Bexhill Academy

Year 7 KNOWLEDGE ORGANISER

Term Two

2024

Creating the best opportunities for all

What is your Knowledge Organiser?

Your Knowledge Organiser has been designed by your subject teachers. Your Knowledge Organiser contains a summary of the information your subject teachers would like you to know and understand across each Term. You will be issued with a new Knowledge Organiser at the start of each term.

Understanding the information in your Knowledge Organiser and completing all of the subject tasks will help you to get the very best out of every lesson and to make the very best progress that you can.

Do I need to bring my Knowledge Organiser to lessons?

Yes. You are expected to bring your Knowledge Organiser to every lesson and to Tutor Time.

Your subject teachers will ask you to use your Knowledge Organiser to check key facts and ideas, to check the spelling of key words, to help you to complete a task in the lesson and to help you with your homework. Your subject teachers will ask you questions about the information and ideas in your Knowledge Organiser to check your subject knowledge and understanding.

How can I use my Knowledge Organiser at home?

Your Knowledge Organiser will help you to work independently and develop the skills you need to be a successful learner.

You can use your Knowledge Organiser at home in a number of different ways.

- Complete all of the subject tasks
- Create mind maps or flashcards for different subjects
- Put the key words into new sentences
- Give yourself a spellings or definitions test
- Draw diagrams of processes
- Carry out some further research on a topic and think about how you might present this information.

What are core questions?

Core questions will show you the essential learning that you will need to gather throughout the unit you are studying. Without this knowledge you will not be able to move onto the higher learning aims such as application, analysis and evaluation. As you move through the unit of work your teacher will support you in developing detailed answers to all of the core questions and the challenge questions. You will be asked to refer to the printed answers here regularly in order to develop your core understanding. **The core questions will form part of your Do Nowtasks, your independent learning and your assessments.**

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ART TERMS 1 & 2 MARK MAKING

The bigger picture:

Mark-making, in the form of drawing, is often considered to be the foundation of art – a way of thinking visually. It can be used for different purposes and is a powerful form of communication. When it comes to creating art, our students can overly worry about the marks that they make. **Markmaking - doesn't have to be a precious exercise.** Marks can be used to produce hyper-realistic drawings (and this is fine), but they can also be more expressive, experimental, accidental, playful, abstract, energetic, symbolic, disruptive, misleading...

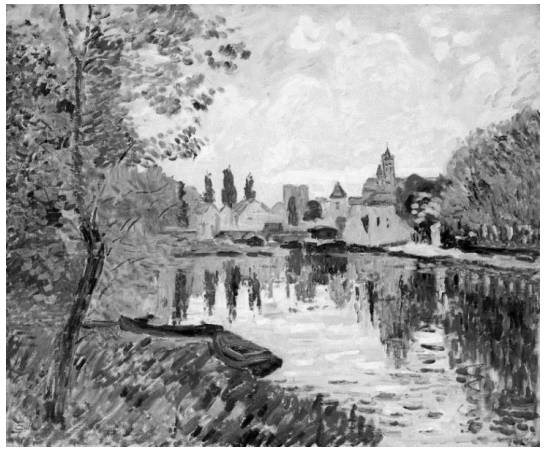
One of the challenges for our art students is this: to **worry less about creating impressive marks** and to **pay more attention to the qualities and subtleties of mark making. Think carefully, observe sensitively, and question often.** *How is this line weighted? How does this ink flow differently to that paint? How might that texture be re-created? What happens when I create marks without overly thinking - or without looking, even? What happens if I'm listening to music? Do marks have to be visual - for example, could a sound or a smell be considered as a type of mark?*

The meanings of marks are not fixed and are open to interpretation by individual viewers. How we read and interpret marks is shaped by our experiences , knowledge, understanding and intuition. Marks can be combined in infinite ways to draw our attention, with each addition having the potential to remind, provoke, suggest, challenge, express, celebrate, portray... Understanding the histories of art will improve your visual literacy.

Core Question	Markmaking	Answers
1.	What are the '**Formal Elements**' in Art education?	These are the building blocks or ingredients of ART
2.	List the 6 Formal elements in Art education?	Formal elements are Line, Shape, Space, Form, Texture and Colour.
3.	What is **markmaking** in Art education?	Mark making is not fixed or limited to the materials that you find in the art room. Marks - lines, dots, scratches, scribbles, patterns, textures, rubs, bumps, brushstrokes, pixels, with an infinite amount of tools and techniques.
4.	Which artist used rough Charcoal line, marks and smudges to suggest movement in the people he drew?	Williem De Konning used gestural marks to express movement.
5.	Who is the painter that dripped and splashed paint to create 'action paintings'?	Jackson Pollock used expressive marks to create purely abstract paintings.
6.	What painter fired a gun through bags of paint to create explosive marks?	Niki de Saint Phalle created a novel way of markmaking exploding bags of paint onto a canvas.
Challenge Question	What is abstract Art?	

ART: TERMS 1 & 2 MARK MAKING

What is Mark making ? Where can it be seen in Art work?
Mark making describes the different lines, dots, marks, patterns, and textures we create in an artwork. It can be loose and gestural or controlled and neat. It can apply to any material used on any surface: paint on canvas, ink or pencil on paper, a scratched mark on plaster, a digital paint tool on a screen, a tattooed mark on skin…even a sound can be a form of mark making. Artists use markmaking to express their feelings and emotions in response to something seen or something felt – or gestural qualities can be used to create a purely abstract composition.



Armand Guillaumin Moret – Sur-Loing 1902

The impressionists used mark making – in the form of separate brush marks or dabs of paint – to add life, movement and light to their paintings of the things they saw around them. Later artists working in an expressionist style such as Williem de Konning also created representational artworks using mark making. In his Untitled drawing of 1966–7 de Kooning uses rough charcoal lines, marks and smudges to suggest the movement of the people he draws.

Williem de Konning Untitled 1966

Artists often use mark making and gestural qualities to express their feelings or emotions about something they have seen or experienced. Patrick Heron's Azalea Garden was inspired by the effervescence of flowers 'erupting' in his garden. The vicious clawed and battered marks used by Jean Fautrier in creating his sculpture *Large Tragic Head* seem to directly communicate the horror and fear he experienced during the Second World War. Cy Twombly developed gestural mark making into a form of personal handwriting. In his series of Paintings based on Seasons, he uses this 'handwriting' of marks to express what the different seasons mean to him.

Jackson Pollock Number 14 1951

Artists also use expressive mark making to create purely abstract artworks which do not necessarily refer to anything in the real world but are intuitive or respond to a defined set of rules.
Action painters such as Jackson Pollock (who dripped and splashed paint onto his canvases) and Niki de Saint Phalle, who in her shooting pictures found a novel way of mark making, by firing a gun through bags of paint which then exploded onto a canvas creating explosive marks, splashes and drips. An important influence on this kind of improvised mark making was the surrealist doctrine of automatism– which meant accessing ideas and imagery from the subconscious or unconscious mind.

Cy Twombly Quattro Stagioni Autunno 1993-5

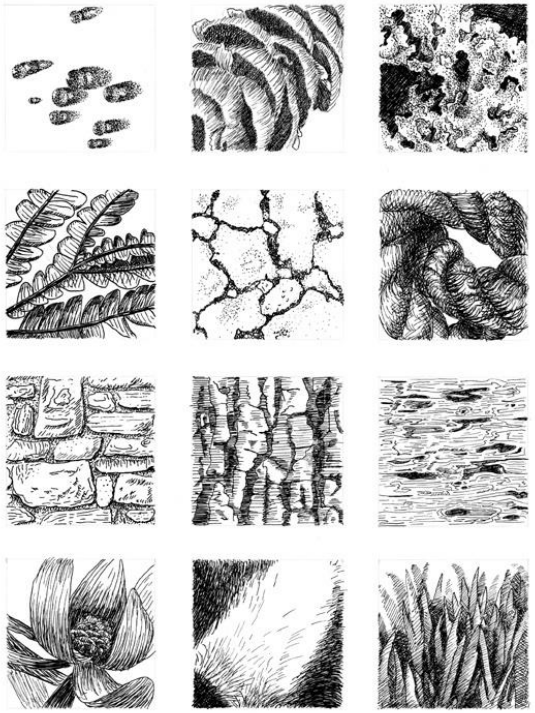
Niki de Saint Phalle Shooting painting 1961

Further Reading:
Tate Student Guide to Mark-Making

ART: TERMS 1 & 2 MARK MAKING

Key words

Mark-making is a term used to describe the different lines, patterns, and textures we create in a piece of artwork. It applies to any art material on any surface, not only paint on canvas or pencil on paper.
Line – a mark that moves across a space or surface. Made by a tool such as a biro, a piece of charcoal, a stick, these can be directional or patterned.
Dots- are usually small spots that are circular in shape. Dots are often used in multiples or in combinations to recreate a surface, through pattern rhythm and or movement.
Dash - is a rushed dot, this can be made with any media; these may not be uniform in shape.
Cross Hatch - uses parallel lines drawn closely together to create texture and or shade in artworks. Crosshatching is the application of two layers of hatching at right-angles to create a mesh-like pattern. Multiple layers in varying directions can be used to create exciting textures, using any media.

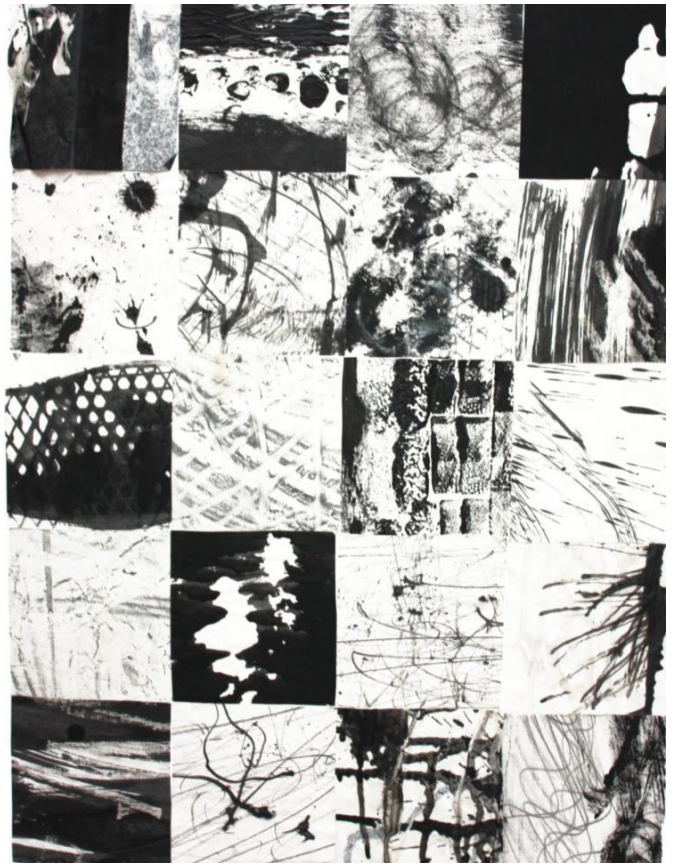


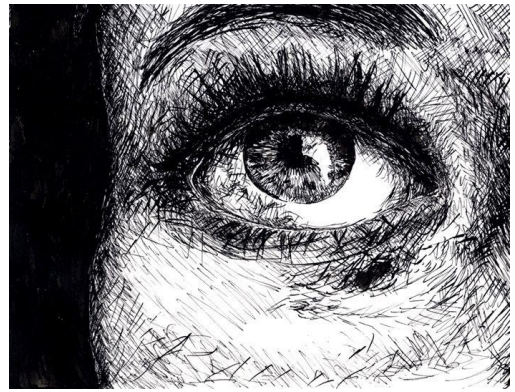
Examples of TEXTURE
Using Mark making techniques

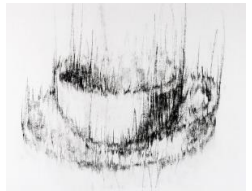
Every painting, drawing, or photograph is a collection of mark making including dots, cross hatching, dash's and lines.

Creating Artwork with non-Art materials

Artwork will be created using stains such as coffee, tea, food colouring and also using unusual implements such as sticks, feathers, cardboard, and cloth. The key to Year Seven Art is **experimenting** with mark-making, being willing and able to create using the unusual.







ART TERMS 1 & 2 MARK MAKING

Galleries and Exhibitions

Try to go and see art in real life, this will inspire you in your own work.

Please remember to check with each gallery opening times and charges.

Towner Art Gallery Eastbourne	Emma Stibbon: Melting Ice, Rising Tides	9 May to 15 September 2024	Free Entry
	Drawing the Unspeakable	5 October 2024 to 27 April 2025	Entry Charge
De La Warr Pavilion Bexhill	MIKE SILVA	Saturday 21 September 2024 – Sunday 19 January 2025	Free entry
	CALLUM HILL	Saturday 21 September 2024 – Sunday 19 January 2025	Free entry
Hastings Contemporary	IMMORTAL APPLES, ETERNAL EGGS	21 September 2024 - 16 March 2025	Entry charge
Tate Britain London	NOW YOU SEE US WOMEN ARTISTS IN BRITAIN 1520–1920	UNTIL 13 OCTOBER 2024	Free entry
Tate Modern London	EXPRESSIONISTS KANDINSKY, MÜNTER AND THE BLUE RIDER	UNTIL 20 OCTOBER 2024	Entry charge
	ZANELE MUHOLI	UNTIL 26 JANUARY 2025	Entry charge
Royal Academy of Arts London	Michael Craig-Martin	21 September - 10 December 2024	Entry charge

Challenge Tasks

1.Take a series of photos of your favourite local land/sea scape, at the same time for a week in different weather conditions.

2.Take sections/strips and create a personal response to your chosen scape working in the style of Patrick Heron…..creating an expressive response to your photographs using **Mark-making** techniques Dots/Dashes/Directional lines and Cross Hatching

3.Annotate why you have personally chosen your image and how can you relate your response to Patrick Herons artwork.

4.What do you think the artist is trying to say through his artwork?

Additional Reading:
Who was Patrick Heron (Tate Kids)

Patrick Heron
1920- 1999

British abstract and figurative artist, critic, writer, and polemicist, who lived in Cornwall. Patrick Heron was recognised as one of the leading painters of his generation.

COMPUTER SCIENCE – Year 7 – Term 2

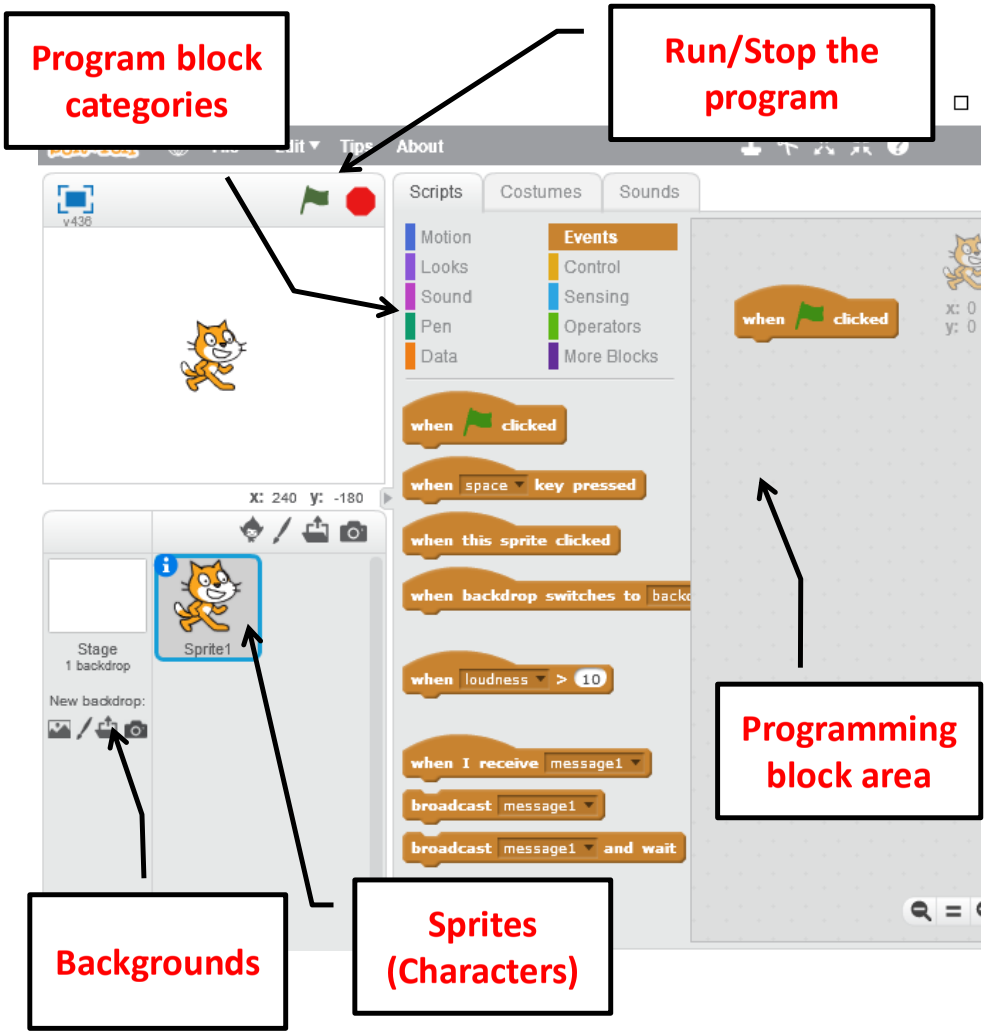
What programs did you create in primary school?
Can you get the Scratch cat to have a conversation?

The Bigger Picture: Some of you will already be excellent programmers and some of you may not have had much experience of coding. It doesn't matter what your starting point is, as we will build on what you already know so that you can learn how to code in a creative, efficient and independent way. This term we will start with the visual programming language Scratch. The programming skills that we learn in Scratch will later be able to be applied to other programming languages. You will be using your logic and problem solving skills a lot this term.

Core Question	Answer
What is an input in programming?	An action by the user that makes something happen.
What is a variable in programming?	A value that may change and that your program needs to remember for later.
What is a loop in programming?	When a block of code is repeated a set number of times or until a condition is met.
Challenge: What is meant by iteration, selection and sequence in programming?	

Scratch @ Home

Introducing Scratch



Useful ICT Keyboard Shortcuts

COPY Press Ctrl and C

PASTE Press Ctrl and V

CUT Press Ctrl and X

BOLD Press Ctrl and B

UNDERLINE Press Ctrl and U

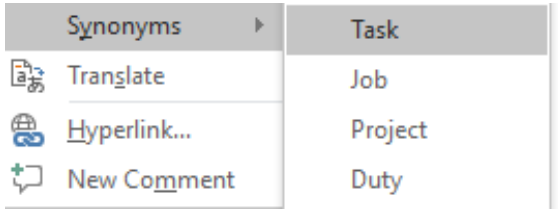
ITALIC Press Ctrl and I

Literacy Help

Synonyms = Similar words.

In Microsoft Word RIGHT click on the word and select Synonyms. Check to see if another word is suitable.

Example = Assignment



Key Scratch Blocks

Basic

When the **space bar** is pressed the cat (or any other sprite) will move 10 places

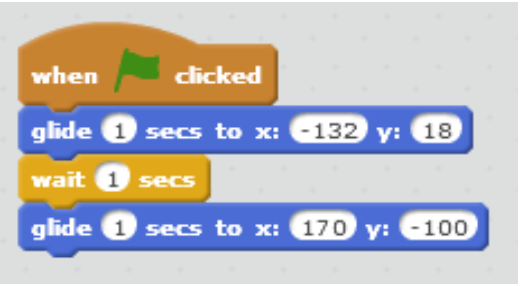
When the **space bar** is pressed the cat (or any other sprite) will say Hello for 2 seconds

When the **space bar** is pressed the cat (or any other sprite) will ask you your name then say it on the screen

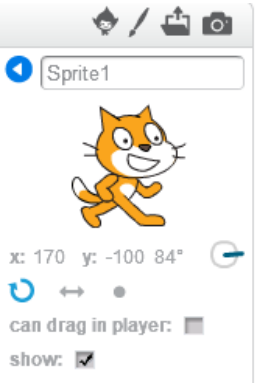
When the **program starts** the cat (or any other sprite) will point upwards

Advanced

When the **program starts** the cat (or any other sprite) will move 10 places say I moved 10 steps then repeat this 10 times. The sprite will move a total of 100 steps



When the **program starts** the cat (or any other sprite) will glide to a location (co-ordinates) pause then glide to another location (co-ordinates)



Change key items of your sprite.
Name of the sprite (give it a good name)
Direction that it is pointing
Circular movement or left/right

Task

1. Create a simple Scratch program from one of the sites on the left.
2. Create a simple Scratch program that allows a user to add up 2 numbers and displays the answer.
3. Create a more complex Scratch program (calculator) that allows a person to add, subtract, multiply and divide 2 numbers.
4. Create a more complex Scratch program from one of the sites on the left.
5. Create an advanced program in Python that allows a user to add, subtract, divide, multiply 2 numbers.

Wider Reading

Use these **two** Scratch sites to expand your programming skills/understanding:

Self Evaluation

This Section will be used in your lessons to help you track your progress.

Computing Knowledge/Skills

- ❑ Write simple algorithms
- ❑ Write programs in scratch
- ❑ Use loops in programming
- ❑ Predict what a program will do

ICT Knowledge/Skills

- ❑ Describe what is meant by software
- ❑ Give examples of software and their purpose
- ❑ Use keyboard shortcuts

Year 7 Drama

Term 2

How to achieve success:

Expected:

I can… **identify simple features** of each genre studied. I will… **organise a simple performance** through some use of blocked movements. I can… **experiment with selected performance skills** to communicate character.

Exceeding:

I can… **identify multiple features** of each genre studied. I will… **organise a clear performance,** using the generic features and clearly **blocked movements, with different levels.** I can… use an **increasing ranges of performance skills effectively.** I will… **improve and refine my acting** through using my time effectively.

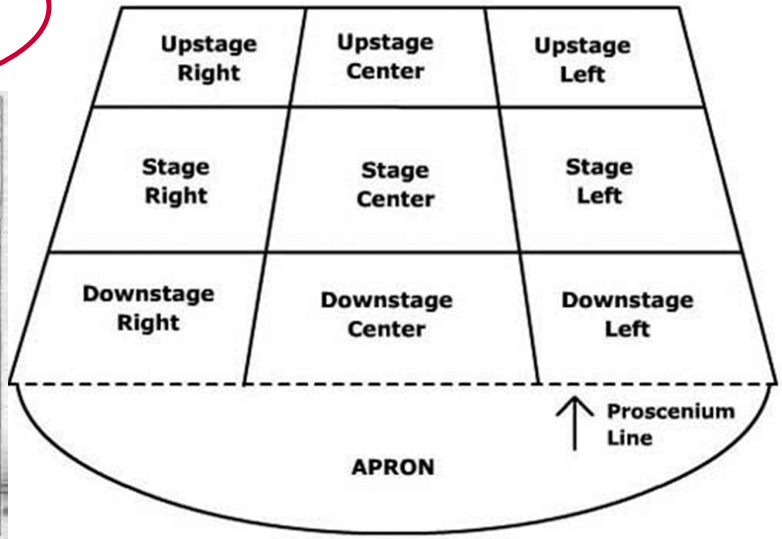
Excelling:

I can… **apply multiple features** of each genre studied. I will… **organise and present performances with different purposes,** creating different impacts on my audience. I will… **use my space effectively,** including using proxemics and levels to show setting and character relationships. I can… **select and control appropriate vocal and physical skills** with some subtlety. I can… **improve and refine my acting through effective use of time and clear use of rehearsal techniques**– e.g. moulding.

Topic: Genre– an exploration of Mystery, Melodrama and Horror

The bigger picture: Through this topic of study, you will gain an understanding of the processes of blocking and rehearsing a piece of script. You will develop your awareness of space and audience by considering how to position yourself and move across a stage.

Areas of the stage



Director

A ***director*** is the person responsible for supervising the actors and directs the action in the production of a play. They create the vision and instruct other members of the production team– for example the lighting designer and costume designer.

Rehearsal technique: Moulding

One actor 'moulds' another into a chosen character by giving verbal instruction, showing their partner or moving them into position. This helps an actor to explore their physicality when playing a character.

Your task:

Analyse the images to explain how these characters fit the Melodrama stereotypes.

GCSE THEORY

TO HELP:

- **Analyse** (pick apart) how costume, blocking and physicality has been used.
- **Explain** how this makes an audience feel.
- Use the following **terminology** in your response: *blocking, body language, costume, facial expressions and connotation* (the implied meaning of something).

MELODRAMA

https://www.youtube.com/watch?v=wxzz31ww4M4

Tension: A growing sense of expectation within the drama, a feeling that the story is building up towards something exciting happening.

The *melon-* part of *melodrama* comes from the Greek *Melos*, which also gives us the word *melody*, and a melodrama was originally a stage play that had an orchestral accompaniment and was divided with songs.

What are the features of a Melodrama?

- **Character types** *hero, villain, damsel, helper, dispatcher, aged parents, comic sidekick.*
- **Musical melodies for each character** which are repeated in different variations and are played each time we see that character on screen. A trumpet is used for the hero, a flute for the damsel…
- **Stock plots** *the villain creates a problem the hero has to put right, often putting the damsel in danger and meaning the hero has to rescue him/her in the process of saving the day.*
- **Stereotypical characters and exaggerated conflicts and emotions.**
- **Special effects**: fire, explosions, drowning, earthquakes.
- *A simplified moral universe;* good and evil are embodied in stock characters.

Key words:

Atmosphere:

The feeling or mood you create for an audience. E.g. Scary, tense, happy, exciting.

Blocking:

The process of deciding where and how a character moves around the stage.

Genre:

A category or type of performance—for example, comedy, drama, horror, mystery. Each genre has it's own set of rules to follow.

Horror:

A genre which aims to scare the audience- stories about fictional monsters and

Levels:

The level at which you position yourself on stage. e.g. standing, lying down on the floor.

Melodrama:

A Victorian genre focussing on heroes and villains with stereotypical plot lines and

Mystery:

A genre which aims to create suspense by creating a puzzle for the audience to solve.

Stage directions:

The written instructions in a piece of script which tell the actor how to speak, how to move or what to do.

Proxemics:

When an actor uses space and distance to show their character's relationships to others or the setting. For example- if two characters are standing close and facing each other, it could indicate that they are friends.

Your task:

Write a short paragraph to explain how you would block this scene.

GCSE THEORY

- ***Explain*** *how you would block the action (describe the movements across the stage.)*
- ***Explain*** *how you would ask your actors to deliver their lines of dialogue…*
- ***Explain*** *the impact you want to have on your audience (what do you want them to think/feel?)*
- ***CHALLENGE:*** *include the following terminology in your response: stage left, stage right, upstage, downstage, pitch, tone.*

Additional reading:

Read this extract from Tom Stoppard's play – *The Real Inspector Hound* (1968).

RADIO We interrupt our programme for a special police message. The search for the dangerous madman who is on the loose in Essex has now narrowed to the immediate vicinity of Muldoon Manor. Police are hampered by the deadly swamps and the fog, but believe that the madman spent last night in a deserted cottage on the cliffs. The public is advised to stick together and make sure none of their number is missing. That is the end of the police message.

[FELICITY *turns off the radio nervously. Pause.*]

CYNTHIA Where's Simon?

FELICITY Who?

CYNTHIA Simon. Have you seen him?

FELICITY No.

CYNTHIA Have you, Magnus?

MAGNUS No.

CYNTHIA Oh.

FELICITY Yes, there's something foreboding in the air, it is as if one of us——

CYNTHIA Oh, Felicity, the house is locked up tight—no one can get in—and the police are practically on the doorstep.

FELICITY I don't know—it's just a feeling.

CYNTHIA It's only the fog.

MAGNUS Hound will never get through on a day like this.

CYNTHIA [*Shouting at him.*] *Fog!*

FELICITY He means the Inspector.

CYNTHIA Is he bringing a dog?

FELICITY Not that I know of.

MAGNUS —never get through the swamps. Yes, I'm afraid the madman can show his hand in safety now.

[*A mournful baying hooting is heard in the distance, scary.*]

https://www.youtube.com/watch?v=xItPAonhKRI

CYNTHIA What's that?!

FELICITY [*Tensely.*] It sounded like the cry of a gigantic hound![6]

MAGNUS Poor devil!

CYNTHIA Ssssh!

[*They listen. The sound is repeated, nearer.*]

FELICITY There it is again!

CYNTHIA It's coming this way—it's right outside the house!

[MRS DRUDGE *enters.*]

MRS DRUDGE Inspector Hound!

CYNTHIA A *police* dog?

[*Enter* INSPECTOR HOUND. *On his feet are his swamp boots. These are two inflatable—and inflated—pontoons with flat bottoms about two feet across. He carries a foghorn.*]

HOUND Lady Muldoon?

CYNTHIA Yes.

HOUND I came as soon as I could. Where shall I put my foghorn and my swamp boots?

CYNTHIA Mrs Drudge will take them out. Be prepared, as the Force's[9] motto has it, eh, Inspector? How very resourceful!

HOUND [*Divesting himself of boots and foghorn.*] It takes more than a bit of weather to keep a policeman from his duty.

[MRS DRUDGE *leaves with chattels. A pause.*]

CYNTHIA Oh—er, Inspector Hound—Felicity Cunningham, Major Magnus Muldoon.

HOUND Good evening.

[*He and* CYNTHIA *continue to look expectantly at each other.*]

CYNTHIA AND HOUND [*Together.*] Well?—Sorry——

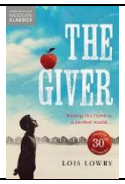
CYNTHIA No, do go on.

HOUND Thank you. Well, tell me about it in your own words—take your time, begin at the beginning and don't leave anything out.

Genre: Mystery

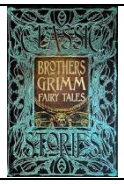
What do we expect to see in a mystery?

- ***Setting:*** *sometimes in everyday locations so the audience feels connected to the story- e.g. a kitchen, a library. Other settings build tension- dark woods or an old cathedral.*
- ***Plot:*** *Always has a clear beginning, middle and end. A problem or puzzle is established which needs solving by the protagonist. The use of red herrings helps to mislead the audience*
- ***Technical:*** *use of shadows or smoke machines help to create dark and mysterious atmosphere. Blues create a cold atmosphere. Soundscape helps build a picture of the setting.*
- ***Character:*** *the protagonist (main character) has the job of solving the puzzle. Sometimes they need help from a sidekick or receive clues from mysterious characters we know little about.*



Year 7 English
Fantasy Worlds

Terms One and Two: The Moral Maze

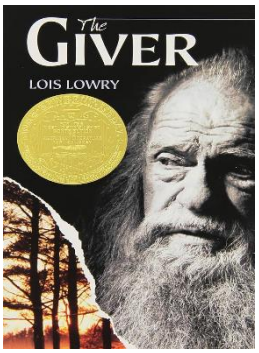


This term in English we will be:

- reading the dystopian novel 'The Giver' by Louis Lowry
- reading a selection of original fairy tales written by the brothers Grimm
- studying how to write an analytical response
- studying how to structure and write an effective short story
- studying a range of literary devices
- studying how to punctuate sentences effectively
- studying how to use paragraphs effectively

What is The Giver about and what themes does it include?

The Giver" by Lois Lowry is about a boy named Jonas who lives in a seemingly utopian society without pain or suffering. When he is chosen to be the Receiver of Memory, he discovers from The Giver the deep emotions and experiences that the rest of his community is missing out on, such as love, color, and even pain. Realising the cost of their controlled lives, Jonas decides to change his world. The novel covers themes such as what is ethically right and wrong, capital punishment, the power of knowledge, and society's expectations and governance.

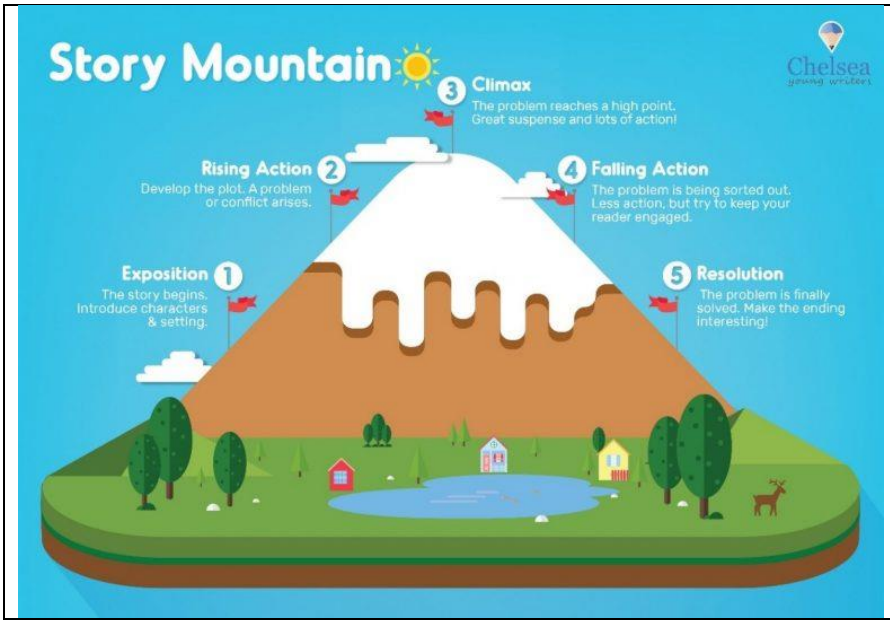


What are the Brothers Grimm fairy tales?

The Brothers Grimm fairy tales are a collection of stories that include magic, adventure, and moral lessons. These tales often feature brave heroes, wicked villains, talking animals, and enchanted objects. Famous stories from the collection include "Cinderella," "Snow White," "Hansel and Gretel," and "Rapunzel." These tales have been passed down through generations and often teach lessons about good and evil, bravery, and kindness.

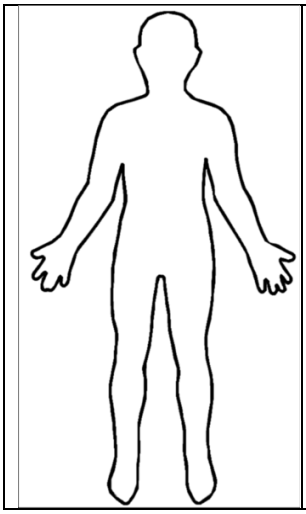
How to write an analytical paragraph

1. Identify **what** the writer has done through using evidence from the text
2. Consider **how** the writer's choices affect the reader
3. Consider **why** the writer made that choice



How to write an effective short story

- Plan your story first using the 'story mountain' structure
- Only use 2-3 characters.
- Set the story in 1-2 locations.
- Keep the storyline simple
- Describe rather than tell the reader what is happening.



How to create effective characters

- **Appearance –** describe what the character looks like using adjectives.
- **Actions** – describe the character doing something and describe how they do it.
- **Dialogue** – describe the character speaking. Remember to punctuate speech correctly.
- **Context** – describe background information about the character.
- **Character's thoughts** – describe what the character is thinking.
- **Other characters' reactions** – describe how other characters react to them.

Word Class	Definition	Example
Noun	A person, place or thing	Cat, school, book and sky
Proper Noun	A specific person, place or thing that needs a capital letter.	**B**exhill **A**cademy, **M**rs **B**rown and **E**ast **S**ussex
Adjective	Describes a noun	The **brilliant** book. The **beautiful** sky. The **black** cat.
Verb	A state of doing, being or having.	I **am** here. The cat **jumped**. The sky **was** blue.
Adverb	Describes a verb.	The cat jumped **suddenly**. The dog barked **loudly**.

Sentence Type	Example
Simple sentence = one independent clause that has a subject and a verb.	**I enjoy reading.**
Compound sentence = two or more independent clauses that are joined through a connective (for, and, nor, but, yet, and so).	**I enjoy reading and I like going to English lessons.**
Complex sentence = contains a main independent clause and an additional subordinate clause which gives further details on the main clause.	**I enjoy reading because I like learning about other worlds.**

Key Vocabulary

- **Dystopian**: Describing an imaginary society where everything is unpleasant or bad, often because of a totalitarian government, environmental disaster, or other crises.
- **Utopia**: An imagined place or state where everything is perfect, and everyone is happy.
- **Moral**: A lesson or principle about what is right and wrong that can be learned from a story or experience.
- **Dejected**: Feeling very sad, disappointed, or hopeless.
- **Burden**: A heavy load, either physical or emotional, that is difficult to carry or deal with.
- **Interdependence**: A situation where two or more people or things rely on each other.
- **Admonition**: A gentle warning or piece of advice about how to behave or what to do.
- **Benign**: Harmless, gentle, or kind; not causing any danger or damage.
- **Remorse**: A strong feeling of regret or guilt for doing something wrong.
- **Conformity**: Behavior that matches the expectations or standards of a group or society.
- **Isolation**: Being alone or separated from others, either physically or emotionally.

Literary Devices

- **Metaphor**: A figure of speech where a word or phrase is used to describe something it doesn't literally apply to, suggesting a resemblance.
- **Simile**: A figure of speech that compares two different things using the words "like" or "as."
- **Personification**: A figure of speech where human qualities are given to animals, objects, or ideas.
- **Foreshadowing**: A literary device where the writer gives hints or clues about what will happen later in the story. It builds anticipation and prepares the reader for future events.
- **Flashback**: A scene in a story that takes place earlier than the main events. It's used to provide background information, often revealing important details about characters or events.

Year 7 Food Preparation & Nutrition

Health & Safety - The bigger picture

In Year 7, we will be learning the **key principles** of how to keep **ourselves**, and **others**, **safe** in the **kitchen**. This will involve both **practical skills** and the **theory** behind **food hygiene**. We will also consider how we can keep **ourselves** and the **environment healthy** by eating a **balanced diet** and **reducing food waste**

Core question
What are the 4Cs

The 4Cs are Cross-contamination, Cook, Chill & Cleaning. We follow these essential rules to prevent food poisoning

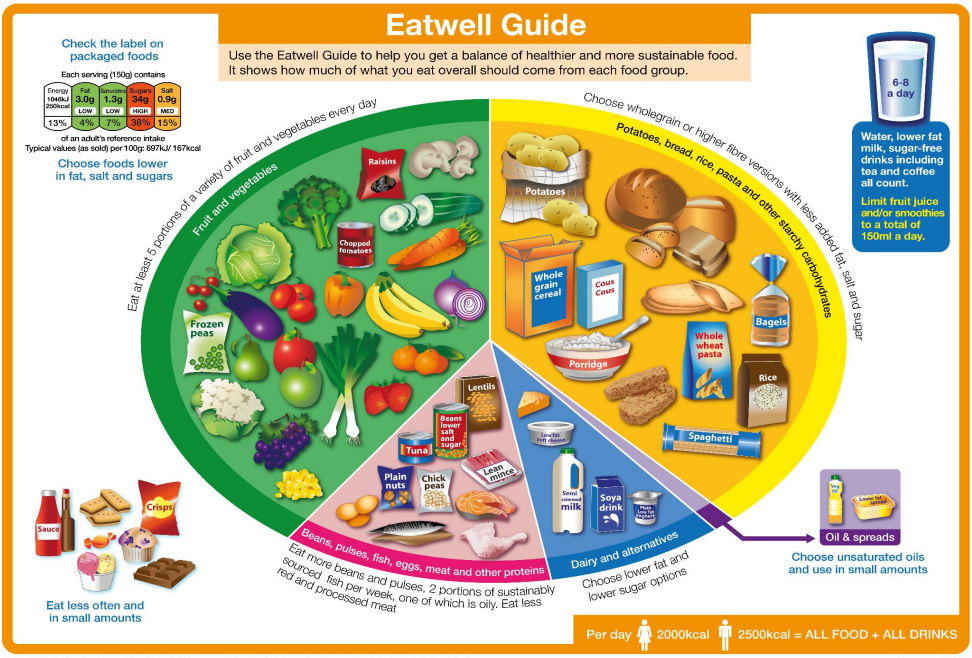
Core question
What is a HRF?

A HRF is a High Risk Food. HRFs are usually contain a lot of protein in moisture which are the perfect conditions for pathogenic bacteria growth.

Core question
What is the Eatwell Guide?

The Eatwell Guide is a government guide on how we can eat a balanced diet to stay healthy

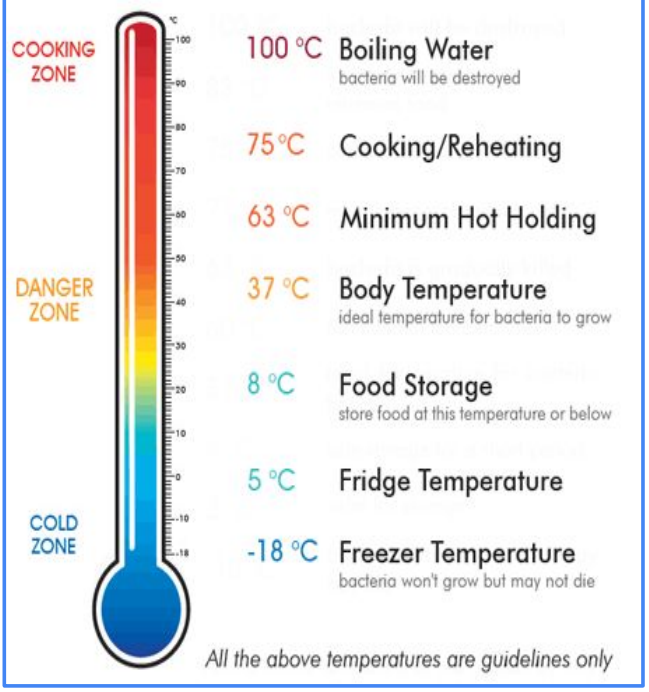
Challenge Core question
What effects does food waste have on us and the environment?



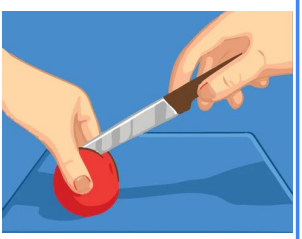
Year 7 Food Preparation & Nutrition

Keywords & Definitions

The Eatwell Guide *The Eatwell Guide is a visual representation of how different foods and drinks can contribute towards a healthy balanced diet. The Eatwell Guide is based on the 5 food groups and shows how much of what you eat should come from each food group*	**Bacteria** *A microorganism which needs time, moisture, food & warmth to survive, grow & reproduce. Some bacteria can be harmful to us (pathogenic) while others are helpfully such as Bifidum*	**Cross-contamination** *The process by which bacteria or other microorganisms are unintentionally transferred from one substance or object to another, with harmful effect.*
Dormant *Latin 'Dorm' = sleep. When frozen, bacteria become dormant, they do not die but become inactive or 'asleep"*	**HRF** *High Risk Foods are foods high in protein and moisture such as meat and dairy products*	**Pathogenic** *A bacteria that is diseased and could cause food poisoning such as salmonella*



Safe knife holds



Bridge hold

Claw grip

Year 7 Food Preparation & Nutrition

Recipe card

Equipment

Brown board - Mixing bowl
Knife - Measuring jug
Frying pan - Fish slice
Measuring spoon
Fork - Temp probe

Skills

Weighing & measuring
Following instructions
Hygiene & safety
Time & temperature control

Heat transfer

Conduction

Beef burgers

Ingredients

½ Onion
100g Beef mince
1 tsp Mixed herbs
½ Egg
Seasoning (salt & pepper)
Burger bun
Optional
Salad
Cheese

Method

1. Finely dice onion
2. Add onion to a mixing bowl
3. Add mince, herbs & seasoning
4. Break egg in to a jug & beat with a fork
5. Add half to beef & mix well
6. Heat frying pan on 5 with a little oil
7. Shape burger pattie & place gently in to the pan, repeat with remaining mix
8. Leave to cook until brown (coagulated)
9. Turn burgers & cook other side
10. Check core temp then serve

Demonstrate Knowledge AO1

- Name the HRFs listed on the recipe card ……
- State the ingredient that would be chopped on the brown board
  ……

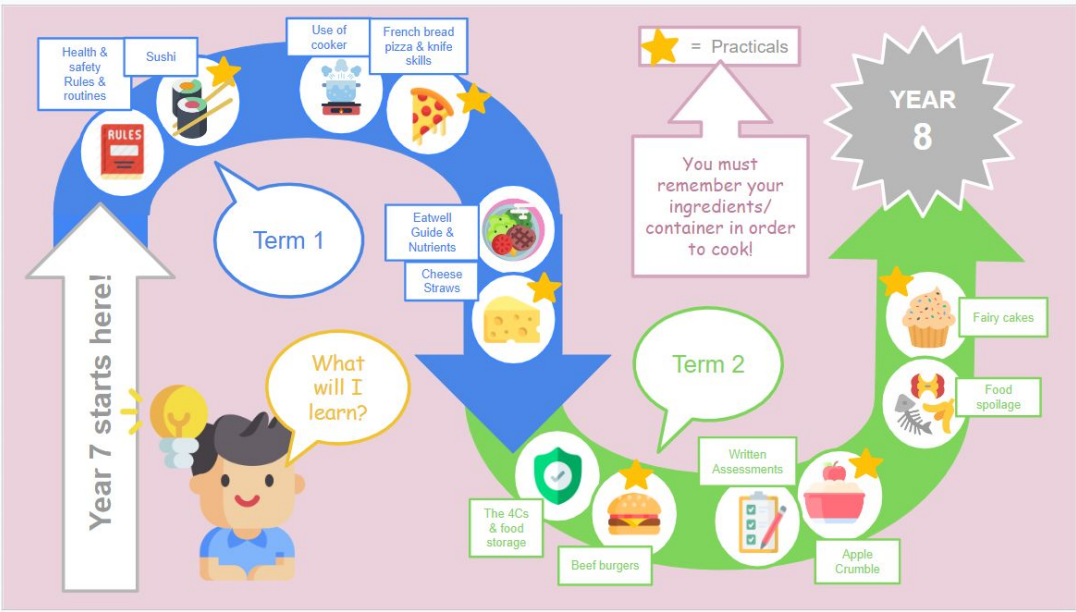
Apply Knowledge AO2

- Explain why it is important to check the core temperature of the burger ……
  ……
- Explain why minced beef should be stored in the fridge ……
  ……
- Explain how we can prevent cross contamination while preparing the burgers ……
  ……

Analyse & Evaluate AO4

- Evaluate the advantages and disadvantages of storing any leftover, uncooked minced beef in the freezer ……
  ……
  ……
  ……
- Analyse and evaluate the recipe in terms of following a balanced diet
  ……
  ……
  …… ……

Year 7 Food Preparation & Nutrition



Key knowledge	Practical skills	Key Vocabulary	Reading and Oracy	Numeracy	Common Misconceptions	End point
Hygiene & Safety Eatwell	Knife Skills Weighing & Measuring Use of the cooker Rubbing in Method Safe use of temperature probe	Eatwell Guide Bacteria Cross-contamination Dormant High Risk Foods Pathogenic	Recipe cards The 4Cs The Eatwell Guide	Weighing & measuring Percentages & fractions Time Temperature	To understand why we wash up and dry up as bacteria need warmth moisture,food and time to multiply	Students have a basic knowledge of nutrition and can use a wide range of practical skills to safely prepare food for themselves

Food storage

Fridges should be kept at _ -_℃ to slow down the growth of b_ _ _ _ _ _ Foods should be _ _ _ _ _ _ _ and kept on the correct shelf. D_ _ _ _ foods should be stored on the top shelf. _ _ _ _ _ _ foods & meat should be stored on the second shelf and _ _ _ _ _ _ _ _ should be stored on the bottom shelf. _ _ _ _ _ & vegetables should be kept in the bottom drawer.

Fruit - Covered - Raw meat
Cooked - 75℃ - Dairy - Bacteria

Colour chopping boards help to prevent cross-contamination

How can I talk about school in French?

The Bigger Picture:

What's your favourite subject? Why? Is school in France the same as school in Britain? How is it different? Which would you prefer?

This term we will look at how to speak about our life at school, and understand when others talk about their school day. We will talk about the subjects we like and dislike and give reasons for our opinions. We will also learn about schools in different countries around the world where French is spoken.

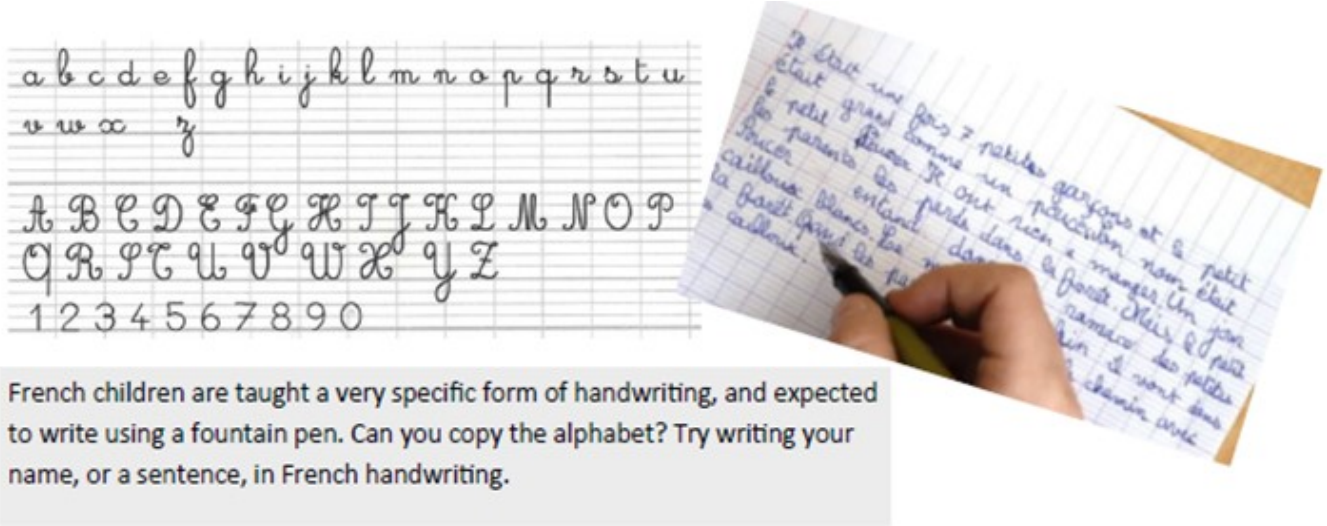
Questions essentielles *Core questions*	**Réponses** *Answers*
Qu'est-ce que tu aimes au collège? *What do you like at school*	**J'aime l'EPS.** *I like PE.*
Pourquoi? *Why?*	**Parce que c'est cool et actif.** *Because it's cool and active.*
Qu'est-ce que tu n'aimes pas au collège? *What don't you like?*	**Je n'aime pas l'histoire.** *I don't like history,*
Pourquoi pas? *Why not?*	**Car c'est difficile et ennuyeux.** *because it's difficult and boring.*
Quelle est ta matière préférée? *What is your favourite subject?*	**L'anglais est ma matière préférée.** *English is my favourite subject*
Pourquoi l'anglais? *Why English?*	**J'adore la lecture et le prof est sympa.** *I love reading and the teacher is nice.*

Follow the QR code to listen to a song about school subjects and opinions. Concentrate on how they are pronounced. Listen again and sing along! What opinions are being given?

j'aime	**le** français **le** théâtre **l'**anglais **l'**EPS **l'**histoire **la** géographie **la** musique **la** danse **les** sciences **les** maths	car *because*	c'est cool
j'adore		parce que *because*	c'est amusant
je n'aime pas		mais *but*	c'est actif
je déteste		et *and*	je **le** trouve difficile I find it difficult je **la** trouve super I find it super je **les** trouve faciles I find them easy
je préfère		cependant *However* néanmoins *nevertheless*	le prof est sympa la prof est un peu bizarre on a beaucoup de devoirs

J'aime l'anglais car c'est facile et la prof est sympa—cependant je préfère le francais parce que c'est amusant et la prof est un peu bizarre!

What's my opinion? Can you write about your school subjects?



French children are taught a very specific form of handwriting, and expected to write using a fountain pen. Can you copy the alphabet? Try writing your name, or a sentence, in French handwriting.

Classe 6E B

Professeur principal: Mme DUBOSCLARD

	Lundi	Mardi	Mercredi	Jeudi	Vendredi
08h10	MATHEMATIQUES Mme LEMARCHAND B15	FRANCAIS Mme DUBOSCLARD B15	HIST.GEO.EN.MOR.CIV M. FOUET B15	AC. P si Mme LE GUILL ACCPESC3 / ETUDE ETUDE Gr:ETUDE / ACCOMPAGN Mme MARTOT B13 6ACCPE-A	FRANCAIS Mme DUBOSCLARD B15
9h05 / 09H05	HIST.GEO.EN.MOR.CIV M. FOUET B15	ANGLAIS LV1 Mme MARTOT B15	PHYSIQUE-CHIMIE M. CHAPELIER B11	ANGLAIS LV1 Mme MARTOT B15	ARTS PLASTIQUES Mme RAINELLI-AUBRY AP
10h00	---	---	---	---	---
10h00 / 10h20	c si M. DURAN OASIS Gr:G1 / c si Mme TRIC CDI Gr:G2 / c sp M. DURAN OASIS Gr:G2 / c sp Mme TRIC CDI Gr:G1	ED.PHYSIQUE & SPORT M. GUENANI GYM1	TECHNOLOG si Mme LE GUILLOU TECHN / MATHEMATI sp Mme LEMARCHAND B15	FRANCAIS Mme DUBOSCLARD B15	FRANCAIS si Mme DUBOSCLARD B15 / ETUDE sp ETUDE
11h15	AC. PERSO. sp M. CHAPELIER,Mme L ACCPESC / ETUDE ETUDE Gr:ETUDE		TECHNOLOGIE Mme LE GUILLOU TECHN	EDUCATION MUSICALE M. CAMPAUT B36	MATHEMATIQUES Mme LEMARCHAND B15
12h10	repas SELF	repas SELF		repas SELF	repas SELF
13h45	ANGLAIS LV1 Mme MARTOT B15	HIST.GEO.E si M. FOUET B15 / PHYSIQUE-C sp M. CHAPELIER B11		ED.PHYSIQUE & SPORT M. GUENANI GYM1	SCIENCES VIE & TERR Mme GUERINIER B12
14h40	FRANCAIS Mme DUBOSCLARD B15	MATHEMATIQUES Mme LEMARCHAND B15			ETUDE si ETUDE / SCIENCES VI sp Mme GUERINIER B12
15h35	---	---		---	---
15h50	MATHEMATIQUES Mme LEMARCHAND B15	AC. P si Mme LE GUILL B13 ACCPESC2 / ETUD si ETUDE Gr:ETUDE / HIST. sp M. FOUET B15		ETUDE si ETUDE / VIE DE CLAS sp Mme DUBOSCLARD B15	ANGLAIS LV1 Mme MARTOT B15
16h45					

This is a real timetable for a child in sixième in France, someone the same age as you.

How many subjects do you recognise? _____

Are there some you need to find out about? Which ones? _____

What time does school start and finish for this student? _____

When are their breaks? How long are they? _____

Which lessons do they have most often? _____

Which lessons are longer than average? _____

What is the same or similar about this timetable and yours? _____

What is different? _____

Would you prefer this timetable? Why? Why not? _____

_____

What other questions will you ask in class about this timetable?

_____

_____

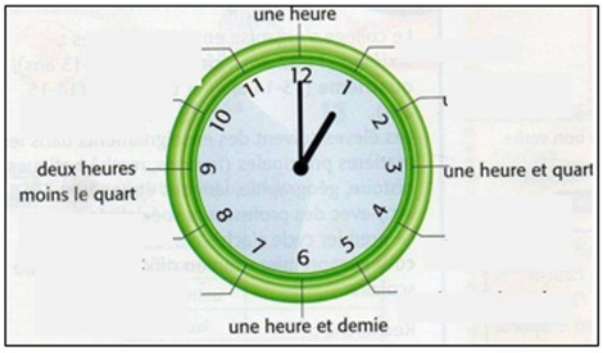
Mon emploi du temps

Which is your favourite day?

le lundi *On Mondays* le mardi *On Tuesdays* le mercredi *On Wednesdays* le jeudi *On Thursdays* le vendredi *On Fridays*	à neuf heures *at 9.00* à onze heures *at 11.00* à onze heures et demie *at 11.30* à deux heures moins le quart *at 1.45* à trois heures *at 3pm*	le matin *In the morning* l'après-midi *In the afternoon*	j'ai *I've got* on a *We've got*	le français l'anglais les maths l'EPS le thèâtre l'histoire la géo la musique les sciences l'espagnol
			on a *We have*	la récré *break* La pause de midi-*lunch*

How to use a range of sequencers to make writing interesting

In the morning	first	we've got English	then	we've got history	afterwards	we have break
Le matin	d'abord	on a l'anglais	ensuite	on a l'histoire	après	on a la récré



Fill the gap to complete the time

a. 1:00 à ____ heure
b. 2:00 à deux _____
c. 7.00 __ _____ heures
d. 2.15 à deux heures __ _____
e. 9.30 à neuf heures et _____
f. 5.45 à six _____ moins le _____
g. 7.30 à sept _____ et _____
h. 11.15 à onze _____ et _____

Bronze			Silver		Gold
7.2	pronounce phonics correctly		predict the pronunciation of new words		read aloud with confidence
7.6	Understand and use some sequencers and/or time phrases		Understand and use sequencers and time phrases effectively.		Use a range of sequencers, time indicators and connectives
7.7	say, write and translate sentences from memory		say, write and translate a paragraph from memory		say, write and translate a short text (individually selected language)

Year Seven Geography Term Two

How extreme is our world?

<u>The bigger picture</u>:

Our world is an amazing place! This unit allows you to go on a virtual trip to two contrasting extreme environments, the tropical rainforest and the Arctic. We will investigate the opportunities, challenges and threats to both places and look at how to manage them in a sustainable way.

Core Question	Development	Answers
1	What is an **extreme environment**?	An **extreme environment** is a habitat in which it is hard to survive due to extreme conditions.
2	What is an **ecosystem**?	An **ecosystem** is a community of plants and animals living in an area of similar vegetation and climate.
7	What is animal and plant **adaptation**?	**Adaptation** is any feature that helps a plant or animal better survive in their environment.
8	Why are the rainforests at **risk**?	Rainforests are at risk of deforestation for **logging**, **farming** and **mining**.
10	What are the **threats** to the Arctic?	The Arctic is at risk from **climate change** and **mining**.
Challenge Question	Give examples of how plants and animals adapt to the rainforest.	
Challenge Question	Should the rainforests be protected? Give reasons.	

An **extreme environment** is a habitat in which it is hard to survive due to extreme conditions. Look at the photos. What makes these places so harsh?

Extreme Environments

Describe these photos.
Where do you think they are located?
Describe the climate.
What difficulties might people face?

Key Words:

Adaptation: Changes made by plants and animals to survive in the environment they live in.

Biomes: Large ecosystems.

Challenges: a task or situation that tests someone's abilities to survive.

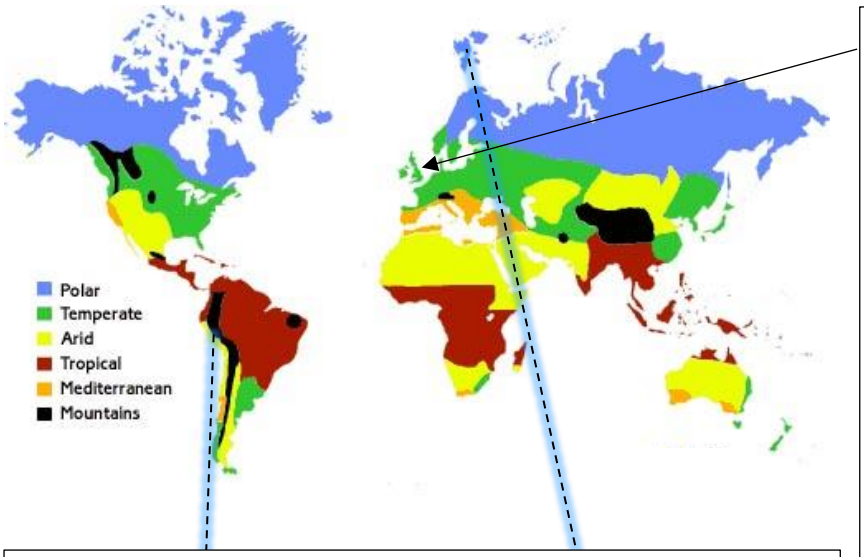
Climate change: Long lasting changes to the average temperature and rainfall over time.

Deforestation: The removal of trees.

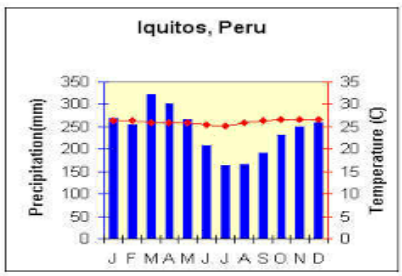
Ecosystem: A community of living things living in an area with a similar vegetation and climate.

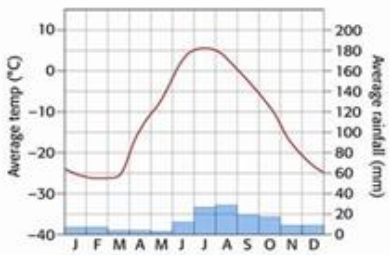
Sustainability: Meeting the needs of today without compromising the needs of the future or damaging the environment beyond repair.

Threats: Something that poses a danger to the environment or people.



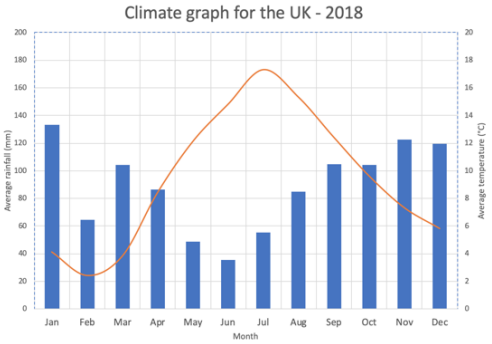
Latitude affects the location of the different ecosystems. You need to know the location of tropical rainforests and polar environments, and be able to describe their climate.





We are located here. This is a temperate climate. On a climate graph, the blue bars represent precipitation (rainfall) and the red line represents temperature.

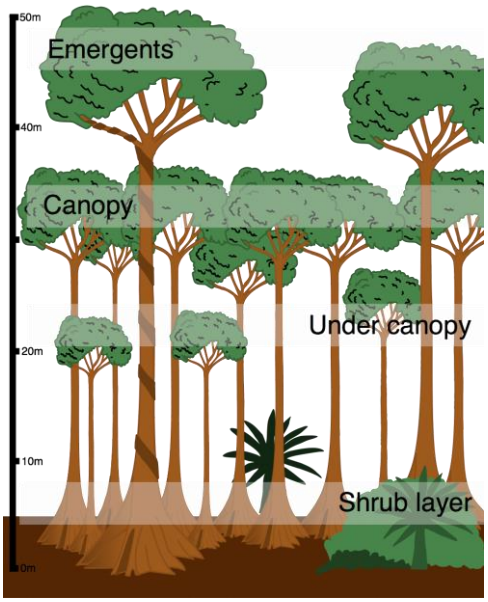
Below is a climate graph for the UK.



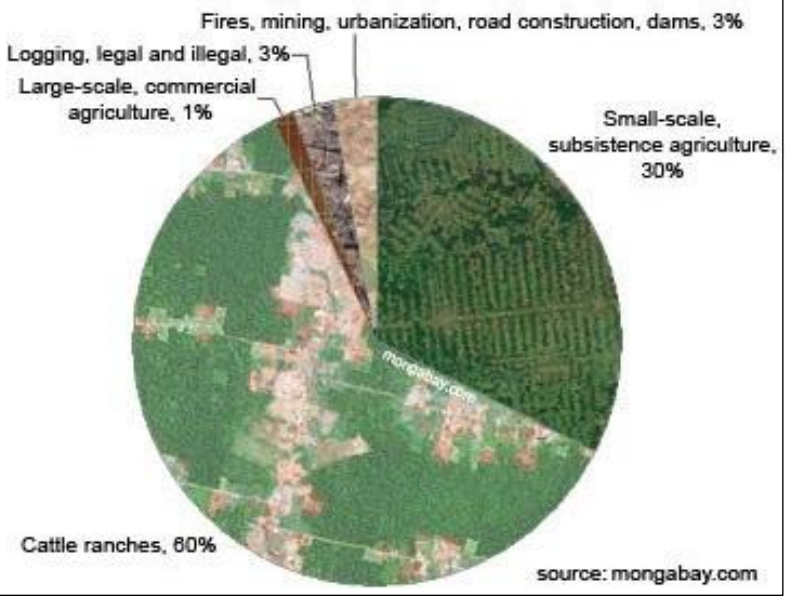
Describe the climate in the UK? When is the highest and lowest temperature and rainfall?

Describe the difference in climate between the polar regions and the tropical rainforest?

Layers of a rainforest



Causes of deforestation in the Amazon rainforest



Effects of deforestation

These can be social, economic, and environmental. Can you classify the effects below into social, economic and environmental? Explain each of the effects.

- Soil erosion
- Soil infertility
- Loss of animal habitat
- Interrupts the nutrient cycle
- Global warming

Management of rainforests

Rainforests can be managed in the following ways to reduce deforestation: Replanting new trees after mature trees are cut down.

- Educating local people and businesses of the value of the forest.
- Using money from ecotourism to protect the rainforest.
- International agreements to make sure the rainforest is conserved.

Plant adaptations in the rainforest

The following adaptations allow plants to survive in the conditions of the rainforest.

- Lianas - these are woody vines that have roots in the ground but climb up the trees to reach the sunlight. Their leaves and flowers grow in the canopy.
- Tree trunks - these are tall and thin to allow trees to reach the sunlight. The bark on these trees is smooth to allow water to flow down to the roots easily.
- Drip tips - plants have leaves with pointed tips. This allows water to run off the leaves quickly without damaging or breaking them.
- Buttress roots - large roots have ridges which create a large surface area that help to support large trees.

Animal adaptations in the rainforest

- The sloth uses camouflage and moves very slowly to make it difficult for predators to spot.
- The flying frog has fully webbed hands and feet, and a flap of loose skin that stretches between its limbs, which allows it to glide from plant to plant.
- The toucan has a long, large bill to allow it to reach and cut fruit from branches that are too weak to support its weight.

Threats and challenges in the Arctic

The Arctic is under great threat from environmental changes, most importantly through climate change, but also through pollution, industrial fishing, foreign species introduced to the area, nuclear waste and oil drilling. It is not just animals that are at risk, but the traditional way of life for the indigenous people due to climate change.

Plant and animal adaptations in the Arctic

Those few organisms that call the Arctic home have some special adaptations to help deal with the freezing temperatures and the lack of plentiful food. Some of the animals that live in the polar biome include polar bears, penguins, and arctic foxes on land and seals, whales, and zooplankton in the ocean.

The common adaptations of animals in this biome are extra thick layers of fat, such as the blubber in whales, to insulate the body from cold. Thick fur coats are a must amongst the land animals, and in the lower latitudes some animals shed a brown coloured fur during the summer.

Since most of the polar biome is located above the Arctic Circle where there is no land, plant life is nearly non-existent in this biome. Only the hardiest plants can thrive during the extremely short summer growing season; there isn't even soil to grow on and in the winter there isn't much sun for months. Lichens and mosses are normally the only plants that can grow on rocks in the polar biome.

Knowledge:
Identify the features of an ecosystem.
Describe two different ecosystems.
Explain the opportunities and challenges in each ecosystem.

Understanding:
Explain how plants and animals survive in an extreme environment.
Compare the tropical rainforest with the cold environments.
Critique two ways of using the rainforest in a sustainable way.

Application:
Prove, using evidence which ecosystem has a greater biodiversity.
Compare the climate, vegetation and animals within the tropical rainforest with the Arctic.
Evaluate the most sustainable ways of managing fragile environments.

Year Seven History — Term Two

What were The Crusades? Why did people go on Crusades?

How important was religion to medieval life?

The bigger picture:

The Crusades lasted centuries. From 1095, European Christians invaded the Middle East on several occasions. Despite bringing back a vast amount of knowledge to Europe, thousands of lives were lost. Ultimately, the Crusades failed to create the Holy Land, which was their intention when they invaded the Middle East, but in the process, they changed the western world forever.

After the Crusades, European Christians learned many things; better castle design, what gunpowder was, ideas about science and medicine and the idea that the Muslim world stretched to India.

What questions could you ask about this image?
What is the link between The Crusades and the video game Assassin's Creed?
Who were the Knights of the Templar?

This is a doom painting which could be found in some medieval churches. It usually showed angels welcoming good people into heaven and devils pulling murderers and other sinners into hell.
What does this tell you about how important religion was in Medieval England?
How does this image link to the Crusades?

Key words on the Crusades:

Crusade – The 'War of the Crosses,' a Holy war in which Crusaders from Europe set out to fight Muslim Turks.

Christian – A person who believes in God and follows the teachings of his son, Jesus Christ.

Muslim – People who believe in Allah (God), and that a prophet called Muhammad was his messenger.

Prophet – Someone sent by God to tell his messages.

Turks – A tribe of Muslim warriors who moved to Jerusalem and the Holy Land.

Jerusalem – The most important city on earth for Christians and Muslims during the medieval period as it was birthplace of Jesus and the spot where the prophet Muhammed ascended to Heaven.

Pilgrimage – A religious journey.

Saracens – The name given to describe Muslims in the Holy Land

Franks – The name given to describe all crusaders.

Find out: Who is this a Disney interpretation of? Why does he have the nickname he does?
What is his link to another famous historical story?

Extended reading: Crusade by Elizabeth Laird **or** Crusade in Jeans by Thea Beckman

Keywords on Medieval towns and knights:

Guild – A group or club made up of traders

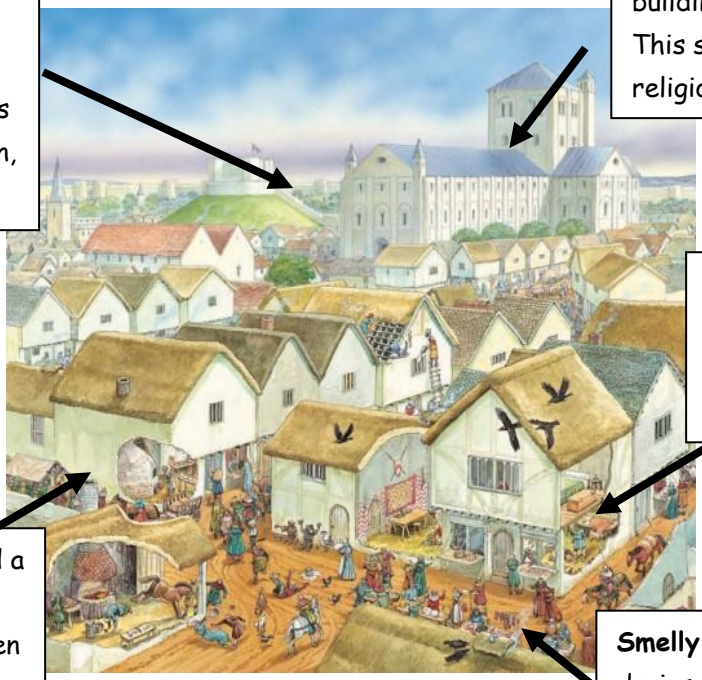
Charter – A document allowing the townspeople, not a lord, to run their own town.

Chivalry – Unwritten rules that a knight would follow.

Medieval Town – It is important to understand what life was like in Medieval Europe

Castle and town walls – Many towns grew up near a castle. A wall (or sometimes fence) surrounded the town, which guards would patrol.

Church – This was the largest building in the village or the town. This signified the importance of religion to everyone.



Town houses – Wooden frames with the spaces filled with wattle and daub

For sale – Most towns had a market once or twice a week, with a few shops open most days.

Smelly streets – There were no drains, just an open ditch down the middle of the street.

Your task:
Describe two features of a medieval town.
(4 marks)

To help:
Describe means you must give an account of the main characteristics of something. You develop your description with relevant details, but you do not need to include reasons of justifications.
Your first mark comes from a feature and the second from developing your description.

Knight Life:

William the Conqueror brought the first knights to England in 1066 and, as a reward for fighting for him, they were given land in England.

Key elements:

- Knight school – Started at the age of 7 for the page (how the boy would be known) who would serve in the home of a knight.
- At the age of 14 – They would become a squire and start learning the code of chivalry.
- At the age of 19 – They would be ready to go through the knighting ceremony.
- Tournaments – To amuse themselves they would set up tournaments with blunt weapons.
- Jousting – A joust was a contest between two knights in which they could make a living winning the competitions.

Source A: Two knights in combat (c. 1450)

Your task:
How useful is this source about the life of a knight?
(6 marks)

- What can you see?
- Does this link to your own knowledge?
- Is there more you know about knights?
- What about the provenance? - Who created it? When? Why? (what was the purpose?)

Crusade timeline:

1096 – The People's Crusade
An English monk called Peter the Hermit and a few thousand peasants including women and children went on this crusade. The 'army' were poorly trained and did not have enough resources. It was an easy Muslim victory.

1097 – The First Crusade
Robert of Normandy took well-trained French knights on a crusade.
They travelled 1,500 miles and were exhausted when they got to the Holy Land.
Many died of disease as well as fighting.
A Christian victory and Jerusalem stayed in Christian hands.

1147 – The Second Crusade
Emperor Conrad of Germany and King Louis VII of France plus well-armed knights went to take back control of land taken by the Turks.
The Christian crusaders were heavily defeated and by 1187 the Turks recaptured Jerusalem.

1189 – The Third Crusade
Richard I of England, Phillip of France and Emperor Frederick of Germany plus well-armed soldiers, again tried to take back control. Emperor Frederick died in a river (and was PICKLED IN VINEGAR by his troops). Phillip and Richard spent most of their time arguing so, when Phillip returned hom,e Richard made peace with the Muslim Turks or Saracens.

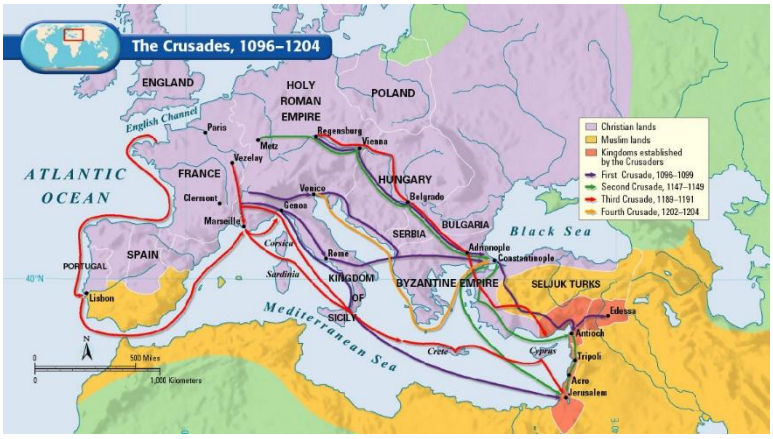
Interesting fact: There are more crusades than this however, historians disagree how many in total (some say there were nearly 10!) and these are the only ones we will be studying during this unit.
Horrible histories summaries many of the others in this great video:
https://www.youtube.com/watch?v=IQ1WVmRN5SQ

Find out:
What was the 1212 Children's crusade? What happened? Try searching for "Hugh the Iron" and "William the Pig".

Source B - The Children's crusade
Published by Kiara Contreras in 2013

Your task: What can you infer about the 1212 Children's crusade using Source B opposite?
To help:

- What can you see in Source B?
- What age do you think these people are?
- How well equipped do you think these people were for a crusade?
- Using your research, can you give extra detail about the lead figure?

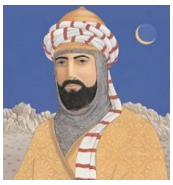


Map of the Crusades:

Study the map showing the first four crusades.

- Which crusade route is the most direct?
- Why do you think Jerusalem and Edessa are in the red zone?
- Why does the Third Crusade go by sea and land do you think?
- Can you infer the problems faced by those going on crusades just from the journey?

Saladin born Yusuf ibn Ayyub



Occupation: Sultan of Egypt and Syria

How he came to power: When Saladin's leader, Nur al-Din, died in 1174, this left a gap in power in the Middle East. Saladin took his army to Damascus and claimed Nur al-Din's position. He spent the next 12 years battling other Islamic factions in order to unify the region. By 1186, Saladin was in control of the Muslim Empire.

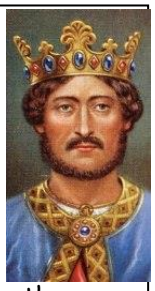
Fighting in the Crusaders: Saladin wanted to remove the Crusaders from the Middle East and regain control of Jerusalem.

Crusade Victories: At the Battle of Hattin Saladin decided to set a trap for the Crusader army. He first attacked the city of Tiberias knowing that the land between the Crusader army and Tiberias was very dry land. The Crusader army began to march to Tiberias. When the Crusaders grew tired and thirsty, Saladin sprung his trap and attacked the Crusader army with his full force. Saladin and his army soundly defeated the Crusaders.

Jerusalem: In 1187, after defeating the Crusader army, Saladin marched to Jerusalem. His army surrounded the city and began to shoot arrows and to catapult rocks over the walls. Within a week, the city surrendered and Saladin marched in victorious. Over the next year, Saladin captured most of the Crusader castles in the region.

Defeat and Peace: When the Christians in Europe heard of the loss of Jerusalem, they mounted the Third Crusade under the leadership of King Richard the Lionheart. Saladin suffered major defeats in battle at both Acre and Arsuf. Despite their victories, the Crusaders realised they would not be able to take Jerusalem. Saladin and King Richard agreed to a truce. In 1192, they signed the Treaty of Jaffa, which kept Jerusalem in the hands of the Muslims, but allowed for the safe passage of Christian pilgrims.

Richard I



Occupation: King of England

How he came to power: Even before he became king, Richard fought with his family, joining them in the great rebellion against their father Henry ll. In 1183 his elder brother Henry died, leaving Richard heir to the throne. Richard became King in 1189.

Fighting in the Crusades: Richard's chief ambition was to join the Third Crusade, prompted by Saladin's capture of Jerusalem in 1187. To finance this, he sold sheriffdoms and other offices and in 1190 he departed for the Holy Land.

Crusade Victories: Richard arrived in the Holy Land in June 1191 and Acre fell to him the following month with Richard and his men killing 3000 Saracens (including women and children). In September, his victory at Arsuf gave the crusaders a good military possession of Joppa.

Jerusalem: Twice Richard led his forces to within a few miles of Jerusalem. However, the recapture of the city, which constituted the chief aim of the Third Crusade, eluded him.

There were fierce quarrels among the French, German, and English contingents. Richard insulted Leopold V, Duke of Austria, by tearing down his banner and he quarrelled with Philip II, who returned to France after the fall of Acre. It was rumoured, unjustly, that Richard was even involved in Conrad's murder.

Defeat and Peace: After a year's unproductive skirmishing, in September 1192, Richard made a truce for three years with Saladin that permitted the Crusaders to hold Acre and a thin coastal strip and gave Christian pilgrims free access to the holy places. However, the main aim of the Third Crusade to recapture Jerusalem was never achieved.

Expected:

Identify what life was like in a medieval town.

Describe the life of a knight.

Identify the key events of the first four crusades.

Describe who the better leader was during the crusades: Saladin or Richard I.

Leading learning: Work with a partner to create a poster for which leader was the best.

Exceeding:

Explain what life was like in a medieval town.

Jousting was the key part of a knight's life. **How far do you agree?**

Chronologically write about the key events of the first four crusades.

Explain who the better leader was during the crusades: Saladin or Richard I.

Leading learning: Create a pair of top trump cards on Saladin and Richard I and be willing to explain which one is better.

Excelling:

Evaluate how important religion was to medieval life

.**Evaluate** how important jousting was to the life of a knight.

Write a narrative account of the first three crusades.

Evaluate who the better leader was during the crusades: Saladin or Richard

Leading learning: Create a teaching and learning activity, for other students, around debating whether Saladin or Richard was the better leader.

YEAR SEVEN MATHEMATICS TERM 2

7.4 Place Value, 7.5 Number Sense, 7.6 FDP Equivalence

The Bigger Picture

Equivalence is crucial in Mathematics for several reasons; Simplification – Equivalence helps simplify mathematical expressions and can reduce the complexity of problems. Comparison – Equivalence is used to compare values by converting the value into the same format. Understanding values – By converting a value into it's equivalent, it can be easier to comprehend for example, 0.3 reoccurring is equivalent to one third, working with a third is much simpler to grasp and work with than a reoccurring decimal.

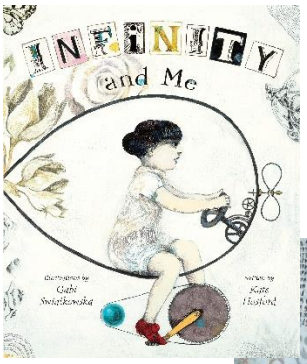
Core Questions

Core Questions	Development	Answers
1	Why do we need to round numbers?	We round numbers to simplify them and make estimations. Rounding allows us to work with approximations that are easier to work with them.
2	Why do we have order of operations (BIDMAS)?	These rules are essential to ensure that mathematical calculations are interpreted consistently and produce the same answer.
3	What is the purpose of standard form ?	The purpose of standard form is to represent very large or very small numbers in a concise way.
4	What is the definition of equivalence?	When two or more expressions are considered equivalent if they have the same value.
5	How are fractions, decimals and percentages all equivalent?	FDP are all different ways of representing the same value. All FDP values can convert to each other
Challenge Question	What industries use standard form?	Astronomy, Physics, Engineering, Chemistry, Biology, Economics, Computer Science, Geology

Further Reading

Infinity and Me by Kate Horford

Uma can't help feeling small when she peers up at the night sky. She begins to wonder about infinity. Is infinity a number that grows forever? Is it an endless racetrack? Could infinity be in an ice cream cone? Uma soon finds that the ways to think about this big idea may just be infinite.



YEAR SEVEN MATHEMATICS TERM 2

7.4 Place Value

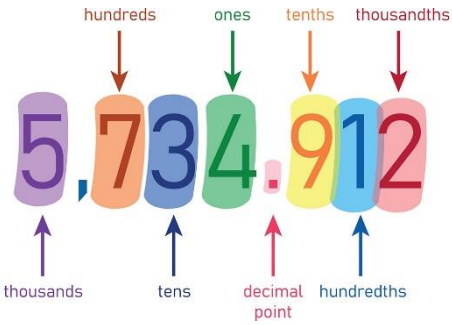
As we multiply, the numbers get larger!

The exponent tells us how many zeros we need.

$8 \times 10^1 = 80$

$8 \times 10^2 = 800$

$8 \times 10^3 = 8,000$



sparx

Upcoming Sparx Homework

Week 1 – Using number lines. **(M763)** Integer place values **(M704)**

Week 2 – Rounding integers. **(M111)** Calculating range. **(M328)** Calculating the median. **(M934)**

Multiply by powers of ten

$72 \times 1000 =$

$64 \times 0.01 =$

$0.03 \times 100 =$

$95 \times 0.001 =$

a) 72,000
b) 0.64
c) 3
d) 0.095

Which of these numbers is closest to 1?

0.9306 | 0.9208 | 0.9304

0.9008 | 0.93 | 0.906

0.9306

Find the median weight, in kilograms (kg), of the weights below:

4.5 kg, 4.2 kg, 8.7 kg, 5.6 kg, 7.2 kg

5.6kg

If we add the number 18 into the following list as a sixth value, then how much does the median increase by?

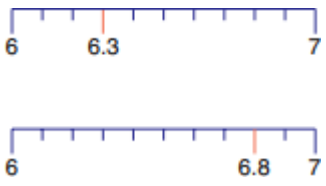
10, 23, 6, 3, 19

Increase by 4

ONE STAR	TWO STARS	THREE STARS
I can round to the powers of 10 I can order positive and negative integers. I know integer place values.	I can round to a given number of decimal places. I know and can use the rounding rules. I know and can use decimal place values.	I can round to a given number of significant figures. I can order algebraic expressions. I can order numbers in standard form.

YEAR SEVEN MATHEMATICS TERM 2

7.5 Number Sense



It can be useful to use a number line when rounding. Consider the statements 'my rounded number is either…or…' which go at each end of the number line. Identify which 'end' of the number line the number to be rounded is closest to and this provides your answer.

Target 100

This game needs two players.
You will need one calculator between two people.

- Player 1 enters any number onto the calculator.
- Player 2 then has to multiply this by another number so that the answer will be as near to the target number, as possible.
- Player 1 then multiplies this new answer by a number, trying to get nearer still to 100.
- The players take this in turns until one player 'hits' the target by getting 100.***** on the calculator display.

It doesn't matter which way round you add, you get the same answer. $a + b = b + a$	It doesn't matter which way round you subtract, you get the same answer. $a - b = b - a$
If you add 10 to a number, your answer will be greater than the number. $a + 10 > a$	If you take 10 away from a number, the answer will be greater than the number. $a - 10 > a$
It doesn't matter which way round you multiply, you get the same answer. $a \times b = b \times a$	It doesn't matter which way round you divide, you get the same answer. $a \div b = b \div a$
If you multiply 10 by a number, your answer will be greater than 10. $10a > 10$	If you multiply 10 by a number, your answer will be greater than the number. $10a > a$
If you divide a number by 10, the answer will be less than the number. $a \div 10 < a$	If you divide 10 by a number, your answer will be less than 10. $10 \div a < 10$

Always, sometimes or never true? Justify your answers

Each calculation here is incorrect. Explain how you can tell this without actually working them out. Bring your answers to Mr. Parker in F4

Calculation
12 × 13 = 135
29 × 18 = 5222
162 ÷ 16 = 9
4.2 ÷ 0.5 = 2.1
54 × 0.7 = 378
5.6 ÷ 11.2 = 2

sparx

Upcoming Sparx Homework

Week 3 – Decimal place value. **(M522)** Rounding decimals. **(M431)** Rounding integers using significant figures. **(M994)**

Week 4 – Finding fractions of shapes. **(M158)** Constructing fractions. **(M939)**

Use the calculations below to create and answer 'different' ones.

E.g. 2.8 x 3.2 = 8.96

28 x 32 = 896

105 x 19 = 1995

1430 ÷ 22 = 65

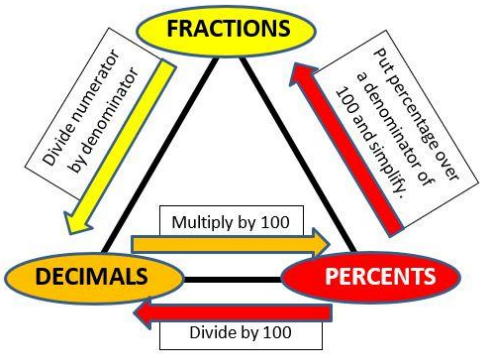
975 ÷ 75 = 13

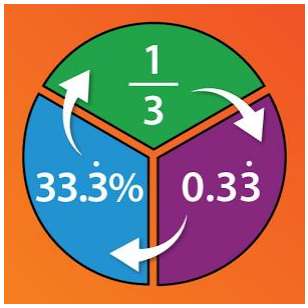
56 x 14 = 784

ONE STAR	TWO STARS	THREE STARS
I can use mental maths to perform operations with integers. I can use order of operations correctly	I can use mental methods to perform operations with decimals and fractions. I can use estimation for checking.	I can use algebraic facts to derive other facts. I can justify my chosen strategy to solve problems.

YEAR SEVEN MATHEMATICS TERM 2

7.6 FDP Equivalence



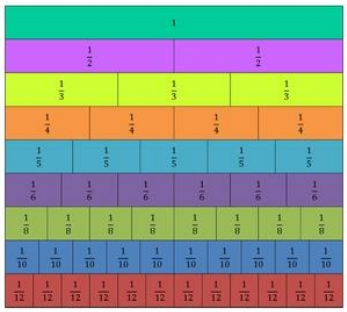


sparx

Upcoming Sparx Homework

Week 5 – Finding equivalent fractions. **(M410)**
Simplifying fractions **(M671)**

Week 6 – Converting between fractions and decimals. **(M958)**
Ordering FDP. **(M553)**



percentage	fraction	decimal
30%	$\frac{3}{10}$	0.3

to go from a fraction to a percentage we can convert to a decimal first

3/5 → 0.6 → 60%

1	·	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
Units		Tenths	Hundredths	Thousandths
0	·	0	1	5

0·015 = $\frac{15}{1000}$

numerator (number of parts we have) 2

5 denominator (total parts in whole)

What is the median value in this list?

$\frac{6}{10}$, $\frac{1}{2}$, 0.9, 75%, 0.03

6/10

The probabilities that Kaya will win three different games are given below.

0.41, 38%, $\frac{4}{10}$

Order the probabilities of winning from least likely to most likely.

38%, 4/10, 0.41

Fraction	Decimal	Percentage
$\frac{7}{100}$	0.07	
	0.35	35%
$\frac{3}{5}$		60%

7%
35/100 = 7/20
0.6

ONE STAR	TWO STARS	THREE STARS
I can explain unit fractions pictorially. I can convert between FDP using place value columns. I can recall simple FDP equivalences.	I can convert FDP when some denominators need converting. I can compare/order a combination of FDP. I can perform some equivalences.	I can perform and explain operations with a combination of FDP. I can convert between any FDP with any denominator and justify equivalence.

Year 7 Music	Term 2	Just Play & Find Your Voice!

The Bigger Picture: Singing is the most accessible way to access music. In every culture around the world, singing is evident in present times and throughout history. Singing is powerful and collective. It expresses human emotion in such a way that it makes us unique in the great circle of life. This term you will also be building and developing essential keyboard skills. Playing the keyboard is an excellent tool in musical learning and understanding. You will learn how to play the keyboard with brilliant posture and technique and through this learn crucial skills and musical theory to help you perform, improvise, compose and listen in future musical study.

Odd One Out

Below are five different keyboard instruments. Can you name them all? Which one do you think is the odd one out? Why?

Core Questions:

1. How do we read musical notation on the treble clef stave?
2. What is 'technical control'?
3. How do we perform with excellent posture and technique on the keyboard?
4. What is a scale & why are they important in music?
5. What is a chord & why are they important in music?

Answers:

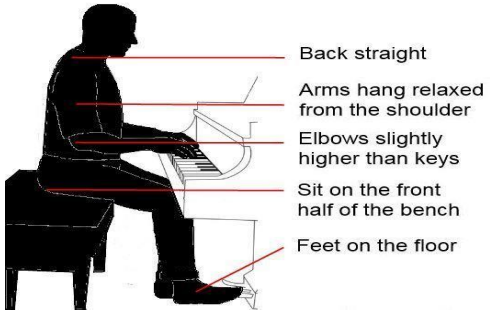
1. Reading from the bottom to the top, the lines on the stave are E-G-B-D-F. The spaces are F-A-C-E.
2. This is how accurate you play/sing and how successful your posture is.
3. Hands need to be held 'up' and curved (like there is a tennis ball under your hand). You should use all your fingers.
4. An order/pattern of notes that ascends and/or descends. Scales are linked to musical keys – building blocks od melody & harmony
5. 2 or more notes playing at the same time. A basis of harmony.

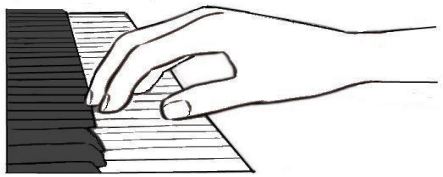
Year 7 Music Term 2

Just Play & Find Your Voice!

Keywords:

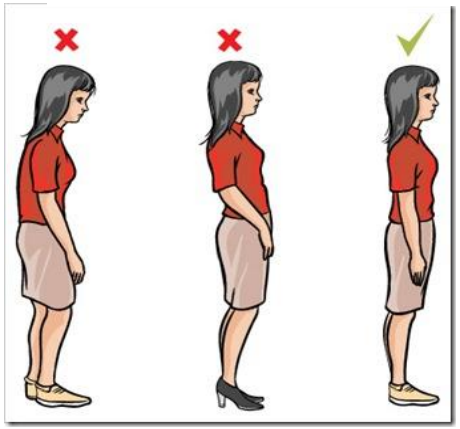
- **Melody** – the main 'tune' of a piece of music.
- **Chords** – two or more notes played together.
- **Middle C** – the 'white note' to the left of the 2 black keys.
- **Scales** – a pattern of successive pitch.
- **Treble Clef** – a symbol on a stave that determines the notes to play (most often the right hand part on a keyboard).
- **Sharps/Flats** – to raise/lower a note by a semitone (step) – most often the 'black keys' on the keyboard.
- **Voice/Tone** – controls the different instruments on the keyboard.
- **Style** – controls the different accompaniment programmes on the keyboard.
- **Tempo** – the speed of a piece of music.
- **Posture** - the position in which someone holds their body/parts of their body when standing or sitting.
- **Ensemble** - a group of musicians who perform together.
- **Diaphragm** - a dome-shaped thin muscle that contracts and flattens.
- **Projection** – singing loudly and clearly
- **Diction** – singing so that every word is sung clearly





BRILLIANT Posture!

- ✓ Shoulders down
- ✓ Feet on the ground, shoulder width apart
- ✓ Slightly bent knees
- ✓ Back straight
- ✓ Arms hanging free
- ✓ Slightly lifted chest
- ✓ Head upright



Additional Reading:

The keyboard is a musical instrument of the electronic instrument family. Keyboards are very similar to a piano in appearance and are capable of producing a variety of sounds that would normally require a large number of instruments to produce. Some more expensive elaborate keyboards are used for stage performances to replace the sounds of an orchestra within a band, or for recording purposes in studios. The more expensive and professional keyboards are digital pianos, stage pianos, synthesizers, workstations, midi controllers, and keytars.

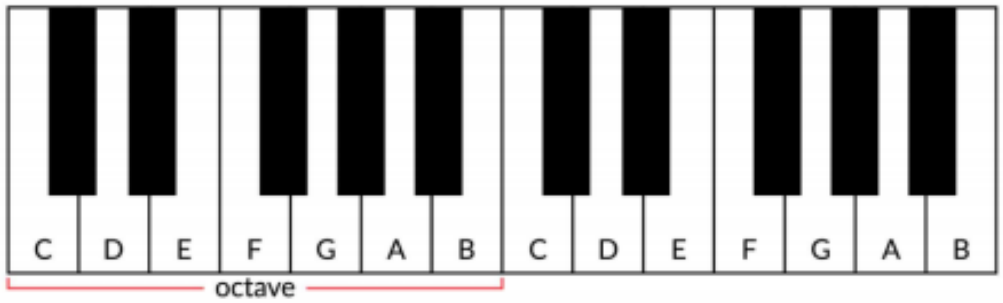
Modern keyboards have several main components including the musical keyboard (black and white keys that looks like a piano). User interface software (a program within the keyboard controlled by the menu), computerized musical arranger (software to produce chords and rhythm), amplifier and speaker (internal sound system), power supply (usually an AC adapter), MIDI terminals (input and output for hooking up to a computer or other instruments). Some features of keyboards include chord recognition, demonstration songs, touch sensitivity, after touch, polyphony, multi-timbre, split point, accompanying tracks, tempo, auto harmonizing, pitch bending, vibrato, drawbars, and piano action to mimic the feel of a traditional acoustic piano while playing. One of the most successful keyboard manufacturing companies is Yamaha, which sells more than 770,000 keyboards of various models each year. Casio is another leading keyboard manufacturing company. In several countries such as Japan, India, China, and Indonesia the keyboard is referred to as an organ. Keyboards are used in a wide variety of music genres including rock, pop, gospel, jazz, blues, alternative and many more.

Famous keyboard players include Billie Currie of Ultravox, Vadim Pruzhanov of DragonForce, Bernie Worrell of Parliament-Funkadelic, George Duke, Jan Hammer, Steve Winwood, Ray Manzarek of The Doors, and Tony Banks of Genesis.

Year 7 Music — Term 2

Just Play & Find Your Voice!

A. Layout of a Keyboard/Piano

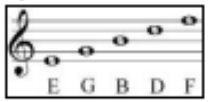


A piano or keyboard is laid out with **WHITE KEYS** and Black Keys (see section G). C is to the left of the two Black Keys and the notes continue to G then they go back to A again. Notes with the same letter name/pitch are said to be an **OCTAVE** apart. **MIDDLE C** is normally in the centre of a piano keyboard.

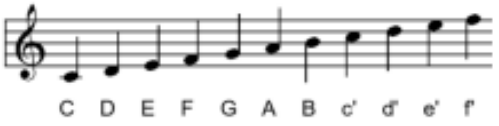
B. Treble Clef & Treble Clef Notation

A **STAVE** or **STAFF** is the name given to the five lines where musical notes are written. The position of notes on the stave or staff shows their **PITCH** (how high or low a note is). The **TREBLE CLEF** is a symbol used to show high-pitched notes on the stave and is *usually* ised for the right hand on a piano or keyboard to play the **MELODY** and also used by high pitched instruments such as the flute and violin. The stave or staff is made up of 5 **LINES** and 4 **SPACES**.

Every Green Bus Drives Fast. Notes in the **SPACES** spell "FACE"

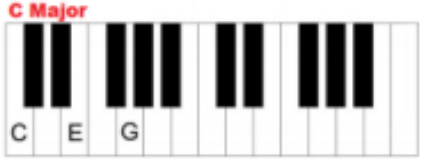


Notes from **MIDDLE C** going up in pitch (all of the white notes) are called a **SCALE**.

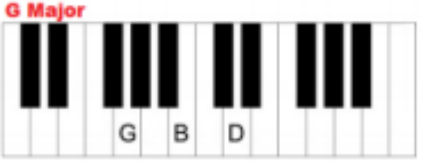


C. Keyboard Chords

C Major

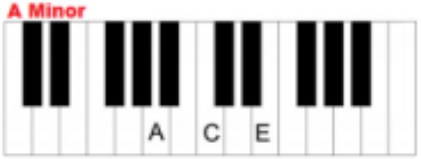


G Major



F Major

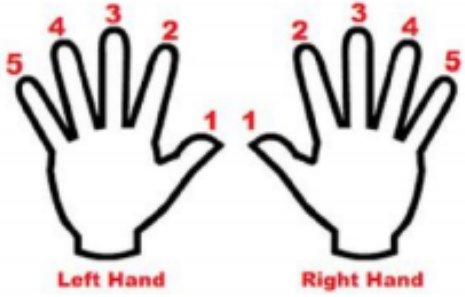
A Minor



Play one – Miss one – play one – miss one – play one

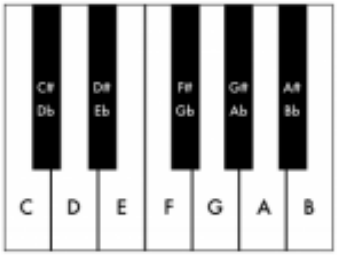
D. Keyboard Functions

E. Left Hand/Right Hand (1-5)



F. Black Keys and Sharps and Flats

There are five different black notes or keys on a piano or keyboard. They occur in groups of two and three right up the keyboard in different pitches. Each one can be a **SHARP** or a **FLAT**. The # symbol means a **SHARP** which raises the pitch by a semitone *(e.g. C# is higher in pitch (to the right) than C)*. The *b* symbol means a **FLAT** which lowers the pitch by a semitone *(e.g. Bb is lower in pitch (to the left) than B)*. Each black key has 2 names – C# is the same as D*b* – there's just two different ways of looking at it! Remember, black notes or keys that are to the **R**IGHT of a white note are called SHA**R**PS and black notes to the **L**EFT of a white note are called F**L**ATS.



Year 7 Physical Education

The bigger picture:

A high-quality physical education curriculum inspires all pupils to succeed and excel in competitive sport and other physically-demanding activities. It should provide opportunities for pupils to become physically confident in a way which supports their health and fitness. Opportunities to compete in sport and other activities build character and help to embed values such as fairness and respect.

Our aim at Bexhill academy:

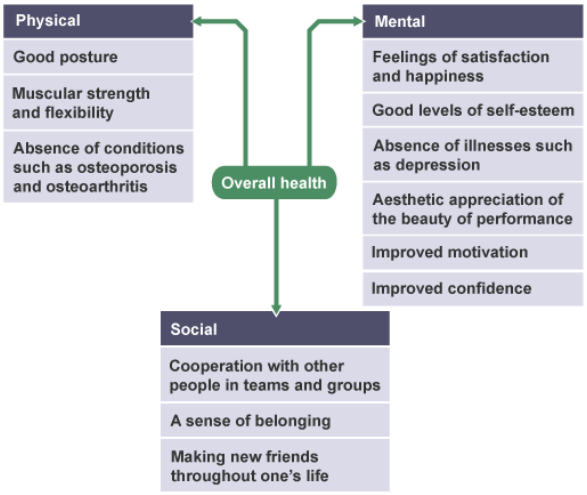
For every student to find a sport or physical activity that they enjoy, and learn how to lead healthy, active lives.

Health, fitness and exercise:

Health:

Health can be defined as 'complete physical, mental and social wellbeing and not only the absence of illness and infirmity'

The components for health are:



Fitness:

Fitness can be defined as 'the ability to meet the demands of the environment' and relates to how physically demanding life is. Therefore, a person doing an office job requires lower levels of physical fitness than an Olympic athlete.

Exercise:

Exercise can be defined as 'a form of physical exercise done to improve health or fitness or both'. It is recommended that adults and children follow different activity routines in order to maintain good health and fitness.

How much physical activity should children and young people aged 5 to 18 do to keep healthy?

Children and young people need to do 2 types of physical activity each week:

-Aerobic exercise

-Exercises to strengthen their muscles and bones

Children and young people aged 5 to 18 should:

-Aim for an average of at least 60 minutes of moderate or vigorous intensity physical activity a day across the week

-Take part in the variety of types and intensities of physical activity across the week to develop movement skills, muscles and bones

-Reduce the time spent sitting or lying down and break up long periods of not moving with some activity. Aim to spread activity throughout the day.

Sedentary lifestyles

What is a sedentary lifestyle?

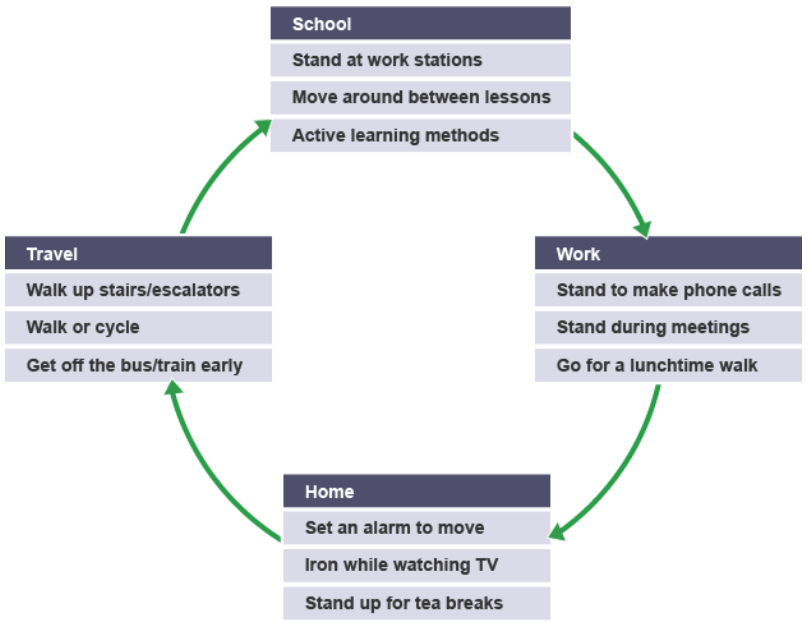
A sedentary lifestyle is one with no or irregular physical activity and an excessive amount of daily sitting.
In addition to the recommended levels of physical activity, people also need to reduce **sedentary behaviours**. Being sedentary means sitting or lying down for extended periods when awake.

Characteristics of a sedentary lifestyle:

-Not participating (much) in physical activity or too passive in their life
-Too much time watching TV, playing video games or on the computer (and not enough activity)
-Driving or using public transportation a lot and rarely walking or cycling
-Spending a lot of time sitting at work, school, college or at home
-Not having hobbies or interests with a physically active element, such as sports or outdoor pursuits

Risks of a sedentary lifestyle:

Solutions to prevent a sedentary lifestyle:



Create a poster that teaches year 6 children how to lead a healthy, active life and why it is important?

Challenge:

- **List some of the ways you could become more active?**
- **What effects could a sedentary lifestyle have on an individual's mental health?**
- **Why is our mental health as important as our physical health?**

YOU ARE WHAT YOU EAT!

Why should we eat a healthy, balanced diet?

How do we achieve a healthy, balanced diet?

Eating a balanced diet

Diet is the variety of foods that are eaten over a period of time. As no single food provides all of the body's required nutrients, an individual's diet should be balanced across a variety of foods. Individual foods are not necessarily healthy or unhealthy. Healthy eating requires a **balanced diet**.

Effects of an unhealthy diet

-Obesity
-Increased risk of acne or skin issues
-Increased risk of chronic diseases
-Increased risk of poor mental health

Eatwell plate:

A balanced diet includes different foods from each of the **five main food groups**. The NHS *eatwell plate* shows these food groups and the proportions in which they should be eaten. The foods in the smallest group – high in fat and/or sugar – are not required as part of a healthy diet.

Importance of a healthy, balanced diet

Eating a healthy, balanced diet is a lot more important than you might think to maintain good health throughout childhood and adulthood.

Benefits of a healthy, balanced diet:

-Lowers risk of chronic health conditions, such as heart disease, type 2 diabetes and some cancers
-Support immune system function
-Help the digestive system function
-Help maintain a healthy weight
-Keeps your bones and teeth strong and healthy
-Repair and strengthen muscles
-Improve energy levels
-Supports brain function and brain health
-Boosts mood and self-esteem
-Support healthy growth and development in children
-Help with sleeping patterns

Create yourself a one week meal plan using the eatwell plate. Ensure it is balanced and healthy.

Fitness

What different components make up a performer who has good fitness levels?

The bigger picture:

Fitness for sport and physical activity can be broken down into 10 components. All performers need a good level of all 10 components of fitness, but different sports have different requirements. This means that one sport may need a much higher level of fitness in a specific component than in another. For example, a gymnast will focus on developing …… in order to execute movements well, whereas a discus thrower will focus on developing …….. to increase the distance they can throw.

Component	Definition	Example	Test
Cardiovascular endurance	The ability of the heart and lungs to deliver oxygen to the working muscles	Completing a half marathon with consistent split times across all parts of the run	Multi-stage fitness test
Flexibility	The range of movement possible at a joint		Sit and reach test
Muscular endurance	The ability of a muscle to undergo repeated contractions, avoiding fatigue.	A rower repeatedly pulling their oar against the water to propel the boat towards the line	Sit-up test
Muscular strength	The ability to overcome a resistance	Pushing with all one's force in a rugby scrum against the resistance of the opposition pack	Handgrip dynamometer test
Agility	The ability to change direction quickly whilst in control	A badminton player moving around the court from back to front and side to side at high speed and efficiency	Illinois agility test
Balance	The ability to keep your centre of mass over the base of support		Standing stork test
Coordination	The ability to use two or more body parts at the same time/together smoothly and efficiently	A trampolinist timing their arm and leg movements to perform the perfect tuck somersault	Wall toss test
Power	Strength x speed to create fast, high intensity movements	A javelin thrower applies great force to the spear while moving their arm rapidly forward	Vertical jump test
Reaction time	The time taken to initiate a response to a stimulus		Ruler drop test
Speed	Maximum rate at which an individual is able to perform a movement/cover a distance in a period of time		30m sprint test

Year Seven PSHE Term Two

Question: What is PSHE?

PSHE stands for **Personal, Social, Emotional** and **Economics**. In this subject you will learn the knowledge and skills needed to manage your lives, now and in the future. PSHE will help you to stay healthy, safe and will prepare you for life and work.

Living in the wider world - The bigger picture:

This term in PSHE the topic you will be learning about careers, different industries, fraud, including online safety and how to save money.

How to save on the things you buy

Key words & Definitions:

Economy - The way people spend and make money in a specific area i.e. country or region

Customer - A person paying for or using goods and services

Deposits - Money a person puts into the bank

Loan - money that you borrow from someone for a specific purpose or an unforeseen event with a promise to pay back

Bank account - a record of your income (money you are paid) and expenses (money you have paid to a business or individual)

Current account - an account for day-to-day spending

Saving account - an account for storing money while you earn some interest from it.

Interest - money that is paid as a reward to savers or as a fee on borrowed money.

Profit - the amount of money made by a business that is more than the amount put in at the start or paid out as expenses.

Identification - a document that proves who you are

Key words & Definitions:

Career: an occupation undertaken for a significant period of a person's life and with opportunities for progress.

Values: principles or standards of behaviour; one's judgement of what is important in life.

Industry: An industry is a collective term for a group of businesses that produce a particular type of product or service.

Employment: Working in exchange for payment.

Part time employment: A working week with fewer hours than full-time work

Temporary employment: When a contract is given for short-term work, for example over a busy period in the year when more workers are needed

Fraud: wrongful or criminal deception intended to result in financial or personal gain

Perpetrator: someone who has committed a crime

Scam: a dishonest scheme; a fraud

Identity fraud: is when a fraudster uses someone else's identity (or creates a fake identity) to access a product or service so they get out of paying for it themselves.

Sources of support:

For more advice or support related to work, studying or careers, you can speak to a tutor, head of year, or careers advisor.

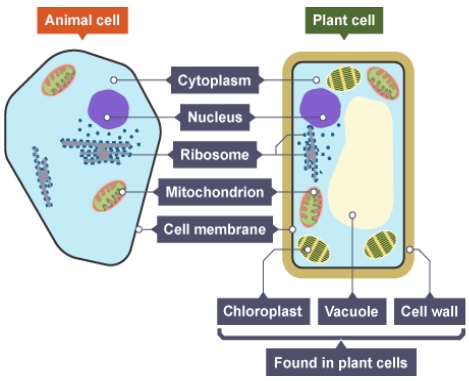
Or, you can visit,

- Childline www.childline.org.uk; 0800 1111
- National Careers Service nationalcareers.service.gov.uk/contact-us; 0800 100 900
- National Careers Service - Skills for life skillsforcareers.education.gov.uk/pages/young-people

Year 7 Science- Term 2- Biology: Cells and Movement

The Bigger Picture:
Explore how the skeletal system and muscular system in a chicken wing work together to cause movement. Why do we need a skeleton? How do we move? Identify the principal features of a cheek cell and describe their functions. What are we made of?
Understanding how our bodies work is one of the basic tools a scientist can have. We start off looking at the macro (bigger picture) what organs do we have, how do these work together as systems? How do our bodies move, what is role of the skeleton? The on to the micro. What are cells? How do these tiny parts of us make us who we are?

Key Knowledge	**R**	**A**	**G**
Identify different cells and the subcellular structures within cells			
State what each type of cell is by its features			
State the roles of different specialised cells and how they are adapted to their function			
Describe what is meant by a unicellular organism. Identify the structures in a unicellular organism.			
State how substances move in and out through the cells- diffusion			
Applying Your Knowledge	**R**	**A**	**G**
State the differences between plant and animal cells			
State the difference between unicellular and multicellular organisms and the organelles they share/different			
Explain how to calculate magnification			
Skills	**R**	**A**	**G**
Set up and use a microscope			
Make a cheek cell swab			
Calculate magnification			



Key Vocab:
Joints: Places where bones meet
Bone marrow: Tissue found inside some bones where new blood cells are made
Ligaments: Connect bones in joints
Tendons: Connects muscle to bones
Cartilage: Smooth tissue found at the end of bones, which reduces friction between them
Antagonistic muscle pair: Muscles working in unison to create movement
Cell: the unit of a living organism, contains parts to carry out life processes
Unicellular: Living things made up of one cell
Multi-cellular: Living things made up of many types of cell
Tissue: Group of cells of one type
Organ: Group of different tissues working together to carry out a job

Magnification: The degree by which an object is **enlarged**.
Magnification
$= \frac{\text{size of image}}{\text{size of real object}}$

Questions task:
1) What is the function of a nucleus?
2)Which organ system helps pump blood around our body?
3) How do you calculate magnification?
4) What is 5mm in nm?

Organisation task:
1)Name all the organs involved in the digestive system
2)Name all the organs in circulatory system

Challenge questions: Make deductions about how medical treatments work based on cells, tissues, organs and systems.
Suggest how damage to an organ can affect other body functions
Find out how recreational drugs might affect different parts of the body

Year 7 Science- Term 2- Chemistry: Particle model and separating mixtures

Why do different states of matter behave differently?

The bigger picture:

Different materials have different properties, which make them suitable for different uses. Many materials can exist as a solid, liquid and gas, which are known as the states of matter. The state of a material depends on the temperature. Different materials have different melting and boiling points. When a change of state occurs this is known as a physical change, which means these changes are reversible.

The density of a material is dependent on the mass and volume. This will also change depending on the state of matter of the material. We are also going to look at how we can separate mixtures that are soluble and insoluble.

This term we will study the links between the behavior and the properties of solids, liquids and gases. We will analyse data to determine the temperature at which changes of states occur and plot data collected from practical work. We will investigate the methods scientists use to determine the densities of different materials, including both regularly and irregularly shaped objects as well as evaluate the risks, precautions and errors that can occur during a practical.

Key Vocab:

Particle: A very tiny object such as an atom or molecule, too small to be seen with a microscope

Particle model: A way to think about how substances behave in terms of small, moving particles.

Diffusion: The process by which particles in liquids or gases move from a high concentration to a low concentration

Evaporate: Change from liquid to gas at the surface of a liquid at any temperature.

Boil: Change from a liquid to a gas when the temperature reaches boiling point

Condense: Change of state from gas to liquid when the temperature drops

Melt: Change from a solid to a liquid when reaches melting point

Solvent: A liquid that dissolves another substance

Solute: A substance that can be dissolved in a liquid

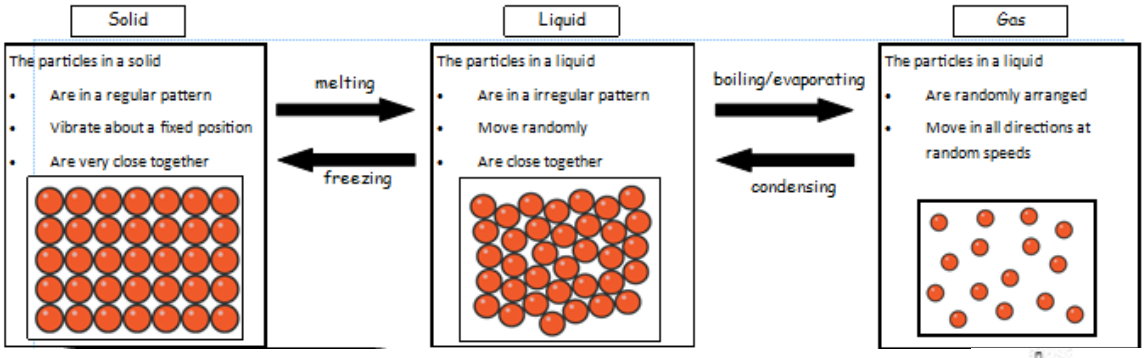
Dissolve: When a solute completely mixes with a solvent

Solution: Mixture formed when a solvent dissolves a solute

Filtration: Separating substances using a filter to produce a filtrate

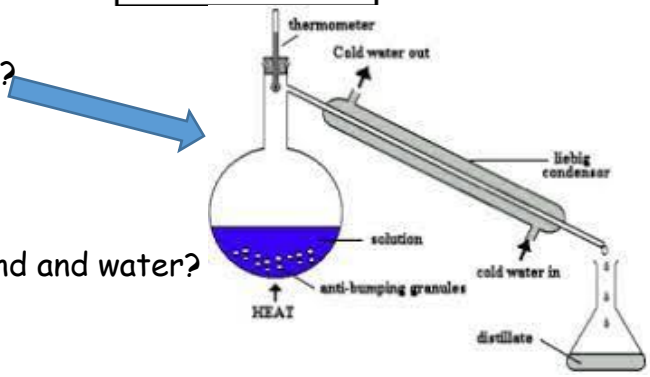
Distillation: Separating substances by boiling and condensing liquids

Chromatography: Used to separate different coloured substances



Question task:

1) What experiment is this apparatus set up for?



2) What technique would you use to separate sand and water?

3) How do solid particles move?

4) What is sublimation?

Challenge:

Evaluate observations that provide evidence for the existence of particles.

Suggest a combination of methods to separate a complex mixture and justify your choice

Look at evidence for identifying an unknown substance using separating techniques

Year 7 Science- Term 2- Physics: Forces - speed and gravity

Investigate variables that affect the speed of a toy car rolling down a slope. Where do forces come from? How do we measure speed? Is the force of gravity the same on the moon? Understanding forces is incredibly important to understanding the world around us. Although we rarely think about forces they are part of everything we do. On Earth it is not possible to imagine a situation in which forces are not involved. Gravity causes objects to fall to the ground; friction causes our shoes to wear out and when cycling air resistance slows us down.

Key Knowledge	R	A	G
List examples of forces			
Describe what is meant by a force.			
Describe that when the resultant force on an object is not zero, its motion changes and it slows down, speeds up or changes direction.			
Describe the movement of objects using a graph. A straight line on a distance-time graph shows constant speed, a curving line shows acceleration.			
Explain that the higher the speed of an object, the shorter the time taken for a journey.			
Identify the definitions of mass and weight.			
Explain the difference between mass and weight.			
Outline the factors that influence gravity.			
Outline that gravity holds planets and moons in orbit around larger bodies.			
Describe examples of different planets where the force of gravity is different. Eg. g on Earth = 10 N/kg. On the moon it is 1.6 N/kg.			

Key Vocab:

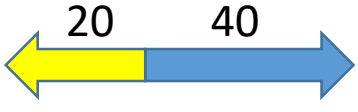
Speed: How much distance is covered in how much time.
Average speed: The overall distance travelled divided by overall time for a journey.
Relative motion: Different observers judge speeds differently if they are in motion too, so an object's speed is relative to the observer's speed.
Acceleration: How quickly speed increases or decreases.
Weight: The force of gravity on an object (N). Non-contact force: One that acts without direct contact.
Mass: The amount of stuff in an object (kg). Gravitational field strength, g: The force from gravity on 1 kg (N/kg).
Field: The area where other objects feel a gravitational force.

Applying Your Knowledge	R	A	G
Show a journey with changing speed on a distance-time graph, and label changes in motion.			
Describe how the speed of an object varies when measured by observers who are not moving, or moving relative to the object.			
Skills	**R**	**A**	**G**
Use the formula: speed = distance (m)/time (s) or distance-time graphs, to calculate speed.			

Questions task:

1) What is force measured in?
2) What is an unbalanced force?
3) What does a distance- time graph show?

4) Is this balanced or unbalanced? How could you make it balanced?



Challenge:

Suggest how the motion of two objects moving at different speeds in the same direction would appear to the other.
Predict changes in an object's speed when the forces on it change.
Draw conclusions from data about orbits, based on how gravity varies with mass and distance.
Suggest implications of how gravity varies for a space mission.

Year 7 Spanish **Term 2: Mi insti** **Talking about school**

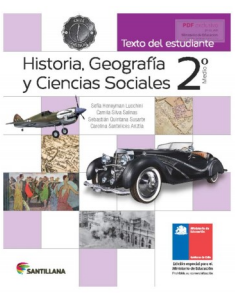
How can I talk about school in Spanish?

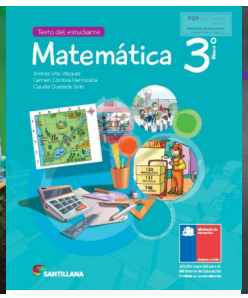
The Bigger Picture:

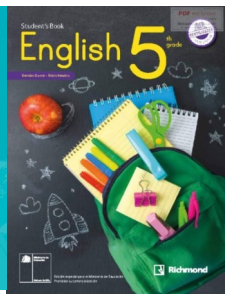
What's your favourite subject? Why? Is school in Spain the same as school in Britain? How is it different? Which would you prefer?

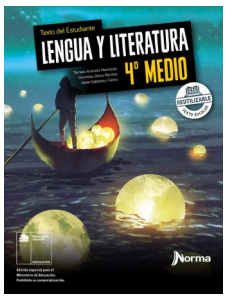
This term we will look at how to speak about our life at school, and understand when others talk about their school day. We will talk about the subjects we like and dislike and give reasons for our opinions. We will also learn about schools in different countries around the world where Spanish is spoken.

Preguntas *Core questions*	**Respuestas** *Answers*
¿Qué te gusta en tu insti? *What do you like at school*	**Me gusta la educación física.** *I like PE.*
¿Por qué? *Why?*	**Porque es guay y activo.** *Because it's cool and active.*
¿Qué no te gusta en tu insti? *What don't you like?*	**No me gusta la historia.** *I don't like history,*
¿Por qué no? *Why not?*	**Porque es díficil y aburrido.** *because it's difficult and boring.*
¿Cuál es tu asignatura favorita? *What is your favourite subject?*	**El inglés es mi asignatura favorita.** *English is my favourite subject*
¿Por qué el inglés? *Why English?*	**Me encanta leer y el profe es amable.** *I love reading and the teacher is nice.*









What subjects would you need these books for?

Me gusta	**el** español **el** teatro **el** inglés **el** baile **la** historia **la** educación física **la** geografía **la** música **las** ciencias **las** matemáticas	porque *because*	es guay *it's cool*
Me encanta		ya que *since*	es divertid@ *it's fun*
No me gusta		pero *but*	es activ@ *it's active*
Detesto		y *and*	**lo** encuentro difícil *I find it difficult* **la** encuentro la leche *I find it awesome* **los** encuentro faciles *I find them easy*
Prefiero		sin embargo *however*	el profe es amable *The teacher is nice* el profe es un poco raro *the teacher is a bit odd* tenemos muchos deberes *we have lots of homework*

Me gusta el inglés porque es fácil y el profe es amable—sin embargo prefiero el español porque es divertido y el profe es un poco raro!

What's my opinion? Can you write about your school subjects?

Horario	Lunes	Martes	Miércoles	Jueves	Viernes
De 9:00 A 9:55	**Inglés** *Isabel Molina*	**Inglés** *Isabel Molina*	**Matemáticas** *Jesús González*	**Inglés** *Isabel Molina*	**Geografía e Historia** *Margarita Cendrero*
De 9'55 A 10'50	**Geografía e Historia** *Margarita Cendrero*	**Lengua** *Carmen Prieto*	**Biología y Geología** *Jesús González*	**Religión** *Margarita Cendrero*	**Matemáticas** *Jesús González*
De 10'50 A 11'45	**Tecnología Creativa** *Benito Prieto* ---------- **Francés** *Isabel Molina*	**Geografía e Historia** *Margarita Cendrero*	**Geografía e Historia** *Margarita Cendrero*	**Lengua** *Carmen Prieto*	**Biología y Geología** *Jesús González*
De 11:45 A 12:00	R	E	C	R	E	O
De 12:00 A 12:55	**Matemáticas** *Jesús González*	**Religión** *Margarita Cendrero*	**Inglés** *Isabel Molina*	**Matemáticas** *Jesús González*	**Tecnología Creativa** *Benito Prieto* ---------- **Francés** *Isabel Molina*
De 12:55 A 13:50	**Biología y Geología** *Jesús González*	**Ed. Física** *J. Francisco Vidal*	**Lengua** *Carmen Prieto*	**Música** *Rafael Del Campo*	**Plástica y visual** *Benito Prieto*
De 13:50 A 14:45	**Lengua** *Carmen Prieto*	**Música** *Rafael Del Campo*	**Plástica y visual** *Benito Prieto*	**Ed. Física** *J. Francisco Vidal*	**Tutoría** *Carmen Prieto*

Life at a Spanish Secondary School

There's lots of different types of secondary school in Spain. Lots of children go to Catholic schools. There are also state schools, private schools, semi-private schools and international schools.

Some schools have very long lunch breaks and they expect you to go home for lunch. Others, like this one have no lunch break at all.

There are three 11 week terms in the school year and no half-terms but Spain has a lot of religious festivals and three day weekends.

The Christmas and summer holidays are long, but there is a lot of homework and many children go to extra classes over the summer in summer schools.

Spanish students do not do GCSEs they do the 'Bachillerato'.

In Spain you would be in sixth grade (6º Primaria) which means you would still be in Primary school. ESO (Secondary Education) is only four years long.

Spanish students get 11 weeks summer holiday but they do on average 2.5 hours home-work a day at secondary school!

How many subjects do you recognise? _____

Are there some you need to find out about? Which ones?_____

What time does school start and finish for this student?_____

When are their breaks? How long are they? _____

Which lessons do they have most often? _____

Which lessons are longer than average? _____

What is the same or similar about this timetable and yours? _____

What is different? _____

Would you prefer this timetable? Why? Why not? _____

Learn about a school day in Spain!

Watch this video: https://www.bbc.co.uk/bitesize/clips/zty76sg

Los lunes *On Mondays* Los martes *On Tuesdays* Los miércoles *On Wednesdays* Los jueves *On Thursdays* Los viernes *On Fridays*	a las nueve *at 9.00* a las once *at 11.00* a las once y media *at 11.30* a las dos menos cuarto *at 1.45*	por la mañana *In the morning* por la tarde *In the afternoon*	estudio *I study* estudiamos *We study*	francés *French* inglés *English* matemáticas *maths* educación fisica *PE* teatro *drama* historia *history* música *music* ciencias *science* dibujo *art*
			tenemos *we have*	el recreo *break* la hora de comer- *lunch*

How to use a range of sequencers to make writing interesting

In the morning	first	we've got English	then	we've got history	afterwards	we have break
por la mañana	primero	Tenemos inglés	después	tenemos historia	luego	Tenemos el recreo

Watch & listen to the subjects on You tube:

https://www.youtube.com/watch?v=RrUSEGDqMf0

Write any new ones down.

bronze			silver		Gold
7.2	pronounce phonics correctly		predict the pronunciation of new words		read aloud with confidence
7.6	Understand and use some sequencers and/or time		Understand and use sequencers and time phrases		Use a range of sequencers, time indicators and connec-
7.7	say, write and translate sentences from memory		say, write and translate a paragraph from memory		say, write and translate a short text (individually

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