

Year 8

Booklet 2
Knowledge
Organiser
2022/2023

Independent
Study

Name & LF:



Cabot
Learning
Federation

How to do your independent study

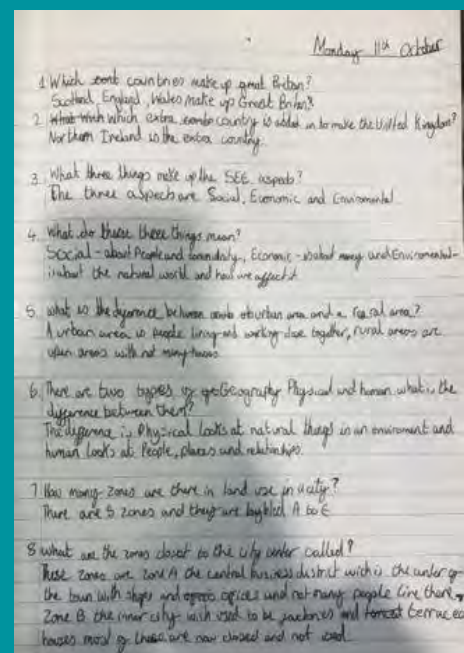
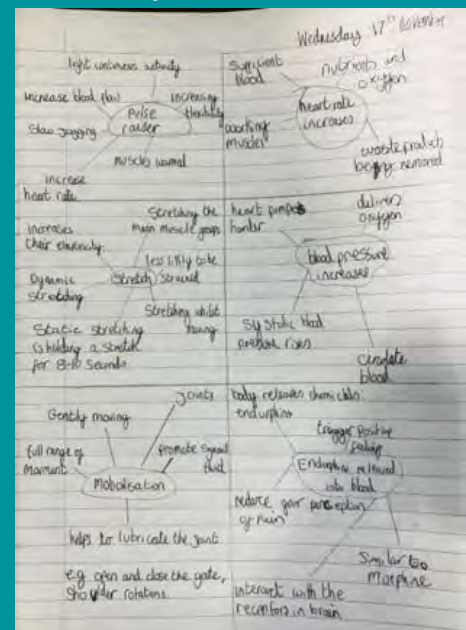
For all subjects except Maths, Knowledge Organisers are used for IS tasks. You will have five pieces of I.S due every week, which will be checked by your teacher of the subject due. You can attend IS club at 3pm in the Art Barn to get your IS done or complete it at home.

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.

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Examples of Good IS:

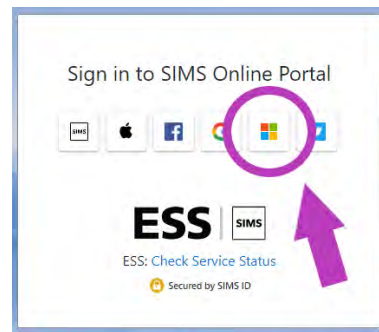
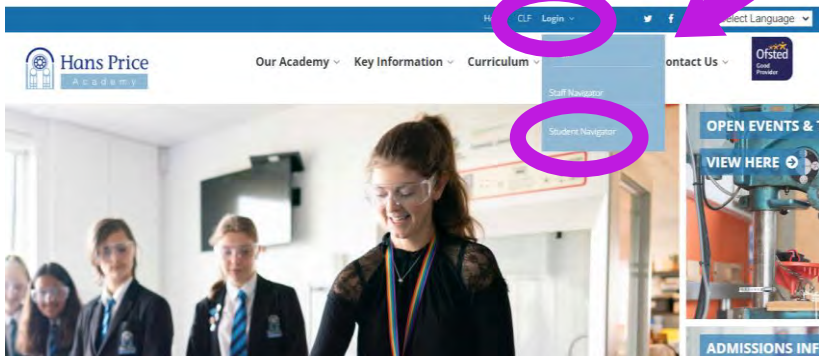


Using SIMS

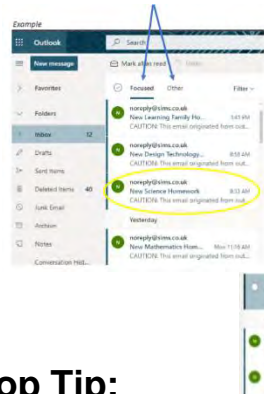
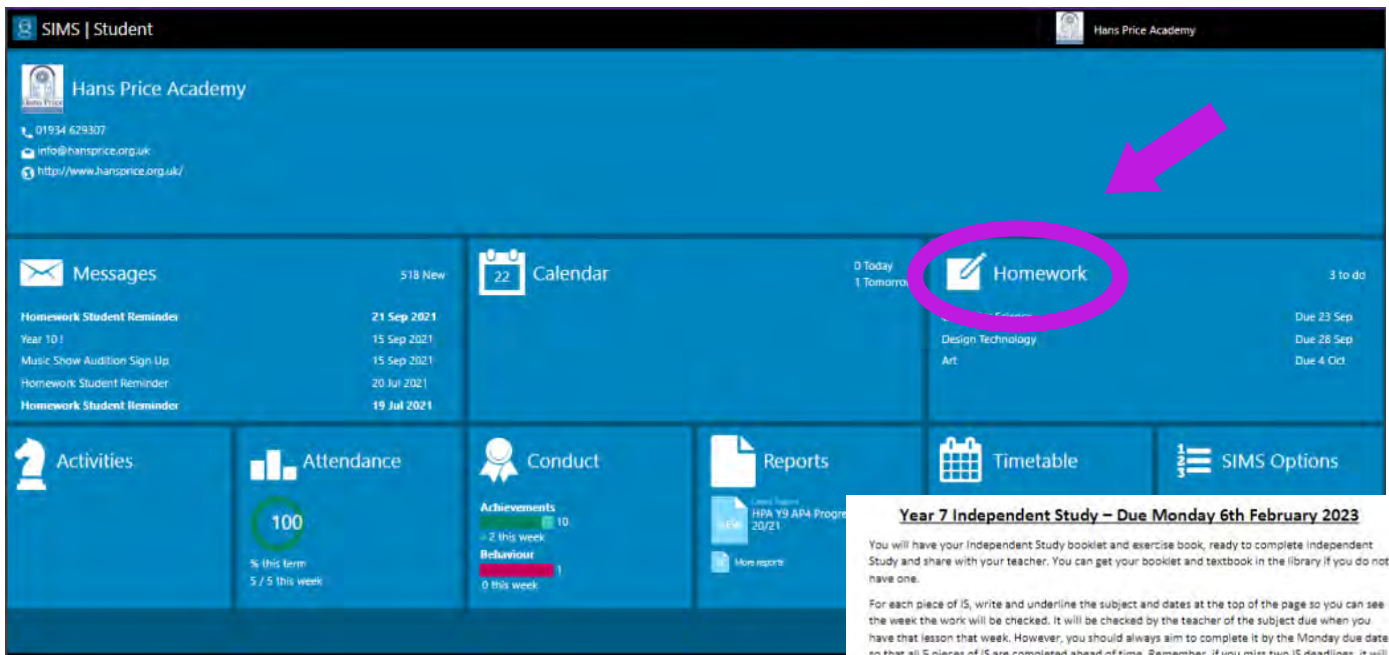
Each week, further instructions to help you complete your IS will be set in SIMS.

All five pieces of IS for the following week are summarised on one pdf. Further instructions from your subject teachers may be added separately.

You can log into SIMS by downloading the app to your phone or through the tiles on the CLF Navigator in school or at home.



Top Tip:
Always click on the Microsoft icon to log into SIMS.



If you cannot access SIMS for any reason you can still find the IS in your school emails.

Year 7 Independent Study – Due Monday 6th February 2023

You will have your Independent Study booklet and exercise book, ready to complete Independent Study and share with your teacher. You can get your booklet and textbook in the library if you do not have one.

For each piece of IS, write and underline the subject and dates at the top of the page so you can see the week the work will be checked. It will be checked by the teacher of the subject due when you have that lesson that week. However, you should always aim to complete it by the Monday due date so that all 5 pieces of IS are completed ahead of time. Remember, if you miss two IS deadlines, it will result in catch up at 3pm on the following Monday.

Please see the 5 pieces of IS which you need to complete in the table below:

| Subject | Independent Study to be completed |
|-----------|--|
| Maths | This will be set on SIMS by your class teacher, to be completed on SPARKS. |
| English | Week 15 Vocabulary You will be set 5 words in lesson at the beginning of the week which you will learn based on vocabulary you have covered this term or vocabulary you will be covering next term. |
| Science | Produce 9 self-quizzing questions and answers. From boxes 5-8 from the Reproduction knowledge organiser. Three of these questions should be state questions, 3 describe questions, 3 explain questions. Please answer these in your IS books and bring them to all your lessons this week. If your teacher has told you to do different boxes, please use these instead. Extra help: State: Recall one or more pieces of information e.g. State the temperature water boils at. Describe: Use words to express what a picture, graph or concept is showing e.g. Describe how the particles move when a solid melts into a liquid. Explain: Provide the reasons why something happens. Use the word because in the answer. e.g. Explain why a solid has a fixed shape. |
| SPACE | 1. Write 3 things you have learnt about during your Dreams and Goals topic this term. 2. Complete the Quizzz about Dreams and Goals using the code: Write |
| Geography | Complete the crossword puzzle using the clues and your knowledge organisers to help you. You should have your crossword stuck in your IS books from your last lesson. If not email your teacher. |

Top Tip:

For support using SIMS check the guides on the HPA website or email simsstudentapp@hpa.clf.uk

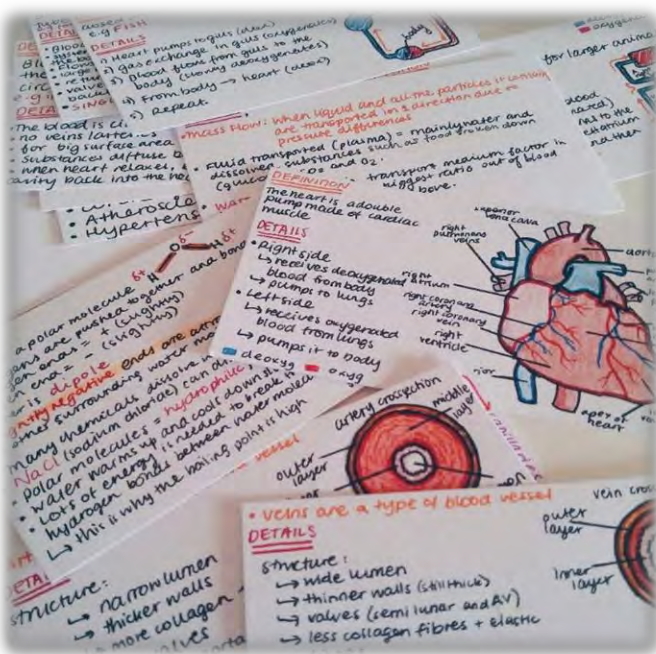
Revision Techniques

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.



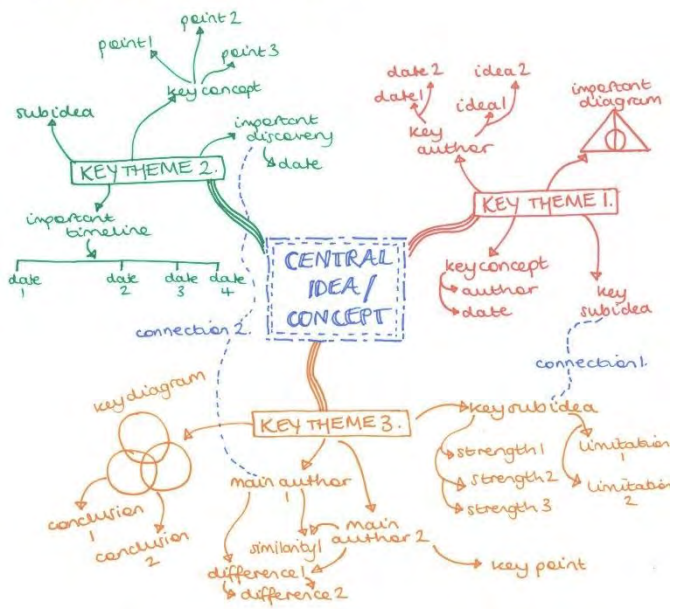
Mind Map

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

The logo for SPARX MATHS, featuring the word 'SPARX' in white on a black background and 'MATHS' in blue on a white background.

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.



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.

To achieve a **High Expectations** achievement point you need to:

- Create two different sentences showing your understanding of each word.
E.G.: Conflict:
 1. Conflict is shown in *A View From the Bridge* in the characters of Prospero and Caliban.
 2. In *The Landlady*, Billy is conflicted about going into the B and B but then something makes him.

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.

To achieve a second achievement point you need to show you are **Ambitious**.
To achieve this, you need to:

- Create a short story including all the 5 words.
- Create flashcards which display the words, their definitions and a picture which represents their meaning.



| Due Date | Word | Definition |
|----------|---|--|
| Week 1 | <p>Allegory</p> <p>Symbolism</p> <p>Foreshadowing</p> <p>Juxtaposition</p> <p>Irony</p> | <p>A story, poem, or picture that can be interpreted to reveal a hidden meaning, typically a moral or political one.</p> <p>The use of symbols to represent ideas or qualities.</p> <p>Be a warning or indication of (a future event).</p> <p>The fact of two things being seen or placed close together with <u>contrasting</u> effect.</p> <p>A literary technique, originally used in Greek <u>tragedy</u>, by which the full significance of a character's words or actions is clear to the audience or reader although unknown to the character.</p> |
| Week 2 | <p>Dialogue</p> <p>Monologue</p> <p>Prologue</p> <p>Satire</p> <p>Characterisation</p> | <p>A conversation between two or more people as a feature of a book, play, or film.</p> <p>A long speech by one actor in a play or film, or as part of a <u>theatrical</u> or broadcast programme.</p> <p>A separate <u>introductory</u> section of a literary, dramatic, or musical work.</p> <p>The use of humour, irony, <u>exaggeration</u>, or ridicule to expose and <u>criticize</u> people's <u>stupidity</u> or vices, particularly in the context of contemporary politics and other topical issues.</p> <p>The creation or construction of a fictional character.</p> |

| | | |
|---------------|---|---|
| <p>Week 3</p> | <p>Semantic field</p> <p>Allusion</p> <p>Analysis</p> <p>Rhetoric</p> <p>Stanza</p> | <p>A set of words related to each other</p> <p>An expression designed to call something to mind without <u>mentioning</u> it explicitly; an indirect or passing reference.</p> <p>Detailed examination of the elements or structure of something.</p> <p>The art of persuasion</p> <p>A paragraph in poetry</p> |
| <p>Week 4</p> | <p>Dystopia</p> <p>Utopia</p> <p>Propaganda</p> <p>Conflict</p> <p>Democracy</p> | <p>An imagined terrible place</p> <p>An imagined perfect place</p> <p>Information, especially of a <u>biased</u> or misleading nature, used to promote a political cause or point of view.</p> <p>A serious disagreement or argument, typically a <u>protracted</u> one.</p> <p>A system of government by the whole population or all the eligible members of a state, typically through elected representatives.</p> |

| | | |
|--------|---|--|
| | <p>Archetype</p> <p>Narrative</p> | <p>A very typical example of a certain person or thing.</p> <p>A spoken or written account of connected events; a story.</p> |
| Week 8 | <p>Inference</p> <p>Sensory Language (write examples of this)</p> <p>Imagery</p> <p>Plot</p> <p>Setting</p> | <p>A conclusion reached on the basis of evidence and reasoning.</p> <p>Using the senses in your writing.</p> <p>Visually <u>descriptive</u> or <u>figurative</u> language, especially in a literary work.</p> <p>The main events of a play, novel, film, or similar work, <u>devised</u> and presented by the writer as an <u>interrelated</u> sequence.</p> <p>The place or type of surroundings where something is positioned or where an event takes place.</p> |
| Week 9 | <p>Imperative</p> <p>Implicit</p> <p>Explicit</p> <p>Personify</p> <p>Connotation</p> | <p>An order – or something of utmost importance.</p> <p>Suggested but not directly expressed.</p> <p>Directly expressed.</p> <p>To give something human qualities.</p> <p>An idea beyond the original meaning.</p> |

| | | |
|---------|--|--|
| Week 10 | <p>Characteristics</p> <p>Victim</p> <p>Villain</p> <p>Imperialism</p> <p>Wealth</p> | <p>A feature or quality belonging to a person, place or thing.</p> <p>A person harmed, injured or killed as a result of a crime or accident.</p> <p>A character whose evil actions or motives are important in a story.</p> <p>Extending power and influence over another country/territory.</p> <p>A quantity of valuable possessions or money.</p> |
| Week 11 | <p>Symbolism</p> <p>Motif</p> <p>Misogyny</p> <p>Feminism</p> <p>Verb</p> | <p>When a thing or image represents an idea or concept.</p> <p>A literary technique that consists of a repeated element that recurs throughout the text.</p> <p>Hate or hostility towards women.</p> <p>The advocacy of women's rights on the ground of equality of gender.</p> <p>A word or phrase that describes an action, condition or experience.</p> |
| Week 12 | <p>Advocate</p> <p>Anticipate</p> <p>Stereotype</p> <p>Mercy</p> <p>Forgiveness</p> | <p>To publicly support or suggest an idea, development or way of doing something.</p> <p>To imagine or expect that something will happen.</p> <p>A widely held but fixed image or idea of a particular type of person or thing.</p> <p>Compassion or forgiveness shown towards someone.</p> <p>The action of forgiving or being forgiven.</p> |

| | | |
|---------|--|---|
| Week 13 | <p>Tyrannical</p> <p>Sublime</p> <p>Uncanny</p> <p>Convention</p> <p>Corruption</p> | <p>Showing power in a cruel way.</p> <p>Of great excellence or beauty.</p> <p>Strange, mysterious, unsettling.</p> <p>The way in which something is usually done.</p> <p><u>Dishonest</u> or <u>fraudulent</u> conduct by those in power, typically involving <u>bribery</u>.</p> |
| Week 14 | <p>Irreproachable</p> <p>Modest</p> <p>Novice</p> <p>Ethical</p> <p>Incredulous</p> | <p>Beyond criticism – perfect – faultless.</p> <p>Under playing one’s abilities.</p> <p>New</p> <p>Relating to moral decisions and ideas.</p> <p>Unbelievable.</p> |
| Week 15 | <ol style="list-style-type: none"> 1. 2. 3. 4. 5. | |
| Week 16 | <ol style="list-style-type: none"> 1. 2. 3. 4. 5. | |

| | | |
|---------|--|--|
| Week 17 | <ol style="list-style-type: none">1.2.3.4.5. | |
| Week 18 | <ol style="list-style-type: none">1.2.3.4.5. | |
| Week 19 | <ol style="list-style-type: none">1.2.3.4.5. | |

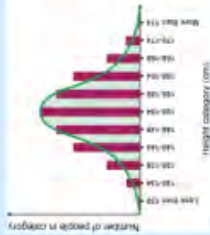
1. Variation

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.

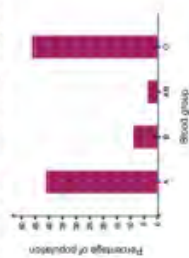
For any species a characteristic that changes gradually over a range of values shows continuous variation. Examples of such characteristics are height and weight. This shape of graph is typical of a feature with continuous variation.



3. Discontinuous Variation

A characteristic of any species with only a limited number of possible values shows **discontinuous variation**. Human blood group is an example of discontinuous variation. In the ABO blood group system, only four blood groups are possible (A, B, AB or O). There are no values in between, so this is discontinuous variation. Here are some examples blood group, sex (male or female) and eye colour.

A bar chart can be used to represent discontinuous data.



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.



KS3 Science Evolution

@HansPriceSci
#BiologyLearnUK

5. Natural Selection

If all the individuals of a species were genetically identical they would be vulnerable to the same diseases. If this were the case a single disease could wipe out an entire species! As a result of their genes, some individuals of a species might have better camouflage, or be able to run faster.

These individuals are more likely to survive. This is called the **survival of the fittest**.

The members of a species that survive may reproduce. Their offspring are likely to have the desirable characteristics of their parents. This is how species change in **evolution**.



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.



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.

Eg magnesium + copper sulphate → magnesium sulphate + copper



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.

| | |
|-----------|----------------|
| Potassium | most reactive |
| Sodium | |
| Calcium | |
| Magnesium | |
| Aluminium | |
| Carbon | |
| Zinc | |
| Iron | |
| Tin | |
| Lead | |
| Hydrogen | |
| Copper | |
| Silver | |
| Gold | |
| Platinum | least reactive |

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:

Acid + metal → salt + hydrogen

Eg

Hydrochloric acid + magnesium → magnesium chloride + hydrogen



KS3 Science

Metals and Reactivity

©hansprice50
Always Learning!

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.

Hydrochloric acid → chloride salts

Nitric acid → nitrate salts

Sulphuric acid → sulphate salts

Eg

Hydrochloric acid + sodium hydroxide → sodium chloride + water

Hydrochloric acid + magnesium → magnesium chloride + hydrogen

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:

CO₂ – Carbon Dioxide

1. Lit splint is extinguished (goes out) in the presence of CO₂ gas.

2. lime water turns from colourless to cloudy.

H₂ – 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.

| Element | Observations |
|--------------|---|
| 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 lilac flame, disappears rapidly, often with a small explosion |

3. Acid and Alkali Reactions

An acid and an alkali can be reacted together in a neutralisation reaction. This produces salt and water.

The general equation for this is:

Acid + alkali → salt + water

Eg

Hydrochloric acid + sodium hydroxide → sodium chloride + water

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

1. Composition of the Earth

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



The Earth has four layers:

- Crust (thin and rocky)
- Mantle (properties of solid but flows easily)
- Outer core (made from nickel and iron)
- Inner core (made from nickel and iron)

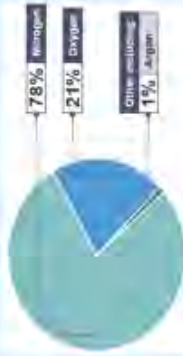
2. Composition of the Early Atmosphere

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



4. Composition of the Today's Atmosphere

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



5. Fossil Fuels

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

6. Generating Electricity

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



KS3 Science

Earth & Atmosphere

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#study4elementary

3. Evolution of Atmosphere

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

Stage 1 – Volcanoes:

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

Stage 2 – Green plants:

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

Stage 3 – Complex animals:

The oxygen allowed more complex organisms to form. The ozone layer formed and this allowed further evolution of complex organisms.



7. Non-renewable Energy Sources

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



8. Renewable Energy Sources

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

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

9. Renewable Energy Resources

| Resource | Advantages | Disadvantages |
|---------------|--------------------|-----------------------------|
| Wind | no CO ₂ | Unightly, not always windy |
| Solar | No CO ₂ | Expensive, not always sunny |
| Hydroelectric | No CO ₂ | Destroys habitat |
| Geothermal | No CO ₂ | Specific locations |

10. Carbon Cycle

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



KS3 Science

Earth & Atmosphere

Millions of Years Ago
Now/Here/Then

11. Carbon Cycle

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

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

12. Carbon Cycle

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

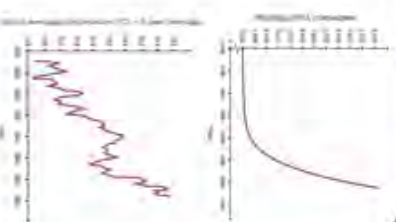
13. Greenhouse Effect

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



14. Global Warming

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



1. Photosynthesis

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

Word equation



2. Structure of a leaf

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

| | |
|-------------|---|
| Thin | a short distance for CO ₂ to move by diffusion |
| Chlorophyll | Absorbs light |
| Stomata | Allows CO ₂ to move in by diffusion |
| Guard cells | open and close the stomata depending on the conditions |
| Tubes | To transport water (xylem) and glucose (phloem) |

3. Investigating photosynthesis

Method:

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



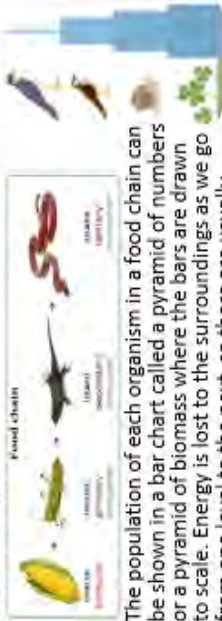
4. Habitats and Ecosystems

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



6. Food Chains

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



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



KS3 Science

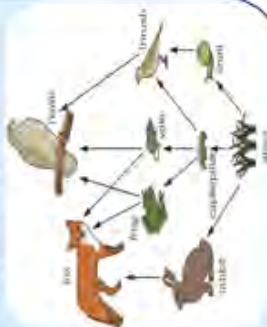
Photosynthesis and Ecosystems



7. Food Webs

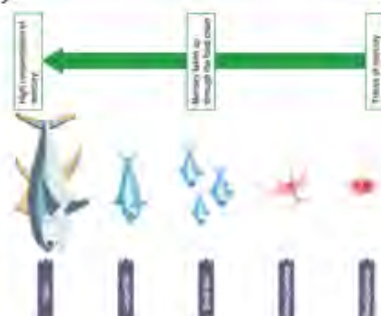
When all the food chains in an ecosystem are joined up together, they form a **food web**. Although it looks complex, it is just several food chains joined together.

This leads to some interesting effects if the population in the food web decreases. Some animals can just eat more of another organism if food is in short supply, while others may starve and die. This in turn can affect the populations of other organisms in the food web.



8. Pollution

Pollution can be taken in by living things, most is excreted. Some polluting toxins cannot be excreted. These are taken in by primary consumers at low levels. When these primary consumers are eaten in large number these toxins stay in the food chain. Eventually they can severely damage the top predators. The build-up of these toxins is called **bioaccumulation**.

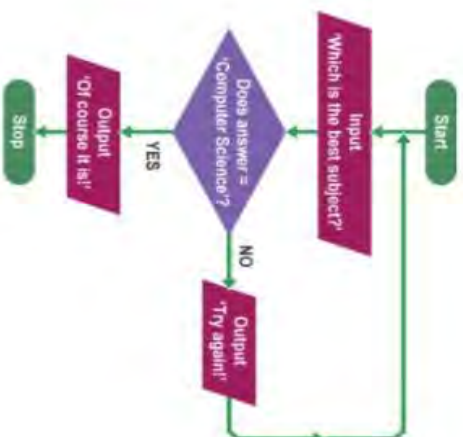


| Computational Thinking | Abstraction | Decomposition | Pattern Recognition | Algorithms | Sequence | Selection |
|--|---|--|---|---|---|--|
| Computational thinking allows us to take a complex problem, understand what the problem is and develop possible solutions. We can then present these solutions in a way that a computer, a human, or both, can understand. | Focusing on the important information only, ignoring the details that are not needed. | Breaking down a complex problem or system into smaller, more manageable parts. | Looking for similarities among and within problems. Looking for patterns. | Developing a step-by-step solution to the problem, or the rules to follow to solve the problem. | Following an ordered set of instructions. | Making a decision within a computer program to decide which instruction to carry out next. |

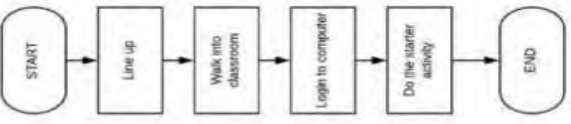
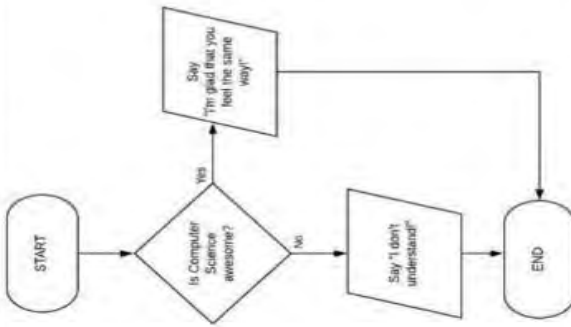
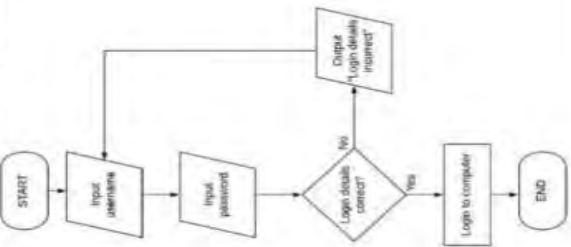


Keywords

| | |
|-----------|--|
| Variable | Stores data in a computer program. This has the ability to change when the program is running. |
| Data type | The type of data which is being stored in the variable. Variables use the following data types: <ul style="list-style-type: none"> • Character (single character) • Real (Decimal numbers) • Integer (Whole numbers) • Boolean (True/False) • String (More than 1 character) |
| Increment | When a variable increases in value (e.g. score increments by 100). |
| Decrement | When a score decreases in value (e.g. lives decrements by 1). |



Programming Construct Examples

| Sequence | Selection | Iteration |
|--|---|--|
| <p>A series of instructions carried out in a specific order...</p>  | <p>When decisions are being made (IF / ELSE).</p>  | <p>When you repeat a sequence of instructions (loops).</p>  |


Definitions (use these when completing your tasks).

| | |
|--|---|
| Algorithm | A set of step by step instructions in order to solve a problem. |
| Flowchart | An algorithm which is a visual representation of the steps needed to solve a problem. |
| Pseudocode | An algorithm which uses text to show the steps needed to solve a problem. |
| Decomposition | Breaking a complex problem down into smaller, more manageable problems. |
| Abstraction | Focusing on what is important and leaving out unnecessary detail. |
| You need to know the three main programming constructs: | |
| Sequence | A series of instructions carried out in a specific order. |
| Selection | When decisions are being made (IF / ELSE). |
| Iteration | When you repeat a sequence of instructions (loops). |

What is an algorithm?

- A series of steps to solve a problem.
- They are not just about computers, we use them all the time in our everyday lives.
- There can be many algorithms to solve the same problem.

| | |
|---|--|
|  | Terminator - This either contains START or END . |
|  | Input/Output - This shows something that is going in or out of the system. |
|  | Process - This shows something that is happening. |
|  | Decision - We use these when we need to make a choice. Decisions must have two exits, YES and NO . |
|  | Connector - Shows the direction of data through the flowchart. |

| Keywords - Binary - Character Sets | Bit | Nibble | Byte | Kilobyte | Megabyte | Gigabyte | Terabyte |
|--|---|--|---|--|--|--|----------------|
| | A single 1 or 0 | 4 bits | 8 bits | 1024 Bytes | 1024 Kilobytes | 1024 Megabytes | 1024 Gigabytes |
| Binary | Denary/Decimal | Base 2 | Base 10 | ASCII | UNICODE |  | |
| A number system that contains two symbols, 0 and 1. Also known as base 2. | The number system most commonly used by people. It contains 10 unique digits 0 to 9. Also known as decimal or base 10. | The binary counting system, uses two symbols - 0 and 1 | The denary counting system, uses ten symbols - 0 to 9 | A 7-bit character set used for representing English keyboard characters. | A 32-bit character set. Is capable of representing over 2 billion different characters including a wide range of emoji | | |

BINARY ADDITION

There are four rules that need to be followed when adding two binary numbers. These are:

- 0+0=0**
- 1+0=1**
- 1+1=10 (binary for 2)**
- 1+1+1=11 (binary for 3)**

OVERFLOW ERROR

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| + | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 |
| | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |

Sometimes, when adding two binary numbers we can end up with an extra digit that doesn't fit. This is called an **overflow error**.



What is Binary?

Binary is a number system that only uses two digits: 1 and 0. All information that is processed by a computer is in the form of a sequence of 1s and 0s. Therefore, all data that we want a computer to process needs to be converted into binary.

ASCII Table

| Char | Dec | Char | Dec | Char | Dec | Char | Dec |
|---------------------------|-----|-------|-----|------|-----|------|-----|
| Null | 32 | Space | 64 | 8 | 96 | , | 44 |
| Start of heading | 33 | ! | 65 | A | 97 | a | 97 |
| Start of text | 34 | " | 66 | B | 98 | b | 98 |
| End of text | 35 | # | 67 | C | 99 | c | 99 |
| End of transmission | 36 | \$ | 68 | D | 100 | d | 100 |
| Enquiry | 37 | % | 69 | E | 101 | e | 101 |
| Acknowledge | 38 | & | 70 | F | 102 | f | 102 |
| Audible bell | 39 | ' | 71 | G | 103 | g | 103 |
| Backspace | 40 | (| 72 | H | 104 | h | 104 |
| Horizontal tab | 41 |) | 73 | I | 105 | i | 105 |
| Line feed | 42 | * | 74 | J | 106 | j | 106 |
| Vertical tab | 43 | + | 75 | K | 107 | k | 107 |
| Form feed | 44 | , | 76 | L | 108 | l | 108 |
| Carriage return | 45 | - | 77 | M | 109 | m | 109 |
| Shift out | 46 | . | 78 | N | 110 | n | 110 |
| Shift in | 47 | / | 79 | O | 111 | o | 111 |
| Data link escape | 48 | 0 | 80 | P | 112 | p | 112 |
| Device control 1 | 49 | 1 | 81 | Q | 113 | q | 113 |
| Device control 2 | 50 | 2 | 82 | R | 114 | r | 114 |
| Device control 3 | 51 | 3 | 83 | S | 115 | s | 115 |
| Device control 4 | 52 | 4 | 84 | T | 116 | t | 116 |
| Flag acknowledge | 53 | 5 | 85 | U | 117 | u | 117 |
| Synchronous idle | 54 | 6 | 86 | V | 118 | v | 118 |
| End of transmission block | 55 | 7 | 87 | W | 119 | w | 119 |
| Cancel | 56 | 8 | 88 | X | 120 | x | 120 |
| End of medium | 57 | 9 | 89 | Y | 121 | y | 121 |
| Substitution | 58 | : | 90 | Z | 122 | z | 122 |
| Escape | 59 | ; | 91 | [| 123 | { | 123 |
| File separator | 60 | < | 92 | \ | 124 | | 124 |
| Group separator | 61 | = | 93 |] | 125 | } | 125 |
| Record separator | 62 | > | 94 | ^ | 126 | ~ | 126 |
| Unit separator | 63 | ? | 95 | | 127 | | 127 |

How to convert ASCII to BINARY

ASCII value: Cat

C=67 (01000011) a=97 (01100001) t=116 (01110100)

Cat (ASCII) 01000011 01100001 01110100 (Binary)

How to convert BINARY to DENARY

Binary value: 01100101

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

$64+32+4+2+1=103$
01100101=103

Binary Addition

Binary addition involves adding two or more binary numbers together.

When adding two numbers, you will have the following possible outcomes:

- 0+0 = 0
- 0+1 = 1
- 1+1 = 11

When adding binary numbers, do so right to left.

Example: add **0100** and **0101**

| | | | | | | |
|---------------------|----------|----------|----------|----------|--|----------|
| 1 st num | 0 | 1 | 0 | 0 | | |
| 2 nd num | 0 | 1 | 0 | 1 | | + |
| Carried | 1 | | | | | |
| Answer | 1 | 1 | 0 | 1 | | = |

0 + 1 = 1 ← START

0 + 0 = 0

1 + 1 = 11, so the one is carried
0 + 0 + 1 = 1

Therefore, the answer is **1101**

Overflow Error: An overflow error occurs when the largest number that a CPU register can hold is exceeded.

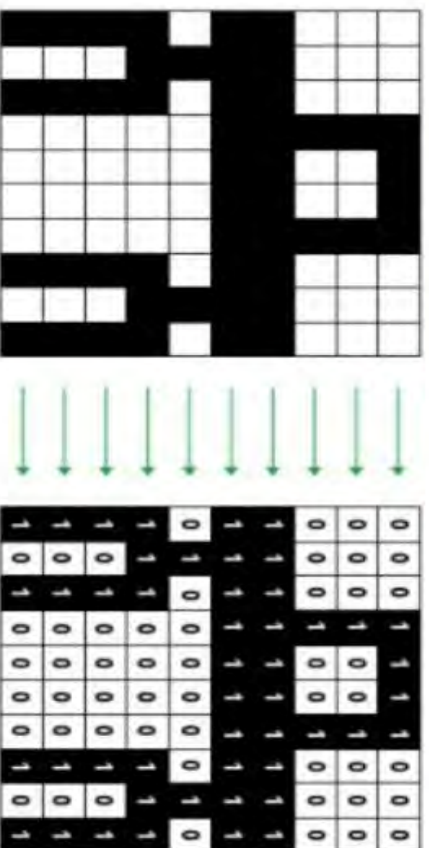
Representing images

Images also need to be converted into binary in order for a computer to process them so that they can be seen on our screen. Digital images are made up of pixels. Each pixel in an image is made up of binary numbers.

If we say that 1 is black (or on) and 0 is white (or off), then a simple black and white picture can be created using binary.

To create the picture, a grid can be set out and the squares coloured (1 – black and 0 – white). But before the grid can be created, the size of the grid needs to be known. This data is called metadata and computers need metadata to know the size of an image. If the metadata for the image to be created is 10x10, this means the picture will be 10 pixels across and 10 pixels down.

This example shows an image created in this way:



Images

Pixel: A single point in an image.

Resolution: The number of pixels that make up an image e.g. 800 x 600

Colour Depth: The number of bits used for each colour. E.g. 8 bit colour and 24 bit 'True Colour'.



Adding colour

The system described so far is fine for black and white images, but most images need to use colours as well. Instead of using just 0 and 1, using four possible numbers will allow an image to use four colours. In binary this can be represented using two bits per pixel:

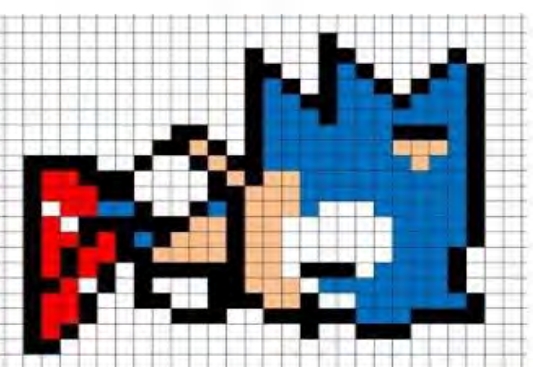


Image quality

Image quality is affected by the resolution of the image. The resolution of an image is a way of describing how tightly packed the pixels are.

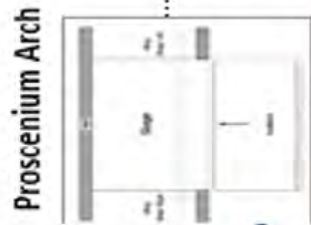
In a low-resolution image, the pixels are larger so fewer are needed to fill the space. This results in images that look blocky or pixelated. An image with a high resolution has more pixels, so it looks a lot better when you zoom in or stretch it. The downside of having more pixels is that the file size will be bigger.

- 00 – white
- 01 – blue
- 10 – green
- 11 – red

While this is still not a very large range of colours, adding another binary digit will double the number of colours that are available:

- 1 bit per pixel (0 or 1): two possible colours
- 2 bits per pixel (00 to 11): four possible colours
- 3 bits per pixel (000 to 111): eight possible colours
- 4 bits per pixel (0000 – 1111): 16 possible colours
- ...
- 16 bits per pixel (0000 0000 0000 0000 – 1111 1111 1111 1111 1111): over 65 000 possible colours

The number of bits used to store each pixel is called the colour depth. Images with more colours need more pixels to store each available colour. This means that images that use lots of colours are stored in larger files.



| | | Performance Skills | | | | | | | | | | | | |
|---|-------------------|--|----|-------------|---|----|------------|---|--|--|--|--|--|--|
| | | Physical Skills | | | | | | Vocal Skills | | | | | | |
| 1 | Gait | The way you walk | 7 | Interaction | How you use eye contact and proxemics to show relationships | 12 | Tone | The way in which you use your voice to show mood | | | | | | |
| 2 | Posture | The position you hold your body when standing or sitting | | | | | | | | | | | | |
| 3 | Eye Contact | Where you are looking and who you are looking at | 8 | Pitch | How high or low you voice is to show age or emotion | 13 | Emphasis | Changing your voice by adding focus | | | | | | |
| 4 | Body Language | How you express you emotions through your body | 9 | Pace | How fast or slow you speak | 14 | Intonation | The rise and fall of your voice | | | | | | |
| 5 | Facial Expression | Showing your character's emotions through the way in which your contort the muscles in your face | 10 | Pause | How you show emotion through gaps in your dialogue | 15 | Accent | To show which country you are from | | | | | | |
| 6 | Gesture | A small hand or head movement to communicate meaning | 11 | Volume | How loud or quiet your voice is | 16 | Range | The difference between how high and low your voice can go | | | | | | |
| | | | | | | 17 | Dialect | To show which region you are from | | | | | | |

REFLECTION PLENNARY

Before I only knew ...
now I also know ...

I know if I need further
support or help I could
speak to.... or contact...

Before I could/would say
and do ... but now I feel I
am able to say

The key words for
this lesson are...

I always knew ... but now
I can see how it connects to...

One thing I didn't
realise was... now I know that...

I'm really proud of the
way I have...

I used to feel ...
but I now feel ..

The most important thing I
have learnt today is...

I would like to learn...

Today I have tried to...

A question I
would like to
ask is...

Before I thought that ...
but now I realise...

One assumption of
mine that was
challenged was...

Next lesson I would like to...

Before I would have done...
Now I will ...

Before I would have
said ... but now I will say...

A problem I overcame
today was...





Drama Word Puzzle | Language & Voice

Search for all of the words in the puzzle and then fill in the sentences below using some of the words in the puzzle

G A M Z S K J B K I L O C M S L
 A R T I C U L A T I O N F L F
 V X Y Y G K B N F N V H C Q H
 Y O V R P D F U O T C F V D Q
 A A L S E L G I W T B W E Z T
 X J F U U T T U I C O J Y F B
 D F M E M A S P F J Z A U G K
 I F N Z N E I I Y T I R A L C
 V C H O L U S I G H L A J F E
 Y V T Y K R A E R E Y C E K O
 F N C N K G H C E C R C K D O
 I W L M Z V P A H N Z E H X L
 K E V N E G M P L U O N N Z B
 E A K A X V E F G R R T C Y H

ACCENT CLARITY FLUENCY INTONATION

ARTICULATION PACE REGISTER PAUSE

EMPHASIS TONE VOLUME PITCH

- _____ is when sounds or words are stressed in speech.
- _____ is the loudness or softness of the voice.
- _____ is "Clear pronunciation of words"
- _____ is the speed of speech
- _____ is how clearly the words are understood.
- _____ is the way in which speech is altered depending on is being spoken to.
- _____ is "Natural flowing speech"
- "A way of speaking used in a local area or country": _____
- _____ is the variation in the height or depth of the voice.
- _____ is changes in the rise and fall of the voice during or at the end of a sentence.

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.



Kate Olivia Malone MBE in London, is a British studio potter, ceramic artist and judge, along with Keith Brymner 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.

A R T I S T S



Tim Burton is an American director, producer, artist, writer, and animator. He is known for his dark, gothic, and eccentric horror and fantasy films such as *Beetlejuice* (1988), *Edward Scissorhands* (1990), *The Nightmare Before Christmas* (1993). Burton has often worked with actor Johnny Depp.



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

Assessment:

(D) Demonstrate a deepening- knowledge, understanding and skills

(O)On Track- Demonstrate some- knowledge, understanding and skills

(Y)Yet to be on Track- developing some- knowledge, understanding and skills

(A)Earlier Stage- minimal knowledge, understanding and skills

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?

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?

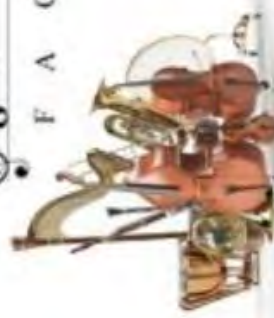
Sentence starters

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

Compositional Skills

The Elements of Music

- **Tempo** (Speed)
- **Timbre** (Sound of the Instrument)
- **Pitch** (High or Low Notes)
- **Dynamics** (Loud or Soft)
- **Texture** (Layers of Music)
- **Duration** (Length of Notes)
- **Silence** (No Sound)
- **Structure** (Order of Sections)
- **Rhythm** (Long and Short Notes)



Key Composers & Pieces

- *Tocatta and Fugue* by J.S. Bach
- *Canon* by Pachelbel
- *Zadok the Priest* by Handel



Key Words

- **Chromaticism** - moving up or down in semitones.
- **Scale** - an organised sequence of notes, stepwise.
- **Ostinato** - a repeated pattern (e.g. rhythm).
- **Motif** - a short musical phrase.
- **Sequence** - a repeating motif, moving up/down in pitch.
- **Melody** - the main tune.
- **Baroque** - A genre of music, popular between around 1600 and 1750.
- **Harpsichord** - A piano-like instrument without dynamic changes.
- **Ground Bass (Ostinato)** - A repeating bass part.



Glastonbury Festival

The Elements of Music

- **Tempo** (Speed)
- **Timbre** (Sound of the Instrument)
- **Pitch** (High or Low Notes)
- **Dynamics** (Loud or Soft)
- **Texture** (Layers of Music)
- **Duration** (Length of Notes)
- **Silence** (No Sound)
- **Structure** (Order of Sections)
- **Rhythm** (Long and Short Notes)



About the Festival

- Glastonbury Festival was originally known as Pilton Pop, Folk & Blues Festival.
- It began in 1970, founded by Michael Eavis.
- In 1980, Michael Eavis built the famous stage known as the Pyramid Stage.
- The aim of Glastonbury Festival is to encourage youth culture through music, drama, theatre, poetry, art and design and more.
- It's estimated that the festival has donated over £100 million to local charities and the communities.



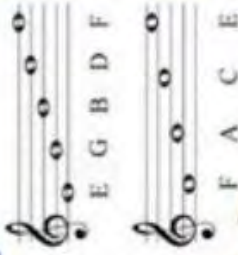
Music at Glastonbury Festival

- As one of the most famous music festivals in the world, the genres performed are very diverse.
- Headliners have included, Stormzy, Foo Fighters, Florence and the Machine, David Bowie, Adele, Robert Plant, U2, Paul McCartney, Billie Eilish and Beyonce.
- Different types of performers have included soloists, bands and orchestras.

Instrumental Skills

The Elements of Music

- **Tempo** (Speed)
- **Timbre** (Sound of the Instrument)
- **Pitch** (High or Low Notes)
- **Dynamics** (Loud or Soft)
- **Texture** (Layers of Music)
- **Duration** (Length of Notes)
- **Silence** (No Sound)
- **Structure** (Order of Sections)
- **Rhythm** (Long and Short Notes)



Drums



- Played with drum sticks
- Keeps the rhythm and timing for an ensemble



Bass Guitar

- Often has 4 strings
- Low in pitch
- Often read IAB to learn music
- It has pickups and needs an amplifier for volume.



Guitar

- Often has 6 strings
- Often read IAB to learn music
- But it can be acoustic or electric. Electric has pickups and needs an amplifier for



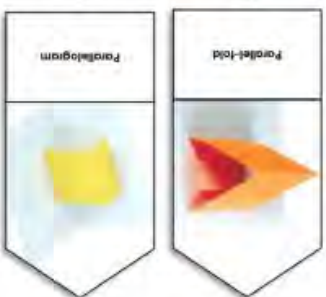
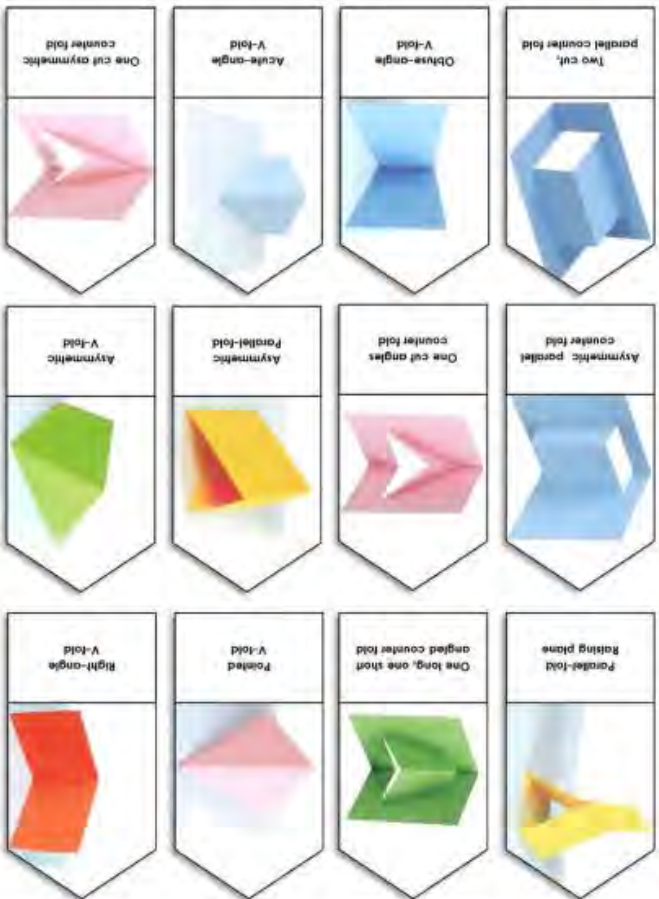
Performing skill keywords: Fluency, Timing, Confidence, Solo, and Ensemble.

Vocals

- Good posture and breathing are important when singing.
- It is important to project your voice.



DT: Paper Pop-up

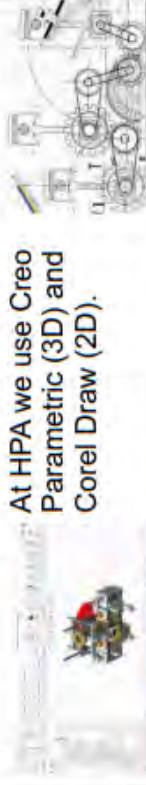


| Board | Properties | Uses |
|------------------------------|--|--|
| Corrugated cardboard | Strong, lightweight | Packaging protection in transportation of products and used to package some hot food such as a pizza due to its insulating properties. |
| Duplex board | Cheaper than white board, available with different finishes (metallic, holographic etc.) | Food packaging, eg biscuit boxes or containers |
| Solid white board | Top quality, range of thicknesses, excellent to print on | Hardback books |
| Foil-lined board | Expensive, good quality, aluminium foil lining, excellent barrier against moisture | Pre-pocked food packages, cosmetic cartons |
| Inkjet board | Expensive, printable, photo quality | Posters, photography, art reproductions |
| Foam-core board (foam board) | Strong, lightweight, paper face, foam core | Model making, mounting photographs |

| Key Vocabulary | |
|----------------|--|
| Functional | Designed to be practical and useful. |
| Appealing | Attractive or interesting. |
| Pop - up | (of a book or greetings card) containing folded cut-out pictures that rise up to form a three-dimensional scene or figure when the page is turned. |
| Mechanics | The machinery or working parts of something. |
| Mechanisms | A system of parts working together in a machine; a piece of machinery. |
| Prototypes | The first version of something you make |
| Affixed | To stick, attach, or fasten (something) to something else. |
| Component | A part of element of an object |
| Textile | A type of cloth or woven fabric |
| Rotate | Move or cause to move in a circle round an axis or centre. |

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.

CNC stands for **Computer Numeric Control**

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:



Versalaser Laser Cutter



Roland Camm1 vinyl cutter

3D Cube 3D printer



Denford Compact 1000 CNC Router

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.



CAD/CAM



| | |
|---------------------|---|
| Mansa | King or Emperor |
| Empire | An extensive group of states or countries ruled over by a single monarch, or a sovereign state. |
| Triangular Trade | The route that ships took from the UK, to West Africa, then to the Caribbean, before returning to the UK |
| Scramble Auction | plantation owners would agree a flat rate (same price for all the slaves) then race or scramble to grab the best workers first. |
| Bidding auction | The slaves would be inspected then plantation owners would bid for them and the highest bidder would "win" the slave. |
| Plantation | Large farm that used slave labour to grow crops such as cotton, sugar cane or tobacco |
| Passive Resistance | Resisting a stronger power by indirect and normally non-violent methods |
| Active Resistance | Resisting a stronger power by direct sometimes violent methods. |
| Abolish | Get rid of something |
| Abolitionists | People who wanted to end the slave trade/slavery |
| William Wilberforce | MP and abolitionist |
| racism | Prejudice or discrimination directed against someone of a different race based on the belief that one's own race is superior. |
| slavery | The system where people are owned by other people. |
| slaver | Somebody who owns or keeps slaves. |
| trade | The action of buying and selling services. |
| empire | When one country rules over others. |
| emancipation | Freedom from slavery. |

African Kingdoms

- Mansa Musa was King of the Malian Empire from 1312 – 1337
- Musa brought about many changes and transformed Mali into a great and powerful kingdom.
- His transformations led him to become known as 'Musa the Magnificent' and the time of his rule is known as Mali's Golden Age.
- Mansa Musa's reign led to major economic improvements in Mali.
- Mansa Musa ensured that Mali had a strong army to protect the empire's natural resources.
- Musa also changed the way Mali was governed. He divided the empire into provinces and appointed a governor to rule each one. Each of the villages in each province were ruled by a mayor. He employed judges, scribes and other civil servants.
- In 1324, Mansa Musa set off across the desert on a religious pilgrimage to Mecca. Musa gave away his gold to poor communities he met on his way. He spent money generously wherever he went. Each Friday, he would halt his journey and pay for a new mosque to be built wherever he had stopped.
- During his year long expedition, Mansa Musa became so famous that Mali started appearing on new maps drawn throughout the Middle East and Europe.

When did the African Slave Trade start?

- The slave trade began with Portuguese (and some Spanish) traders, taking mainly West African (but some Central African) slaves to the American colonies they had conquered in the 15th century.
- British sailors became involved in the trade in the 16th century and their involvement increased in the 18th century when the Treaty of Utrecht (1713) gave them the right to sell slaves in the Spanish Empire.



History – Year 8 Knowledge Organiser Topic 3

Why did Britain want an Empire?



Why did the slave trade develop?

- Economic reasons – profits were quickly made by slave owners, there was a labour shortage in the colonies
- Religious reasons – white Europeans wanted to 'civilise' other cultures
- Political reasons – Britain wanted to increase its power abroad

Transatlantic Slave Trade Map



How did slaves resist slavery?

- Passive resistance – such as fasting or peaceful protests; deliberate silence, working slowly.
- Active resistance – such as c=violent protest, sabotage, running away, challenging/arguing with authority

Case Study: The Maroons of Jamaica

- The 'Maroons' of Jamaica were a mixture of indigenous islanders and runaway enslaved people hiding out on the island.
- For over 80 years they held out and lived in the mountains, free from British rule.
- From their remote hideouts they mounted raids on the plantations.
- By the 1730s they were actually at war with the British army. They used guerrilla warfare to hold out against the British forces.
- In 1739, a treaty was drawn up between the British and the Maroons to make peace. This gave the Maroons some land and the Maroons promised not to take in any further runaway enslaved people.



Why was slavery abolished?

- Economic – Reasons to do with money. Slavery wasn't profitable
- Religion and beliefs – How religious ideas and people's ideas/beliefs about slavery changed
- Political and legal – How changes in the law and actions in Parliament helped to stop slavery
- Individuals – How individual people made a difference and helped to stop slavery
- Slave rebellions - Pressure from slaves ready to use violence if necessary

How was slavery abolished?

- The British government banned the transportation of slaves in 1807.
- However, if someone was a slave in 1807, they were not freed until after 1833 when slavery was completely abolished in the British Empire

What about the role of Bristol?

- Bristol was already a thriving port before the local merchants became involved in the slave trade.
- The slave trade opened up new prospects for the city. Local manufacturing industry could supply some of the trade goods needed to exchange for slaves in Africa. The developing colonies owned by the Europeans in North America and the Caribbean islands needed supplies from Europe.
- The slave-produced goods such as sugar and tobacco, grown on the European-owned plantations, were shipped to Bristol and provided new industries and markets for the city.
- The only problem was that trade with Africa was in the hands of the Royal African Company. This was a company of London-based merchants (including the Bristol-born Edward Colston) who had a monopoly on the African trade.
- The merchants of Bristol, organised into the Society of Merchant Venturers, campaigned to have this monopoly control lifted so that they could join the trade.
- In 1698, the Royal African Company lost its monopoly position, and Bristol's merchants were free to join the trade in enslaved Africans.

What is the Legacy of slavery in Bristol today?

- In 2020, the statue of Edward Colston was pulled down by protesters
- Many street names are still connected with the slave trade, as well as buildings
- Pero's Bridge (below) was named after an enslaved African living in Bristol in the 1700s



Key Terms

| | |
|--------------------|--|
| Empire | a group of countries ruled by a single person, government or country. |
| Imperialism | a policy of extending a country's power and influence through colonization, use of military force, or other means |
| Indigenous/native | Someone from an area |
| Sepoy | An Indian soldier serving under British orders |
| Mutiny | Disobeying orders or fighting against the leaders in charge |
| British Raj | Rule by the British Empire in India |
| Colony | Country or area controlled by another country with settlers |
| East India Company | A company that was founded in England in 1600 with the aim of trading in Asia. From 1757 - 1858 it controlled much of India. |
| Penal | To do with punishment |
| Aboriginals | The Indigenous people of Australia |
| Lease | a contract outlining the terms under which one party agrees to rent property owned by another party |
| Opium | Illegal drug |
| Kowtow | Bow until your head touches the floor |

The British Empire – background facts

- British Empire is a term used to describe all the places around the world that were once ruled by Britain.
- Britain began to build its empire in the 16th Century.
- At its height in 1922 the British Empire was the largest empire the world had ever seen, covering around a quarter of Earth's land surface and ruling over 458 million people.
- Britain spread its rule and power beyond its borders through a process called imperialism.
- The British Empire brought huge changes to societies, industries, culture and lives of people all around the world.

Why did Britain want an Empire?

- Social reasons – to spread Christianity or 'civilise' Indigenous people
- Military reasons – to show military strength
- Economic reasons – to expand or protect trade
- Political reasons – to gain power

How did the British take control in India?

- From 1757, Britain increased its control of India through the **East India Company**
- From 1858 onwards, the British government directly ruled India, and it became known as the British Raj.
- The British Raj had a significant impact on people living in India. Many Indians suffered from extreme poverty and famines during British rule.
- The British government and British individuals gained a lot of wealth from trade with India, which they used in part to fund the Industrial Revolution

Y8 History Knowledge Organiser

8.4 – The British Empire

How did the British take control in Australia?

- August **1770** Captain James Cook landed his ship, *HMS Endeavour*, at Botany Bay. He claimed the land and named it New South Wales
- The First Fleet sailed on May 13, 1787, with 11 vessels, including 6 transports, aboard which were about 730 convicts (570 men and 160 women). The fleet reached Botany Bay on January 19–20, 1788.
- Colonisation of Australia began early in 1788. One argument for this is that Britain was trying to relieve the pressure upon its prisons. This had been made worse by the loss of America where, previously convicts were sent to.
- Some historians have argued that this glossed a scheme to provide a stronghold for British sea power in the eastern seas. Some have seen a purely strategic purpose in settlement, other people have argued that Britain was trying to get an economic advantage in Australia.



How did the British take control in Hong Kong?

- A British diplomatic mission to China took place in 1793.
- The goals of the mission included asking for the creation of a permanent base for the British and the lifting of the laws limiting British traders in China.
- The cartoon shows the first meeting with the Chinese Emperor. Macartney (the British diplomat) knelt before the Emperor, but refused to kowtow (bow until his head reached the floor) to the Emperor. The Emperor rejected all British requests as a result.



- Hong Kong was a British colony from 1841 to 1997.
- In 1839 in the First Opium War, Britain invaded China and one its first acts was to occupy Hong Kong.
- In 1841, China surrendered the island to the British and an agreement called the Treaty of Nanking was signed - it formally ended the First Opium War.
- At the end of the Second Opium War, China also surrendered the Kowloon Peninsula to Britain - another part of the island.
- Britain's new colony flourished, and in 1898 Britain was given an additional 99 years of rule over Hong Kong under a special convention.
- This kept Hong Kong under British rule until 1997.

| | |
|--|---|
| Democracy | A form of government where the people have a say in how the government is run by voting. |
| Massacre | deliberately and brutally kill (many people). |
| Protest | a statement or action expressing disapproval of or objection to something |
| Government | the group of people with the authority to govern a country or state. |
| Reform | to make changes in something in order to improve it. |
| Charter | a document granting rights/privileges |
| Campaign | to work in an organised and active way to achieve a (political/social) goal. |
| Suffrage | the right to vote in political elections. |
| Suffragists | NUWSS – National Union of Women’s Suffrage Societies – Campaigned non-violently for votes for women |
| Suffragettes | WSPU – Women’s Social and Political Union – a militant movement campaigning for votes for women. |
| Representation of the People Act, 1918 | Extended voting rights to all men over 21 and some women over 30. |
| Representation of the People Act, 1928 | Extended voting rights to women over 21 bringing electoral equality |

8.5 Knowledge Organiser

How and why has democracy changed in Britain?

What were some of the problems with voting in the 18th century?

- Counties sent two MPs to Parliament. Many counties contained towns that were parliamentary boroughs and these also sent two MPs to Parliament
- Whether you could vote or not depended on where you lived and what you owned.
- In the counties, men could vote if they owned land or property worth more than £2 a year.
- The franchise (who could vote) in boroughs varied a lot, as it depended on ancient rights and customs.
- No women at all could vote.
- Rotten Boroughs had only a few voters but at least one MP
- Pocket boroughs were ‘owned’ by one man who would choose the MP
- In potwalloper boroughs, men could vote if they had a hearth big enough to boil a large pot of water on.
- There was no secret ballot – you raised your hand, or shouted out to vote

What happened at St Peter’s Fields, Manchester in 1819?

- Working class people (around 50,000) had gathered to listen to Henry Hunt calling for the reform of Parliament
- Manchester at this time had no police force, so the army were sent to prevent any disturbances. When Hunt began to speak the army attempted to arrest him, and attacked anybody who got in their way.
- Eleven people were killed and 400 were injured.

The consequences

- The government congratulated the army and those involved in keeping order in Manchester.
- Henry Hunt was sentenced to over two years in prison
- The government banned meetings of more than 50 people at any one time
- Tax on newspapers was increased so that working-class people could not afford to read them and they would be less likely to publish negative things about the government

The 1832 Reform Act
The act stated that:

- One in five men - those whose homes had a lease of £10 or more per year - got the vote
- There were to be MPs in new industrial towns such as Birmingham
- Seats for MPs from rotten boroughs had to be removed
- There was a mixed reaction to the new political changes.
- The middle class was happy about the changes, but the working class still could not vote.
- Elections remained corrupt and the country was still run by the rich.
- MPs in the countryside continued to have more power than those in industrial towns.



Who were the Chartists?
The Chartists had six points that they wanted for electoral reform.

- A vote for every man over 21 years of age
- Secret ballot (instead of the system for voting in public)
- No property qualification to become an MP
- MPs will be paid
- Constituencies of equal size
- An election every year for Parliament

What was the position of women in the late 19th century?

- 1857 – Women could get a divorce in court.
- 1869 – Women could vote in local elections but not in general elections.
- 1870 – Women could control their money and property after marrying.
- 1873 – Women could keep their children if they left the father.

Representation of the People Act 1918

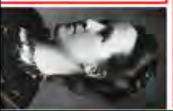
- All men over the age of 21 were given the right to vote even if they did not own property. Men over 19 in the British army could also vote.
- Women over the age of 30 were given the right to vote as long as they owned property or were married to a man who owned property.

Key groups in the campaign for women's enfranchisement.

The Suffragists

"We Demand the Vote"

Officially called the **National Union of Women's Suffrage Societies** who joined together in 1897 led by **Millicent Fawcett**.



The Suffragettes

"Deeds Not Words"

Officially called the **Women's Social and Political Union** founded by **Emeline Pankhurst** in 1903.



Why did some women get the right to vote in 1918?

- Some historians believe it was a result of the contribution women had made to the war effort, in roles such as farming, munitions work and the WAAC.
- Other historians argue that the war actually delayed women getting the right to vote. They believe the government was planning to pass a law before the outbreak of World War One, but it was pushed back to focus on the war.
- There is evidence to support both arguments. The role women played in the war undoubtedly changed the perception some people had of what women were capable of, but it would still be many years before women would be treated as equals in the eyes of the law, especially in areas such as work and pay.



Tactics used by the Suffragists – they believed in non-violent methods



Tactics used by the Suffragettes – they believed in 'deeds, not words'



Area & Population

Asia is the **largest and most populous** continent, with roughly 60 % of the total population. It is home to the largest (**Russia**) and most populous (**China**) nations. It covers ~ 30% of the Earth's land area. China and India are the two largest countries in the world by population. **China** is number one with over 1.34 billion people. **India** is number two with over 1.37 billion.



Keywords

Development: How economically, socially, culturally or technologically advanced a country is.

Primary industries: Are where raw materials are taken from the ground and are the poorly paid jobs

Secondary industries: Are where things are made in factories and people can earn a decent wage with regular hours.

Tertiary Industry: Are jobs in which people provide a service for others e.g. office jobs, teaching, nursing, IT.

Quaternary Industry: Are jobs in which people research and invent things. Bangalore is the home of India's space programme and hi-tech industry.

Why do people migrate = Push & Pull Factors

Push Factors

People want to get away from the negative things that risk or reduce their life chances. (Pushes them away)

Push Factors



- few services
- lack of job opportunities
- unhappy life
- poor transport links
- natural disasters
- wars
- shortage of food

Pull Factors

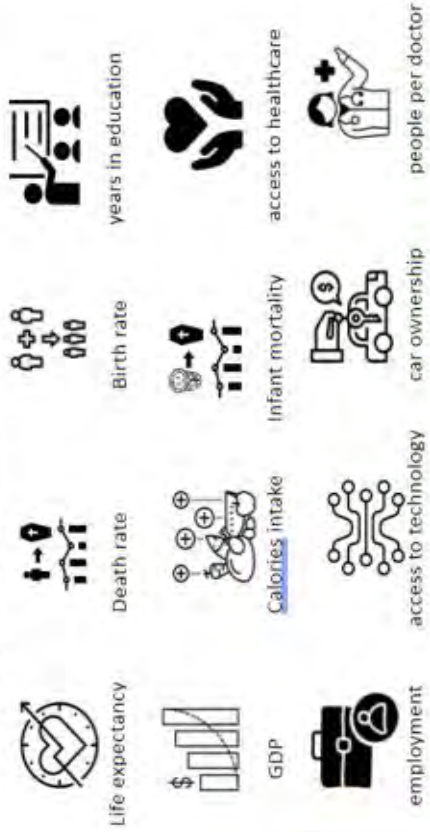
People are attracted to the positive things that improve their life chances (Pulls them in)

Pull Factors



- access to services
- better job opportunities
- more entertainment facilities
- better transport links
- improved living conditions
- hope for a better way of life
- family links

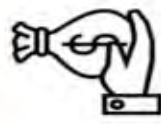
We measure Development using Development Indicators



Human Development Index

HDI: Is the best way to measure development because it combines 3 Development Indicators

Income
GNI per capita

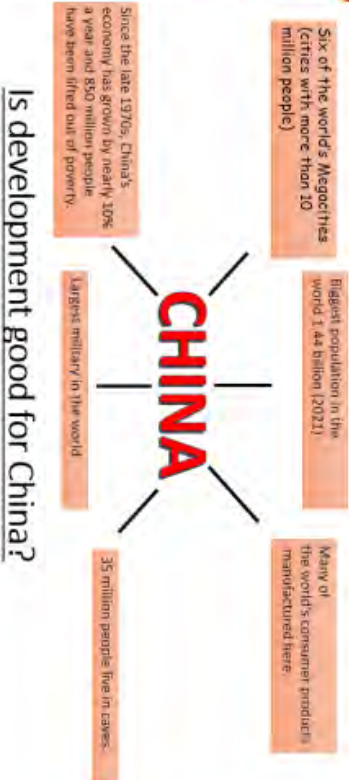
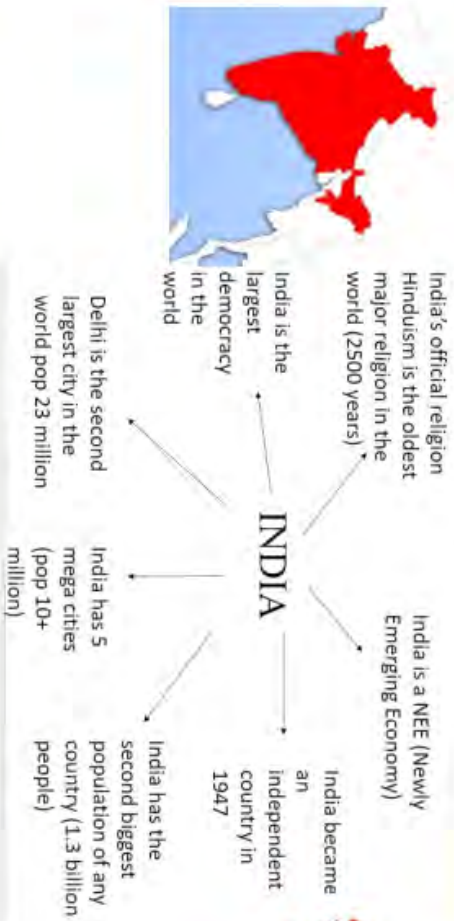


Education
The average number of years of schooling



Life expectancy
Number of years expected to live





Is development good for China?

| | | | |
|--|--|--|--|
| Wages are often low in factories but are higher than in many other types of industry. | The number of years children spend in school has increased as more families have money to pay for education. | Workers paying taxes would help the government to provide other services and goods. | There is an increasing gap between the rich and the poor in China. |
| Factory smoke is also harming rural industry, often leaves toxic black soot all over crops. | The new factory would need to build new roads and buildings that could benefit the city. | 80 percent of people in the manufacturing industry work more than eight hours per day. | The water supply is not always ok to drink, and can make people ill. Sometimes the factories pollute the water supply. |
| 500 million Chinese people cannot afford to see a doctor if they get ill as healthcare is expensive and wages low. | There are many unemployed people and factories offer jobs that pay regular wages. | Factories may contaminate water supplies and leave people with unsafe water. | Women are able to get jobs in factories and earn the same wage as men. |

What are the opportunities and challenges of Urbanisation in India?

| | | | |
|---|--|--|--|
| Wages across the country have increased as more people have found work in the cities. | More people have access to clean water and medical care. | More Indian people than ever before are benefiting from a better education which increases their life chances. | Some large IT companies in the cities employ tens of thousands of people. |
| Some factory/office workers claim they have been exploited with poor pay, and unsatisfying working hours. | There is a 'brain drain' in the countryside as the young talented, motivated people leave for the city. | Older/younger family members who choose not to migrate are left behind in the countryside with little future. | Instead of shrinking the gap between rich and poor in India is getting wider. |
| Slum housing is poorly built houses often built by the newly arrived workers from the countryside. They often unsafe and have no running water or sanitation. | India's growing demand for housing and infrastructure cannot be met. Almost a quarter of people in urban areas live in slums. | Bad conditions in the slums means that there are high levels of illness. The death rate is higher and the expectancy lower in these areas. | More people earning better wages means that more money is available to the government through improved taxes. This can be spent improving services and infrastructure. |
| The government spends most of its tax improving the cities instead of the countryside. Conditions in the countryside are getting further and further behind that of the cities. | Urbanisation has helped to drive India's development. Between 2014 and 2018 India's economy grew even more quickly than China's. | Land and water pollution has increased as a result of rapid urban growth. | Air pollution and greenhouse gas emissions have increased as industry and transport have developed. |

Key words

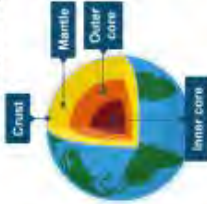
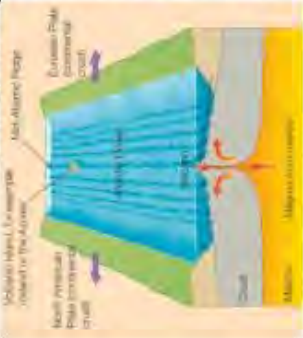


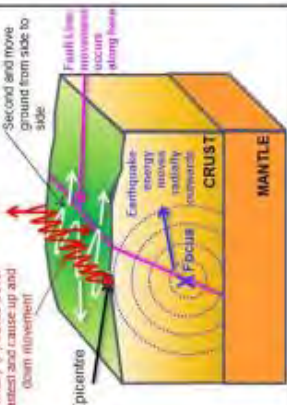
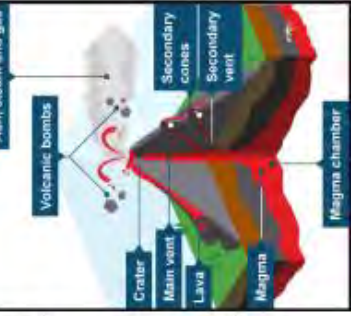
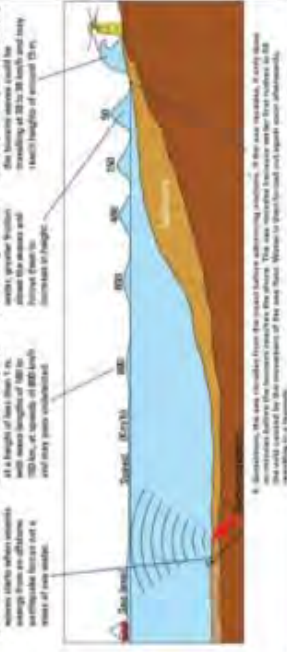
Rural to Urban migration: People moving from countryside to cities

Natural Increase: More births than deaths leading to an increase in population.

Mega city: A city with a population of more than 10+ million people (Bangalore is a Mega city)

Slums: An over crowded area of poor bad housing found in LICs and NEEs. The houses are often built by local people illegally and may lack electricity, toilets and running water.

KS3 Geography Knowledge Organiser – Natural Hazards

| Plate tectonics | | | |
|--|--|---|--|
| <p>Structure of the earth</p> <ol style="list-style-type: none"> The inner core is 5,500°C - extremely hot. It is a very dense solid made from iron and nickel. The outer core is 2,000 km thick and is a liquid. The mantle is semi-molten and about 3,000 km thick. The crust is the rocky outer layer. It is thin compared to the other sections, approximately 5 to 70 km thick.  | <p>Constructive plate margin</p> <ol style="list-style-type: none"> A constructive plate boundary, sometimes called a divergent plate margin, occurs when plates move apart. Volcanoes are formed as magma wells up to fill the gap, and eventually new crust is formed.  | <p>Destructive plate margin</p> <ol style="list-style-type: none"> Destructive plates move towards each other. This occurs when oceanic and continental plates move together. The oceanic plate is forced under the lighter continental plate. Friction causes melting of the oceanic plate and may trigger earthquakes. Magma rises up through cracks and erupts onto the surface.  | <p>Conservative plate margin</p> <ol style="list-style-type: none"> A conservative plate boundary, sometimes called a transform plate margin, occurs where plates slide past each other in opposite directions, or in the same direction but at different speeds.  |
| <p>Earthquakes</p> <p>Primarily P waves travel fastest and cause up and down movement.</p>  <ol style="list-style-type: none"> Seaves arrive Second and move around from side to side Fault lines movement occurs along here <p>Earthquake energy moves rapidly outwards</p> <p>Epitentre</p> <p>CRUST</p> <p>MANTLE</p> | <p>Volcanoes</p> <ol style="list-style-type: none"> A volcano is an opening in the Earth's crust. It allows hot magma, ash and gases to escape from below the surface. There are two types of volcano, composite and shield. Composite volcanoes are steep-sided and cone-shaped, made up of layers of ash and lava and containing sticky lava which doesn't flow very far. Mount Etna in Italy is a composite volcano. Shield volcanoes have gently sloping sides and runny lava that covers a wide area. Gases escape very easily from shield volcanoes. Mauna Loa in Hawaii is a shield volcano.  | <p>Tsunamis</p> <ol style="list-style-type: none"> The location of tsunamis is marked where waves energy from an offshore earthquake focus is at a distance of one mile. The tsunami waves are 100m high, at speeds of 800 km/h and they pass undisturbed. The tsunami waves are 100m high, at speeds of 800 km/h and they pass undisturbed. All the water of the ocean is pushed up, then it falls back down, creating a wave that is 100m high, at speeds of 800 km/h and they pass undisturbed.  | |
| Keywords | | | |
| <p>Hazard risk</p> | <ol style="list-style-type: none"> Probability or chance that a natural hazard may take place. | | |
| <p>Plate margins</p> | <ol style="list-style-type: none"> The border between two types of plates. | | |
| <p>Primary effects</p> | <ol style="list-style-type: none"> Initial impact of natural event caused directly by the hazard. | | |
| <p>Secondary effects</p> | <ol style="list-style-type: none"> After effects that occur as indirect impacts, sometimes on a longer timescale. | | |
| <p>Immediate responses</p> | <ol style="list-style-type: none"> Reaction of people as the disaster happens. | | |
| <p>Long term responses</p> | <ol style="list-style-type: none"> Later reactions that occur, days, weeks, months or years after the event. | | |
| <p>Monitoring</p> | <ol style="list-style-type: none"> Recording physical changes and using scientific methods to help inform decisions. | | |
| <p>Planning</p> | <ol style="list-style-type: none"> Actions taken to enable communities to respond to/recover from disasters. | | |
| Tropical storms | | | |
| <ol style="list-style-type: none"> A tropical storm is a hazard that brings heavy rainfall, strong winds and other related hazards such as mudslides and floods. Tropical storms usually form between approximately 5° and 30° latitudes and move westward due to easterly winds. The Coriolis force sends them spinning towards the poles. In most areas, tropical storms are given names. The names are alphabetical and alternate between male and female. This makes storms easier to identify, especially when they are close together. It is hard to predict the path of a tropical storm, and therefore difficult to manage an adequate evacuation of an area if needed. | | | |

| Topic | Knowledge |
|-------------------------------------|--|
| Life After Death | <p>* There are lots of different beliefs about life after death. Theists believe in life after death because it involves an afterlife which links to faith in God. Some agnostics might be persuaded by arguments for life after death (for example paranormal). Atheists reject an afterlife completely.</p> <p>* Dawkins is a world famous evolutionary biologist and atheist. Some have called him an anti-theist – he rejects all religions and ideas of God, he has spent his life writing books and attempting to prove religions wrong. Dawkins does not believe in a life after death, for Dawkins life after death is something humans believe in, despite a lack of evidence that gives us comfort and meaning to our lives – nothing more, it is just mistaken belief that helps us to survive. Dawkins argues that our need for an afterlife is in our DNA not our souls.</p> <p>He argues that life exists for one reason; to pass along its genetic material to the next generation. Embedded in DNA is the genetic material of our ancestors. Our own genetic material will be added to the DNA of our children. In this way, we will live forever, though not in a personal way.</p> <p>* Justin Welby is the 105th Archbishop of Canterbury and the most senior bishop in the Church of England. He has been involved with the Church since 1992 and is a devout Christian. Welby does believe in life after death, for him belief in life after death would not have been possible without the death and resurrection of Jesus Christ which Welby believes to be a factual historical event. For Welby belief in life after death and love of Jesus gives people hope and comfort in their time of need, Welby suggests that religion is a positive force in our lives and communities which help support and guide people in times of need and grief.</p> |
| Paranormal Activity | <p>Paranormal events are used as evidence for life after death by some people. Examples of paranormal events in this case might include:</p> <ul style="list-style-type: none"> - Ghosts – the soul or spirit of a dead person believed to be sensed by the living. - Mediums – People who claim to be able to communicate to the dead. - Near death experiences – When someone who was close to death wakes up and claims to have had a temporary experience of the afterlife. <p>* Scientists reject paranormal activity as confirmation of life after death and claim that there is no evidence-based proof. They claim that all experiences of the paranormal can be explained scientifically by infrasound (sound waves effecting our brains), waking dreams (psychological issues) or grief (wanting to believe as a comfort).</p> |
| Humanist Views & Science | <p>* Humanists are non-religious people and so do not believe in a God, however they do believe in humanity and place great importance on human life. They:</p> <ul style="list-style-type: none"> - Believe in scientific methods when it comes to understanding how the universe works - Make their ethical decisions based on reason, empathy, and a concern for human beings - Believe human beings should seek happiness in this life and helping others to do the same. <p>* They reject ideas of life after death as they do not believe in a God / afterlife, they suggest that instead we should find meaning in our own lives and live it to the full, when we die our bodies will decompose but we will still be remembered by our family and loved ones.</p> <p>* During the 1980's Michael Persinger a neuro scientist created the 'God Helmet' which claimed to show that religious experiences can be created artificially by stimulating parts of the brain with electromagnetism. Persinger reports over 900 people who took part in his experiments claimed to experience "mystical experiences and altered states". Persinger reports that "at least" 80 percent of his participants experience a presence beside them in the room and about one percent report an experience of "God" and others report less evocative experiences of "another consciousness or sentient being". He used these experiments to claim that God was just a contraction of the human mind.</p> |
| Buddhism & Reincarnation | <p>* Buddhists believe that when someone dies their energy passes into another form. Buddhists believe this is a continuous loop (samsara) and the goal is to ESCAPE! * Buddhists DO NOT believe in a permanent self or soul. A person is not reborn but the energy of that person gets reborn.</p> <p>* Buddhists believe that all life is suffering and therefore the goal for all Buddhists is to escape samsara. By following the teachings of the Buddha and living ethically Buddhists can reach enlightenment (The realisation of the truth about life) and achieve nirvana (indefinable state outside of samsara).</p> <p>* Rebirth is decided by karma. Good actions/ karma = good rebirth. When Buddhist follow the Eightfold Path and gain good karma they will have a better rebirth. They can be reborn as humans, animals, demigods and gods BUT being reborn as a human gives them the best opportunity to escape samsara.</p> |
| Christian Views | <p>* Christians believe that there is life after death. They think that the soul leaves the body after death and enters a new place. This place depends on how a person has lived their life. Most Christians believe that all persons are judged as to whether they lived a good or bad life. Depending on this they will be sent to either:</p> <ul style="list-style-type: none"> * Heaven is a place of perfection (often described as paradise) and is where believers go if have lived a morally good life and who have accepted God and Jesus into their hearts. Jesus' resurrection inspires this. * Hell is a place of torture and eternal suffering. This is where non-believers go or anyone who has done wrong and not asked for forgiveness (or been forgiven). * Catholic Christians also believe that after judgement people enter purgatory and this is an opportunity for believers to ask for forgiveness and pay for their sins. This is often described as process rather than a place. |
| Muslim Views | <p>* Muslims believe in life after death. This is called Akhirah. Muslims believe that when a person dies they go to a place called Barzakh to await judgement. Once the Day of Judgement comes, all bodies will be resurrected to await judgment (which is why Muslims have quick burials). After judgement, Muslims believe those who have passed the test will go to Al-Jannah and those who fail will go to Jahannam.</p> <p>* Al-Jannah – this is also called paradise and is described in the Qur'an (Muslim holy book) as a wonderful garden. Believers go here if they are a real Muslim who has pleased Allah during their life.</p> <p>* Jahannam – this is a place of hell and is described as being fire, black smoke and boiling water; it is a place of punishment where those who deserve it face endless pain and torture, mainly, for turning away from Allah.</p> |

| Key Word | Meaning |
|-----------------------|--|
| Life after Death | The belief that when you die there is another life which a person can transfer to. |
| Paranormal | Events beyond scientific explanation, thought to have a spiritual cause. |
| Near Death Experience | A paranormal event which makes a person experience the afterlife without dying. |
| Mediums | A person who claims to be able to speak to the dead. |
| Humanism | People who do not believe in God but place great importance on human life |
| The God Helmet | A device created by Persinger to replicate religious experiences scientifically |
| Samsara | The cycle of death and rebirth |
| Enlightenment | The realisation of the truth about life |
| Nirvana | Indefinable state outside of samsara |
| Karma | Actions and the consequences of actions |
| Eightfold Path | The eight practices a Buddhist strives to live by |
| The Soul | The nonphysical part of a person, believed to be a gift from God |
| Heaven | A place with God |
| Hell | A place without God |
| Purgatory | Believed by Catholics, where our souls go to be 'purified' before entering heaven |
| Akhirah | Life after death in Arabic (the Islamic view of life after death) |
| Barzakh | The waiting place between death and judgement for Muslims |
| Jannah | The Arabic word for Paradise – a heaven where you go when you die |
| Jahannam | The Muslim word for hell – a place of punishment |
| Jiz'at | The angel that takes our soul from our bodies when we die |

| Quotes |
|---|
| "A delusion is something that people believe in spite of a total lack of evidence" Richard Dawkins |
| "The horizon is not dominated by the past – but by what God can do. And God can raise the dead" Justin Welby |
| "Feeling something beyond yourself, bigger in space and time, can be stimulated" Michael Persinger |
| "Set your heart on doing good. Do it over and over again. And you will be filled with joy" Buddha |
| "The dust returns to the earth as it was, and the spirit returns to God who gave it" The Bible |
| "Who will bring us back? The one who created you the first time" The Qur'an |
| "Life is uncertain; death is certain" Buddha |

Year 8 Unit 2- What does it mean to be religious in the UK?

Religious Festivals– Celebrations to mark an important event or remember certain stories for religious communities. Often these festivals will be a time of celebration and community

Christianity: Christmas

Christmas is a Christian holy day that marks the birth of Jesus, who

Christians believe to be the Son of God. It is often celebrated by counting down the advent, decorating houses and shops, giving gifts, church

services, nativity plays and spending time with family and friends.

Hinduism: Holi– also known as the festival colour

This festival celebrates spring, love, and new life.

Some families hold religious ceremonies, but for many Holi is a time for fun. It's a colourful festival, with dancing, singing and throwing powdered paint and coloured water



Christmas

Christmas celebrates the birth of Jesus as told in the gospel of Matthew and the gospel of Luke. The festival of Christmas does not fall on Jesus' actual birthday and different Christians celebrate it on different dates.

Protestant and Catholic Christians celebrate it on December 25th and Orthodox Christians celebrate it on 6th January.

Mary gave birth to Jesus in Bethlehem and laid him in a manger. Then, according to the gospels, he was visited by kings and shepherds who heard about his birth.

In the UK, Christmas is celebrated in both a religious and secular way. There are church services with carols on Christmas Eve and Christmas Day as Christians thank God for the gift of Jesus. Christmas is a national holiday in the UK and many people both religious and non religious celebrate with parties, food and gifts .

Christian Churches often run events for those in need over the Christmas period as the idea of Christmas is to spread love and peace. For, example a church might provide a space to give food and temporary shelter to people in need.

Holi

Holi is a Hindu festival that celebrates spring, love and new life. Some families hold religious ceremonies, but for many, Holi is more a time for fun. It's a colourful festival, with dancing, singing and throwing of paint. Holi marks the arrival of spring and the end of winter, it is usually celebrated in March. In 2023 it is being celebrated on Tuesday, March 7th. One of the main focuses of the Holi Festival is a celebration of the victory of good over evil.

Good overcoming evil comes from the story of Hiranyakashipu. He was an ancient king who claimed to be immortal and demanded to be worshipped as a god. His son Prahlad was deeply devoted to worshipping Vishnu, and Hiranyakashipu was angry that his son worshipped this god over him. According to the story, the Lord Vishnu appeared as half-lion and half-man, and killed Hiranyakashipu. In that way, good conquered evil.

Present tense holidays Year 8 French 8.7 Knowledge Organiser



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

For the **present tense**, depending on the pronoun, we change the ending of the verb using the table below :

| Pronouns | -er | -ir | -re |
|---------------------|------|---------|------|
| Je (I) | -e | -is | -s |
| Tu (you) | -es | -is | -s |
| il (he), elle (she) | -e | -it | / |
| Nous (we) | -ons | -issons | -ons |
| Vous (you) (pl) | -ez | -issez | -ez |
| ils / elles (they) | -ent | -issent | -ent |

Examples:

- Porter = **to** wear > je porte = **I** wear
- Finir = **to** finish > nous finissons = **we** finish
- Vendre = **to** sell > ils vendent = **they** sell

The present and future tenses

The Near Future :

The near future **tense** (le futur proche) is used to express something that will be happening in the very near future. It is formed by conjugating the verb **aller** (to go) in the present tense, followed by an infinitive.

| English | To go (present) | Infinitive |
|------------------------------|-----------------|------------|
| I am going to go | Je vais | aller |
| You are going to play | Tu vas | jouer |
| He/she/we are going to visit | Il/elle/on va | visiter |
| We are going to swim | Nous allons | nager |
| You (pl.) are going to read | Vous allez | lire |
| They are going to do | Ils/elles vont | faire |

Going to or living in a country

In French the word "to" or "in" with countries changes depending on if they are masculine, feminine, plural or a town/city. Countries which end in "e" are almost always feminine (this really helps)

Examples :

- Je vais **en** Espagne (**feminine**) → I go **to** Spain
- Je vais **au** Portugal (**masculine**) → I go **to** Portugal
- Je vais **à** l'hôtel (**vowel**) → I go **to the** hotel
- Je vais **aux** Etats-Unis (**plural**) → I go **to the** USA
- Je vais **à** Paris (**town/city**) → I go **to** Paris

8.7 Present Holidays - French Vocab List

| Tu vas où? | Where do you go? |
|-------------------|----------------------|
| Je vais | I go |
| À Paris/ Londres | to Paris / to London |
| En France | to France |
| En Espagne | to Spain |
| En Angleterre | to England |
| En Écosse | to Scotland |
| En Irlande | to Ireland |
| Au Pays de Galles | to Wales |
| Au Portugal | to Portugal |
| Au Pakistan | to Pakistan |
| En Pologne | to Poland |
| En Somalie | to Somalia |
| Aux Caraïbes | to the Caribbean |
| Au Royaume Uni | to the UK |
| Aux États-unis | to the States |
| Aux Pays Bas | to the Netherlands |

| Tu restes où? | Where do you stay? |
|-------------------------|----------------------------|
| Je reste dans | I stay in |
| un hôtel cinq étoiles | A (five star) hotel |
| Un camping | A campsite |
| Un appartement | An apartment |
| Une caravane | A caravan |
| Une tente | A tent |
| Une auberge de jeunesse | A youth hostel |
| Un mobil-home | A static caravan |
| Chez mes grand-parents | At my grand-parents' |
| Un hôtel de luxe | A state-owned luxury hotel |
| Un B&B | A B&B |

| Comment Voyager? | How do you travel? |
|-----------------------------------|-------------------------|
| Je voyage/ nous voyageons | I travel / We travel |
| à pied | by foot |
| à vélo | by bike/pushbike |
| en moto | by motorbike |
| en voiture | by car |
| en train | by train |
| en bateau/ en bateau de croisière | by boat / by cruiseship |
| en métro | by tube |
| en car | by coach |
| en bus | by bus |
| en avion | by plane |

| Qu'est-ce que tu visites? | What do you visit? |
|---------------------------|------------------------------|
| Je visite/ Nous visitons | I visit / We visit |
| La plage | The beach |
| La piscine | The swimming pool |
| Le centre-ville | The town centre |
| Le musée | The museum |
| Le marché | The market |
| Le stade de foot/ rugby | The (football/rugby) stadium |
| Le parc d'attraction | The theme park |
| Les monuments | The monuments |
| Les magasins | The shops |
| Les cafés | The cafés |
| Les restaurants | The restaurants |
| L'office de tourisme | The tourist office |

| Que fais-tu? | What do you do...? |
|-------------------------|--------------------------|
| Se relaxer | To rest |
| S'amuser (je m'amuse) | To have fun (I have fun) |
| Bronzer | To sunbathe |
| Visiter des monuments | To visit monuments |
| Aller à la plage | To go to the beach |
| Aller au restaurant | To go to the restaurant |
| Faire du shopping | To go shopping |
| Se promener | To go for walks |
| Prendre des photos | To take photos |
| Acheter des souvenirs | To buy souvenirs |
| Faire du sport | To do (play) sports |
| Faire du sport nautique | To do water sports |
| Danser en boîte | To dance in a club |

| C'est où? | Where is it...? |
|--------------------------------|--------------------------------------|
| C'est loin | It's far |
| C'est proche/ à proximité | It's nearby |
| C'est à 5 minutes d'ici | It's 5 minutes away |
| C'est à 300 mètres d'ici | It's 300 metres away |
| Allez tout droit | Go straight on |
| Aux feux, continuez tout droit | At the traffic lights go straight on |
| Au rond-point tournez à droite | At the roundabout turn right |
| Tournez à gauche | Turn left |
| Tournez à droite | Turn right |
| Prenez la première | Take the first |
| Prenez la deuxième | Take the second |
| Traversez le pont | Cross the bridge |

Past holidays 8.8 French Knowledge Organiser

Reflexive verbs, the perfect tense (past tense)

A verb is a doing, being or having word. e.g. to speak, to eat, to be.

Reflexive verbs in French are verbs which usually mean an action done to yourself (e.g. straighten your hair, brush your teeth, etc.). Many are regular -er verbs and they need an extra reflexive pronoun.

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

Examples:

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

The perfect tense:

You can talk about the **past** by using the **perfect tense** (*le passé composé*). The perfect tense has 3 parts:

1. The **subject pronoun** (eg. Je, nous)
2. The **auxiliary** (*avoir* or *être*)
3. The **past participle**

To form the past participle, take off the infinitive endings (-er, -ir or -re) and add the following endings instead:

- ER verbs > - é
- IR verbs > - i
- RE verbs > - u

Examples:

J'ai acheté des baskets au centre commercial. *J'have bought* trainers at the shopping mall.

Hier il *a joué* au foot dans le parc. *Yesterday he played* football in the park.

Tu *es allé* en ville hier? *You went* to town yesterday?

The 2 auxiliary verbs are AVOIR or ÊTRE.

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

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

Remember!

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

Add -e if feminine e.g. elle est allée

Add -s if plural e.g. ils sont allés

Add -es if feminine plural e.g. elles sont allées

Past holidays 8.8 French Vocab list



| | | | | | |
|---|--|--|---|---|--|
| <p>les participes passés irréguliers? Faire → fait Prendre → pris Boire → bu Voir → vu Lire → lu Vouloir → voulu Dire → dit Devenir → devenu Avoir → eu Écrire → écrit</p> | <p>Irregular past participles ? To do → did To take → took To drink → drank To see → saw To read → read To want → wanted To say → said To become → became To have → had To write → wrote</p> | <p>Quand? Aujourd'hui Normalement D'habitude Parfois/quelquefois Pendant la pause/ le trajet Le week-end Après le collège deux fois par semaine souvent Toujours Rarement De temps en temps Le lundi</p> | <p>When? Today Normally Usually Sometimes During breaktime/the journey On the weekend After school Twice a week Often Always Rarely From time to time On Monday</p> | <p>Qu'est-ce que tu fais normalement? Se reposer (je me repose) Se relaxer (je me relaxe) S'amuser (je m'amuse) Se baigner (je me baigne) S'habiller (je m'habille) Se lever (je me lève) Se laver (je me lave) Se réveiller (je me réveille) S'entendre avec (je m'entends avec) Se brosser les dents/ les cheveux (je me brosse) Se doucher (je me douche) Se maquiller (je me maquille)</p> | <p>What do you do normally? To relax To relax To have fun To bathe To get dressed To get up To wash To wake up To get on with To brush teeth/hair To shower To put on make-up</p> |
| <p>Les opinions C'était Génial Fantastique Intéressant Touchant Inoubliable Incroyable Trop court Ennuyeux/barbant Trop long Passionnant Émouvante Triste</p> | <p>Opinions It was ... Great Fantastic Interesting Moving (emotionally) Unforgettable Incredible Too short Boring Trop long Exciting Emotional sad</p> | <p>Hier Récemment Le week-end dernier La semaine dernière L'année dernière Il y a un mois Demain Bientôt A l'avenir Le week-end prochain La semaine prochaine L'année prochaine Dans un mois</p> | <p>Yesterday Recently Last weekend Last week Last year A month ago Tomorrow Soon In the future Next weekend Next week Next year In a month</p> | <p>Il faisait quel temps? il faisait beau il faisait mauvais il faisait chaud il faisait froid il faisait gris il faisait nuageux il y avait du soleil il y avait du vent il y avait du brouillard il y avait de l'orage il pleuvait il neigeait il geleait</p> | <p>What was the weather like? The weather was nice The weather was bad It was hot It was cold It was grey / overcast It was cloudy It was sunny It was windy It was foggy It was stormy It was raining It was snowing It was icy</p> |



Past tense holidays 8.8 Spanish Knowledge Organiser



Reflexive verbs, the preterite (past tense)

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

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

Examples:

lavarse - to wash

me lavo > I wash

levantarse - to get up

nos levantamos > we get up

Ducharse - to shower

Te duchas > you shower

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

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

Examples:

Tomar = to take
 To form "I took"

~~TOMAR~~ > tom > **tomé**

Hablar = to speak
 To form "she spoke"

~~HABLAR~~ > habl > **habló**

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

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

Past holidays 8.8 Spanish vocab list

| | | | | | |
|---|---|--|---|---|--|
| <p>¿Qué hiciste durante las vacaciones?</p> <p>Fui a la playa al restaurante de compras Me quedé Visité Comí Bebí Vi Probé Hice Descansé Me relajé Me divertí Visité monumentos Di paseos Saqué fotos Compré recuerdos Tomé el sol Hice deportes acuáticos</p> | <p>What did you do on holidays?</p> <p>I went To the beach To the restaurant shopping I stayed I visited I ate I drank I saw I tried (food) I did I rested I relaxed I had fun I visited monuments I went for walks I took photos I bought souvenirs I sun-bathed I did water sports</p> | <p>¿Qué tiempo hacía?</p> <p>Hizo buen tiempo Hizo mal tiempo Hizo calor Hizo frío Estuvo cubierto Estuvo nublado Hizo sol Hizo viento Hubo niebla Hubo tormentas Llovió Nevó</p> | <p>What was the weather like?</p> <p>The weather was nice The weather was bad It was hot It was cold It was grey / overcast It was cloudy It was sunny It was windy It was foggy It was stormy It was raining It was snowing</p> | <p>La vida cotidiana en un país extranjero</p> <p>La gente Las habitantes Los jóvenes Hablar Vivir Comprar Celebrar Preparar Levantarse Lavarse Vestirse Desayunar Ir a trabajar Ir al instituto Comer Almorzar Jugar Volver a casa Ver la tele Cenar Acostarse Afeitarse Bañarse Ducharse</p> | <p>Daily life in a foreign country</p> <p>People Inhabitants Young people To speak To live To buy To celebrate To prepare To get up To wash To get dressed To eat breakfast To go to work To go to school To eat To have lunch To play To return home To watch TV To have dinner To go to bed To shave To have a bath To shower</p> |
| <p>Las opiniones</p> <p>Fue Genial Fantástico Interesante Emocionante Inolvidable Increíble Demasiado corto Demasiado largo</p> | <p>Opinions</p> <p>It was ... Great Fantastic Interesting Exciting Unforgettable Incredible Too short Too long</p> | <p>Yesterday</p> <p>yesterday The day before yesterday Last week Last weekend Last month/year Last summer Last night The other day Two days/years ago Yesterday morning</p> | <p>La semana pasada</p> <p>Ayer Anteayer La semana pasada El fin de semana pasado El mes/año pasado El verano pasado Anoche El otro día Hace dos días/años Ayer por la mañana</p> |  | |

8.7 Present tense holidays

Year 8 Spanish Knowledge Organiser



The present and future tenses

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

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

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

Example:

Descansar = to rest Comer = to eat Vivir = to live
Descanso = I rest Comemos = we eat Viven = they live

The Near Future :
The near future **tense** is used to express something that will be happening in the very near future. It is formed by conjugating the verb **ir** (to go) in the present tense + a + an infinitive.

Example: I'm going to travel by plane > Voy a viajar en avión.

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

Time markers tell us when something happens and help us work out which tense is being used. The following can be used with the future tense.

- Mañana - tomorrow
- La semana próxima- next week
- El fin de semana que viene – next weekend
- El próximo mes - next month
- El año que viene – next year
- En dos años – In two years

8.7 Present Holidays - Spanish Vocab List



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

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

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

| ¿Cómo viajás? | How do you travel? |
|-----------------------|-------------------------|
| Viajo / Viajamos | I travel / We travel |
| a pie | by foot |
| en bici | by bike/pushbike |
| en moto | by motorbike |
| en coche | by car |
| en tren | by train |
| en barco / en crucero | by boat / by cruiseship |
| en metro | by tube |
| en autocar | by coach |
| en autobús | by bus |
| en avión | by plane |

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

| ¿Dónde está...? | Where is it...? |
|---------------------------------|--------------------------------------|
| Está lejos | It's far |
| Está cerca | It's nearby |
| Está a cinco minutos | It's 5 minutes away |
| Está a 300 metros | It's 300 metres away |
| ↑ | Go straight on |
| En el semáforo siga todo recto | At the traffic lights go straight on |
| En la rotonda gira a la derecha | At the roundabout turn right |
| ↶ | Turn left |
| ↷ | Turn right |
| 1 | Take the first |
| 2 | Take the second |
| ↯ | Cross the bridge |

| ¿Qué visitas? | Where do you visit? |
|------------------------------|------------------------------|
| Visto / Visitamos | I visit / We visit |
| la playa | The beach |
| la piscina | The swimming pool |
| el centro | The town centre |
| el museo | The museum |
| el mercado | The market |
| el estadio (de fútbol/rugby) | The (football/rugby) stadium |
| el parque de atracciones | The theme park |
| los monumentos | The monuments |
| las tiendas | The shops |
| los cafés | The cafés |
| los restaurantes | The restaurants |
| la oficina de turismo | The tourist office |

Components of Fitness



Physical Components

1. Aerobic Endurance → The ability to exercise (your cardiorespiratory system) for a long period of time
2. Muscular Endurance → The ability to exercise (your muscular system) for a long period of time
3. Muscular Strength → The maximum force that a muscle or muscle group can produce
4. Flexibility → The range of movement around a joint
5. Speed → Speed is the distance covered over time (meters per second)
6. Body Composition → The ratio of fat mass to fat free mass in the body

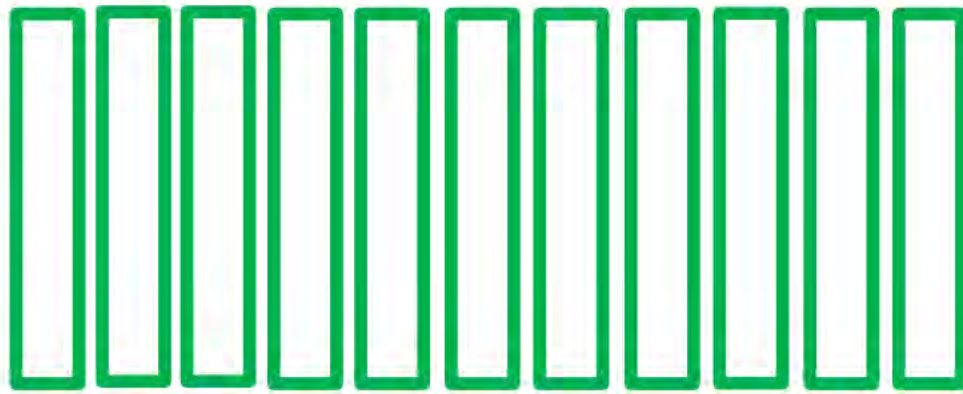
Skill Components

7. Balance → The ability to maintain a centre of mass above a base of support
8. Coordination → Being able to use two or more body parts at once to complete a motor task efficiently
9. Reaction Time → The time taken to respond to a stimulus
10. Power → The combination of speed and strength
11. Agility → The ability to change direction at speed without losing balance

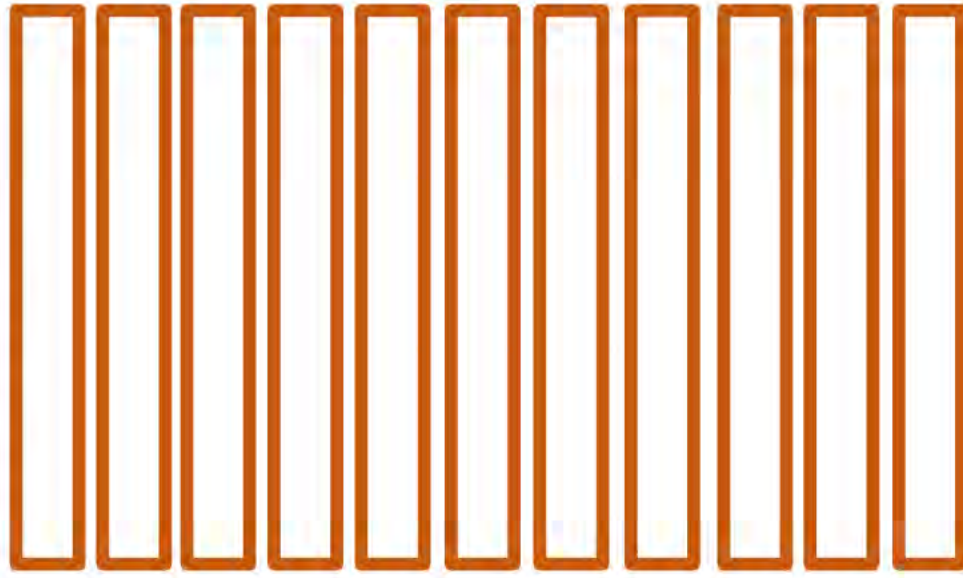


Note-
Aerobic Endurance is also known as
Cardiovascular Endurance.

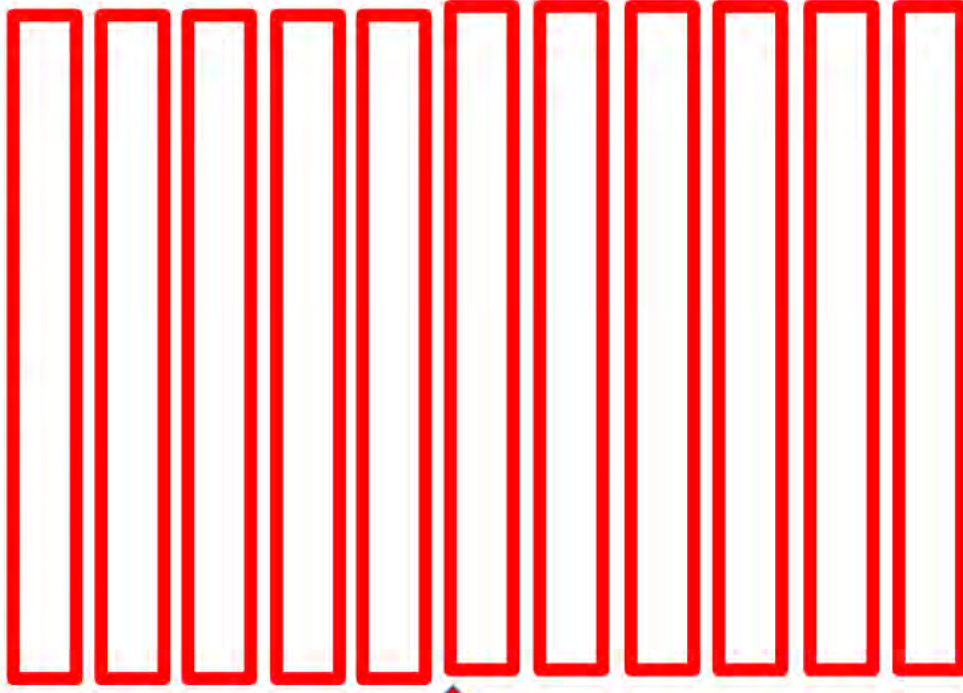
Name



Definition



Sporting Example

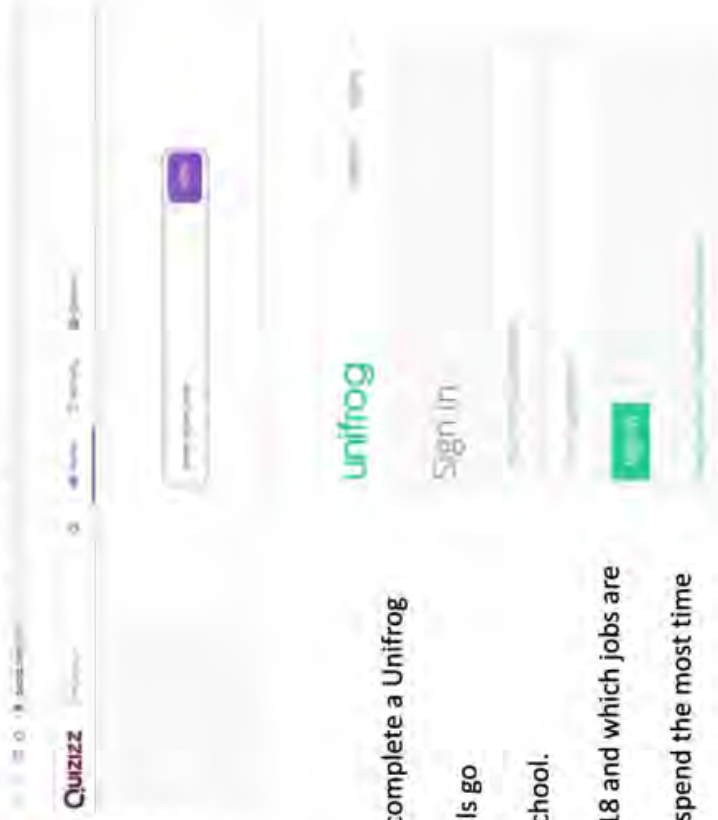


SPACE and Careers Independent Study

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 / EB1'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 |
|-------|--------------|-------|------------|
| | | | |
| | | | |



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.

Independent Study Deadlines:

| Week commencing | Subject | Completed? |
|------------------------|----------------|-------------------|
| 20 February 2023 | English | |
| | Maths | |
| | Science | |
| | RS | |
| | Computing | |
| | | |
| 27 February 2023 | English | |
| | Maths | |
| | Science | |
| | Music | |
| | SPACE | |
| | | |
| 06 March 2023 | English | |
| | Maths | |
| | Science | |
| | Geography | |
| | Drama | |
| | | |
| 13 March 2023 | English | |
| | Maths | |
| | Science | |
| | Art | |
| | MFL | |
| | | |
| 20 March 2023 | English | |
| | Maths | |
| | Science | |
| | History | |
| | PE | |
| | | |
| 27 March 2023 | English | |
| | Maths | |
| | Science | |
| | DT | |
| | Computing | |
| | | |
| Easter Holiday | | |
| | | |
| 17 April 2023 | English | |
| | Maths | |
| | Science | |
| | Geography | |
| | Drama | |

| | | |
|----------------------|-----------|--|
| | | |
| 24 April 2023 | English | |
| | Maths | |
| | Science | |
| | MFL | |
| | PE | |
| | | |
| 01 May 2023 | English | |
| | Maths | |
| | Science | |
| | RS | |
| | SPACE | |
| | | |
| 08 May 2023 | English | |
| | Maths | |
| | Science | |
| | History | |
| | Music | |
| | | |
| 15 May 2023 | English | |
| | Maths | |
| | Science | |
| | Computing | |
| | DT | |
| | | |
| 22 May 2023 | English | |
| | Maths | |
| | Science | |
| | Geography | |
| | Art | |
| | | |
| May Half Term | | |
| | | |
| 05 June 2023 | English | |
| | Maths | |
| | Science | |
| | History | |
| | MFL | |
| | | |
| 12 June 2023 | English | |
| | Maths | |
| | Science | |
| | Computing | |
| | RS | |
| | | |

| | | |
|--------------|-----------|--|
| | | |
| 19 June 2023 | English | |
| | Maths | |
| | Science | |
| | Music | |
| | Drama | |
| | | |
| 26 June 2023 | English | |
| | Maths | |
| | Science | |
| | Geography | |
| | PE | |
| | | |
| 03 July 2023 | English | |
| | Maths | |
| | Science | |
| | DT | |
| | Art | |
| | | |
| 10 July 2023 | English | |
| | Maths | |
| | Science | |
| | MFL | |
| | SPACE | |
| | | |
| 17 July 2023 | English | |
| | Maths | |
| | Science | |
| | History | |
| | RS | |
| | | |