

CLEETHORPES ACADEMY

HOME LEARNING

Year 8
Autumn Term 1



NAME: _____

FORM: _____

We Are ***CARING***

We Are ***CURIOUS***

We Are ***CREATIVE***

SELF QUIZZING

OUR EXPECTATIONS

- The act of self-quizzing supports retrieval. Retrieval is important because the more we revisit knowledge and ideas, the more likely we are to remember it. The more we remember, the greater sense we can make of our learning.
- You should spend a minimum of *30 minutes a night* focusing on a specific subject's retrieval activity.
- You should use the homework log to monitor your completion week on week.
- You should bring your completed work to form, every Tuesday, where your work will be checked and additional retrieval activities will be completed to support your retention of the information studied at home.
- Failure to complete the activities each week, will result in further sanctions.

WHAT YOU SHOULD DO

- Each night, select a subject to focus on.
- Read the subject's information really trying hard to remember what you have read. You might want to highlight and add your own notes to the information you have been given.
- Once you are confident that you can recall the information without having to recheck, use your home learning exercise book to write down everything you can remember, using a black or blue pen. Don't worry if you can't remember everything
- In form time, your tutor will ask you to check through your work and use a green pen to "gap fill" any information you may have missed.
- Your tutor will also ask further questions in relation to the information you have read each week, to further support your retention of new knowledge.
- You will be rewarded with carrot points for your efforts each week.

Home Learning Monitoring

<i>Subject</i>	<i>w/c 8th Sept</i>	<i>w/c 15th Sept</i>	<i>w/c 22nd Sept</i>	<i>w/c 29th Sept</i>	<i>w/c 6th Oct</i>	<i>w/c 13th Oct</i>
<i>English Literature</i>						
<i>English Language</i>						
<i>Mathematics</i>						
<i>Biology</i>						
<i>Chemistry</i>						
<i>Physics</i>						
<i>History</i>						
<i>Geography</i>						
<i>Spanish</i>						
<i>Art</i>						
<i>Music</i>						
<i>Personal Development</i>						

WEEK 1

English Literature

KEY TERM	DEFINITION
Neurotypicality	Neurotypicality refers to the state of having a mind that functions in ways considered typical or standard for most people, particularly in terms of social interaction, communication, and cognitive development. It's the opposite of neurodivergence, which describes individuals whose neurological development and functioning differ from what is considered typical
Neurodiversity	Neurodiversity refers to the natural variation in human brain function and behaviour. It encompasses the idea that people experience and interact with the world in different ways, and that these differences are not deficits but rather natural variations. The term is often used in relation to conditions like autism, ADHD, dyslexia, and dyspraxia.
Neurodivergence	While everyone's brain develops similarly, no two brains function just alike. Being neurodivergent means having a brain that works differently from the average or "neurotypical" person. This may be differences in social preferences, ways of learning, ways of communicating and/or ways of perceiving the environment.

Write down everything you can remember about the key terminology from the table.

WEEK 1

English Language

Key Vocabulary	Definition
1. Artillery	large-calibre guns and the military units that employ them; primarily for delivering fire at extended ranges.
2. Barricade	a barrier or obstruction, often temporary, used to block a passage, control movement, or provide a defensive position.
3. Bayonet	short, sharp-edged, sometimes pointed weapon, designed for attachment to the muzzle of a firearm.
4. Blockade	an act or means of sealing off a place to prevent goods or people from entering or leaving.
5. Civil	the general public, their activities, needs, or ways, or civic affairs as distinguished from special (such as military or religious) affairs.
6. Regiment	a military unit, typically composed of multiple battalions or squadrons, forming a larger, self-contained organisation.
7. Cavalry	soldiers who fight while mounted on horseback.
8. Battle	a sustained fight between large organised armed forces.
9. Ration	a fixed amount of food or goods; officially allowed to each person during a time of shortage, as in wartime.
10. Projectile	any object that is propelled forward by an external force and then moves under the influence of gravity and air resistance.

Write down everything you can remember about the key terminology from the table.

WEEK 1
Mathematics

Ratio

Useful definitions:

Key Vocabulary	Definition
Ratio	A ratio shows the relationships between two or more quantities.
Proportion	Proportion shows how quantities or amounts are related to each other.
Relationship	A relationship between values, where one value increases at the same rate as another.
Ratio notation	When comparing quantities, the notation used is a colon (:) between the numbers.
Parts	In a ratio each number represents a part of something being compared.

Diagrams:

Example: Share £60 in the ratio 3:7

Step 1: $3 + 7 = 10$, so there are 10 parts altogether

Step 2: $£60 \div 10 = £6$, so 1 part is worth £6

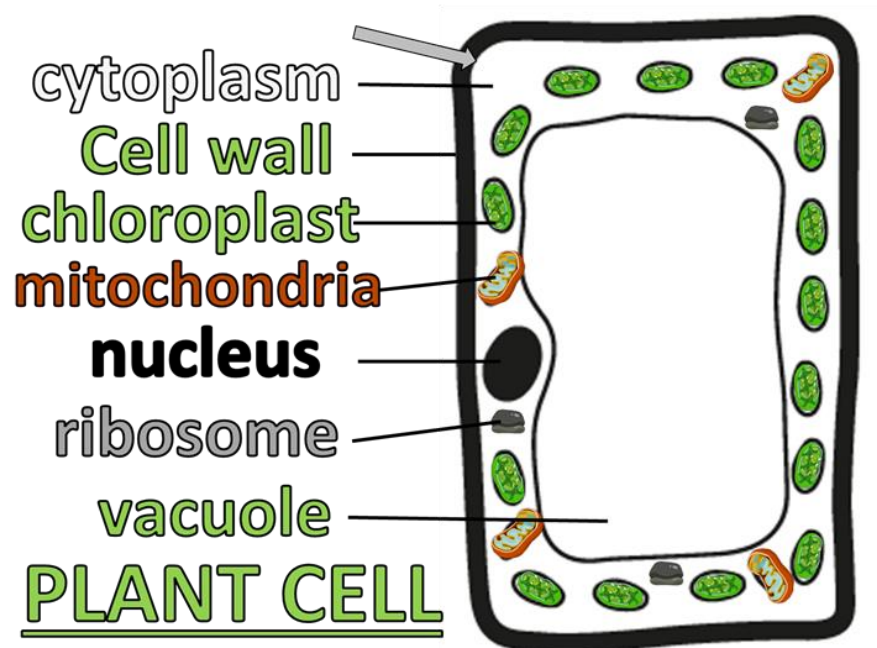
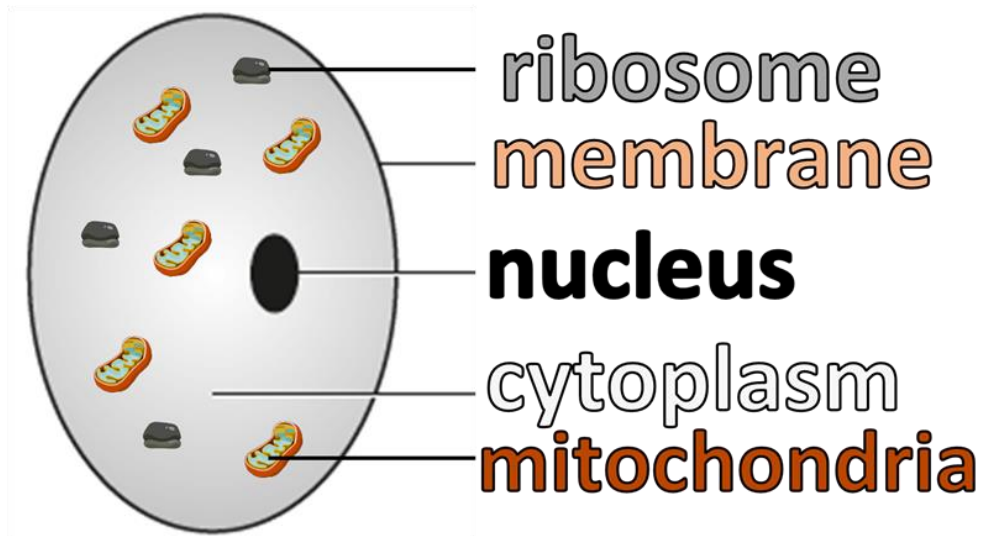
Step 3: The first person gets $£6 \times 3 = £18$

The second person gets $£6 \times 7 = £42$

WEEK 1

Biology

Cells



WEEK 1

Chemistry



Explosive



Flammable



Corrosive



Toxic



Oxidising



Harmful to the
environment



Moderate
hazard



Severe health
hazard

WEEK 1

Physics

Key Words

potential difference	The amount of push (energy) provided by the battery to a moving charge.
current	The flow of electric charge.
resistance	The measure of how difficult it is for a flow of charge to pass through a component.
independent variable	The variable you change in an investigation to see how it affects the dependent variable.
dependent variable	The variable you measure or observe.
control variable	A variable that could affect the dependent variable so must be kept the same.

WEEK 1

History

Keywords

Empire = A group of countries under the control of one country

Economic = money

Culture = The beliefs, social norms and traits of a social groups. Including food, music, celebrations and art.

Political = government/rulers

Democracy = Demos = people, kratia = power. People power. It is a government based on participation of the people

Colony = a geographical area politically controlled by a distant country

Resistance = Refusal to comply with or accept something. Re = against, Sistere = to stand firm

WEEK 1
Geography

Key Words	Definition
River	A river is water flowing downhill in a channel
Source	The point at which a river starts to flow
Mouth	Where a river flows into a larger body of water (i.e. a sea/ocean)

Features of the source vs. mouth:

Source	Mouth
Higher land	Lower land
Steep relief	Flat land
River valleys narrow	Wide river valleys
Shallow river	Deep river
Fields for farming	Settlements, port, harbour and industry.

WEEK 1

Spanish

Types of music

¿Qué tipo de música te gusta?	What type of music do you like?
Escucho...	I listen (to)
No escucho..	I don't listen to
Prefiero	I prefer
la música...music
latina	South American music
electrónica	Dance
rock	Rock
pop	Pop
clásica	Classical
el rap	Rap
el jazz	Jazz
Me gusta	I like
No me gusta	I don't like
Me encanta	I love
Odio	I hate
No soporto	I can't stand
porque es	Because it is
aburrida	Boring
animada	Lively
emocional	Emotional
emocionante	exciting
lenta	Slow
pegadiza	Catchy
relajante	Relaxing
ruidosa	Noisy
siempre	Always
a veces	Sometimes
nunca	never
normalmente	Normally

WEEK 1

Art

Landscapes

A landscape is an area of land, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors. It encompasses everything visible in a single view, including natural features like mountains and rivers, as well as man-made elements like buildings and roads. Landscapes can be broadly categorised as natural (e.g., mountains, forests) or cultural (e.g., farmland, urban areas).

Natural Environment

A natural landscape refers to an environment that has not been significantly altered by human activity. Examples of natural landscapes are:

- Mountain (High elevation, rugged terrain),
- Coastal (Shorelines, beaches, cliffs),
- Desert (Arid conditions, sparse vegetation)
 - Riverine (Rivers, floodplains)
- Forest (rainforest, diverse plants, animal life),
 - Wetland (Marshes, swamps),
- Karst (Formed by soluble rocks, creating caves) and
- Plains (large grassland and cultivated areas).

Cultural Environments

A cultural landscape refers to a landscape that has been shaped by human interaction and cultural practices, representing the combined works of nature and human activity.

Tangible and Intangible elements such as buildings, fields, and infrastructure. Other examples include:









- Rural Landscapes (farming systems, rice fields, vineyards)
 - Urban (Historical cities, cultural districts)
 - Sacred (Spiritual and religious significance)
 - Intentional (Parks and gardens)
- Organically evolved overtime through human interaction



WEEK 1

Personal Development

Protected Characteristics

Age	People cannot be treated unfairly because they are young or old. Everyone deserves respect, no matter their age	 AGE
Disability	People with physical or mental disabilities must be treated fairly, with reasonable adjustments made to support them in school, work, and life.	 DISABILITY
Gender Reassignment	A person is considered to be <i>transitioning</i> if they change their gender through actions like changing their name, pronouns, appearance, or having medical treatment to match their identity.	 GENDER REASSIGNMENT
Marriage and Civil Partnership	People must be treated equally whether they are married, in a civil partnership, or single.	 MARRIAGE AND CIVIL PARTNERSHIP
Pregnancy and Maternity	Pregnant people and new parents must not be treated unfairly because they are having or have had a baby.	 PREGNANCY AND MATERNITY
Race	No one should be treated unfairly because of their skin colour, nationality, or ethnicity (a person's cultural identity, which may include shared language, traditions, and history).	 RACE
Religion or Belief	Everyone has the right to follow their religion or beliefs, or to have no religion, without discrimination.	 RELIGION OR BELIEF
Sex	People must not be treated unfairly because they are biologically male or female.	 SEX

WEEK 1

ICT

Keyboard Shortcuts

A keyboard shortcut is a **quicker way** to tell the computer to do something without having to move your mouse to press buttons or to dig through menus.

It may feel like using shortcuts only saves a second or two, but that adds up over time! Over a full year, you might even **save a few hours** just by using keyboard shortcuts!

<u>Function</u>	<u>Shortcut</u>	<u>Description</u>
Copy	CTRL + C	Used when you need to copy something before pasting it in.
Paste	CTRL + V	Used to paste in an item that you copied.
Save	CTRL + S	Used to quickly save your work. Do this regularly!
Undo	CTRL + Z	Used to undo a mistake.
Redo	CTRL + Y	Used to redo if you used the 'undo' function
Bold	CTRL + B	Used to make selected text bold .
Italic	CTRL + I	Used to make selected text <i>italic</i> .
Underline	CTRL + U	Used to make selected text <u>underlined</u> .

1. Write down why keyboard shortcuts are useful in your exercise book.
2. Then, write down the shortcut and description for each keyboard shortcut in a table.

WEEK 2

English Literature

Asperger's

Asperger's syndrome, now understood to be part of the broader Autism Spectrum Disorder (ASD), is a neurodevelopmental condition characterised by difficulties in social interaction, communication challenges, and repetitive patterns of behaviour or interests. While individuals with Asperger's may exhibit these traits, they generally have average or above-average intelligence and typically do not have the accompanying learning disabilities associated with some forms of autism.

Key Characteristics:

Social communication: understanding body language, facial expressions, tone of voice, jokes, sarcasm, common sayings like, "It's cool".

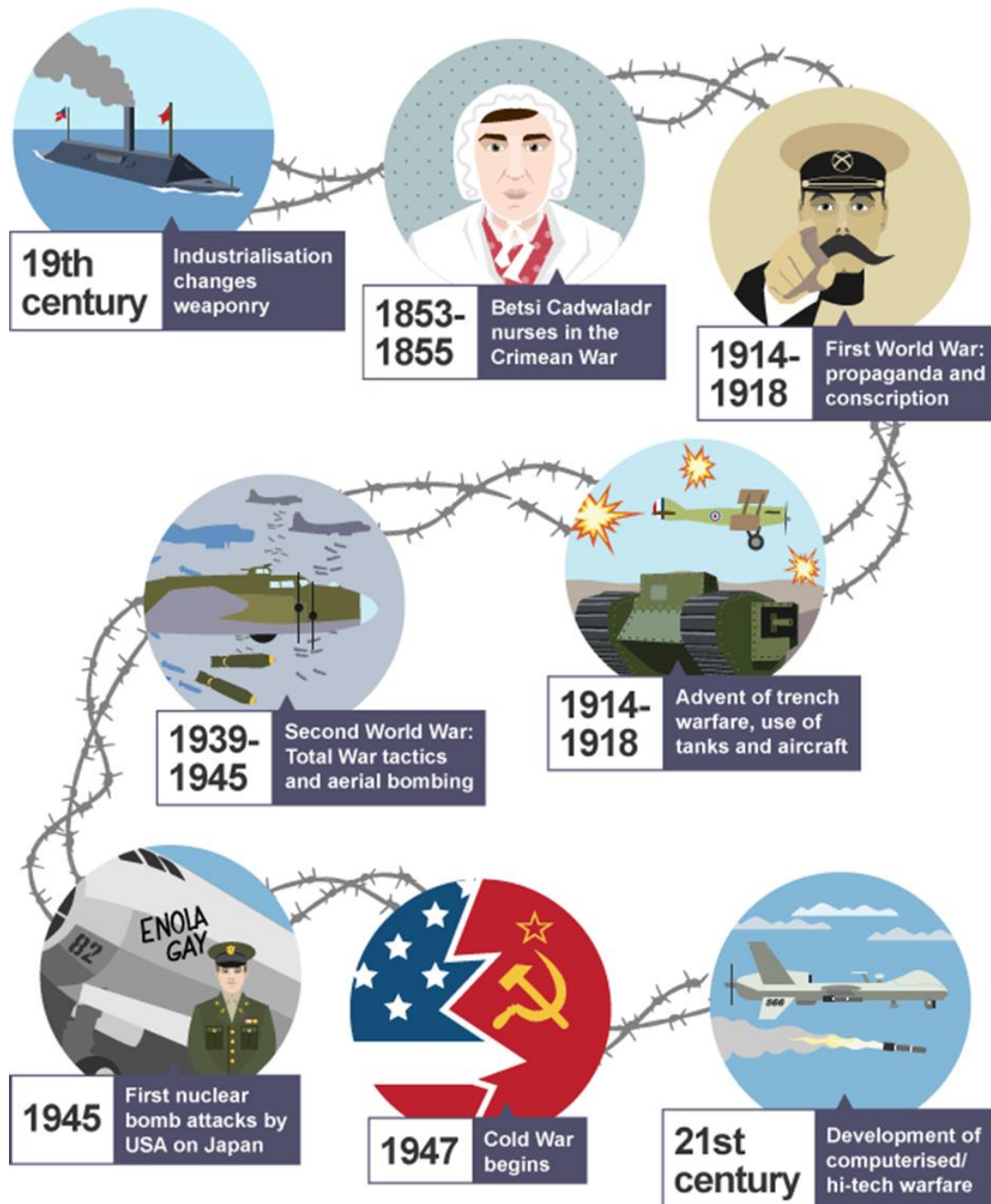
Social interaction: struggle to maintain friendships, not understanding unwritten 'social rules' - may start inappropriate conversations or stand too close to you, find other people confusing.

Social imagination: difficulty in imagining what other people may be feeling and thinking, predicting what might happen next, understanding the concept of danger, preparing for change, coping in unfamiliar situations.

Write down everything you can remember about Asperger's from the text about.

WEEK 2

English Language



Write down everything you can remember from the timeline of modern wars.

WEEK 2

Mathematics

Proportion

Useful definitions:

Key Vocabulary	Definition
Proportion	Is used to show how quantities and amounts are related to each other.
Direct Proportion	Two variables are directly proportional when the variable increases or decreases.
Indirect Proportion	Describes a relationship when there is an increase in one quantity leading to a decrease in the other.
Approximations	An approximation is anything similar but not exactly equal to something else.
Conversions	Changing the units

Diagrams:

A recipe to make **10 cupcakes:**



How do we make **20 cupcakes:**

Sponge

100 g of butter
100 g of sugar
100 g of flour
2 eggs



____ g of butter
____ g of sugar
____ g of flour
____ eggs

Icing

140 g of butter
250 g of sugar



____ g of butter
____ g of sugar

WEEK 2

Biology

Photosynthesis

Plants make their own food by the process of **photosynthesis**.

In this chemical reaction, chlorophyll in plant cells absorbs light energy to change carbon dioxide and water into glucose and the by-product oxygen.

What is the word equation for photosynthesis?



This equation can be read as:

“carbon dioxide and water, in the presence of light energy and chlorophyll, produces glucose and oxygen”.

WEEK 2

Chemistry

Are these substances acidic, alkaline or neutral?










substance	blue litmus	red litmus	acidic, alkaline or neutral?
tap water	stayed blue	stayed red	
sour milk	turned red	stayed red	
ammonia solution	stayed blue	turned blue	
hydrochloric acid	turned red	stayed red	
sodium hydroxide	stayed blue	turned blue	

WEEK 2

Physics

Circuit Diagrams

Electrical circuits are often represented by **circuit diagrams**. They are simple and easy to interpret. **Circuit symbols** are used to represent the **components** used in a circuit.

switch (open)	
switch (closed)	
bulb	
cell	
battery	
ammeter	
voltmeter	
resistor	
motor	

WEEK 2

History

Genghis Khan

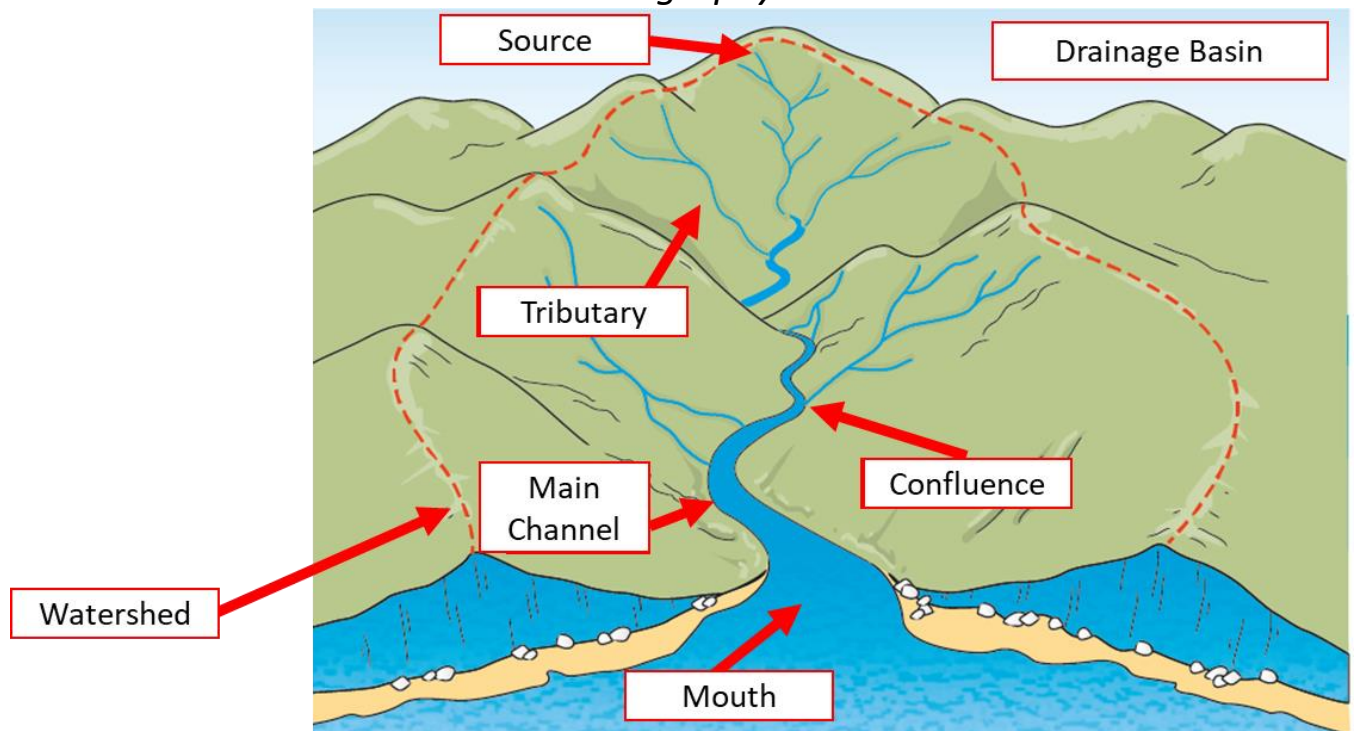
- Genghis Khan didn't become Genghis Khan until well into his 40s. When he was born in c1162, the son of a tribal warrior chief, he was named Temujin. He was born clutching a blood clot, a sign that he would be a brave warrior.
- At the age of eight or nine, his father was poisoned by a rival tribe, the Tatars, and he and his mother were rejected by their clan and forced out onto the grasslands of Mongolia, where they survived by foraging for berries, rats and birds. It was a humiliating existence.
- When he was just 16, he started making alliances first through marriage and then by shared history. He finally became the most powerful warrior in Mongolia after a war with his friend, who fell out with him because Temujin promoted people based on talent rather than family (the opposite to how it had traditionally worked). The war between the two was violent but Temujin was victorious.
- Genghis Khan was the founder of the Mongol Empire.
- Genghis Khan believed in meritocracy, this means that someone's position would be based on their skill and not who their family was (like it was in Medieval Europe). This meant it was possible for anyone to be successful in Khan's armies and empire and it did not matter whether you were born rich or poor.
- Genghis Kahn would often demand peace offerings from cities to stop him attacking and it was common for one of these peace offerings to be a wife. While it is thought that he may have up to 500 wives he only had one "principle" wife who would be considered his empress and only her children would be eligible to take his place. This led to Khan having a lot of children with his different wives which means he has a lot of descendants, 16 million in fact. 0.5% of all men in the world are a direct relation to the Genghis family name. In some parts of Asia, it is 8%.

Siege of Zhongdu

- In June 1215, Genghis Khan attempted to invade Zhongdu in Northern China (modern day Beijing) which was difficult to take over as it had 12m high walls.
- Genghis Khan decided to surround and stop any supplies from getting through.
- This lasted for two years which led to mass starvation inside the walls with some reports that the people had to turn to cannibalism.
- When Khan eventually got through the walls he slaughtered as many people as he could to ensure that there was no one to stand against him.

WEEK 2

Geography



WEEK 2

Spanish

Importance of music/musical instruments

¿Es la música importante para tí?	Is music important to you?
La música es importante para mi	Music is important to me
La música no es importante para mi	Music is not important to me
Me importa mucho la música	Music matters a lot to me
La música me ayuda a..	Music helps me to..
relajarme	relax
dormir	sleep
pensar	think
pasar el tiempo	to pass the time
ser contento	to be happy
La música me inspira.	Music inspires me.
Toco..	I play (musical instruments)
un instrumento	an instrument
la guitarra	guitar
la batería	drums
la flauta	the flute
la trompeta	the trumpet
Canto en un coro	I sing in the choir
Soy miembro de una banda	I am a member of the band
Aprendo a tocar el piano	I am learning to play the piano
Voy a un concierto	I go to a concert
Voy a un festival de música	I go to a music festival
Escucho música	I listen to music
Todo el tiempo	All the time

WEEK 2

Art

Shan Shui Painting

Shan shui (山水), literally "mountain-water", is a style of traditional Chinese landscape painting that focuses on depicting natural scenes, particularly mountains, water, and waterfalls. It's not just about replicating what's seen, but rather conveying the spirit and feeling of nature through the use of brush and ink. Shan shui paintings often incorporate multiple perspectives and aim to evoke an emotional response in the viewer rather than simply presenting a realistic view.

Subject Matter:

Shan shui painting primarily feature natural landscapes, with elements such as, mountains, river, waterfalls, trees and rocks.

Material:

The traditional material to use is brush and ink on paper or silk, not paints.

Style:

The work is not about realistic representations, but more about capturing a feeling and sense of place.

Perspective:

Shan shui painting often use a technique of showing multiple perspective points within a single piece. This is to create a sense of journey and movement through the landscape.

Composition:

Shan shui paintings involve a complicated and rigorous set of almost mystical requirements for balance, composition, and form. All *shan shui* paintings should have 3 basic components:






- Paths - Pathways should never be straight. They should move, like a stream. This helps deepen the landscape by adding layers.
- The Threshold – The path should lead to a threshold. The threshold is there to embrace you and provide a special welcome. The threshold can be the mountain, or its shadow upon the ground, or its cut into the sky.
- *The Heart* – The heart is the focal point of the painting, and all elements should lead to it. The heart defines the meaning of the painting.



WEEK 2
Personal Development

British Values

Schools follow British values to promote fairness, respect, and equality. They help create a safe, inclusive environment where everyone can learn, grow, and feel valued, no matter their differences. The British Values are as follows:

Democracy	Everyone has the right to have a say and make decisions, by voting or expressing their opinion.	
Rule of Law	Laws exist to keep people safe and ensure fairness. It's important to follow the law and respect rules, both at school and in society.	
Individual Liberty	Everyone has the freedom to make their own choices, whether it's about their beliefs, where they live, or what they want to do in life.	
Mutual Respect	We must respect each other's opinions, beliefs, and differences. Treating others with kindness and fairness is key to building a strong community.	
Tolerance of Others	It's important to respect and understand people's different religions, cultures, and beliefs, even if they are not the same as ours.	

WEEK 2


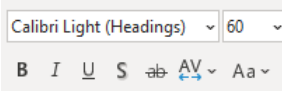


ICT

Microsoft Word Tools

Read through the name and descriptions of each tool in Microsoft Word.

Draw a table in your exercise book and write them down.

You do not have to draw the icon.

<u>Icon</u>	<u>Tool Name</u>	<u>Tool Description</u>
	Table	You can insert a table that has a specific amount of columns and rows.
	Font	You can change the look of text by changing its font and size.
	Text Styles	You can change the style of highlighted text. This could be useful when creating headings quickly.
	Shapes	You can insert a range of shapes into your presentation by using the Shapes tool. You can choose rectangles, circles, arrows and much more!

WEEK 3

English Literature

What is an unreliable narrator?

An unreliable narrator is a storyteller whose account of events cannot be fully trusted. This narrator might be intentionally misleading, have biases, lack complete information, or be psychologically unstable. Their perspective is subjective and can differ significantly from reality or the "true" story.

Key Characteristics:

- **Lack of Credibility:** Their version of events may be inaccurate, incomplete, or distorted.
- **Subjectivity:** Their interpretations are highlighted by their own biases, prejudices, and emotional state.
- **Deception:** They might intentionally lie to the reader or mislead them.
- **Self-Deception:** They might be unaware of their own flaws or biases, leading to unintentional misrepresentations.
- **Psychological Issues:** Mental instability, trauma, or other psychological factors can contribute to their unreliability.
- **First-Person Perspective:** Unreliable narrators are frequently found in first-person narratives, as the reader is limited to their perspective.

Why Use an Unreliable Narrator?

- **Intrigue and Suspense:** Readers must actively analyse the narrative to discern the truth, creating suspense and engaging the audience.
- **Exploration of Themes:** Unreliable narrators can explore themes of perception, memory, and the nature of truth.
- **Character Development:** They can be used to create complex and compelling characters.
- **Twists and Surprises:** They can set up unexpected plot twists and revelations.

Write down everything you can remember about unreliable narrators.

WEEK 3

English Language

1. Infantry	soldiers who fight on foot in ground combat.
2. Ricochet	a bouncing off at an angle (as of a bullet off a flat surface).
3. Reinforcement	the action of strengthening or encouraging something.
4. Ally	a person, group, or nation that is associated with another for a common cause or purpose, often through an alliance or support.
5. Bombardment	a continuous attack with bombs, shells, or other missiles.
6. Revolution	a change in political organisation; especially the overthrow of one government or ruler and the substitution of another by the governed.
7. Maritime	anything related to the sea, ships, or navigation.
8. Memorial	a statue or structure established to remind people of a person or event.
9. Combative	ready or eager to fight or argue.
10. Warfare	engagement in or the activities involved in war or conflict.

Write down everything you can remember from the key vocabulary table.

WEEK 3

Mathematics

Useful definitions:

Key Vocabulary	Definition
Distance	Distance is a measure of length. Distance = Speed x Time
Conversion	Conversion is the process of changing the value from one form of units to another.
Metric System	The metric system is used to measure length, weight and volume. It is based on units of ten, making it easy to convert between different sizes.
Imperial System	Imperial measurements are a system of measure. In the UK we commonly use metric, however we still use some imperial measures e.g. pints, miles, feet, stones

Diagrams:

Lengths can be given in mm, cm, m and km

10mm = 1cm	To convert cm to mm, you must multiply by 10
100cm = 1m	To convert m to cm, you must multiply by 100
1000m = 1km	To convert km to m, you must multiply by 1000

If you are converting the other way you must divide instead of multiplying

Tip: If you are converting to a smaller unit – you multiply

If you are converting to a bigger unit – you divide

Convert: 10mm = 1cm
 a) 7cm to mm So multiply by 10
 $7 \times 10 = 70\text{mm}$
 b) 3.2km to m 1000m = 1km
So multiply by 1000
 $3.2 \times 1000 = 3200\text{m}$

Convert: 100cm = 1m
 a) 450cm to m So divide by 100
 $450 \div 100 = 4.5\text{m}$
 b) 500mm to cm 10mm = 1cm
So divide by 10
 $500 \div 10 = 50\text{cm}$

WEEK 3

Biology

Proving a plant makes food

Glucose (food) is a very small single molecule. We call a single molecule a monomer. A plant sticks Glucose together in a long chain to store it as starch in its vacuole. A long chain is called a polymer. Biosynthesis is sticking little molecules together to make big molecules.

Testing a leaf for starch

Boil the leaf in water

Kills leaf and removes wax layer making the leaf more permeable to ethanol and iodine.

Boil the leaf in ethanol

This chemical breaks the cell membrane releasing the chlorophyll from the leaf. The iodine can then get inside the plant cells. This chemical is flammable.

Cover the leaf in iodine

If starch is in the leaf the starch will stain black.

WEEK 3

Chemistry

Acids taste sour. Some acidic and alkaline solutions are corrosive. A concentrated solution of an acid is more corrosive than a dilute solution. A concentrated solution has more acid particles per litre than a dilute solution.

A corrosive substance could burn your skin or eyes. we control risks from a corrosive solution by;

- Wearing eye protection
- Keeping the solution off the skin

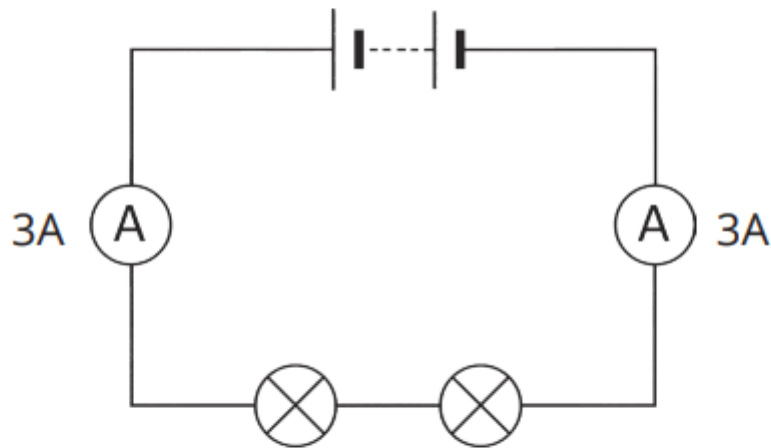
If a solution is very corrosive, you might wear gloves and a protective coat whilst handling it

WEEK 3

Physics

Series Circuits

In a series circuit, the components are connected end to end in a loop as shown in the diagram below. If one bulb breaks, none of the bulbs will be lit as the circuit is no longer complete.



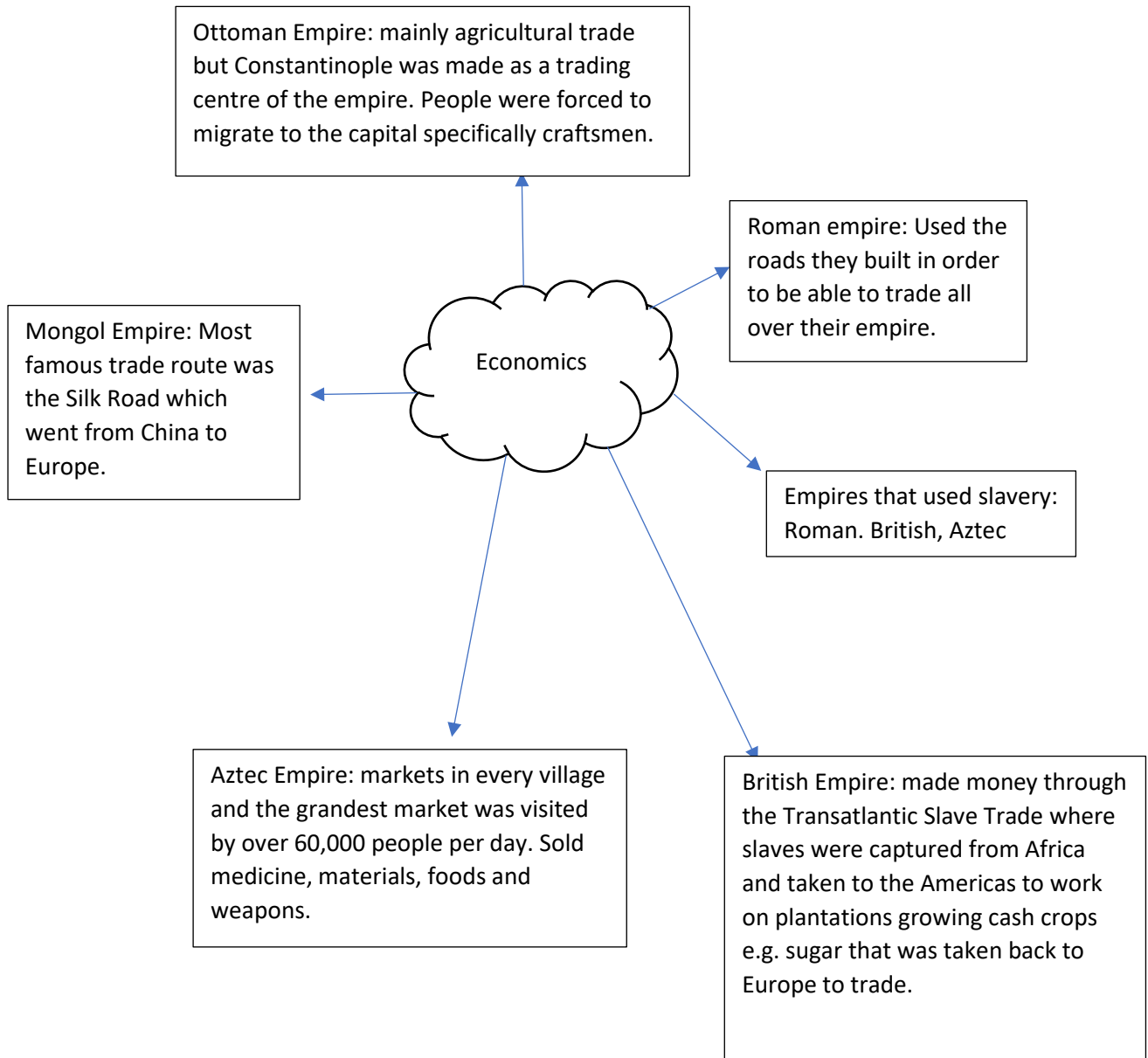
The **current is the same** everywhere in a series circuit. It doesn't matter where you put the ammeter, it will always show the same reading. The more cells or batteries you add, the greater the current. Current is **not** used up.

WEEK 3

History

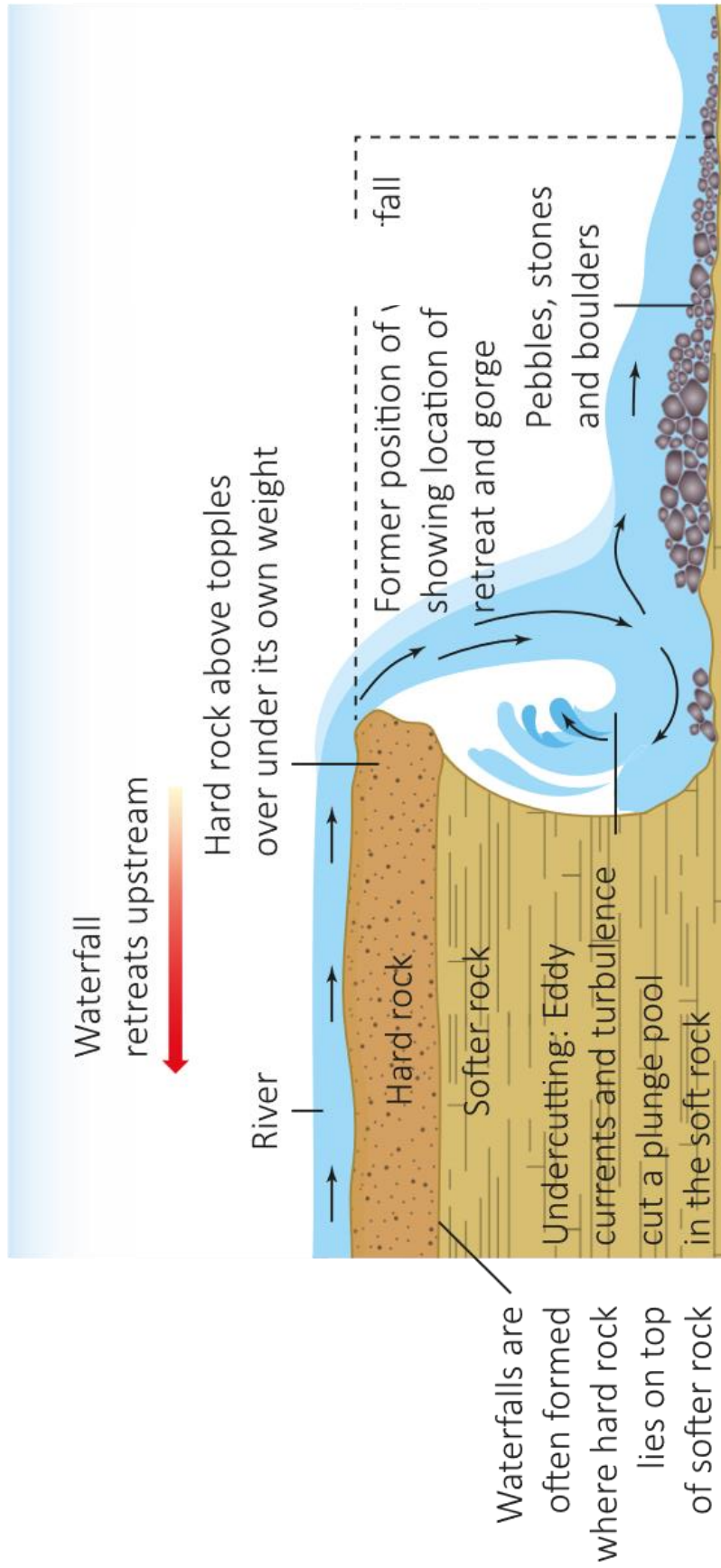
Economic – money

Empires can economically benefit from having colonies as it gives them access to new trade routes, resources and markets.



WEEK 3

Geography



WEEK 3

Spanish

Favourite Celebrities

¿Quién es tu persona famosa favorita?	Who is your favourite famous person?
Mi persona famosa favorita es..	My favourite famous person is..
Mi cantante favorita es..	My favourite singer is..
Mi grupo favorito es..	My favourite group is...
Se llama...	Is called...
Sigo a	I follow
Admiro a	I admire
porque	because
Es...	He/she is...
Son...	They are...
Puede ser..	He/she can be..
inspirador/a	inspiring
animado/a	lively
energico/a	energetic
talentoso/a	talented
amable	kind
inteligente	intelligent
creativo/a	creative
activo/a	active
guapo/a	handsome/attractive
Me gusta(n)..	I like...
su voz	their voice
sus letras	their lyrics
sus canciones	their songs
su talento	their talent
sus valores	their values

WEEK 3

Art

Sumi-E technique

Sumi-e, also known as Japanese ink painting, is a traditional art form that utilises black ink (sumi) and a brush to create images on white paper. It emphasizes capturing the essence and spirit of a subject through simple, elegant brushstrokes and the interplay of black ink and white space.

Sumi-e's connection to Zen Buddhism is significant, as it is considered both a meditative practice and an art form. The process of creating sumi-e is believed to cultivate focus, mindfulness, and an appreciation for the beauty of simplicity.

Ink and paper:

Sumi-e uses black ink, traditionally made from soot (carbon from the burning of organic matter), and glue, which is ground with water on a stone slab. The ink is applied to white paper, often rice paper, allowing the white of the paper to contrast against the intense black.

Minimalism:

Sumi-e aims to represent the subject matter within a minimal amount of brush strokes. Its purpose is to convey a sense of tranquillity and balance.

Subject:









Common subject matter within Sumi-e paintings include landscapes, flowers (bamboo, plum blossoms and orchids), birds and animals, often those found heavily in Japan and Japanese culture.



WEEK 3

Personal Development

Protected Characteristics

Age	People cannot be treated unfairly because they are young or old. Everyone deserves respect, no matter their age	 AGE
Disability	People with physical or mental disabilities must be treated fairly, with reasonable adjustments made to support them in school, work, and life.	 DISABILITY
Gender Reassignment	A person is considered to be <i>transitioning</i> if they change their gender through actions like changing their name, pronouns, appearance, or having medical treatment to match their identity.	 GENDER REASSIGNMENT
Marriage and Civil Partnership	People must be treated equally whether they are married, in a civil partnership, or single.	 MARRIAGE AND CIVIL PARTNERSHIP
Pregnancy and Maternity	Pregnant people and new parents must not be treated unfairly because they are having or have had a baby.	 PREGNANCY AND MATERNITY
Race	No one should be treated unfairly because of their skin colour, nationality, or ethnicity (a person's cultural identity, which may include shared language, traditions, and history).	 RACE
Religion or Belief	Everyone has the right to follow their religion or beliefs, or to have no religion, without discrimination.	 RELIGION OR BELIEF
Sex	People must not be treated unfairly because they are biologically male or female.	 SEX

WEEK 3

ICT

Who is Bill Gates?



Bill Gates is one of the most famous people in the world of technology. He was born in the **United States** in **1955** and showed an interest in computers from a young age. When he was a teenager, he began writing computer programs with his friend Paul Allen.

In 1975, Bill and Paul started a company called **Microsoft**. Their goal was to make computers easier to use for everyone. They created a computer system called **Windows**, which became the most popular operating system in the world!

Because of Microsoft's success, Bill Gates became one of the richest people in history. He is also known for giving away much of his money to help people through his charity work.

Microsoft also made programs like **Word**, **PowerPoint**, and **Excel**, which help people write, present, and work with numbers. They also created the **Xbox**, a popular games console used at home!

Today, Bill Gates is famous not just for inventing things and running Microsoft, but also for trying to solve big problems like global health and climate change.

Write down as much as you can remember about Bill Gates in your exercise book.

WEEK 4

English Literature

What is a literary genre?

Literary genres are categories of literature, distinguished by shared characteristics. The four main genres are poetry, fiction, nonfiction, and drama.

These can be further broken down into subgenres, such as mystery, thriller, historical fiction, romance, and fantasy, among others.

Here's a more detailed look at some common genres and subgenres:

1. Fiction: This genre encompasses narratives that are wholly or partially imagined by the author.

- **Subgenres:** Mystery, thriller, horror, historical fiction, romance, science fiction, fantasy, and more.

2. Nonfiction: This genre focuses on factual accounts and real-life events.

- **Subgenres:** Biography, autobiography, essay, memoir, and historical accounts.

3. Poetry: This genre uses aesthetic and rhythmic qualities of language to evoke meaning.

- **Subgenres:** Lyric, epic, dramatic, and narrative poetry.

4. Drama: This genre is composed in verse or prose and is typically intended for performance.

- **Subgenres:** Tragedy, comedy, history, and melodrama.

Write down everything you can remember about literary genres.

WEEK 4

English Language

Type of War	Definition
World War	Large-scale conflict involving many nations across multiple continents. Examples include World War I and World War II.
Civil War	Armed conflict between organised groups within the same state or nation.
Cyber Warfare	A specific type of information warfare involving attacks on computer systems and networks.
Chemical Warfare	Warfare using toxic chemicals as weapons.
Biological Warfare	Warfare using biological agents like viruses or bacteria.
Blitzkrieg	A tactic of warfare involving a swift and sudden military attack, often using a combination of armoured and air forces. An example of this is when the Nazi Luftwaffe (air force) bombed London for 56 consecutive days and killed around 43,000 civilians.
Religious War	Conflicts motivated by religious differences or beliefs.
Economic War	Conflicts driven by economic competition or the desire to cripple an opponent's economy.
Defensive War	A war fought to protect territory or sovereignty.
War of Independence	A war fought to gain freedom from colonial rule or foreign domination.
War of Liberation	A war fought to free a people or territory from oppression.
Colonial War	Conflicts that arose as the result of overseas territories being settled by foreign powers creating a colony.
Revolutionary War	A war fought to overthrow a government.

Write down everything you can remember about the different types of war.

WEEK 4
Mathematics

Converting Currency

Useful definitions:

Key Vocabulary	Definition
Exchange Rate	To change from pounds into a foreign currency.
Currency	Currency is the money that a country uses. In the UK we use British Pound Sterling. Different countries use different currencies.
Conversion	When travelling abroad this involves converting currencies into the currency of the country visited.
Estimate	Estimating means making numbers simpler but keeping their value close to what it was. The result is not exact, but it gives an idea of what the total will be.
Sterling	British Pound Sterling is the currency used in the UK

Diagrams:

An exchange rate allows you to change money to different currencies

To convert to a foreign currency you must **multiply** by the exchange rate

$$£1 = \$1.4$$

Example:

What is £25 in dollars?

$$£25 \times 1.4 = \$35$$

To convert back from a foreign currency you must **divide** by the exchange rate

$$£1 = \$1.4$$

Example:

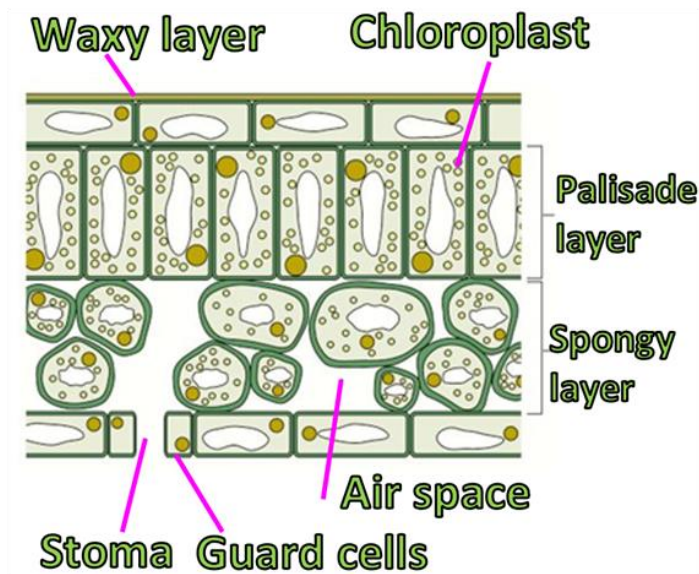
What is \$84 in pounds?

$$\$84 \div 1.4 = £60$$

WEEK 4

Biology

Cross section of a leaf



	are tiny holes in the bottom of the leaf They let gases in and out of the leaf. One of these cells on their own are called Stoma.
	This layer prevents water loss from the leaf from evaporation. It is a transparent layer so sunlight can get to cells below
	surround the stoma in the bottom layer of the leaf. They help to open and close the stoma to allow gases into the leaf.
	contain chlorophyll and is where photosynthesis occurs.
	Layer near the top of the leaf. This is where most of photosynthesis happens
	contains air spaces, allowing carbon dioxide to diffuse throughout the leaf. Oxygen diffuses out of the leaf.
	xylem transports water UP from the soil. Phloem transports food (glucose) DOWN to the roots

WEEK 4
Chemistry

acid + base → salt + water

acid + metal → salt + hydrogen

1. Magnesium + sulfuric acid → magnesium sulfate + hydrogen

2. Zinc + hydrochloric acid → zinc Chloride + Hydrogen

3. Sodium hydroxide + nitric acid → Sodium nitrate + water

4. Copper oxide + sulfuric acid → Copper Sulfate + water

5. Sodium hydroxide + hydrochloric acid → sodium chloride + water

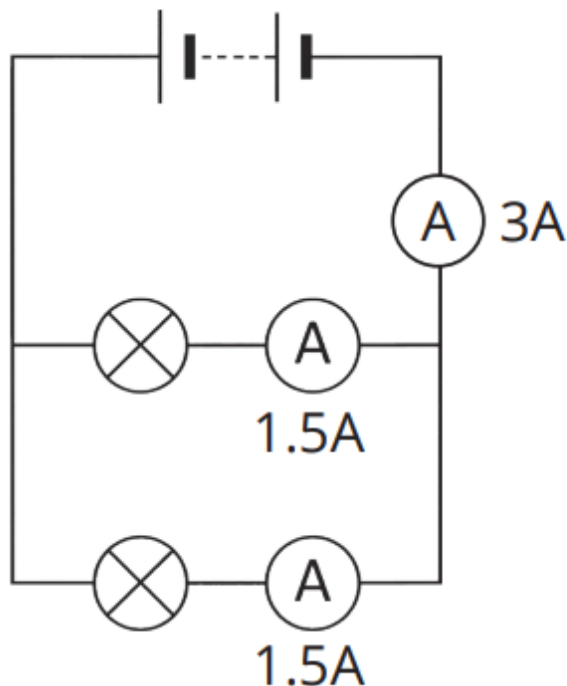
6. Sodium + hydrochloric acid → sodium chloride + Hydrogen

WEEK 4

Physics

Parallel Circuits

In a parallel circuit, the components are connected on separate branches as shown in the diagram below. This gives the current several different paths to flow down. If one bulb stops working, the other bulbs will remain lit as the circuit is still complete.



The **current is split** between the branches in a parallel circuit.

WEEK 4

History

How did countries govern their empires?

Maintain	Maintain and change	Change
<p>Aztec allowed territories to run themselves as they always had.</p> <p>Ashanti chiefs of territories allowed to continue self-rule as long as they acknowledge of the King</p>	<p>Mughal introduced a new tax system but used important locals as tax collectors.</p> <p>Mongol used Yasa (code of law) for the empire. When trying to maintain control ruling was mostly kept to tradition in the territories.</p>	<p>Persian split the empire into areas run by a Persian governor.</p> <p>Roman were run by Roman army generals to give them greater security.</p> <p>British always put their systems of government and law and order in their colonies.</p>

WEEK 4

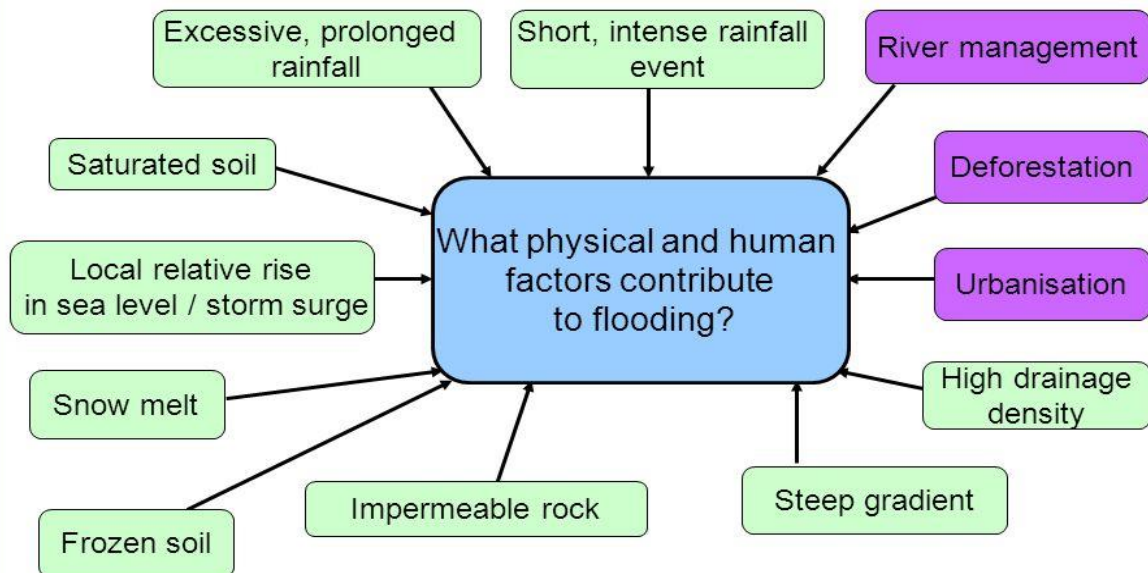
Geography

Starter: Causes of river flooding

Flooding occurs when a river exceeds its bankfull discharge

Human factors

Physical factors



WEEK 4

Spanish

Physical Descriptions

Tiene los ojos.....	He/she has.....eyes
azules	blue
verdes	green
marrones	brown
avellana	hazel

Tiene el pelo...	He/she has.....hair
rubio	blond
moreno	dark
castaño	light brown
pelirrojo	ginger
negro	black
blanco	white
liso	straight
rizado	curly
ondulado	wavy
de punto	spiky
corto	short
largo	long
Lleva gafas	He/she wears glasses
Tiene bigote	He has a moustache
Tiene una barba	He has a beard
Tiene tatuajes	He/she has tattoos
Es...	He/she is
Alto/a	Tall
Bajo/a	Short
delgado	Slim
Gordo/a	Fat
Canta música....	He / she sings...

WEEK 4

Art

Vincent Van Gogh

Who was he?

Vincent van Gogh was a famous Dutch painter who lived a short but busy life. He was born in Netherlands in 1853 and died in 1890. He's known for his beautiful and emotional paintings, even though he didn't become famous until after he died. He painted many famous pictures like "Starry Night" and "Sunflowers".

Art Style

Van Gogh was a post-Impressionist painter, often reflecting his personal feelings and experiences, making his work impactful. He would often apply paint thickly to the canvas, creating a textured, 3- dimensional effect with his brushstrokes. This technique is called impasto.

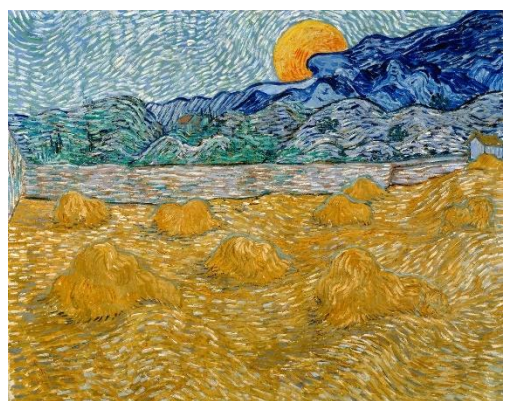
Synthetic coloured pigment was relatively new at the time, and he would use them to achieve vibrant and expressive colours, to convey emotion and emotion.

Prior to creating his pieces, he primed his canvas', and lightly drew out, planned composition and structured his paintings. Within his work, he used swirling, directional brushstrokes, to create a dynamic and energetic quality to his paintings, suggesting movement and vibrations.

Behind the imagery of his work, he often incorporated symbolic meanings into his paintings, using recurring motifs like sunflowers, to represent hope and admiration. Whilst he would predominantly use canvas, and primarily known for his Post-Impressionist style, Van Gogh also experimented with and incorporated elements of Impressionism (everyday scenes, visible brushstrokes, tone and colour), Pointillism (small, distinct dots of colour applied in a pattern), and Japanese woodcuts (relief printmaking, carved from wooden blocks).

Landscapes






Van Gogh's brother Theo encouraged him to paint landscapes, as an exchange for regular financial support. Although Van Gogh sometimes struggled with the technique, his paintings demonstrated an appreciation for natural beauty and colour contrasts. His work frequently included peoples in the distance of his work, this was to show human relationships with nature.



WEEK 4
Personal Development

British Values

Schools follow British values to promote fairness, respect, and equality. They help create a safe, inclusive environment where everyone can learn, grow, and feel valued, no matter their differences. The British Values are as follows:

Democracy	<hr/> <hr/> <hr/> <hr/>	
Rule of Law	<hr/> <hr/> <hr/> <hr/>	
Individual Liberty	<hr/> <hr/> <hr/> <hr/>	
Mutual Respect	<hr/> <hr/> <hr/> <hr/>	
Tolerance of Others	<hr/> <hr/> <hr/> <hr/>	

WEEK 4

ICT

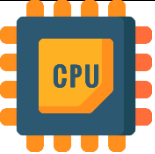
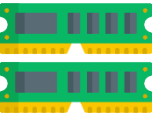



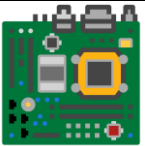
Computer Literacy

In your exercise book, draw a table and write down each key computer component's function.

You must write down the full name of each component.
(For example, write "Central Processing Unit (CPU)".)

You do not need to draw the icons, however you can if you choose.

Useful definitions:

Computer Component		Function
	CPU Central Processing Unit	The CPU acts like the brain of the computer. Its job is to carry out all computer commands.
	RAM Random Access Memory	The RAM stores currently running programs but is wiped when the computer is turned off. This is the "short term memory".
	HDD Hard Disk Drive	The HDD is where your software, documents and files are stored. This is the "long term memory".
	Heat Sink	The heat sink is used to cool down the CPU by taking heat away from it.
	PSU Power Supply Unit	The PSU sends the correct amount of electricity to each computer component so they work. In a laptop or smartphone, it will be a battery instead.
	Motherboard	The motherboard allows all computer components to send signals to each other.

WEEK 5

English Literature

What Is a Mystery Novel?

The mystery genre is a genre of fiction that follows a crime (like a murder or a disappearance) from the moment it is committed to the moment it is solved. Mystery novels are often called “whodunnits” because they turn the reader into a detective trying to figure out the who, what, when, and how of a particular crime. Most mysteries feature a detective or private eye solving a case as the central character.

What Is the Structure of a Mystery Novel?

Some mystery novels break from the traditional format to heighten suspense or play with readers’ expectations. But generally, most mysteries follow roughly the same structure:

1. **The crime.** The audience is introduced to the crime around which the story is based.
2. **Investigation.** The detective works on solving the mystery. They question each suspect, search for clues, and follow new leads in hopes of finding the guilty party.
3. **Twist.** The detective finds a new clue, an unexpected lead, or a crack in a suspect’s alibi that shocks them—and the reader—and changes the course of the investigation.
4. **Breakthrough.** The detective uncovers the last remaining piece of the puzzle and solves the mystery.
5. **Conclusion.** The culprit is caught and all outstanding questions are resolved.

Write down everything you can remember about mystery novels.

WEEK 5

English Language

World War One

Key Points

- In 1914, the most powerful countries in Europe went to war with each other.
- World War One broke out after the assassination of Archduke Franz Ferdinand.
- World War One lasted for four years, from 1914 – 1918, and resulted in the deaths of millions of people.
- Some of the causes of the war dated back to the 1800s and long-term tensions.

Empires

In 1900, the UK had the largest empire in the world, ruling over 400 million people spread across the UK, Africa and Asia. While people around the world had different experiences of the empire, it brought the UK huge amounts of wealth and power. France also had a large empire, making them a powerful European rival for the UK.

Germany was a relatively new country, formed in 1871. They had ambitions to grow an empire to compete with France and the UK. Kaiser Wilhelm II made a famous speech in Hamburg in 1901, saying he wanted Germany to have 'a place in the sun.' Germany's ambition concerned the UK and France, as they started to see them as a potential threat. Germany interfered in French attempts to colonise Morocco in 1911, sending a gunboat called The Panther to Agadir, on the Moroccan coast. Germany was eventually forced to back down, but they had shown their intent to challenge the UK and France.

The Naval Race

In order to build an empire, Germany needed to expand their navy to be able to travel across the seas to other countries. This was a threat to the UK, who at the time had the biggest navy in the world. They had adopted a 'two-power' standard, meaning they wanted their navy to be at least as big as the second and third biggest navies combined. Because the UK is an island, a navy was more important than an army for defence. They had a small standing army, compared to the size of France, Russia, Germany and Austria-Hungary, but their navy was significantly more powerful. This led to a naval race, with countries across Europe building up bigger and more powerful weapons and ships. The UK launched HMS Dreadnought in 1906, which was seen as the first modern battleship, and sparked a naval race with Germany, who wanted to challenge the UK's navy. Future ships built in this style were referred to as Dreadnoughts.

The Assassination of Franz Ferdinand

In 1908, Austria-Hungary had annexed Bosnia. This angered many Bosnian people, who had wanted to join with Serbia, which was also a Slavic country. In 1914, a group was formed called the Black Hand. The Black Hand was a group of Serbians who wanted Austria-Hungary to leave Bosnia and planned to assassinate the heir to the Austrian throne, Archduke Franz Ferdinand, the nephew of Austria-Hungary's emperor Franz Joseph. On 28 June, Ferdinand was visiting Sarajevo in Bosnia. The Black Hand's first attempt at assassination failed when their bomb exploded and missed the car he was travelling in. When Ferdinand ordered his car to take him to visit the injured in hospital, it drove back past one of the assassins, Gavrilo Princip. He fired two bullets, killing both Franz Ferdinand and his wife, Sophie.

Write down everything you can remember about World War One.

WEEK 5
Mathematics

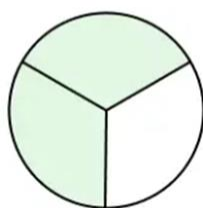
Fractions

Useful definitions:

Key Vocabulary	Definition
Numerator	The numerator is the top number in a fraction. It represents the number of parts being considered out the whole.
Denominator	The denominator is the bottom number. It indicates the total number of equal parts the whole is divided into.
Simplify	The process of simplifying a fraction is to make the numbers in a fraction smaller. To simplify a fraction, you need to divide both the numerator and denominator by their highest common factor.
Reciprocal	The reciprocal of a number is explained as the number you multiply to get 1. The reciprocal of 5 is $\frac{1}{5}$. The reciprocal of $\frac{1}{3}$ is 3.
Vinculum	The vinculum is the line that separates the numerator from the denominator. It represents division.

Diagrams

Fractions
Parts of Fractions



$\frac{2}{3}$

→ Numerator
→ Vinculum
→ Denominator

WEEK 5

Biology

Plant minerals

When crops are harvested, minerals are removed from the soil in that field.

These would normally be replaced when the plant dies, or when leaves are shed.

The next crop in the field won't have enough minerals(elements) to grow properly (deficiency).

Farmers add chemicals to the soil to replace missing minerals(elements).

These chemicals are called fertilisers.

Using fertilizers makes crops grow bigger and faster than they would do naturally.

Making proteins for healthy growth = Nitrogen

Healthy roots = Phosphorous

For healthy leaves and flowers = Potassium

Making chlorophyll (green) = Magnesium

WEEK 5

Chemistry

Pure molecule	Atoms bonded together are the same
Compound molecule	Atoms bonded together are different
Mixture	Atoms or molecules can be separated quite easily

The soluble solids “disappear”. Insoluble solids float or sink to the bottom of the container	dissolve
Only particles that are smaller than the holes can get through. Larger particles will not be able to pass through.	sieve
This will attract materials such as iron and leave non-metal materials behind.	magnets
Has tiny holes in it (so small you cant see them). Only extremely small dissolved particles can get through the holes. Large particles will stay on the paper.	filter
When the liquid has gone, anything that was dissolved in it will be left behind and will form a solid	evaporate

WEEK 5

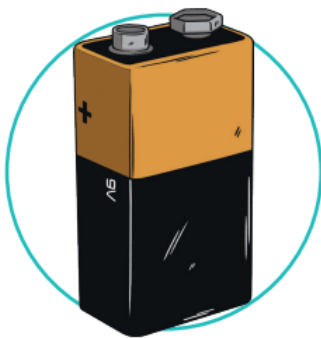
Physics

Batteries

Batteries store **chemical energy** and transfer it as electric current in a circuit.

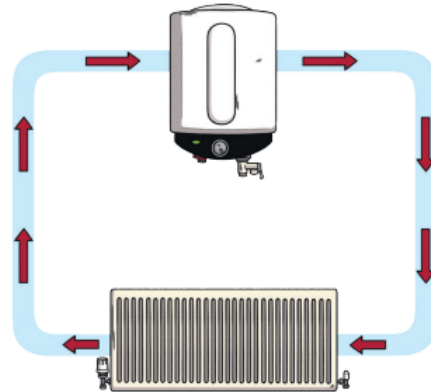
The potential difference of a battery tells us how much **energy** it provides to the components in the circuit.

Batteries contain an **electrolyte** and **two electrodes**. One of the electrodes is **positively charged** and the other is **negatively charged**. A chemical reaction between the two electrodes creates a flow of electrical energy to the circuit.



Modelling Circuits

Scientists often use models to help them to explain difficult concepts. Some models are better than others.



In the boiler and radiator model, the pump pushes the water around the system. It does a similar job to a **battery** pushing the **charges** around a circuit. The pipes carry the flow of water around the system, like the **charge** flowing through wires in a circuit. The radiator is similar to a bulb because it transfers **energy** supplied by the system to the surroundings.

WEEK 5

History

Religion

Romans were tolerant of other religions.

Mongols were tolerant of most religions, they were known for organising competitions of religious debates.

Mali wanted everyone to be Muslim but after facing resistance allowed people to continue to believe what they liked.

British forced all in their colonies to become Christian and did not respect the religious beliefs that were held before.

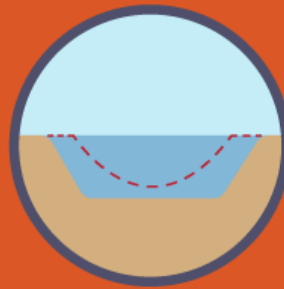
Mughal enforced religious tolerance and encouraged conversations between religious leaders at the House of Worship

WEEK 5

Geography



Levees and embankments – built along riverbanks to manage flooding



Straightening and deepening – changing the river to carry more water or move in a different direction



Flood walls – built to raise the height of the riverbank



Dams – built to hold back water



Washlands – allowing areas downriver to flood



Afforestation – planting trees near rivers to intercept water

Land use zoning – deciding which areas are likely to flood:
Red – probable
Green – possible
Yellow – unlikely



WEEK 5

Spanish

Positive influences in the world

Es	He/she is
un influeciador	an influencer
un buen modelo	a good role model
son	They are
personas famosas	famous people
cantantes famosas	famous singers
raperos	rappers
actores	actors
tiktokeros	tiktokers
deportistas	sports people
artistas	artists
políticos/as	politicians
porque son	because they are
graciosos/as	funny
educativos/as	educational
emocionantes	exciting
relajantes	relaxing
informativos/as	informative
útiles	useful
motivantes	motivational
poderosos/as	powerful/influential
inspiradores/as	Inspirational

WEEK 5

Art

Emotional response to colour

Colour psychology is the study of how different hues affect human behaviour and emotions. It explores the emotional associations people tend to make with different colour and how those associations can influence mood, perception, and even decision making.

These are just a few examples:

Warm Colours:

Red – Often associated with passion, energy, excitement, and also the opposite, anger, danger and aggression.

Orange - Can evoke feelings of enthusiasm, creativity and warmth.

Yellow – Frequently linked to happiness, optimism and intellect.

Cool Colours:

Blue – Generally associated with calmness, peace, and tranquillity, but can also evoke feelings of sadness.

Green – Often linked to nature, growth, balance, relaxation and comfort.

Purple – Can be associated with luxury, creativity and spirituality.

Other:

White – Often linked to purity, innocence and cleanliness.

Black – Can be associated with power, elegance, and sophistication, but equally, mourning, mystery and negativity.









Grey – Often associate with neutrality, balance and calmness.

It's also important to note that cultural backgrounds can also play a significant role in how colours are perceived and interpreted. Understanding colour psychology can be beneficial in various fields. In marketing, colour can be used to influence consumer behaviour, for example the colours red and yellow together can create a sense of hunger. In interior design, colour can create a sense of space.

WEEK 5

Personal Development

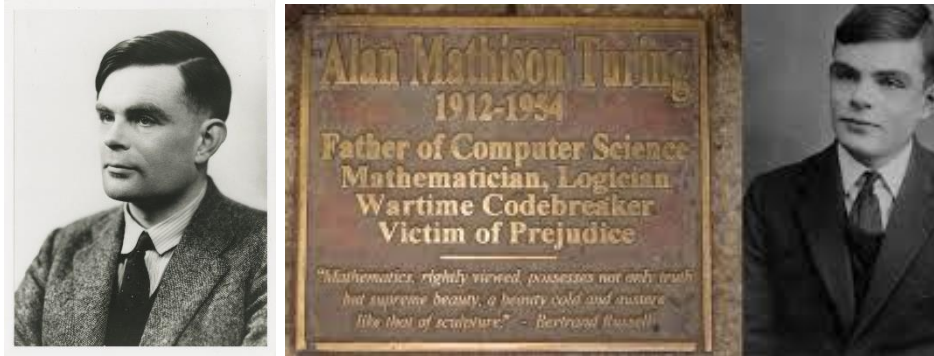
Protected Characteristics

Age	People cannot be treated unfairly because they are young or old. Everyone deserves respect, no matter their age	 AGE
Disability	People with physical or mental disabilities must be treated fairly, with reasonable adjustments made to support them in school, work, and life.	 DISABILITY
Gender Reassignment	A person is considered to be <i>transitioning</i> if they change their gender through actions like changing their name, pronouns, appearance, or having medical treatment to match their identity.	 GENDER REASSIGNMENT
Marriage and Civil Partnership	People must be treated equally whether they are married, in a civil partnership, or single.	 MARRIAGE AND CIVIL PARTNERSHIP
Pregnancy and Maternity	Pregnant people and new parents must not be treated unfairly because they are having or have had a baby.	 PREGNANCY AND MATERNITY
Race	No one should be treated unfairly because of their skin colour, nationality, or ethnicity (a person's cultural identity, which may include shared language, traditions, and history).	 RACE
Religion or Belief	Everyone has the right to follow their religion or beliefs, or to have no religion, without discrimination.	 RELIGION OR BELIEF
Sex	People must not be treated unfairly because they are biologically male or female.	 SEX

WEEK 5

ICT

Alan Turing – The Genius Who Change the World



Alan Turing was a **British mathematician**, born in **1912**. He loved solving puzzles and thinking logically. His biggest idea was that machines could follow instructions to solve problems - a concept that became the basis of how modern computers and devices work today!

During **World War II**, Turing worked in secret at **Bletchley Park**. He helped crack the **German Enigma code** — something thought to be unbreakable. His work helped end the war faster and saved millions of lives.

The **Enigma code** was used by the German military in World War II to hide secret messages. It scrambled letters differently each day, making it almost impossible to read. Turing and his team built a machine to crack it, letting them read German messages which helped them win the war!

Turing's codebreaking helped inspire **modern encryption** which is how we keep our data safe and private. It protects things like passwords, messages, and bank details, so only the right person can access them.

He's now remembered as one of the most important figures in computing. The **Turing Award** - a top prize in computer science - is named in his honour.

Write down as much as you can remember about Alan Turing in your exercise book.

WEEK 6

English Literature

The Curious Incident of the Dog in the Night-Time: Characters

The action in *The Curious Incident of the Dog in the Nighttime* revolves around the protagonist Christopher Boone. Initially, the audience watches him interact with Mrs Shears (the owner of Wellington the dog), his teacher, Siobhan, and his father, Ed. Once Christopher begins his investigation into the murder of Wellington he comes into contact with Mrs Alexander, his elderly neighbour, and as his story moves to London, he makes contact with Judy, his mother whom he thought was dead, and her boyfriend, Roger who was married to Mrs Shears.

Christopher meets several minor characters along the way including 'Man with Socks', 'Punk Girl', a few policemen, Reverend Peters and his head teacher, Mrs Gascoyne.

Main characters:

Christopher Boone

Ed Boone

Judy Boone

Secondary characters:

Siobhan

Roger Shears

Mrs Alexander

Minor characters:

Mrs Shears

Reverend Peters

Mrs Gascoyne

Write everything you can remember about the character in *The Curious Incident of the Dog in the Night-Time*.

WEEK 6

English Language

In the Trenches

The trenches systems were on every front of World War One.

A front is a stretch of land where warring countries confront each other and engage in battle. Trenches were widespread on the Western Front - a 400-plus mile stretch weaving through France and Belgium and down to the Swiss border. This is where the majority of British and Irish soldiers fought in World War One. Though they also saw action in:

- Gallipoli (modern day Turkey)
- Mesopotamia (modern day Iraq)
- Africa

If you were a soldier on the front line, you would most likely be operating out of a trench.

Trenches became valuable to WW1 armies because they were a defensive solution to modern weaponry.

Weapons for Fighting

It had been over fifty years since the last war between the major powers. In that time armies had modernised and developed new war-fighting technologies. As a result, attacking soldiers faced unprecedented firepower.

Machine guns were now capable of firing hundreds of rounds per minute and a modern rifle could be repeatedly fired. Furthermore, artillery - weapons for discharging missiles - were firing explosives and releasing shrapnel, shells that exploded in the air firing metal fragments towards the enemy.

Defence became the priority, the digging of trenches developed and they were employed for the duration of the war.

Illness

Soldiers in the trenches were confronted by a range of hardships and a variety of illnesses. Conditions varied depending on where you were fighting, what the weather was like and the time of year.

In 1914, the winter weather was particularly bad with enormous amounts of rain. Soldiers could find themselves standing in muddy water for days on end and this could lead to a condition known as Trench Foot. Small cuts and blisters on the feet would become infected, leading to numbness, swelling and even gangrene. Many lost toes and in extreme cases had a foot amputated. Trench Foot resulted in many soldiers losing toes and in extreme cases having a foot amputated.

However, on other fronts, such as Gallipoli, it was flies rather than mud that caused issues. Soldiers lacked the protective clothing to avoid being bitten. The flies caused hygiene problems and several thousand soldiers died of dysentery.

Another common problem among the soldiers was lice. Due to poor hygiene, overcrowding and a lack of fresh clothing, many soldiers would find themselves infested. In some cases, the lice spread an infection known as 'trench fever'. One way of killing the lice was to 'pop' them with the end of a cigarette. Soldiers also shared the trenches with pests such as rats. They were attracted by the stores of food and rotting bodies. Many soldiers remarked on their size and the phrase 'rats as big as cats' was often recorded in letters and diaries.

Write everything you can remember about life in the trenches.


WEEK 6
Mathematics

Fractions

Useful definitions:

Key Vocabulary	Definition
Integer	An integer is a whole number
Mixed number fraction	A mixed number fraction has a whole number part and a fraction part.
Improper fraction	An improper fraction has a numerator greater than its denominators.
Algebraic fractions	An algebraic fraction is where the numerator and/or denominator are algebraic expression.
Product	To find the product of fractions, you multiply the numerator together and then multiply the denominator together.

Diagrams:

$$4\frac{2}{3}$$
$$4 \times 3 + 2 = 14$$
$$4\frac{2}{3} = \frac{14}{3}$$


The diagram consists of five vertical rectangles. The first four are completely filled with blue. The fifth rectangle is divided into three horizontal sections; the bottom two sections are filled with blue, and the top section is empty, representing the fraction 2/3.

WEEK 6

Biology

Chemosynthesis

Bacteria that perform chemosynthesis are called chemosynthetic. They live in places without light.

Chemosynthesis reactions:

- use chemicals as their source of energy
- often use carbon dioxide as a reactant
- have glucose as a product.

Sulfur bacteria are found at the bottom of the sea near volcanic vents.

Hydrogen sulfide pours out of the vents.

The sulfur bacteria turn the hydrogen sulfide into sulfur by chemosynthesis.

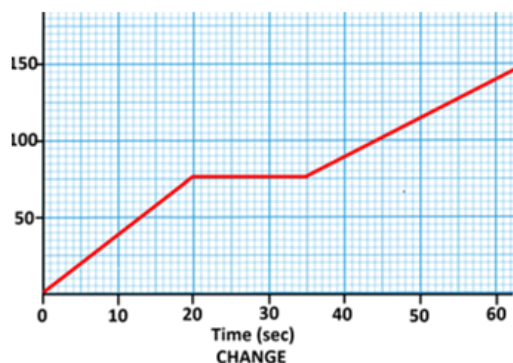
This produces organic molecules, which they use as nutrients.

Nitrogen bacteria perform chemosynthesis using nitrogen compounds. They live in the soil and roots of some plants.

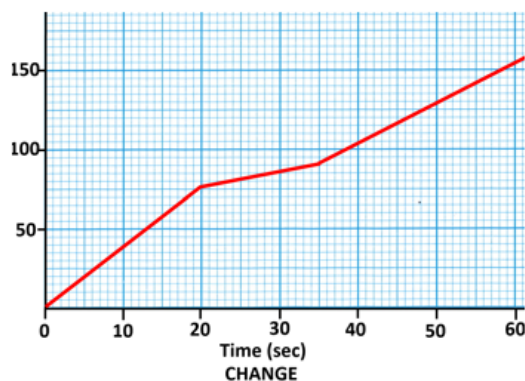
WEEK 6

Chemistry

- Every PURE substance has its own distinct melting and boiling point
- If you had a substance and its melting point is not a single point, it is probably a MIXTURE.



A pure substance has a sharp melting point and stays at a fixed temp until it all melts/boils.



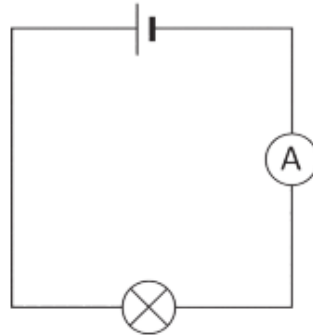
A mixture does not have sharp melting point

WEEK 6

Physics

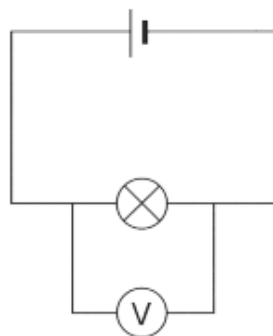
Current

Current is the flow of electrical charge around a circuit. The faster the flow of charge, the higher the current. Current is measured in **amps (A)** using an **ammeter**. An ammeter is connected in **series** with the component.



Potential Difference

Potential difference tells us how hard the battery 'pushes' the electrons around the circuit: the larger the potential difference, the bigger the 'push'. Potential difference is measured in **volts (V)** using a **voltmeter**. A voltmeter is connected in **parallel** with the component.

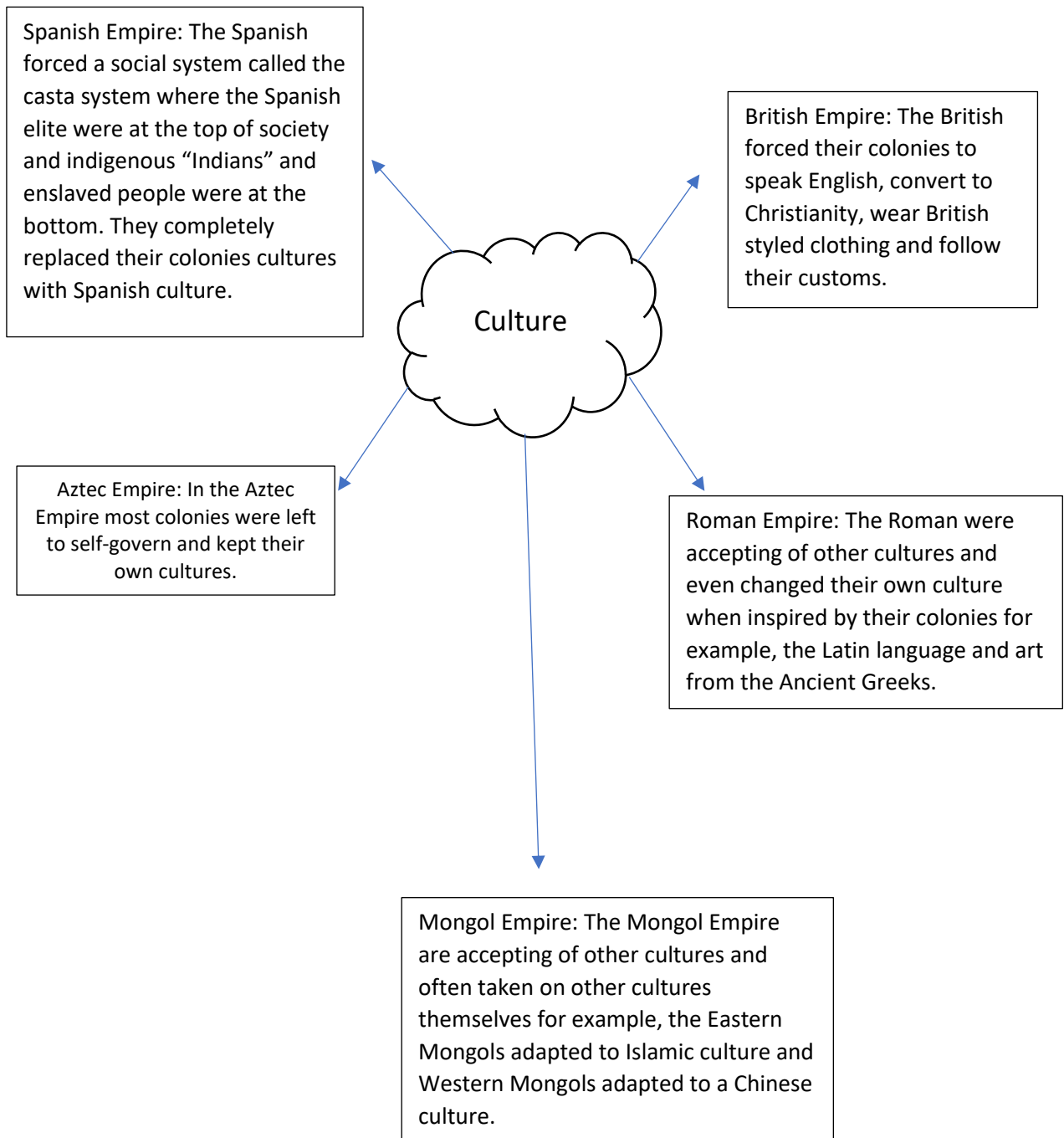


WEEK 6

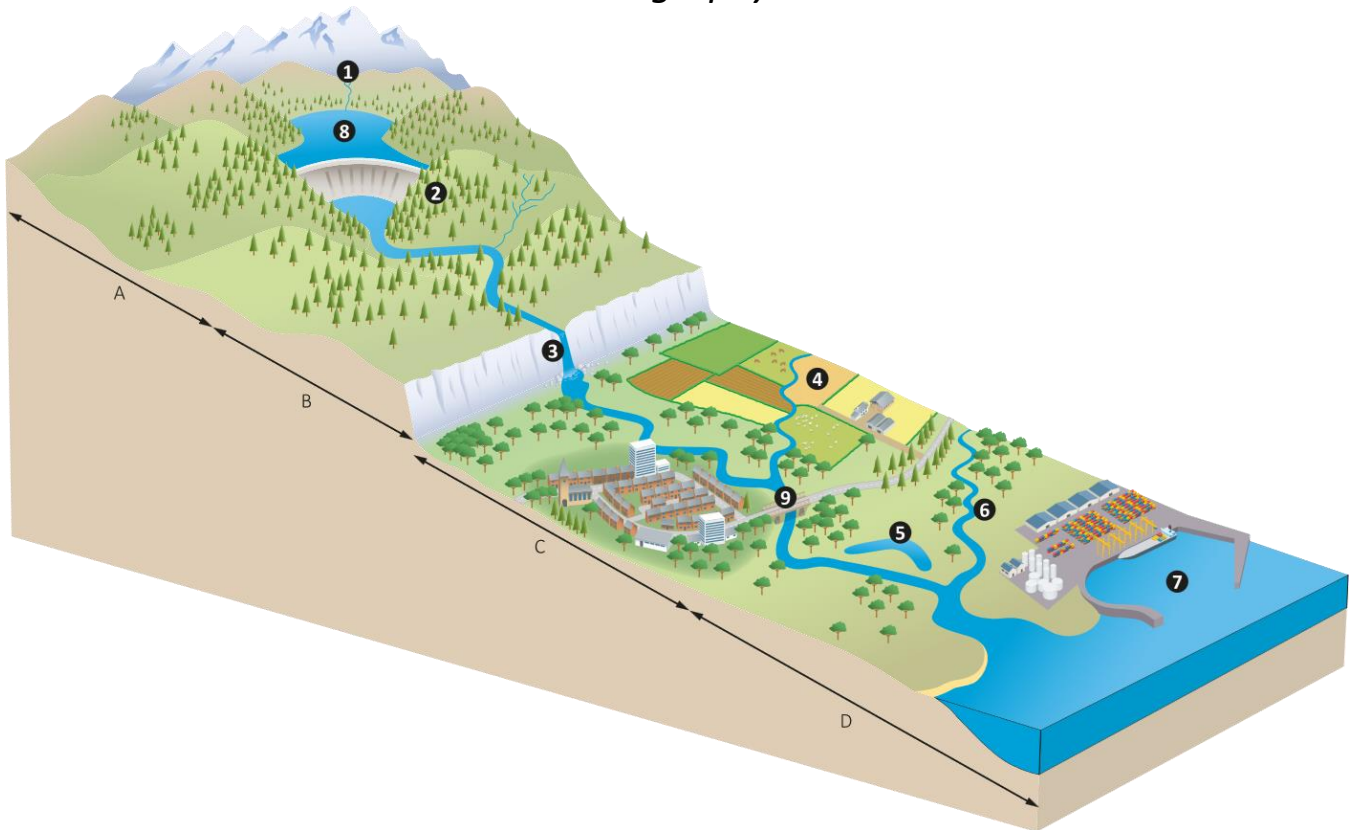
History

Culture= The beliefs, social norms and traits of a social groups. Including food, music, celebrations and art.

In some empires the culture of the colonising nation is forced on the colonies.



WEEK 6
Geography



Label each of the features that are numbered on the diagram.

WEEK 6

Spanish

Positive influences in the world

Ayuda a..	He/she helps..
Apoya	supports
los niños	children
las familias pobres	poor families
los hospitales	hospitals
los jóvenes	young people
Lucha por...	He/she fights for...
la igualdad	equality
la igualdad de oportunidades	equal opportunities
un mundo mejor	a better world
la justicia	Justice
Da mensajes positivos	Sends positive messages

WEEK 6

Art

Claude Monet

Monet was born in Paris in 1840 and as a child he showed great talent as an artist. In 1872 he painted a picture of a harbour using very loose brushstrokes. He called the picture *Impression, Sunrise* and exhibited it along with paintings by his friends who also painted 'en plein air'. The artists became known as the impressionists after the title of Monet's painting.

Impressionism:

Impressionism is a style of painting that began in France in the early 1860s when artists started painting pictures outside, rather than in their studios. This was called 'en plein air' (which is French for open air). They wanted to capture moments in time. Because the light conditions kept changing, they had to work very quickly, using quick, gestural brushstrokes of paint.

Subject matter:

Claude Monet's primary subject matter was landscapes and scenes of modern life, with a particular focus on capturing the effects of light and colour. He is well-known for his series paintings, where he depicted the same subject at different times of the day and in varying weather conditions.

The landscapes he painted frequently featured scenes of nature, gardens, rivers and coastal areas. He also depicted the bustling life of Paris and its surrounding areas, scenes such as streets, train stations and public gatherings.






He also created series paintings which allowed him to demonstrate his interest in capturing the changing effects of light and atmosphere. He liked to showcase how the weather could alter the appearance of a scene.



WEEK 6
Personal Development

British Values

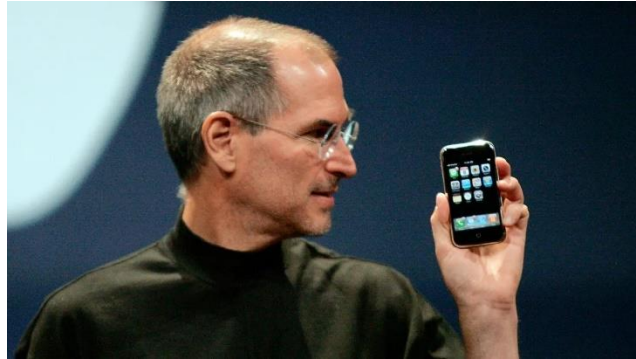
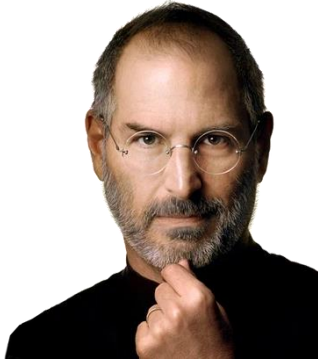
Schools follow British values to promote fairness, respect, and equality. They help create a safe, inclusive environment where everyone can learn, grow, and feel valued, no matter their differences. The British Values are as follows:

Democracy	<hr/> <hr/> <hr/> <hr/>	
Rule of Law	<hr/> <hr/> <hr/> <hr/>	
Individual Liberty	<hr/> <hr/> <hr/> <hr/>	
Mutual Respect	<hr/> <hr/> <hr/> <hr/>	
Tolerance of Others	<hr/> <hr/> <hr/> <hr/>	

WEEK 6

ICT

Steve Jobs – The Visionary Behind Apple



Steve Jobs was an **American inventor** and **entrepreneur** who changed the way we use technology. In **1976**, he started a company called **Apple** with his friends Steve Wozniak and Ronald Wayne, working from a small garage!

Their goal was simple: build easy-to-use computers for everyone.

Steve Jobs helped create the **Macintosh** (now called the Mac), the first computer with a graphical screen and mouse that anyone could use. Later, he led the team that invented the iPod, iPhone, and iPad, which millions of people now use each day!

Apple were not successful from Day One. In fact, **Steve was fired from Apple** after a bit of a clash. Instead of giving up, he founded a new company called NeXT and bought an animation studio which eventually became **Pixar**.

Eventually, Apple bought NeXT which meant that **Steve Jobs returned to Apple**. He started as an advisor but soon climbed up the ladder to become the CEO – the head of Apple.

Today, Apple make lots of devices that millions of users use every day. In fact, the original iPhone (released in 2007) was a **game-changer in smartphone technology**. It combined a phone, music player and internet device all in one package – something other companies struggled to make. Nowadays, almost all devices follow this trend!

Write down as much as you can remember about Steve Jobs in your exercise book.