have several adaptations that make them suited to their function.

- Large surface area to allow for maximum gas exchange
- Walls one cell thick to minimise the diffusion distance
- Large blood supply to ensure gases are transported quickly
- Moist walls to allow gases to dissolve.



Smoking and Respiration

Smoking cigarettes cause damage in the lungs. Over time the alveoli become damaged and change shape. This reduces the surface area of the alveoli and reduces the amount of gas exchange that can take place. This causes symptoms like fatigue and shortness of breath.



Ventilation

Ventilation is the scientific word for breathing. Breathing is a process that takes oxygen into the body and removes carbon dioxide. Breathing in is called inhalation and breathing out is called exhalation.

Definition	Common term	Scientific term	Description	Definition
Inhalation	breathing in	Inhalation	breath in	Exhalation
Exhalation	breathing out	Exhalation	breath out	Inhalation
Nose and mouth	respiratory tract	respiratory tract	pathway for air to enter and leave the body	Diaphragm
Volume of air taken in	tidal volume	Tidal volume	amount of air taken in with each breath	Contraction of diaphragm
Heart and lungs	ventilation	ventilation	process of breathing	Expansion of diaphragm
Movement of air	breathing	Breathing	movement of air in and out of the lungs	Contraction of diaphragm



KS3 Science Respiration

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Anaerobic Respiration

During intense exercise not enough oxygen can be supplied to our muscles. When this happens our bodies switch over to anaerobic respiration.

The equation for anaerobic respiration is:



The lactic acid is later broken down into carbon dioxide and water after the period of intense exercise is over. This process is known as the oxygen debt.



Normal bronchial tube



Narrowed bronchial tube

Asthma and Respiration

Asthma is a condition that affects the bronchioles in the lungs. The bronchioles become inflamed and produce mucus making it harder for air to enter and leave the lungs. This causes shortness of breath and tightness in the chest. Inhalers are used as a treatment for asthma and they cause the bronchioles to widen allowing air to return to normal.

1. Variation

Humans, dogs and goldfish are examples of species.

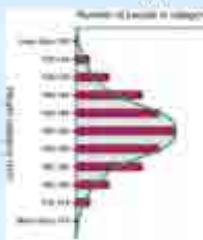
Different species have very different characteristics from each other. For example, dogs have tails and humans do not. Dogs have fur, but goldfish have scales.

The individual members of a species also have differences in characteristics. For example, humans have different coloured eyes, and dogs have different length tails. This means that no two members of a species are identical. The differences in characteristics between individuals of the same species is called variation.

2. Continuous Variation

Human height is an example of continuous variation. It ranges from that of the shortest person in the world to that of the tallest person. Any height is possible between these values. So it is continuous variation.

For any species a characteristic that changes gradually over a range or values shows continuous variation. Examples of such characteristics are height and weight. This shape of graph is typical of a feature with continuous variation.



4. Evolution of Species

Some variation is passed on from parents to offspring via genes, during reproduction. This is inherited variation and examples include eye colour, sex and ability to roll your tongue.

Some variation is the result of differences in the surroundings, or what an individual does such as lifestyle, culture and climate you live in. This is called environmental variation and examples include your language and religion. Some variation is caused by a mixture of both genes and environmental factors and examples include your weight and height.

6. Extinction

Changes in the environment may leave individuals less well adapted to compete successfully for resources such as food, water and mates. Sometimes an entire species may become unable to compete successfully and reproduce. These problems can lead to extinction. Examples of some of the changes in the environment that can cause a species to become extinct are a new disease, new predator, climate change or competition from another species for the resources.

Examples of species that have become extinct include the dodo, dinosaurs and the West African Black Rhinoceros.



KS3 Science Evolution



7. Biodiversity

An endangered species is at risk of becoming extinct. For example, the panda and gorilla are endangered and may become extinct. A species can become endangered for several reasons, including: the number of available habitats falls below a critical level or if the population of the species falls below a critical level.

Biodiversity means having as wide a range of different species in an ecosystem as possible. It is important to conserve the variety of living organisms on Earth. Not only do we have moral and cultural reasons for conserving endangered species, but it also reduces impact on food chains and webs and protects our future food supply.



8. Conservation Measures

Some species in Britain are endangered, including the skylark, red squirrel and grass snake. They could be helped by conservation measures such as:

- education programmes
 - captive breeding programmes
 - legal protection and protection of their habitats
 - making artificial ecosystems for them to live in.
- Plant species can also be endangered. Seed banks are a conservation measure for plants. Seeds are carefully stored so that new plants may be grown in the future. Seed banks are an example of a gene bank. Gene banks are increasingly being used to preserve genetic material for use in the future.

1. Displacement reactions

Displacement reactions are used to help establish the order of reactivity for metals.

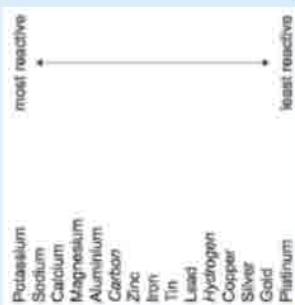
In these reactions a more reactive metal replaces a less reactive metal to form a salt.

Example:



2. The Reactivity Series

The reactivity series is the order of metal based on their reactions with water, air and acid. We can use this to predict what is made in a reaction. Carbon and hydrogen are included as carbon is sometimes used to extract metals from their ores using reduction.



4. Acid and Metal Reactions

Acid and metal reactions are used to determine a metal's reactivity. These reactions produce a metal salt and hydrogen gas. Metals that are higher up the reactivity series react vigorously with acid, whereas metals lower down have a much slower reaction.

The general equation for this is:



Example:



6. Naming Salts

When a salt is named in an acid reaction it has two parts to its name. The first part is the metal and the second part is from the acid. Depending on the acid used the second part of the name will be different.



Eg.



7. Tests for Carbon Dioxide and Hydrogen

In these reactions we can make some gases that we need to test and be able to identify. The tests for hydrogen and carbon dioxide are as follows:

CO_2 – Carbon Dioxide

1. Lit splint is extinguished (goes out) in the presence of CO_2 gas.
2. lime water turns from colourless to cloudy.

H_2 – Hydrogen

Squeaky pop test - a lit splint, in the presence of hydrogen makes a squeak pop sound.

8. Group 1 Metals

In group 1 metals the reactivity increases down the group.

The general equation for this is:



The general equation for this is:



Example:



Metal oxides are examples of alkalis and non-metal oxides are examples of acids.

Element

Lithium, Li

Fizzes steadily, slowly becomes smaller until it disappears

Sodium, Na

Melts to form a ball, fizzes rapidly, quickly becomes smaller until it disappears

Potassium, K

Quickly melts to form a ball, burns violently with sparks and a blue flame, disappears rapidly, often with a small explosion

KS3 Science

Metals and Reactivity



Computer Components | RAM, Hard drive & CPU

RAM

Stores the programs, parts of the operating system and the files **currently being used**.

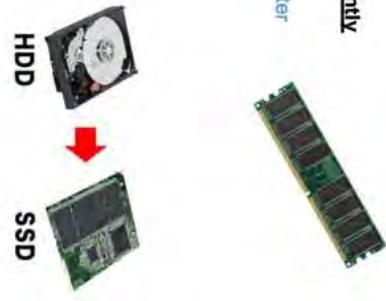
RAM is **volatile**, meaning that the data is not stored when the computer system is switched off.

Hard drive

Stores **all** the programs, operating systems and files **needed for the computer system to run**.

The hard drive is **non-volatile**, meaning that the data is stored even when the computer system is switched off.

This is an example of secondary storage



CPU (Central processing unit)

Fetches, decodes and executes instructions.



The number of **independent processors** in the CPU which run the fetch decode execute cycle **simultaneously**.

Dual core: **2 independent processors** in the CPU working **simultaneously**.

Quad core: **4 independent processors** in the CPU working **simultaneously**.

Simultaneously: At the same time.

Clock speed

The number of **fetch decode execute cycles** a CPU can perform **per second**. This is measured in hertz (Hz).

1Hz – 1 cycle per second

1MHz – 1,000,000 (million) cycles per second

1GHz – 1,000,000,000 (billion) cycles per second



ROM

Virtual Memory

What is it for?

You can't start your computer without it! It stores instructions (e.g. your BIOS) which are **needed** to "boot up" the computer.

1. ROM is **non-volatile!** (Content is stored, even when the PC is switched off).
2. The content of the ROM **never changes** (**or hardly ever!**)
3. You **can't expand** (increase) how much ROM you have.

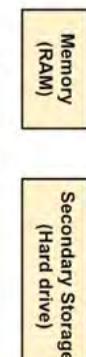
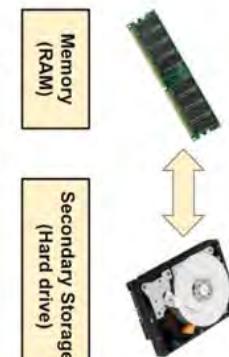


Virtual Memory

Virtual memory is used when RAM is full.

Part of the secondary storage is used as virtual memory (temporary RAM).

Data from RAM is moved to the secondary storage to make space in the RAM for new data.



Advantage

Allows you to run more programs at the same time without needing to buy more RAM.

Disadvantage

Virtual memory is slower to access data compared to RAM. This will make loading programs slower compared to using RAM.

Upgrading components

Upgrade to a CPU with a higher clock speed.

Programs and data will load faster.

Upgrades to a CPU with more cache.

Programs and data will load faster.

Upgrades to a CPU with more cores.

Increase the amount of RAM.

More programs and data will load faster.

More programs and data will load faster.

Programs and data will load faster.

More fetch decode execute cycles can be processed per second.

Can access frequently used data quicker.

More instructions can be processed at once.

Does not need to rely on the virtual memory as much.

Will have a much faster read/write speed which allows files to load and save quicker.

Will have a much slower read/write speed which means that it takes longer to load and save files.

Computer Components | ROM & Virtual Memory

ROM

What is it for?

You can't start your computer without it! It stores instructions (e.g. your BIOS) which are **needed** to "boot up" the computer.

1. ROM is **non-volatile!** (Content is stored, even when the PC is switched off).
2. The content of the ROM **never changes** (**or hardly ever!**)
3. You **can't expand** (increase) how much ROM you have.

3 Key points

ROM is **non-volatile!** (Content is stored, even when the PC is switched off).

The content of the ROM **never changes** (**or hardly ever!**)

You **can't expand** (increase) how much ROM you have.

Year 8 Drama-Block 5 -Voice

Developing Vocal Skills	Knowledge and understanding of how to use the voice to achieve a variety of effects, characters and geographical places.
	<ul style="list-style-type: none"> To develop the ability to control their voice in performance and in everyday life To empathise with characters different from themselves To challenge self-consciousness by stepping out of your comfort zone

Key Skills	
1	Pitch This is how high or low a performer makes their voice when playing different roles. Pitch can show the age, gender and mood of the character.
2	Accent This informs the audience what country you are from e.g. England.
3	Diction This is how clearly you speak using enunciation and pronunciation.
4	Volume This is how loud you speak, this could be from a stage whisper to shouting.
5	Emphasis This is when a performer puts extra focus on a word or words within a sentence to make a point, this can be done by elongating, speaking louder or changing the tone of your voice.
6	Intonation This is varying your voice so that it goes up and down, this helps the fluency of your speech and helps the audience stay engaged with your dialogue.
7	Projection This is speaking with strength. Opening your mouth wider creates a bigger projection.
8	Dialect This is similar to speaking with an accent except it is more specific i.e. it tells the audience what region you are from e.g. London.
9	Tone This is showing the mood that your character is feeling e.g. happy, sad, excited, frustrated etc.
10	Received Pronunciation This is when you speak with a posh accent, taking care to enunciate each letter in every word. Performers use the front of their mouths when they are delivering their dialogue to give a nasal sound.
11	Cockney This is speaking with an East End (London) dialect.
12	Enunciation This is how well a performer speaks e.g. good enunciation means sounding out every letter in every word.
13	Pronunciation This is the accent or mood you speak a line of dialogue with e.g. speaking English with a French accent.
14	Pace This is how fast or slow a performer speaks. A character who is tired or bored may speak with a slow pace compared with a happy, excited character who will speak with a fast pace.

Key Words	Definition
15 Scene	A section of a play/act
16 Dialogue	Speech
17 Duologue	Two people speaking
18 Performance	A showcase
19 Improvise	Creating a piece of unscripted work
20 Script	Written dialogue
22 Audience	Spectators
23 Character	A person who you play in role
24 Rehearsal	Practicing a scene/performance



Year 8 Creatures & Characters

Content: In this project you will

Develop knowledge- of some different styles of characters

Understand- what inspired artists to create their work and how to write about the work

Develop skills- drawing, shading, painting with ink, showing the influence of other artists in your own work and presentation

Outcome- a Tim Burton inspired Creature/Character in clay.



Analysis

All artist research pages should be annotated

Artwork-



- Artist name
- Describe the work-what does it look like? Use the formal elements i.e. colour, line etc.
- What techniques/materials were used?
- What is your opinion of the work? How is it relevant to your own idea?

Keywords:

(Self)Portrait-representation of a person/representation of the artist by himself

Shading/Tone-dark, light, flat, smooth, graduated, contrasting

Symbolism- using an object to represent a meaning

Sentence starters

- I like/dislike the way the artist has used...because
- I think the colour scheme used is effective because...
- I think the artist has been inspired by...because

Evaluation of Your Artwork-

- What inspired you to create the piece?
- What techniques did you use and why?
- What does it mean to you?
- How is it relevant to your idea?

Sentence starters

- The technique I have used is...
- The skill/technique I found most difficult was...because...
- I think my work is successful because...

Research

Develop knowledge- of some different styles of characters

Understand- what inspired artists to create their work and how to write about the work

Develop skills- drawing, shading, painting with ink, showing the influence of other artists in your own work and presentation

Outcome- a Tim Burton inspired Creature/Character in clay.



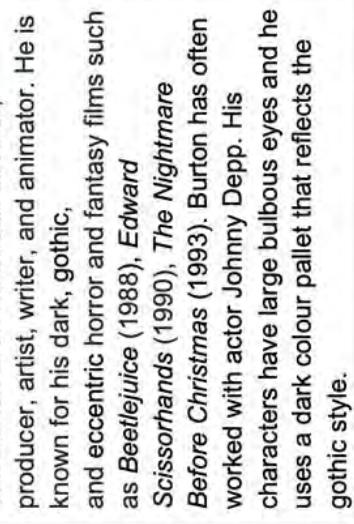
Olivia Malone MBE

Develop knowledge- of some different styles of characters

Understand- what inspired artists to create their work and how to write about the work

Develop skills- drawing, shading, painting with ink, showing the influence of other artists in your own work and presentation

Outcome- a Tim Burton inspired Creature/Character in clay.



Kate Olivia Malone MBE in London, is a British studio potter, ceramic artist and judge, along with Keith Brymer Jones, on BBC2's The Great Pottery Throw Down presented by Sara Cox. Malone is known for her large sculptural vessels and rich, bright glazes.

The Blues [The Struggle for Equality]

12 Bar Blues Chords



- **The Blues** originated from the slave trade in the 18th/19th century.



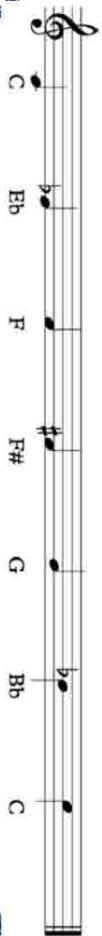
- Hold each chord for 4 beats and keep repeating it throughout.

- A **chord** is when you play 2 or more notes together at the same time.

C C+E+G	C	C	C
F F+A+C	F	C	C
G G+B+D	F	C	C

Improvisation

- **Improvisation** is where you make something up on the spot. This is often a melody played as a solo using the **blues scale**. The notes in the blues scale are shown below.



Walking Bass

- A **walking bass** is a bassline that keeps moving, often playing the same notes as the chords.

- It is usually

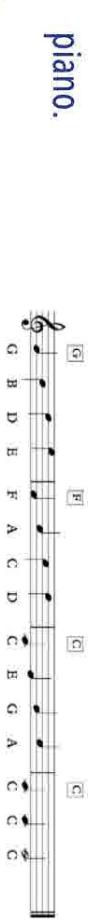
played by the double bass, bass

guitar or the lower part of the piano.




- AAB structured lyrics is where the first line is repeated twice, before a different third line is heard.

AAB Lyrics





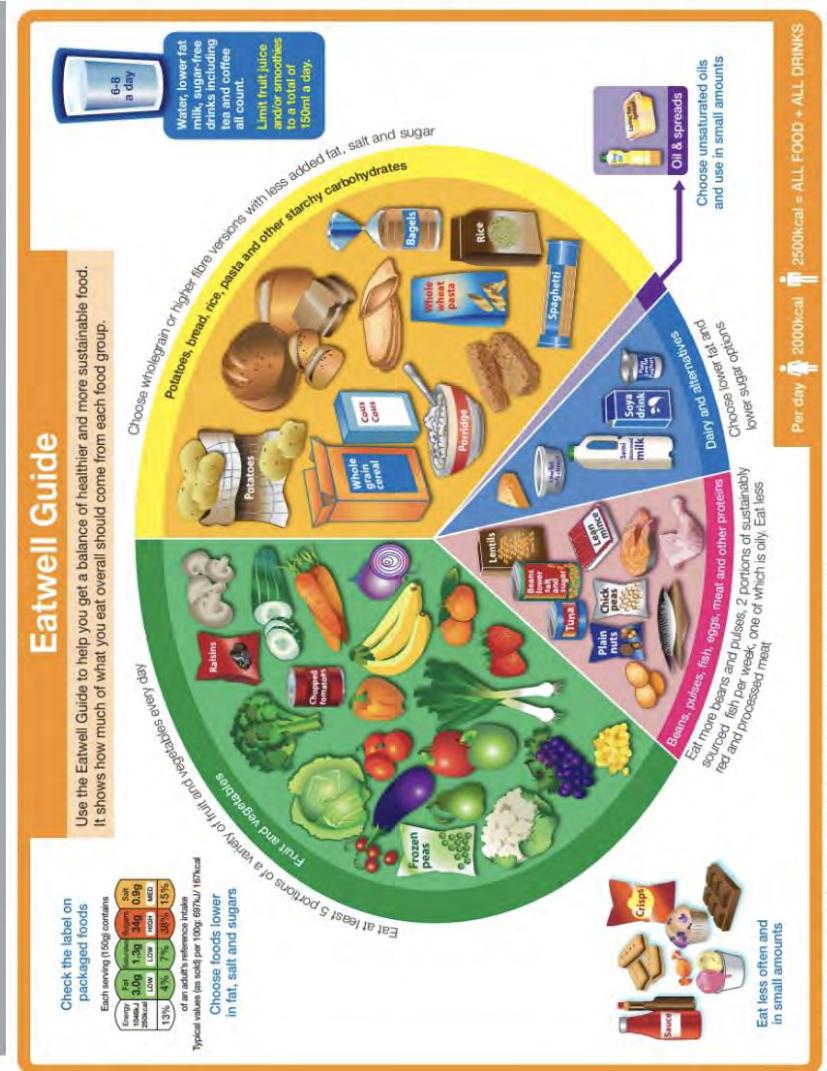
Materials: Food



Diet is the term for the food and drink that we consume daily. A diet needs to be both healthy and sustainable. A healthy diet is a **balanced diet**. It provides the necessary **nutrients** needed for healthy body functions and normal physical activity. To keep a balanced diet is to eat a variety of foods to give the body the range of nutrients it needs to stay in top condition. Eating a balanced diet promotes good health and contributes to a healthy lifestyle.

The Eatwell Guide is designed to help everyone over the age of two to eat a healthy, balanced diet. It shows how much of each food group should be eaten. The four food groups are:

- potatoes, bread, rice, pasta and other starchy carbohydrates
- fruit and vegetables
- dairy and alternatives
- beans, pulses, fish, eggs, meat and other proteins



Nutrients are chemicals found in food which give the body nourishment and are needed for the maintenance of life. The body needs nutrients to perform its daily **functions** properly. Health problems might occur if any one of these nutrients is lacking in a person's diet. There are two types of nutrients:

Macronutrients:

Carbohydrates - the main energy source for the body.

Protein - needed for growth, repair and maintenance of the body.

Fat - used for energy and essential vitamins and fatty acids.

The body needs these in large amounts and are measured in grams.

Micronutrients

Vitamins

Minerals

Trace elements

The body needs these in small amounts and are measured in milligrams or micrograms. In order for the body to function properly it needs a range of vitamins and minerals

The body also needs **dietary fibre** and **water**

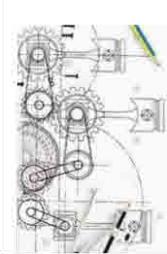
CAD

stands for **Computer Aided Design**

It is the use of computer software to produce designs for products. The designs can be 2D drawings or 3D models.



At HPA we use Creo
Parametric (3D) and
Corel Draw (2D).



Advantages of CAD

- CAD is extremely accurate, more accurate than drawing by hand.
- It is easy to modify or revise a design.
- Storage space is reduced.
- Files can be shared around the world very quickly, or imported into presentations.
- 3D models can be rotated and viewed from different angles.
- Designs can be simulated to see how well they will function. This allows potential problems to be spotted early.
- Designs can be exported to CAM equipment for manufacture.

Disadvantages of CAD

- Some CAD packages are expensive to buy.
- There needs to be access to appropriate ICT hardware to run the software. This usually needs to be a high powered computer which adds to the cost.
- Some designers may not be familiar with how to use CAD software, so time and money must be spent training them. They must regularly update their skills.
- Files can be corrupted or hacked.

CAM

stands for **Computer Aided Manufacture**

It is the use of computer software to control machine tools or manufacture products.

Examples of CAM equipment include laser cutters, vinyl cutters, CNC Routers and 3D printers.

At HPA we use:



3D Cube
3D printer



Versalaser
Laser Cutter



Denford
Compact
1000
CNC Router



Roland Camm1
vinyl cutter

Advantages of CAM

- Complex shapes can be produced much more easily than when manufacturing by hand.
- There is consistency of manufacture as every product produced is exactly the same.
- It enables very high levels of manufacturing precision and accuracy.
- There is greater efficiency as machines can run 24 hours a day, 7 days a week.
- It can increase the speed of manufacture, especially when producing large numbers.

Disadvantages of CAM

- CAM machines are usually very expensive, although their cost is reducing with time.
- Operators must be trained to use the equipment, which adds time and cost.
- For one-off products, CAM can actually be slower than if the product was produced by hand.

CNC

stands for **Computer Numeric Control**



CAD/CAM



Enquiry: What was the impact of the Transatlantic Slave Trade at the time?

The transatlantic slave trade involved the transportation by slave traders of enslaved African people, mainly to the Americas. The slave trade regularly used the triangular trade route and its Middle Passage, and existed from the 16th to the 19th centuries.

Key Impacts of the Slave Trade

- 1 The Human Impact** – The impact the slave trade had on people, including: displacement, dehumanization, death, separation of families, suffering, oppression, economic prospects and racism.
- 2 The Economic Impact** – How the slave trade had an impact economically, including: money for industry, the industrial revolution, empire, how Bristol's merchants got very wealthy and money helped build Bristol as a city further.
- 3 The Global Impact** – Laid the foundations for empire. Through trade, empire and globalisation.

The Triangular Trade System

Historians have estimated that around 11 million Black people were forcibly taken from Africa to the Americas. Also that about 1 million died during the Middle Passage.

Further your learning

Find out more about the impact of the Transatlantic Slave Trade on Bristol here:
<https://www.bristolmuseums.org.uk/stories/bristol-transatlantic-slave-trade/>

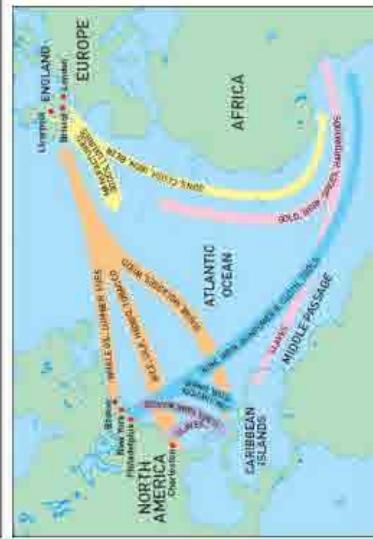
BBC Bitesize – The Transatlantic Slave Trade
<https://www.bbc.co.uk/bitesize/topics/z2qj6sg>

Key Terms

7	Human Rights	The basics rights and freedoms that belong to all humans.
8	legislation	An act/law.
9	racism	Prejudice or discrimination directed against someone of a different race based on the belief that one's own race is superior.
4	Impact	To have a marked effect or influence.
5	Significance	The impact at the time and how we judge importance through legacy.
6	Historical Evidence	Sources that we use as Historians to make sense of the past.
10	slavery	The system where people are owned by other people.
11	slaver	Somebody who owns or keeps slaves.
12	trade	The action of buying and selling services.
13	empire	When one country rules over others.
14	Colonies	Countries that are controlled by another country.
15	auction	Where slaves were sold off to the highest bidder.
16	slave plantation	Large farms forced slaves to harvest cotton, rice, sugar, tobacco and other farm produce for trade.
17	Resistance	Passive: using peaceful methods to oppose. Active: using violent or illegal methods to oppose.
18	revolt	To take violent action against an establishment.
19	Underground Railroad	The system used to help slaves escape.
20	emancipation	Freedom from slavery.

Key People

Mansa Musa	Olaudah Equiano	Toussaint Louverture	Harriet Tubman	Romaine-la-Prophétisse	Marie-Jeanne Lamartinière	Samuel Sharpe



We need to talk about the British Empire.....

Between 1815 and 1914, the **British Empire** covered 10 million square miles of territory (quarter of the world's land surface) and 450 million people. At the time of the British Empire Exhibition of 1924 Britain was the 'Mother Country' of a worldwide empire and Britannia 'ruled the waves'. But should we be proud of the British Empire?

Key Events

- 1 **1612** – East India Company began a small empire of trading posts in India.
- 2 **1757** – victories by Robert Clive drive out the French and established British control in India
- 3 **1807** - Slave trade outlawed (but does not outlaw slavery itself)
- 4 **1833** - Slavery abolished in British Empire
- 5 **1857** - rebellion in India (Indian Mutiny). British government took over India from the East India Company.
- 6 **1877** - Queen Victoria declared 'Empress of India'.
- 7 **1879** - Africa. Zulu Wars between British and local tribal leader Chetshwayo. 11 VC medals won at Rourke's Drift
- 8 **1881-1919** - The 'Scramble for Africa' – Britain acquired colonies in Africa stretching from Cairo to Cape Town.
- 9 **1919** - British government massacred a peaceful gathering at Amritsar, India.
- 10 **1947** - India and Pakistan given independence.

Key People

- | | | |
|----|----------------|--|
| 11 | Queen Victoria | Reigning monarch of Britain from 1819 - 1901 |
| 12 | Gandhi | Indian activist who was the leader of the Indian independence movement against British colonial rule. Used non-violent methods |



History Knowledge Organiser



8.2 The British Empire Modern Context

The First and Second World Wars left Britain weakened and less dominant of its empire. Many parts of the empire had contributed troops and resources to the war effort, some with the promise of more independence in the future. This led to a steady decline of the empire after 1945.

Some of the empire evolved into the British Commonwealth & Britain is still sovereign in many parts of the world. Many people from the former empire viewed Britain as their 'mother country'



History Skills Focus

Source skills

Inference – making an educated guess/work out what the source is saying (e.g. **Britain was strong and powerful**)

Interpretation – the viewpoint or opinion of the source (e.g. **the lion represents Britain as having a strong and powerful empire**)

Significance – understanding why an event is important and where it 'fits' in history (**why do you think the British empire was important?**)

Judgement – how far do you agree with an interpretation? (**Consider why you agree and/or disagree with the interpretation given**)



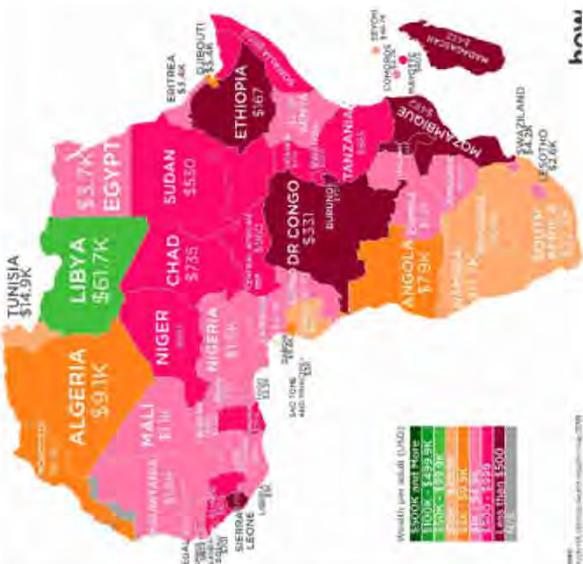
Key Terms

13	empire	Group of countries, people or land 'ruled by one single country referred to as "mother" country.'
14	imperialism	The act of building an empire.
15	Colony	Country that is part of an empire.
16	legacy	What someone or something leaves behind, is remembered for, has an impact
17	Nationalism	Wanting your country to be the best or to be free from someone's empire
18	Britannia	female figure used to symbolise British Empire
19	The Raj	Period of British rule in India after 1857. From the Hindi word for reign.
20	Commonwealth	A group of countries that were once part of Britain's Empire

Useful resource:
BBC Bitesize British Empire Through Time -
<https://www.bbc.co.uk/bitesize/guides/zf7fr2j/revision/1>

Year 8 Knowledge Organiser - Africa

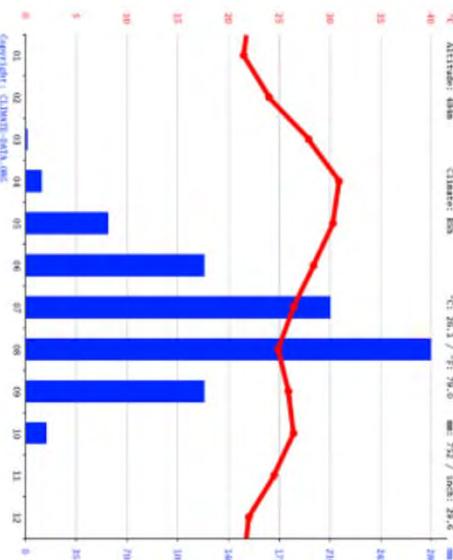
1. Physical feature	Natural feature of the land e.g. a river	10. Africa is both rich and poor
2. Human feature	Man made feature e.g. a city	11. Some African economies are the fastest growing in the world...with Kenya and Rwanda outperforming many countries in terms of % GNI growth.
3. Africa	A continent made up of 54 different countries	12. Over 400 million people in Africa live in extreme poverty....\$1.90 a day
4. Latitude	Horizontal across the map. The Equator, Tropic of Capricorn and Tropic of Cancer pass through Africa	13. We can measure how developed a country is by using development indicators. Lots of data is collected from countries around the world. We can use this to compare countries, areas, people
5. Longitude	Vertical up and down the map. Prime Meridian passes through Africa.	14. GNI per capita
6. Equator	O degree line of latitude that divides the earth in half	15. Quality of life
7. Prime (Greenwich) Meridian	O degree line of longitude that divides the earth in half	16. Standard of living
8. Diversity	Africa is different in landscapes, people and culture	17. Development
9. Misconception	A view or opinion that is incorrect because based on faulty thinking or understanding	18. Life expectancy



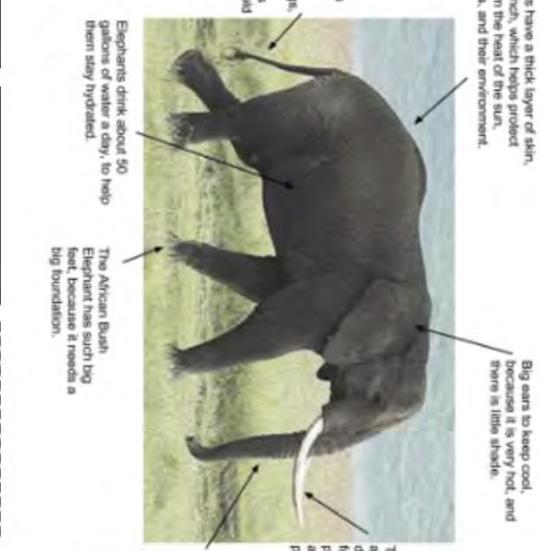
14. GNI per capita	Gross National Income - Dollar value of a country's final income in a year divided by its population
15. Quality of life	The general well being of people, which includes income, health, education, employment, happiness and environment
16. Standard of living	The degree of wealth and owned possessions available to a person or community
17. Development	Complex idea but simply defined as people reaching an acceptable standard of living or quality of life. Can improve over time.
18. Life expectancy	Average age someone is expected to live from birth
19. Infant Mortality rate	Number of deaths of a child before 2nd birthday per 1000
20. Literacy rate	Number of over 16's who can read and write

Year 8 Knowledge Organiser - Africa

21. Biome	A large area with the same plants, climate and animals
22. Hot desert	An area with little rainfall, high daily temps. and little vegetation.
23. Tropical rainforest	Found around the Equator. Dense trees, warm temperature and high rainfall.



Impacts of safari tourism - Botswana

Hot air balloon safaris cause distress to wildlife due to their loud noise and shadows.	Tourism brings lots of overseas money into Botswana.	The National Parks often force locals out of their homes and grazing land.	Most of the money spent by tourists goes to the government or漏s abroad.	Jobs in the tourist sector can be low paid, low skilled and seasonal.
The Salt Pans and Okavango Delta are both fragile environments, and tourism puts them under pressure.	Money from tourism can help to improve the standard of living in Botswana by funding schools and hospitals.	Key: Positive Negative Social Economic Environmental	  <p>The tail is used for swatting away bugs, and the elephants bathe their tails on the tail.</p> <p>Elephants drink about 50 gallons of water a day, to help them stay hydrated.</p> <p>The African Bush Elephant has such big feet, because it needs a big foundation.</p> <p>These tusks are used for digging and protection against predators.</p> <p>The elephant's trunk is great for picking up things, smelling, and touching things.</p> <p>Big ears to keep cool, because it is very hot, and there is little shade.</p>	

Elephants have a thick layer of skin, about 1cm, which helps protect them from the heat of the sun, predators, and their environment.

Big ears to keep cool, because it is very hot, and there is little shade.

Good and Evil Knowledge Organiser

The Problem of Evil

(This is an important reason for why many people do not believe in God)

Picture	Key Concept	Meaning
	Morality	Ways to decide if an action is right or wrong, for example, some people look at the consequence of an action to decide.
	Natural evil	Suffering that is caused by nature, for example floods and earthquakes.
	Moral evil	Suffering caused by humans, for example bullying and murder.
	Free will	Being free to make our own moral choices, God does not control our actions.
	Absolutism	What is right stays the same in ALL situations, for example believing that killing someone is always wrong.
	Relativist	What is right changes depending on the situation, for example believing that killing someone to save many others is the right thing to do.

How can we work out what is right?

Consequentialists (or the teleological approach)	Intentionalists (or the deontological approach)
Say that an action is good if the consequences of that action are of benefit to others.	Say that an action is good if the person had good motives for doing it even if the consequences are not all good in the end.
For example: "Giving money to a homeless person is good if the homeless person spends it on food or shelter. However, if the homeless person spends the money on drugs, giving the money was a bad thing to do."	For example: "Helping your friend with their homework is a good thing to do, even if they get a really bad mark because of your help, you had good intentions so it was a good thing to do"

- The 4 Ps**
- 1. Put off**
- 2. Put right**
- 3. Protect**
- 4. Pay back**

Abdul-Mumin Jitmoud - A case study in forgiveness <p>Salahuddin Jitmoud was stabbed and robbed as he delivered his last pizza of the night. He was a delivery driver for Pizza Hut.</p> <p>a. My son, my nephew,</p> <p>b. I'm not angry with you, I don't blame you for hurting my son.</p> <p>c. I'm angry at the devil, I blame the devil who misguided you and misled you to do such a horrible crime.</p>	The Death Penalty Debate <p>FOR the death penalty</p> <p>Some criminals are not sorry for their crimes (often murder). If they leave prison they will re-offend or might try to get revenge. Society can end the lives of very dangerous people so they can never be a threat again.</p> <p>It is a deterrent. Hopefully others will see the punishment and be put off committing that crime.</p> <p>Some people say that it is cheaper to kill a murderer than to use tax payers money to keep them in prison</p> <p></p>	AGAINST the death penalty <p>Once someone is executed you can't bring them back. People have been executed and then found to be innocent, but by then it is too late.</p> <p>The death penalty is hypocritical. Killing people who kill people to teach them that killing is wrong.</p> <p>Killing people for their crimes is an uncivilised uneducated thing to do. As society improved we can leave the death penalty behind us</p> <p>Capital punishment is not a deterrent anymore. In the USA there is no reduction in murders even though they use the death penalty a lot.</p> <p>Humans should not be the ones to decide when people die. It should be left to fate or God.</p> <p>Executing someone means that prisoners do not get rehabilitated (put-right). Therefore it does not serve the purposes of punishment.</p> <p>Executing someone means they do not have to suffer for what they have done. Their punishment should be having to live with their own guilt.</p>
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<p>"NO MERCY WILL BE SHOWN TO THOSE WHO KNOW NO MERCY, AND NO FORGIVENESS WILL BE GIVEN TO THOSE WHO CANNOT FORGIVE OTHERS." (Jesus)</p> <p></p> <p>Do not judge and you will not be judged. Do not condemn and you will not be condemned. Forgive and you will be forgiven.</p> <p>Show forgiveness, speak for justice and avoid the ignorant</p> <p>Forgive 70 x 7</p>	<p>Some religious people would say that all evil and suffering is caused by human Freewill.</p> <p>They believe God created the world it was perfect, people were created, called Adam and Eve and they had free will; they were able to choose to make good or bad decisions. The people made bad decisions and disobeyed God which brought suffering and sin into the world so it was no longer perfect. This is called the Fall.</p> <p>This is the same with us today - we can choose to greet people with a high five or a slap. What we choose to do will create suffering or happiness in the world. It is up to us to choose to do the right thing to make the world a better place.</p> <p>God allows people to have free will, and their actions to have consequences, this brings a lot of suffering into the world BUT...people who have free will can make real moral choices. If God has created humans like puppets (without free will) they would never be able to choose to do the right thing, it would just be automatic. They would also not be able to choose to love God or love other people.</p> <p>God lets people have free will, even though he knows we will cause suffering. But he thinks it is worth it so we can have free will and real morality.</p>	<p>Some religious people would say that evil and suffering are actually good things because they help us learn and develop. This is the way we can make our souls.</p> <p>They believe God created the world but it was not perfect, God has deliberately put some challenges and suffering in our world because through learning from suffering we can develop our own morality.</p> <p>By making mistakes and learning from the consequences we grow and learn not to make that mistake again because it causes suffering and evil to us and others. For example, if you choose not to revise for a test you will be disappointed with your grade, this suffering will help you to revise next time.</p> <p>These religious believers think that God also allows other people to suffer because it gives us an opportunity to help. If we see someone starving, we have an opportunity to learn how to be compassionate and share our food. If someone is being bullied we can learn how to have courage to stand up for them.</p> <p>These believers think that if there was no suffering in the world we would never develop these good qualities.</p> <p>These religious people would say that the whole point of life is for God to test us so he can know whether to send us to Heaven or Hell.</p>	<p></p> <p>Some people believe that everyone can choose to do right and wrong, they follow God or the Devil.</p> <p>God is in control but he gives the devil permission to tempt people away from him during their lives. The suffering we experience is a test to see if we will continue to follow God when times are hard.</p> <p>These people think God has picked out just the right amount of suffering for us to go through in our lives. If you suffer a lot, it means God knows you have a strong faith and know you can handle a difficult test.</p> <p>The test results come out when the world ends; many people believe there will be a judgement day, the good things you have done will be weighed against the evil things. If there is more good than evil then you will go to Heaven.</p>	<p>Life is a Test The Soul-Making Defence Freewill Defence</p>
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Est-ce que tu aimes... ?
Do you like... ?

OPINION	NOUN	JUSTIFICATION	INTENSIFIERS	ADJECTIVES
Je préfère	le pain (bread)	parce que c'est because it is	très very	agréable (pleasant)
I prefer	le poisson (fish)		assez quite	délicieux/euse (delicious)
J'adore	le fromage (cheese)		un peu a bit	fantastique (fantastic)
I love	le beurre (butter)		trop too	savoureux/euse (tasty)
J'aime	le lait (milk)			sain/e (healthy)
I like	le café (coffee)			horrible (horrible)
Je n'aime pas	le thé (tee)			terrible (awful)
I don't like	le cola (coke)			doux/douce (sweet)
Je déteste	le sucre (sugar)			aigre (sour)
I hate	le jambon (ham)			dégoûtant/e (disgusting)
À mon avis	le chocolat chaud			épicé/e (spicy)
In my opinion	(hot chocolate)			salé (salty)
Je pense que	la pomme (apple)			gras/se (fatty)
I think that	la viande (meat)			bon/ne pour la santé (good for your health)
	la confiture (jam)			mauvais/e pour la santé (bad for your health)
	la glace (ice-cream)			REMEMBER TO MAKE THE ADJECTIVES AGREE WITH THE NOUN
	les haricots verts (green beans)			
	les légumes (vegetables)			
	les frites (chips)			
	les chips (crisps)			
	les épinards (spinach)			
	l'oeuf (egg)			
	l'eau (water)			



Quand est-ce que tu manges?

When do you eat?



Le petit déjeuner

Breakfast

Le déjeuner
Le goûter
Le dîner

Lunch
Snack
Evening meal/tea

DANS LE MARCHÉ / SUPERMARCHÉ / IN THE MARKET / SUPERMARKET

Tu voudrais... ? Would you like... ?

Un paquet de A packet of

Un litre de A litre of

Un kilo de A kilo of

Un demi kilo de Half a kilo of

Une bouteille de A bottle of

deux cents



Qu'est-ce que vous voulez manger? Est-ce que je peux vous aider?

Comme entrée Comme plat principal Comme dessert Comme boisson

Manger/böire Je prends... Un serveur/ une serveuse L'addition s'il vous plaît Le pourboire C'est tout Merci

Can I help you?

For the starter For the main For dessert For drinks I would like To eat/ to drink I'll take (have) A waiter/ waitress The bill, please That's all Thank you

What would you like to eat?

8.5 Food and Drink

Food, prices and quantities. Ordering food in a restaurant.

Verbs and the present tense in French

The infinitive

When you look up a verb in the dictionary, you find its original, unchanged form which is called the ***infinitive*** (regarder, manger, boire, finir, jouer, avoir, être, etc.). The infinitive ends in **-er**, **-ir** or **-re**.

Forming the present tense in French

Take off the last 2 letters of the infinitive (**-er**, **-ir** or **-re**) and add the following endings depending on the pronoun:

	ER verb	IR verb	RE verb
je	-e	-is	-s
tu	-es	-is	-s
il / elle/ on	-e	-it	/
nous	-ons	-issons	-ons
vous	-ez	-issez	-ez
ils/elles	-ent	-issent	-ent

Comparisons

Plus - more

Moins - less

Superlative

Le /la plus – the most

Le /la moins – the least

Jean est plus intéressant que Paul
 Paul est moins intéressant que Jean

Jean est le plus intelligent
 Marie est la moins sympa

Adjective agreement.

Remember adjectives have to agree with the noun they are describing. Normally we add an **-e** to make it feminine unless there is already an **e** and we add an **-s** to make it plural.

*But be careful! :

- Adjectives which end in **-f** change to **-ve** feminine
- Adjectives which end in **-ux** or **-ur** change to **-se** in feminine.
- Adjectives which end in **-il** change to **-ille** in the feminine.

Check out the examples below:

- | |
|--|
| Il est délicieux – elle est délicieuse |
| Il est sain – elle est saine |
| Il est savoureux – elle est savoureuse |
| Il est gras – elle est grasse |

Opinion phrases help to make your work more interesting – have a look at the list on your vocabulary list. Try to use a range of different ones in your work e.g. J'aime (I like)/je pense que (I think that)/ à mon avis (in my opinion).

In French there are different ways of saying 'some'. See the box to the right.	Words come before the noun	masculine (sing.)	feminine (sing.) (vowel)	masculine plural	feminine plural
	some	du	de la	des	des

Year 8 French Knowledge Organiser 8.6

Where I live geographically, Places in town, Phrases that use infinitives.

Opinion starters:

Je pense que

Je crois que

À mon avis

Pour moi

Il me semble

Je pense que Bristol est historique - I think that Bristol is historic

Je crois que Londres est assez industriel – I think that London is quite industrial

Je préfère Bath parce que c'est moins touristique que Liverpool – I prefer Bath because it is less touristy than Liverpool.

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 French the verb ends in -er, -ir, -re
e.g. I like to run – J'aime courir.

On peut

Je vais

J'aime

- One can

- I am going to

- I like

On peut aller au centre-ville – One can go to the city centre.

Je vais manger dans un restaurant – I am going to eat in a restaurant.

J'aime jouer dans le parc - I like to play football in the park.

These are followed by an infinitive.



Il y a (there is) and il n'y a pas de (there is not) – these phrases are very important to allow us to say what is in our town or city. Remember! When using il n'y a pas, we use a 'de', but no article e.g. **Il y a un parc but il n'y a pas de parc**.

It is important to use the correct **article** in front of a noun. This will depend on if we want to say 'a' (indefinite article) or 'the' (definite article), and also in French if the noun is **mASCULine**, **fEMININE**, **SINGULAR** or **PLURAL**.

Articles	A/some	The
MASCULINE	Un	Le
FEMININE	Une	La
PLURAL	Des	Les

Aller – to go	
I	Je vais – I go / I am going
you	Tu vas – You go / you are going
he/she/i t	Il/elle/on va – he goes / he is going
we	Nous allons – we go / we are going
you (pl)	Vous allez – you (pl) go / are going
they	Ils/elles vont – they go / are going



My home! Year 8 French ARE 8.6 vocab. list		What is there in your town?
Qu'est-ce qu'il ya dans ta ville?	Where do you live?	What is there in your house?
Il y a...	I live...	There is...
La plage	In a house	The beach
La jetée	In a flat	The pier
La piscine	In a caravan	The swimming pool
La patinoire	In the countryside	The ice rink
La boucherie	In the mountains	The butchers
La boulangerie	By the sea	The bakery
La gare	In a city/town	The train station
La gare routière	In the suburbs	The bus station
La librairie	In a village	The book shop
La pâtisserie	In the north	The cake shop
La poste	In the south	The post office
Le centre-ville	In the west	The town centre
Le cinéma	In the east	The cinema
Le musée		The museum
Le théâtre		The theatre
Le syndicat d'initiative		The tourist information office
Le centre commercial		The shopping centre
Le centre de loisirs		The leisure centre
Le commissariat		The police station
Le marché		The market
Le supermarché		The supermarket
Le stade		The stadium
Le parc d'attractions		The theme park
Le tabac		The newsagent's
L'hôpital		The hospital
Les monuments		The monuments
Les magasins		The shops
Les cafés		The cafés
Les restaurants		The restaurants

Where is...?	What is there in your bedroom?
on	A bed
under	A wall
in front of	
in	
behind	
between	
next to	
opposite to	
near to	

What can you do?	What are you going to do?
What can you do?	What are you going to do?
You can...	
I am going to...	
Go for a walk	
Visit museums	
Eat in a restaurant	
Rest on the beach	
To go out with friends	



¿Te gusta...? Do you like...?

OPINION	NOUN	JUSTIFICATION	INTENSIFIERS	ADJECTIVES
Prefiero I prefer	el pan (bread)	porque es porque es because it is very	muy	sabroso / rico (tasty) delicioso (delicious)
Me encanta(n) I love	el pescado (fish) el queso (cheese) la mantequilla (butter)	porque son porque son because they are quite	bastante	sano (healthy)
Me gusta(n) I like	el café (coffee) el té (tea)	un poco a bit	un poco	malsano (unhealthy)
No me gusta(n) I hate	la cola (Coke) el azúcar (sugar) el jamón (ham) el chocolate caliente	demasiado too	demasiado	terrible (awful)
Odio	la manzana (apple) la carne (meat) la mermelada (jam) el helado (ice-cream)			asqueroso (disgusting)
En mi opinión In my opinion	las judías verdes (green beans) las verduras (vegetables) las patatas fritas (chips) las papas (crisps) las espinacas (spinach) el huevo (egg) el agua (water)			picante (spicy) dulce (sweet) amargo (bitter) salado (salty) grasiento (greasy) bueno para la salud (good for your health) malo para la salud (bad for your health)
Pienso que I think that				⚠ REMEMBER TO MAKE THE ADJECTIVES AGREE WITH THE NOUN -o/-a/-os/-as



¿Cuándo comes? When do you eat?

El desayuno Breakfast	Lunch
La comida Snack	
La cena Evening meal/tea	
Desayunar To eat breakfast	To eat lunch
Comer To snack	To eat dinner
Merendar Cenar	



EN EL MERCADO / SUPERMERCADO

IN THE MARKET / SUPERMARKET

¿Te gustaría...? Would you like...?	How much?
Un paquete de A packet of	diez 10
Un litro de A litre of	veinte 20
Un kilo de A kilo of	veintiuno 21
Un medio kilo de Half a kilo of	treinta 30
una botella de A bottle of	treinta y uno 31
	cuarenta 40
	cincuenta 50
	sesenta 60
	setenta 70
	ochenta 80
	noventa 90
	cien 100
	doscientos 200
	quinientos 500
	Euros Euros
	Libras Pounds



8.5 Food and Drink SPANISH

EN EL RESTAURANTE

IN THE RESTAURANT

¿Qué quieres comer?

What do you want to eat?

De primer plato

For the main course

De segundo plato

For dessert

Quisiera

I would like

Para mí

For me

Para beber

To drink

Para comer

To eat

Una ración de...

A portion of...

Camarero/a

Waiter/waitress

¿Tienes...?

Do you have...?

La cuenta, por favor

The bill, please

La propina

The tip

¿Cuánto cuesta? How much?

diez 10

veinte 20

veintiuno 21

treinta 30

treinta y uno 31

cuarenta 40

cincuenta 50

sesenta 60

setenta 70

ochenta 80

noventa 90

cien 100

doscientos 200

quinientos 500

Euros Euros

Libras Pounds

8.5 Food and Drink

Year 8 Spanish Knowledge Organiser

Food, prices and quantities. Ordering food in a restaurant.



Verbs and the present tense in Spanish

The infinitive

When you look up a verb in the dictionary, you find its original, unchanged form which is called the **infinitive** (comer, beber, jugar, visitar, vivir, ir etc.). The infinitive ends in -ar, -er or -ir.

Forming the present tense in Spanish

Take off the last 2 letters of the infinitive (-ar, -er or -ir) and add the following endings depending on the pronoun:

* Important! There are some key irregulars to learn which don't follow this pattern – ir (as shown here), ser, tener and hacer are really important!

	AR verb	ER verb	IR verb
yo (I)	-o	-o	-o
tu (you)	-as	-es	-es
él/ella (he/she)	-a	-e	-e
nosotros/as (we)	-amos	-emos	-imos
vosotros/as (you all)	-áis	-éis	-ís
ellos/ellas (they)	-an	-en	-en

Comparisons

más - more
menos - less

Superlative

El / la más – the most

El / la menos – the least

La cola es **más** deliciosa que el café
El café es **menos** delicioso que la cola

El queso es **el más** rico
La carne es **la menos** sabrosa

Words come before the noun	Masculine (sing.)	Feminine (sing.)	Masculine plural	Feminine plural
A / some	un	una	unos	unas

Opinion phrases help to make your work more interesting – have a look at the list on your vocabulary list. Try to use a range of different ones in your work e.g. Me gusta (I like)/ Pienso que (I think that)/ En mi opinión (in my opinion).

Adjective agreement.
Remember adjectives have to agree with the noun they are describing. Normally we change the -o to an -a to make it feminine unless there is already an -a then it stays the same and we add an -s to make it plural.
El helado es **delicioso** – La pizza es **deliciosa**
El pan es **asqueroso** – La pasta es **asquerosa**

Other rules :
• **Adjectives which end in -e stay the same when feminine (just add -s to make it plural)**
e.g. El café es terrible – La leche es terrible

- **Adjectives which end in -or change to -ora when feminine**
e.g. El deporte es agotador – La natación es agotadora
- **Adjectives which end in -í (or other consonants) stay the same whe feminine**
e.g. El helado es genial – La mantequilla es genial

Year 8 Spanish Knowledge Organiser 8.6

Where I live geographically, Places in town, Phrases that use infinitives.

Opinion starters:

Pienso que

Creo que

En mi opinión

Para mí

Me parece que

Encuentro

I think that
I believe that
In my opinion
For me
It seems to me
I find

Pienso que Bristol es histórico - I think that Bristol is historic
Encuentro Londres bastante industrial – I find London quite industrial.
Prefiero Bath porque es menos turístico que Liverpool – I prefer Bath because it is less touristy than Liverpool.

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 Spanish the verb ends in –ar, -er , -ir.
e.g. I like to run – Me gusta correr.

Se puede – One can
Voy a - I am going to
Me gusta - I like

These are followed by an infinitive.

Se puede ir al centro – One can go to the city centre.
Voy a comer en un restaurante – I am going to eat in a restaurant.
Me gusta jugar al fútbol en el parque - I like to play football in the park.

Hay (there is) and no hay (there is not) – these phrases are very important to allow us to say what is in our town or city.

Remember! When using no hay there is no un/una
e.g. **Hay un parque** but **no hay** parque

It is important to use the correct **article** in front of a noun. This will depend on if we want to say '**a**' (indefinite article) or '**the**' (definite article), and also in Spanish if the noun is **masculine, feminine, singular or plural**.



	Ir – to go
I	Voy – I go / I am going
you	Vas – You go / you are going
he/she/it	Va – he goes / he is going
we	Vamos – we go / we are going
you (pl)	Vais – you (pl) go / are going
they	Van – they go / are going



Articles	A/some	The
Masculine	Un	El
Feminine	Una	La
Masc Plural	Unos	Los
Fem Plur	Unas	Las

¿Dónde vives?	Where do you live?
Vivo ...	I live
en una casa	In a house
en un apartamento	In a flat
en el campo	In the countryside
en las montañas	In the mountains
en la costa	On the coast
en la ciudad	In the city/town
en las afueras	In the suburbs
en un pueblo	In a village
en el norte	In the north
en el sur	In the south
en el oeste	In the west
en el este	In the east
¿Dónde está?	Where is...?
en	On/in
debajo de	under
delante de	in front of
detrás (de)	behind
entre	between
al lado de	next to
enfrente	opposite
cerca de	near to
¿Qué se puede hacer?	What can you do?
¿Qué vas a hacer?	What are you going to do?
Se puede...	You can...
Voy a ...	I am going to...
ir de paseo	Go for a walk
visitar museos	Visit museums
comer en un restaurante	Eat in a restaurant
descansar en la playa	Rest on the beach
quedarse con amigos	Hang out with friends

My home! Spanish Year 8 - 8.6

¿Qué hay en tu casa?	What is there in your house?
Hay.... No hay...	There is / are... There isn't...
Un jardín	A garden
Un garaje	A garage
Un salón	A living room
Un pasillo	A hall
Un dormitorio	A bedroom
Un comedor	A dining room
Un cuarto de baño	A bathroom
Una cocina	A kitchen
Una terraza	A terrace
Una oficina/un despacho	An office/study
Los baños	Toilets
El dormitorio de mis padres	My parents' bedroom
En la primera planta	On the first floor
En la planta baja	On the ground floor
Arriba	Upstairs
¿Qué hay en tu dormitorio?	What is there in your bedroom?
Una cama	A bed
Un escritorio	A desk
Un ordenador	A computer
Un armario	A wardrobe
Un estante	A shelf
Una lámpara	A lamp
Una mesa	A table
Una puerta	A door
Una silla	A chair
Una televisión	A television
Una ventana	A window
Una cómoda	A chest of drawers
Una moqueta	A carpet
Unos pósteres	Some posters

¿Qué hay en tu ciudad?	What is there in your town?
En mi ciudad hay...	In my city there is...
La playa	The beach
La piscina	The swimming pool
La pista de hielo	The ice rink
La biblioteca	The library
La carnicería	The butchers
La comisaría	The police station
La mezquita	The mosque
La iglesia	The church
La librería	The book shop
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 supermercado	The supermarket
el estadio	The stadium
el parque de atracciones	The theme park
el hospital	The hospital
el puerto	The port
los monumentos	The monuments
las tiendas	The shops
los cafés	The cafés
los restaurantes	The restaurants
la oficina de turismo	The tourist information office



Parts of a warm up

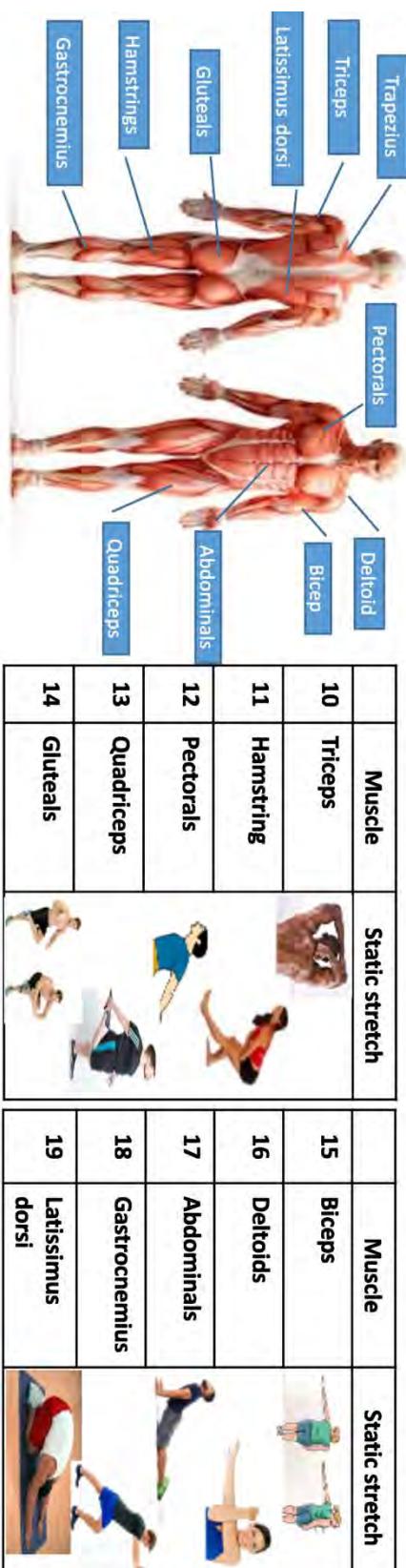
1	Pulse raiser	Light continuous activity such as slow jogging, is used to increase heart rate and blood flow. Muscles, ligaments and synovial fluid in the joints are warmed, increasing flexibility.
2	Stretch	Stretching the main muscle groups and joints increases their elasticity and mobility so that they are less likely to be strained. Dynamic stretching is a form of stretching whilst moving and therefore not holding a stretch e.g. lunges. Static stretching is holding a stretch for 8-10 seconds (before exercise).
3	Mobilisation	Gently moving the joints through a full range of movement to promote synovial fluid the helps to lubricate the joint e.g. shoulder rotations. Shoulder rotations, open and close the gate, ankle plantar and dorsiflexion.

Effects of exercise

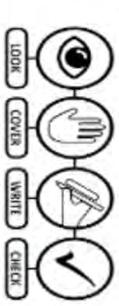
4	Heart rate increases.	During exercise the heart rate increases so that sufficient blood is taken to the working muscles to provide them with enough nutrients and oxygen. An increase in heart rate also allows for waste products to be removed.
5	Blood pressure increases.	Your heart starts to pump harder and faster to circulate blood to deliver oxygen to your muscles. As a result, systolic blood pressure rises.
6	Endorphins are released into the blood.	When you exercise, your body releases chemicals called endorphins. These endorphins interact with the receptors in your brain that reduce your perception of pain. Endorphins also trigger a positive feeling in the body, similar to that of morphine.

Benefits of exercise

7	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.
8	Mental health (emotional) and well-being	Reduces stress, release feel-good hormones in the body such as serotonin, helps us to control our emotions and work productively.
9	Social health and well-being	Provides opportunities to socialise/make friends, encourages cooperation, teamwork and mental resilience.



	Muscle	Static stretch		Muscle	Static stretch
10	Triceps	A person performing a triceps stretch by bending over and reaching behind their head with their arms.	15	Biceps	A person performing a biceps stretch by holding a dumbbell or weight and bending forward at the waist.
11	Hamstring	A person performing a hamstring stretch by sitting on the floor and leaning forward from the hips.	16	Deltoids	A person performing a deltoid stretch by standing with arms raised and reaching towards the floor.
12	Pectorals	A person performing a pectoral stretch by lying on their back and pulling one knee towards their chest.	17	Abdominals	A person performing an abdominal stretch by lying on their back and pulling one knee towards their chest.
13	Quadriceps	A person performing a quadriceps stretch by sitting on the floor and straightening one leg while keeping the other bent.	18	Gastrocnemius	A person performing a gastrocnemius stretch by standing on a step and lowering their heel towards the ground.
14	Gluteals	A person performing a gluteal stretch by lying on their stomach and raising one leg.	19	Latissimus dorsi	A person performing a latissimus dorsi stretch by lying on their stomach and raising one leg.


Structure of a PE lesson

1. Warm up
2. Sports specific drills
3. Adapted games
4. Cool down

SPACE and Careers Independent Study

This year you will take a Quizizz at the end of your SPACE topics to demonstrate your understanding of key topics. This will be uploaded to SIMS the same as your other subject with the instructions and Quizizz code you will need to use.

- When you enter your name, you must add your SPACE teacher's initials in brackets to show us which class you are in. E.g. Polly Thomas (DDA)
- When completed write your score and percentage in your knowledge organiser booklet on your SPACE page. Write the title and score along with 2 www's /EBI's in your IS textbook. These will be based on the questions you felt most confident about and ones you got wrong.

Topic	Quizizz Code	Score	Percentage
Being me in my world			
Celebrating difference			

A screenshot of a Quizizz dashboard. At the top, there is a search bar with placeholder text 'Search Quizizz'. Below it is a large blue button labeled 'Quizizz'. To the right of the button are three small icons: a magnifying glass, a person icon, and a gear icon. Further to the right is a 'JOIN' button with a purple background and white text. The background of the dashboard is white with some light gray grid lines.



Once a term you will have a careers lesson using Unifrog and one piece of I.S which will be to complete a Unifrog activity which will be explained in SIMS.

- You will find your login details in an email sent by Unifrog. If you have forgotten your details go to www.unifrog.org - sign in – reset password / resend welcome email.
- If you are still having issues logging in, please email Mrs Daw or go to I.S Club in A3 after school.

You can use Unifrog at any time to find out information about career pathways, post 16, post 18 and which jobs are best suited to your personality, likes and dislikes. There will be termly rewards for students who complete the most activities, log the most and spend the most time using Unifrog.

A screenshot of the Unifrog website. At the top, there is a navigation bar with links for 'ABOUT' and 'BLOG'. Below the navigation bar is a search bar with the placeholder 'Search Unifrog'. Underneath the search bar is a 'Sign in' button with a green background and white text. To the left of the sign-in button is a text input field labeled 'Your email address' and another below it labeled 'Your password'. At the bottom of the page, there is a footer with links for 'Home | Unifrog' and 'Unifrog | Unilearning Space'.

Independent Study Deadlines:

Week commencing	Subject	Completed?
17/10/22	English	
	Maths	
	Science	
	-	
	-	
Autumn Half Term		
31/10/22	English	
	Maths	
	Science	
	RS	
	History	
07/11/22	English	
	Maths	
	Science	
	Tech	
	Spanish	
14/11/22	English	
	Maths	
	Science	
	French	
	Geography	
21/11/22	English	
	Maths	
	Science	
	Art	
	RS	
28/11/22	English	
	Maths	
	Science	
	History	
	Spanish	
05/12/22	English	
	Maths	
	Science	
	Drama	
	Careers	

12/12/22	English Maths Science Computing Space	
Christmas Holiday		
02/01/23	Bank Holiday Inset Day	
04/01/23	English Maths Science Spanish History	
09/01/23	English Maths Science French PE	
16/01/23	English Maths Science Music Geography	
23/01/23	English Maths Science History RS	
30/01/23	English Maths Science Space Spanish	
06/02/23	English Maths Science French Geography	