



**BRISTOL
METROPOLITAN
ACADEMY**

Monday 6th January	Week A
Monday 13th January	Week B
Monday 20th January	Week A
Monday 27th January	Week B
Monday 3rd February	Week A
Monday 10th February	Week B

Please note: Maths homework will be on an online platform for this term. It will be set and checked weekly separately from the timetable.

Knowledge Organisers 2024-25 Year 8 – Term 3

Complete your homework on the night stated e.g. if it is a Monday Week A you will complete ICT/DT

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

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This Knowledge Organiser is to help you see the key information for each subject for this term. You can use this to help you both with homework and with revision, supporting your learning at home. In the table below you will find the instructions for each subject to be completed on the correct day.

Subject	Tasks
Maths	Homework question tasks/sets will be set weekly on an online platform. You will have one week to complete this online, before it is checked for competition and the next set is published.
Science	For term 1 this will be directed by your classroom teacher. It could involve an online platform too.
English	Using the separate question booklet, divide your homework book page in half length ways, write the questions out on the left hand side. First, attempt to answer the questions from memory/your own knowledge. Then use your knowledge organiser booklets to check your answers and fill in the missing ones.
MFL	Find the correct date in the KO and the question booklet. With the list of 10 key words for that week, complete the look – say - cover – write – check method in your homework book. Complete this process for each word/phrase 4 times each.
Geog/Hist/RS /DT	Same process as outlined for English above. DT have 5 questions and not 10.
ICT	For term 1, continue to use the KO to do revision/key words etc in your homework books.
Music/Art	For music and art, you will have two practical tasks to complete each term for each subject. These will be found in the question booklets and will be checked by you classroom teacher.

At the back of this booklet, you will find: Sentence starters, a history chronology, DT sentence starters, a periodic table, maps of the world, subject websites, a RAG sheet and a timetable.

How to present your homework:

Subject written on the left-hand side of the page and underlined.
For example: Food

Topic written on the centre of the page and underlined.
For example: Sugars

One single straight line between both pieces of homework.

Subject: Food Tuesday 25th June 2019

Topic: Sugars

Keyword	Definition
Monosaccharides	
Disaccharides	
Intensive sugars	
Polysaccharides	

Subject: English

Topic: Macbeth

- Who are the four most important characters in Macbeth?
Macbeth, Lady Macbeth, Banquo and Macduff.
- What are three character traits of Banquo?
Gullible, superstitious and ambitious.
- How would you describe Lady Macbeth?
She is manipulative, cold-blooded and cruel.
- How is Lady Macbeth two-faced?
She is warm and welcoming to Duncan, and then manipulates her husband to kill him.
- What is the name of Banquo's son?
Fleance

Date written fully on the right-hand side of the page and underlined. This should be the day you complete the homework.

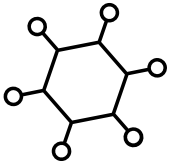
Home Learning Strategies to help you revise

Brain Dump



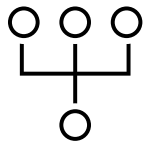
Write down everything you know about a certain topic on a page. Use your KO to add extra notes in a different colour.

Mind Map



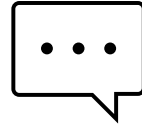
Condense a topic showing the important links and connectors between key parts. Use your KO to add in extra notes.

Diagram



Draw a clear diagram for a subject including labels and key features. Make sure you use correct vocabulary and spellings.

Vocabulary



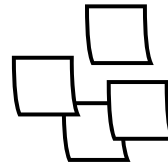
Learn the key words associated with a topic and commit the word and spelling to memory. Test yourself or ask someone else to test you.

Retrieval Quiz



Write key questions about a topic as well as the answers. Use the content of the KO to help you. Check to see if you can remember the answers without looking.

Compare



Complete a comparison table showing two different sides of a topic. Can you use it to create an argument for one viewpoint?

Year 8 Creature & Characters

Content: In this project you will

Knowledge—of different artists who create creatures and characters

Understand—What inspired artists to create their work and how to write about the work

Skills—drawing, collage, painting, clay and showing the influence of other artists in your own work and presentation

Outcome— a 3D monster and watercolour painting



Nicola L Robinson is an illustrator for children's books. She is interested in mythology, history and fairy tales. Her favourite media to work in is 'pen and ink.' She is still working around the UK.

Artists



Alex Lucas is a Bristol based artist, who creates illustrations in a range of media. He also creates murals on walls and garages around the city. Keep an eye out for his artwork!



Cressida Cowell

Keywords

Illustration—a decoration, interpretation or visual explanation of a text.

Texture—used to describe how an object would feel when touched

Complementary Colours—opposite each other on the colour wheel

Analysis

All artist research pages should be annotated

Artwork-

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

Sentence starters

I like/dislike the way the artist has used...because

I think the colour scheme used is effective because...

I think the artist has been inspired by...because

Evaluation of Your Artwork-

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

Consider

Mythology, Fantasy and Surrealism as sources of inspiration

Assessment

D	Demonstrate a deepening knowledge, understanding and skill
O	On Track—demonstrate some knowledge, understanding and skills
Y	Yet to be on track—developing some knowledge, understanding and skills
A	At an earlier stage—starting to develop some knowledge, understanding and skills

Website Design (HTML)

Year 8P (Theme 3)

Knowledge Organiser

Key words

Web Browser
Hyper Text Markup Language (HTML)
Hyperlink
Web Page
Website

Hyper Text Markup Language (HTML) is a basic scripting language for building web pages. It uses a set of pre-defined tags that the web browser then interprets and displays them. Common browsers include: Google Chrome, Microsoft Edge, Safari, Firefox. HTML can be written in specialist software or in a simple text editor like Notepad (++). By simply saving the document with a file extension .HTML, it can be opened and viewed as a webpage from a web browser.

Basic tags

Most tags have a start and an end
<html> is the start tag indicating the beginning of the page
</html> is the end tag for the end of the page
A webpage is split into 2 sections:
<head> section contains the web page's properties, including the page title and CSS code
<body> section contains everything that is visible on the page when viewed in a browser

Headings

<p> is the paragraph tag. Text inside is put in a new paragraph
<p> This is an example </p>
<h1> indicates the main title of the page (the largest text)
<h2> indicates the next largest text
h3, h4, h5 and h6 are other levels of heading, getting smaller from <h1> being used for the largest text
<h3> This is a title </h3>

Example of basic HTML

```
<html>
<head>
<title> My ace web page </title>
</head>
<body>
<p> Welcome to my web page </p>
</body>
</html>
```

Attributes

Attributes provide additional information about HTML elements. They are expressed in the form name = "value"
width="120"
alt = "Picture of a cat"
src="mypic.gif"
ref="page4.html"
border="1"

Tables

HTML tables allow web developers to arrange data into rows and columns. Tables are organised by row, then each row is divided into divisions. A table starts with a <table> tag and ends with a </table> tag. Each row is defined by a <tr> tag and ended with a </tr> tag. Each division in each row is defined by a <td> tag.

Tables Example

```
<table border=1>
<tr> <td> top left </td>
<td> top right </td> </tr>
<tr> <td> bottom left </td>
<td> bottom right </td> </tr>
</table>
```

Top left	Top right
Bottom left	Bottom right

Adding images

The tag for adding an image is with the attribute src (source of the image). The image must be saved in the same folder as the web page (or a subfolder within it).

No end tag is required.

Adding hyperlinks

The <a> tag is used for creating links. It requires a Hyperlink reference. It can be applied to some text or an image.
Text Hyperlink:
 Click here to go to BBC Website
Image Hyperlink:

CSS (Cascading Style Sheets)

Cascading Style Sheets (CSS) can be used to change the style of a whole website, one web page or a single occurrence of an element, e.g. <h1 style="text-align:center">

Example of CSS written in the Head section:

```
<head>
<style>
body {background-color: powderblue;}
h1 {color: blue;}
p {color: red;}
</style>
</head>
```

CSS Syntax



Key themes

The most obvious theme in *Romeo and Juliet* is that of love, but the play deals with many other important ideas too. Shakespeare invites us to examine the importance of fate, death, honour, friendship and duality. All of these themes are still relevant today, which is why the play is still popular after all these years.

The main themes in *Romeo and Juliet* are:

- love
- fate
- duality (or opposites)

Romeo and Juliet - Plot summary

Romeo and Juliet is a play written by Shakespeare. It is a tragic love story where the two main characters, Romeo and Juliet, are supposed to be sworn enemies but fall in love. Due to their families' ongoing conflict, they cannot be together, so they kill themselves because they cannot cope with being separated from one another. *Romeo and Juliet* is a Shakespearean **tragedy**.



1. Two wealthy families, the Montagues and the Capulets, have another brawl in the city of Verona. The Prince and the townspeople cannot cope with the constant fighting so the Prince declares that the next person to break the peace will be killed.
2. Romeo Montague and his friends gatecrash a Capulet party and Romeo meets Juliet Capulet. He falls in love with her instantly. They are shocked to discover they are sworn enemies due to their feuding families. Friar Laurence marries Romeo and Juliet.
3. Romeo goes to celebrate his marriage with his friends, Mercutio and Benvolio, but gets into a fight with Juliet's cousin, Tybalt. Tybalt kills Mercutio and Romeo avenges his death by killing Tybalt.
4. The Prince banishes Romeo because he killed Tybalt. Both Romeo and Juliet are heartbroken.
5. Capulet, Juliet's father, decides she should marry Paris. Juliet refuses and goes to Friar Laurence where they come up with a plan for Romeo and Juliet to be together.
6. Juliet fakes her death and lies in a tomb waiting for Romeo to come so they can run away together. Romeo doesn't receive the message about the plan, so thinks Juliet has actually died. He goes to Verona and sees Juliet in her tomb, 'dead'.
7. Romeo drinks poison so he can be with Juliet in death. She wakes up to discover Romeo is dead. Juliet kills herself with his dagger.
8. The Capulet and Montague families vow never to argue again.

The very first word of this play is **"two"**, and throughout the play we are presented again and again with pairs of people and concepts. In terms of people we have Capulets and Montagues, Romeo and Juliet, Tybalt and Benvolio. As you can see, sometimes the pairs are complementary and work together. Other times they are opposites. We also see duality in the main ideas the play deals with. For example, love and hate, war and peace, home and exile. Perhaps Shakespeare was trying to show us that everything is part of a whole.

The main theme of love is introduced at the very beginning by the Chorus who tells the audience that this is a play about **"star-crossed lovers"**. When we first meet Romeo he is love-sick for Rosaline and talks to Benvolio about how painful love can be.

During the Capulet's party, we are presented with 'love at first sight' when Romeo and Juliet fall instantly for each other. The romantic love between the couple develops throughout the play and for them love ultimately leads to death.

We also see the strength of love between friends when Mercutio stands up to take Romeo's place in a fight with Tybalt.

Parental love is also explored when Capulet suggests that his daughter is too young to marry Paris. He is protective of Juliet. Later when Tybalt dies, Capulet brings the wedding between her and Paris forward, as he thinks this celebration will ease her grief.

Opposites and oxymorons

"Feather of lead, bright smoke,

COLD FIRE,
sick health!"



In this play, two families are at war, the Capulets and Montagues. These two sides can be seen as opposites. Throughout the play, Shakespeare highlights other opposites that we find in life.

- life and death
- love and fate
- light and dark

This emphasizes the hate and the love that exists between the two families.

When words with contradictory meanings are placed side-by-side, it is called an oxymoron. Again, they highlight the contradiction between Romeo and Juliet's love against the backdrop of their warring families.

The prologue introduces the theme of fate when the lovers are called **"star-crossed"** and **"death-marked"**. This means that the events of their lives, and their deaths, are somehow already decided.

There are lots of incidences throughout the play when the main characters refer to omens that hint at their tragic ending. For example, before the Capulet party, Romeo feels worried that something bad is **"hanging in the stars"**. Later when Juliet looks at Romeo from the balcony she is upset that she sees him **"as one dead in the bottom of a tomb"**.

We know from the start of the play that the lovers will die, and the events all lead to this tragic end.

Imagery and metaphor

"It is the east, and *Juliet* is the sun."



Imagery in *Romeo and Juliet* is vivid and often poetic. It adds to the feelings that the characters express and often makes the language of the play beautiful and romantic. For example, when Romeo spots Juliet on her balcony, instead of saying "Oh, she looks nice!" he says **"It is the east, and Juliet is the sun."** This image of Juliet as the sun shows us how bright she appears to him. The sun is necessary for life, so perhaps Romeo is suggesting that Juliet is essential for his life.

Year 8 D&T – Night Light Project

- A** is for **Aesthetics**
- C** is for **Cost**
- C** is for **Customer**
- E** is for **Environment**
- S** is for **Size**
- S** is for **Safety**
- F** is for **Function**
- M** is for **Material**

Analyse the Dinosaur Night Light by using ACCESS FM



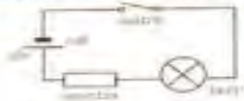
You can use ACCESS FM to analyse existing products, write a specification, annotate designs and to evaluate the final outcome!

Remember to consider the sustainability of your design – try using the 6 R's!



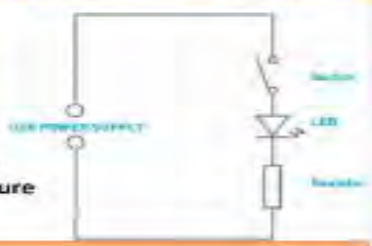
Electrical Systems Involve Circuits

- All electrical systems need to have a **complete circuit** to make them work. Here's a simple circuit:
 - The circuit must be **complete** — meaning all the parts (when you connect the wires) must make a complete loop. Otherwise, the current flows out but never comes in.
- The materials you use in a circuit have to be **conductive** — they need to let electricity flow through. E.g. **copper** is used for the wire that joins the components because it's a **good conductor** and is **cheap**.
- Insulators** (e.g. PVC) don't let electricity through, so they're used to coat the outside of wires.
- Voltage** from a power cell (a battery) or the mains pushes the electric current around a circuit.
 - Some components used for controlling the current are **resistors** and **transistors**.
 - Batteries are used if possible wherever there are **disposable** batteries and **rechargeable** ones.
 - Most **resistors** are **disposable** and more expensive than **disposable** but they can be reused in the next design if you don't need to buy replacing them. They're **built into** some products e.g. mobile phones.
- Resistors** are used to **control** the current in a circuit so you don't damage delicate components (e.g. the lamp in the circuit above). Resistance is measured in **ohms** (Ω). A **larger** resistance means **less** current flows.



Night Light Circuit Diagram

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



CAD = Computer Aided Design
CAM = Computer Aided Manufacture



Practice your tonal drawing skill here

Use modelling to improve your design
Modelling is a good way to solve problems with your design. You can make models using card as it's cheap and easy to work with. When modelling, try out different aspects of your design. For example, you could model just one part of the product separately, to check it works, before going on to the rest.

Develop Ideas with Sketches

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



Practice your isometric drawing here

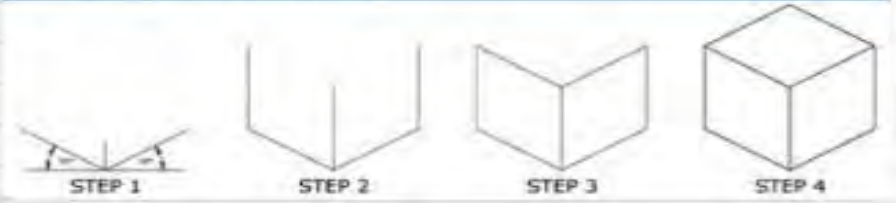
Isometric Drawing Shows Objects at 30°

- Isometric drawing can be used to show a **3D picture** of an object.
- It **doesn't show perspective** (things don't get smaller in the distance), but it's **easier to get dimensions** right.
- There are **three main rules** when drawing in isometric:
 - Vertical lines are drawn as normal (vertical).
 - Horizontal lines are drawn at 30°.
 - Recalling a 3D object, do you what angles.



Test and evaluate each model

- After you've made each model, do some tests to check that it's how it should be. Get some potential customers to try it out and give you feedback too.
- You'll probably find there are some things that don't work out quite how you'd hoped. Write down what the problem is, suggest how to fix it and try out another model.
 - Record how the design develops – take photos of your models.
 - You should evaluate each model, against the design by considering the strengths and weaknesses.



Year 8

Term 3 Knowledge Organiser

Gothic Literature

1. Antagonist	Character who opposes the main character. Sometimes known as a villain.
2. Unreliable Narrator	A narrator who we cannot trust. They might be crazy or mad.
3. Pathetic Fallacy	When the weather is used to reflect the mood. EG rain = sadness, fog = mystery, sun = joy/happiness
4. Personification	When an inanimate object is given a human quality. EG The wind howled, the door screamed as it opened.
5. Atmosphere	The general mood or feeling of a place. Gothic tends to create eerie or mysterious atmospheres.
6. Foreshadowing	Clues that are given to suggest something that will happen later on.
7. Outsiders	Characters that are excluded from society EG Frankenstein's creature is treated differently because he is manmade.
8. Tension	Feeling on edge about events that are about to happen
9. Climax	The peak of action and intensity
10. Juxtaposition	Contrasts between two ideas.

11. Gothic	A literary genre that creates a sense of fear and haunting.
12. Supernatural	Things that are beyond the real world. Eg ghosts, vampires, demons, werewolves.
13. Ominous	The worrying impression that something bad will happen
14. Foreboding	Fearful apprehension
15. Submissive	A character being weaker than others.
16. Isolation	Being alone.
17. Dominance	A character being stronger or more powerful than others.
18. Tyrannical	Leaders that are mad with power and control

Notable Gothic texts (in chronological order)

The Castle of Otranto – Horace Walpole, 1765
 Vathek – William Beckford, 1786
 Frankenstein – Mary Shelley, 1818
 The Hunchback of Notre Dame – Victor Hugo, 1831
 The Raven – Edgar Allan Poe, 1845
 Wuthering Heights – Emily Bronte, 1847
 The Strange Case of Dr Jekyll and Mr Hyde – R.L. Stevenson, 1887
 The Picture of Dorian Gray, Oscar Wilde, 1890
 Dracula – Bram Stoker, 1897
 Rebecca – Du Maurier, 1931
 The Woman in Black – Susan Hill, 1983
 The Twilight Series – Stephanie Meyer, 2006

**How to create the Gothic mood****Features of buildings:**

towers, trapdoors, gargoyles, mysterious corridors, tunnels, vaults, strange portraits

Weather: howling wind, thunder and lightning and torrential rain.

Eerie sounds: creaking doors, approaching footsteps, clanking chains, slamming doors, distant howling, strange laughter, toiling bells.

Dark or dim spaces: lights going on and off, flickering candles, dimmed lamps.

Supernatural: curses, hidden books and secret manuscripts, Extreme emotions (isolation and nightmares), Science used for evil purposes, Family curses and secrets

Gothic Adjectives for places:

Ancient Antique Creepy Desolated Distant Dusty Elaborate Eerie Empty Gruesome Isolated Locked Macabre Neglected Ornate Overgrown Peculiar Solitary Untouched Unusual

Gothic Adjectives for people:

Austere Determined Drawn Friendly Helpless Hideous Intimidating Looming Menacing Murderous Pallid Sinister Sleepless Surprised Taken aback Terrifying Treacherous Villainous Vulnerable

Some of the texts you will study: | Gothic Literature

The Woman in Black by Susan Hill	The Woman in Black is a ghost story by Susan Hill, in which Arthur Kipps relates his haunting experiences at Eel Marsh House. In his story, a young Arthur Kipps, a junior solicitor, is sent to settle the affairs of Alice Drablow. He sees a woman dressed in black at her funeral, though apparently no one else does.
The Tell-tale heart by Edgar Allen Poe	It is narrated by a madman who decides to kill the old man he lives with because he can't stand the gaze of the man's strange eye. However, after committing the crime, the narrator becomes convinced he can hear the old man's heart beating and gives away the location of the body.
The Red Room by H G Wells	It follows a confident young sceptic-the unnamed narrator of the story-as he attempts to spend the night in an infamously haunted room in a castle. Owing to the black and red décor of the room the narrator finds it necessary to light several candles to see his way around, but a draft keeps extinguishing the candles faster than he can keep them lit.
Frankenstein by Mary Shelley	Frankenstein tells the story of gifted scientist Victor Frankenstein who succeeds in giving life to a being of his own creation. However, this is not the perfect specimen he imagines that it will be, but rather a hideous creature who is rejected by Victor and mankind in general. The Monster seeks its revenge through murder and terror.

As well as:
The Wreathwell
by Angela Carter

Click Clack
The Rattle Bag by Neil Gaiman

Poetry:
The Cold Earth Slept Below
Percy Bysshe Shelley

Spellbound
Emily Bronte

The term 'gothic' comes from the Germanic tribe 'the Goths', who played a part in the fall of the Roman Empire. The Goths are sometimes called barbarians. They destroyed a lot of Roman architecture in around C3 and replaced it with buildings in the gothic style.

- Medieval Europe (C3-14) is sometimes referred to as the 'Dark Ages' (although this can be contested for a number of reasons.) Some believe that people lived in fear due to superstition and ignorance and that not much learning took place in this time. Castles with gargoyles were built to ward off evil spirits, this architecture is known as 'gothic' e.g. Notre Dame.

- Figures from The Age of Enlightenment (C18-19) believed that scientific progress was the only way to advance society, and great discoveries were made in this time. They tried to rid Europe of superstition and ignorance through promoting reason and logic.

- A group of poets, artists and thinkers called the Romantics challenged this because they believed that not everything can be explained by science, and too much reason rids the world of beauty and mystery.

- The gothic genre first emerged from the Romantic movement. It used art and ideas from the Dark Ages, wild emotion and nature to contrast modern ideas about science and logic.

- Gothic writing transformed into the format of the extremely popular Victorian ghost story.

- Today, we use the term 'gothic' widely to describe art, style, clothing (e.g. Alexander McQueen couture) music and film (e.g. Tim Burton films). The style and genre is very much still alive.

Gothic writing also includes a lot of poetry. Writers might use methods such as:

Meaning – the main message of the poem

Speaker – the voice of the poem.

Imagery – the words which paint images in the reader's mind.

Simile – indirect comparison (like/as)

Metaphor – direct comparison

Personification – when a non-living object is described as looking like or behaving like a human.

Tone – the feeling/atmosphere of the poem

Structure – the organisation of the poem, its rhyme scheme, the rhythm.

Stanza – grouped lines in a poem

Form – the type of poem – i.e. sonnet, ode.

Caesura – punctuation which occurs mid-line; slows the rhythm.

Enjambment – lack of terminal punctuation, speeding up the poem.

End-stopping – punctuation at the end of a line

Metre – number of beats per line

Plosive – sound made by stopping airflow – b,t,k, d, p; it creates a harsh sound.

Onomatopoeia – a word which sounds like the thing it is describing – i.e. bang

Alliteration – the repetition of the same sound

Sibilance – the repetition of the 's' sound

Why do we cook food?

The application of heat in the preparation of a food or mixture may:

- improve digestibility;
- improve appearance, flavour, odour and texture;
- increase the availability of nutrients;
- prevent spoilage;
- increase keeping qualities.

Heat Exchange

As a food is heated, its molecules absorb energy and vibrate more vigorously. The faster they move, the more the temperature of the food rises. If heat is removed, the molecules become less active, reducing the food's temperature.

Heat can be exchanged in three ways:

- conduction;
- convection;
- radiation

Factors that affect food choice

- Celiac** – cannot eat products containing gluten.
- Lactose intolerance** – the body can't digest the sugar lactose in dairy products.
- Vegetarian**: No meat in the diet
- Vegan**: No products from animals in the diet e.g. meat, milk or honey.
- Religion** :
 - Islam**: Requires Halal meat, no alcohol, no pork
 - Judaism**: Requires Kosher food, no meat and dairy together, no pork
 - Hinduism**: No beef

Micro-nutrients

Vitamins and minerals are essential nutrients that your body needs in small amounts to work properly.

Fat-soluble vitamins

Fat-soluble vitamins (vitamin A, D, E and K) are mainly found in: animal fats, vegetable oils, dairy foods, liver and oily fish. While your body needs these vitamins to work properly, you don't need to eat foods containing them every day.

Water-soluble vitamins

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

Minerals

Minerals include calcium and iron amongst many others and are found in: Meat, cereals, nuts, fish, milk and dairy foods, fruit and vegetables

Minerals are necessary for 3 main reasons:

- Building strong bones and teeth
- Controlling body fluids inside and outside cells
- Turning the food you eat into energy

Micros



Macros



Alternative protein

Proteins are known as the building blocks of life: in the body, they break down into amino acids that promote cell growth and repair. (They also take longer to digest than carbohydrates, helping you feel fuller for longer and on fewer calories—a plus for anyone trying to lose weight.) You probably know that animal products—meat, eggs, and dairy—are a good source of protein.



Setting and thickening (coagulation): Eggs will set when cooked. This is shown when you make a quiche or an egg custard.

Enriching: Eggs add nutritional value to a dish. This is shown when you make egg fried rice.

Raising agent: When whisked, eggs can hold air and become a raising agent. They can make a mixture light in texture, e.g. Chocolate éclairs.

As a glaze and to add colour: Beaten egg can be used as a glaze which turns golden brown on heating. An example is glazing sausage rolls with egg before cooking to give a golden brown finish.

Aeration: Eggs can be whisked to hold air and form a foam. The protein in the egg white becomes stretched and holds the air bubbles. This is shown in making meringues or a whisked sponge. When the meringues or whisked sponge are cooked the protein sets and hardens.

Food Poisoning

Food poisoning is a disease caused by eating a spoiled or contaminated food. Such food may contain certain microorganisms, toxins or enzymes.

Symptoms of food poisoning:

- Stomach pains and cramps
- Nausea and vomiting
- Diarrhoea
- Fever
- Muscles

Vegetarians and vegans don't consume meat so instead they use protein alternative products which are manufactured in order to provide protein in a diet and protein rich foods.

Protein complementation is when two LBV proteins are eaten together. Examples of protein complementation's are: hummus with pitta bread; nut roast made from a variety of nuts and seeds; vegetable curry and rice; lentilsoup and wholemeal bread; baked beans on toast.

LBV proteins - Foods that are deficient in one or more of the essential amino acids are said to have a **low biological value (LBV)**. Foods originating from plants (cereals, nuts, seeds, lentils, beans, pulses)

Food Spoilage

Cross-contamination

Cross-contamination means that bacteria, toxins or food particles were transferred to a food product. Cross-contamination can cause food poisoning and allergic reactions. Anaphylactic shock is a life-threatening reaction of the immune system to an allergen.

- Food can become contaminated from:
- Waste food and rubbish
 - Pest and rodents
 - The cook's hand
 - Work surfaces and equipment
 - Other contaminated foods, including high-risk foods.
- Most common allergens:
- Nuts
 - Fish and seafood
 - Milk
 - Eggs

Signs of Food Spoilage- Many species of microorganism and some enzymes can cause food spoilage.

	Bacteria	Yeast	Mould	Enzymes
Food Spoilage	The bacteria Clostridium botulinum produces a toxin which causes meat preserves to bulge. Bacteria can also make meat products look slimy and green in colour.	Ferments sugar in juices and beverages, making them sour, fizzy and foamy.	Create green, white or black coat on food products such as bread, grapes, tomatoes and jams.	Turns bananas, apples, potatoes and other foods brown.

Key words

- Microorganism** - a very small living bacteria.
- Toxins** - poison of plant or animal origin, especially one produced by or derived from microorganisms
- Preserves** - something in its original state
- Ferments** - The process in which yeast produces the gas carbon dioxide and alcohol.

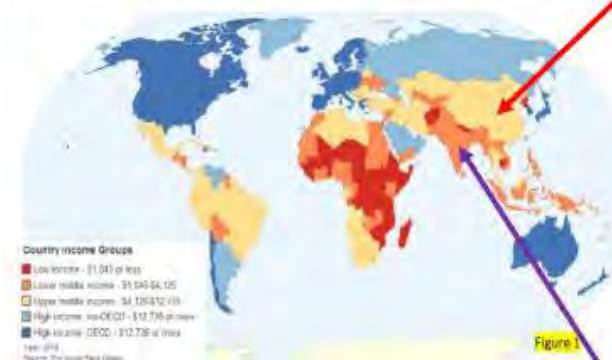
Keywords	
Development	A process of change that improves the standards of living of people in a country
NEE	Newly emerging economy (not yet fully developed but making progress at a rapid rate)
Global	The world
Globalisation	The process by which the world is becoming increasingly interconnected
Transnational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

Year 8 Geography

How is Asia changing?



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



Country income groups: GNI per capita



HDI



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

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



My home! Year 8 German ARE 2 vocab. list

<p>Wo wohnst du? Ich wohne... In einem Haus in einer Wohnung in einem Wohnwagen auf dem Land in den Bergen an der Küste in der Stadt am Stadtrand in einem Dorf im Norden im Süden im Westen im Osten</p>	<p>Where do you live? I live... In a house  In a flat  In a caravarn  In the countryside  In the mountains  On the coast  In a city/town  In the suburbs  In a village  In the north  In the south  In the west  In the east </p>
<p>Extending our sentences Opinion phrases Meiner Meinung nach Ich denke, dass Ich glaube, dass Ich finde Intensifiers wirklich sehr ziemlich ein bisschen Connectives weil or denn auch aber obwohl</p>	<p>Extending our sentences Opinion phrases In my opinion I think that I believe that I find Intensifiers Really Very Quite A little Connectives Because Also But However</p>

<p>Was hast du in deinem Haus? Es gibt ... Es gibt keinen,keine,kein einen Garten einen Dachboden ein Büro eine Garage ein Wohnzimmer einen Eingang eine Küche ein Schlafzimmer ein Esszimmer ein Badezimmer eine Terrasse die Toiletten einen Balkon im ersten Stock im zweiten Stock im Erdgeschoss</p>	<p>What is there in your house? There is / are... There isn't... A garden An attic An office/study A garage A living room A hall A kitchen A bedroom A dining room A bathroom A terrace The toilets A balcony On the first floor On the second floor On the ground floor</p>
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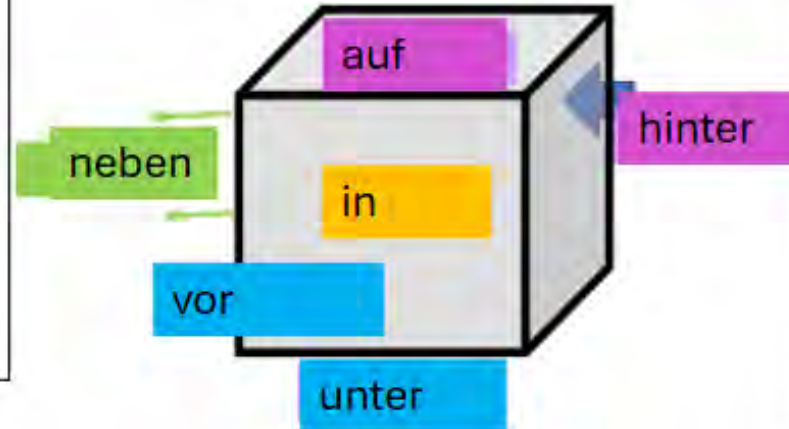
<p>Was hast du in deinem Schlafzimmer? ein Bett eine Wand einen Schreibtisch einen Computer einen Kleiderschrank einen Teppich ein Regal eine Lampe eine Tür einen Stuhl ein Fenster eine Kommode die Poster</p>	<p>What is there in your bedroom? A bed A wall A desk A computer A wardrobe A carpet A shelf/shelves A lamp A door A chair A window A chest of drawers Some posters</p>
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My Town! Year 8 German ARE 2 vocab. list

Beschreib dein Dorf/ deine Stadt	Describe your village/ town
Es ist...	It's...
groß	big
klein	small
historisch	historic
ruhig	peaceful
touristisch	appealing to tourists
industriell	industrial
kulturell	cultural
wichtig	important
lebendig/lebhaft	lively
laut (e)	noisy
verschmutzt	polluted
modern	modern
schön	pretty
hässlich	ugly
neu	new
alt	old
bequem	comfortable
Es ist kleiner als...	It's smaller ... than...
Es ist weniger ...als	It's less ... than...
Ich bevorzuge... weil	I prefer... because
E ist mehr/weniger...	it's more/less...

Wo ist...?	Where is...?
auf	on
unter	under
vor	in front of
in	in
hinter	behind
zwischen	between
neben	next to
gegenüber	opposite to
In der Nähe	near to



Was besuchst du?

Ich besuche...

Wir besuchen...

den Strand

das Schwimmbad

das Eisstadion

die Metzgerei

die Bäckerei

den Bahnhof

den Busbahnhof

die Buchhandlung

die Konditorei

die Post

das Stadtzentrum

das Kino

das Museum

das Theater

das Verkehrsamt

das Einkaufszentrum

das Sportszentrum

die Polizeiwache

der Markt

der Supermarkt

das Stadion

den Freizeitpark

das Krankenhaus

die Denkmäler

die Geschäfte

das Cafe

das Restaurant

What do you visit?

I visit...

We visit...

The beach

The swimming pool

The ice rink

The butchers

The bakery

The train station

The bus station

The book shop

The cake shop

The post office

The town centre

The cinema

The museum

The theatre

The tourist information office

The shopping centre

The leisure centre

The police station

The market

The supermarket

The stadium

The theme park

The hospital

The monuments

The shops

The café

The restaurant

Year 8 German Knowledge Organiser 2

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

Opinion starters:

Ich denke, dass = I think that
 Ich glaube, dass = I believe that
 Meiner Meinung nach = In my opinion
 Für mich = For me
 Ich mag = I like/Ich mag...nicht = I don't like
 Ich gehe lieber = I prefer going
 Ich sehe lieber = I prefer seeing
 Ich finde = I find

Ich denke, dass Bristol historisch ist. - I think that Bristol is historic
 Ich finde London ziemlich laut.=I find London quite loud
 Ich bevorzuge Bath, weil Bath ruhiger als Liverpool ist – I prefer Bath because it is quieter than Liverpool.

Phrases that use **infinitives**.

An infinitive is the basic form of the verb. In English it starts with to_ to run, to jump, to swim.
 In German, the verb ends in **-en** or **n**. The infinitive goes to the end of the sentence

e.g., I will eat – ich werde essen

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

These are followed by an infinitive.

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

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



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

um...zu + infinitive = in order to

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

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

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

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

Key Impacts of the Slave Trade

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

The Triangular Trade System

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



History – Year 8 Knowledge Organiser Topic 3



Key Historical Skills

4	Impact	To have a marked effect or influence.
5	Significance	The impact at the time and how we judge importance through legacy.
6	Historical Evidence	Sources that we use as Historians to make sense of the past.

Further your learning

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

Key People

						
Mansa Musa	Olaudah Equino	Toussaint Louverture	Harriett Tubman	Romaine-la-Prophestesse	Marie-Jeanne Lamartinière	Samuel Sharpe

Key Terms

7	Human Rights	The basics rights and freedoms that belong to all humans.
8	legislation	An act/law.
9	racism	Prejudice or discrimination directed against someone of a different race based on the belief that one's own race is superior.
10	slavery	The system where people are owned by other people.
11	slaver	Somebody who owns or keeps enslaved people.
12	trade	The action of buying and selling services.
13	empire	When one country rules over others.
14	colonies	Countries that are controlled by another country.
15	auction	Where enslaved people were sold off to the highest bidder.
16	Plantation	Large farms forced enslaved people to harvest cotton, rice, sugar, tobacco and other farm produce for trade.
17	resistance	Passive: using peaceful methods to oppose. Active: using violent or illegal methods to oppose.
18	revolt	To take violent action against an establishment.
19	Underground Railroad	The system used to help enslaved people escape.
20	emancipation	Freedom from enslavement.

GRAPH OF LINEAR FUNCTION

What you need to know:

Plotting Straight Line Graphs

To plot a straight line graph, you may be given a table or you may need to draw one.

Example: Plot the graph of $y = 4x - 2$ for the values of x from -3 to 3.

1) Draw a table of values if you have not been given one.

x	-3	-2	-1	0	1	2	3
y							

2) Substitute in your x values to $y = 4x - 2$, this will give the corresponding y values.

x	-3	-2	-1	0	1	2	3
y	-14	-10	-6	-2	2	6	10

3) Plot the points on the graph.

E.g. (-3, -14), (-2, -10), (-1, -6), (0, -2), etc

Identifying the gradient and intercept

The equations of all straight lines can be written in the form:

$$y = mx + c$$

Gradient – The number in front of the x .
This tells us how steep the line is.

Intercept – The number on its own.
Shows where the line cuts the y axis.

Example: Find the gradient and intercept of the following lines.

1) $y = 5x - 2$

Grad = 5 Intercept = -2

2) $2y = 4x + 5$

$y = 2x + 2.5$

Grad = 2 Intercept = 2.5

3) $x + y = 10$

$y = -x + 10$

Grad = -1 Intercept = 10

Rearrange all equations so they are in the form $y = mx + c$ (the y must be isolated)

Key Terms:

Axes: A fixed reference line on a grid to help show the position of coordinates.

Gradient: How steep a graph is at any point.

Y Intercept: Where the graph cuts through the y axis.

Perpendicular: A line that is at 90° to another line. They meet or cross at a right angle.

Parallel: Lines that are the same distance apart. They never cross.

Equation: A mathematical statement containing an equals sign.

Substitute: When a letter is replaced by a number.

Reciprocal: This is found by doing 1 divided by the number.

You need to be able to:

- Plot and draw linear graphs from equations and tables of values.
- Identify and interpret the gradient and y intercept of a linear graph in the form $y = mx + c$.
- Find the equation of a line given its gradient or points it passes through.
- Interpret information presented in a range of linear graphs.
- Find the equations of parallel and perpendicular lines from coordinates and other equations.

Remember:

$y = ?$ is a horizontal line which crosses the y axis at ?
 $x = ?$ is a vertical line which crosses the x axis at ?

GRAPH OF LINEAR FUNCTION

What you need to know:

Calculating the gradient from two points

Calculate the gradient of a line that passes through the points (4,10) and (-3,-11).

Use the formula $\frac{y_2 - y_1}{x_2 - x_1}$ or $\frac{\text{Change in } y}{\text{Change in } x}$

1) Label your coordinates.

(4,10) and (-3,-11).

x_1, y_1 x_2, y_2

2) Substitute into the formula or your choice.

$$\frac{-11-10}{-3-4}$$

3) Simplify the fraction.

$$\frac{-21}{-7} = 3$$

So the gradient of the line joining these two points is **3**.

Parallel and Perpendicular Lines

Parallel lines: The gradient of parallel lines is the same, this is why they never meet.

$$y = 2x + 1 \quad y = 2x - 4 \quad y = 2x$$

The gradients are all 2 here so they are all parallel.

If we are told that we want a line parallel to $y = 4x + 6$ and going through the point (1, 3) then we know that the gradient of our new line is 4 so $y = 4x + C$. We would then substitute in (1, 3) to calculate the value of C as seen above.

Finding the equation of a line from two points

Find the equation of the line passing through the points (3,1) and (-2,-9).

1) Find the gradient, using the formula. $\frac{y_2 - y_1}{x_2 - x_1} = \frac{-9 - 1}{-2 - 3} = \frac{-10}{-5} = 2$

2) Write out the equation replacing m with the found gradient.

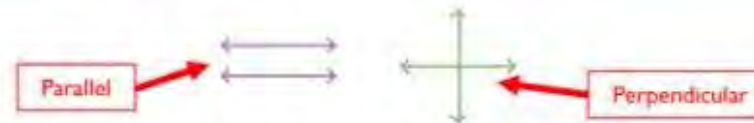
$$y = 2x + c$$

3) Substitute in one pair of coordinates and rearrange to calculate the value of c .

$$\begin{aligned} 1 &= (2 \times 3) + c \\ 1 &= 6 + c \\ -5 &= c \end{aligned}$$

3) Re-write your equation in the form $y = mx + c$ with your calculated values of m and c .

$$y = 2x - 5$$



Perpendicular lines: The gradient of perpendicular lines is the negative reciprocal, this is why they meet at right angles.

$$y = 2x \quad y = -\frac{1}{2}x$$

The negative reciprocal of 2 is $-\frac{1}{2}$.

If the gradient of a line was $-\frac{2}{3}$ then the line perpendicular would have a gradient of $\frac{3}{2}$. You could then find the full equation by substituting in a given coordinate using the same method as above.

GRAPH OF LINEAR FUNCTION

Key Words

Intercept: Where two graphs cross.

Gradient: This describes the steepness of the line.

y-intercept: Where the graph crosses the y-axis.

Linear: A linear graph is a straight line.

Quadratic: A quadratic graph is curved, u or n shape.

FORMULA

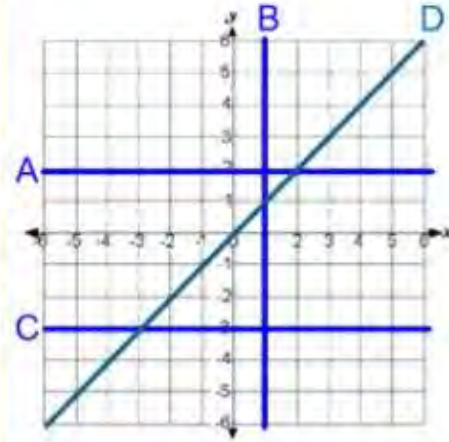
Gradient

$$= \frac{\text{difference in } y\text{'s}}{\text{difference in } x\text{'s}}$$

Tip

Parallel lines have the same gradient.

Examples

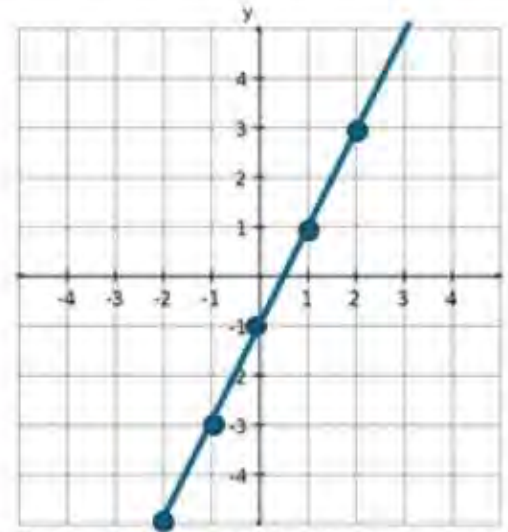


A: $y = 2$ B: $x = 1$
C: $y = -3$ D: $y = x$

Draw the graph of

$$y = 2x - 1$$

X	-2	-1	0	1	2
Y	-5	-3	-1	1	3



Notice this graph has a gradient of 2 and a y-intercept of -1.

Table of values

In a table of values, the value of y depends on the value of x . That means that we choose the values for x and substitute them into the equation to get the corresponding value for y .

The table provides a list of a coordinates the line passes through.

$$y = 2x + 5$$

To get y double x and add 5

x	-3	-2	-1	0	1	2	3
y	-1	1	3	5	7	9	11

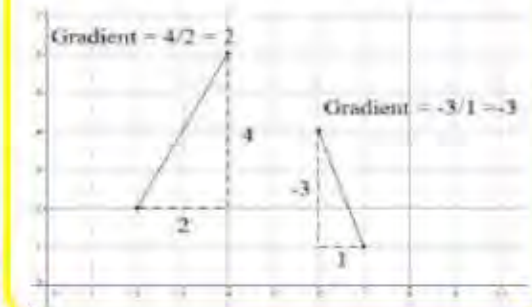
(-3, -1) (-2, 1) (-1, 3) (0, 5) (1, 7) (2, 9) (3, 11)

Gradient of Straight Lines

The gradient of a line is how steep it is.

$$\text{Gradient} = \frac{\text{Change in } y}{\text{Change in } x}$$

The gradient can be positive (sloping upwards) or negative (sloping downwards)



Questions

- 1) What are the gradient and y-intercept of: a) $y = 4x - 3$ b) $y = 4 + 6x$ c) $y = -5x - 3$
- 2) Draw the graph of $y = 3x - 2$ for x values from -3 to 3 using a table.

ANSWERS: 1) a) $m = 4, c = -3$
b) $m = 6, c = 4$
c) $m = -5, c = -3$

PERCENTAGES

KEY CONCEPTS

Calculating percentages of an amount without a calculator:

10% = divide the value by 10

1% = divide the value by 100

Calculating percentages of an amount with a calculator:

Amount \times percentage
as a decimal

Calculating percentage increase/decrease:

Amount \times (1 \pm percentage
as a decimal)

KEYWORDS

Percent
Increase
Decrease
Appreciate

Depreciate
Multiplier
Divide

Calculating a percentage – non calculator:

Calculate 32% of 500g:

$$10\% \rightarrow 500 \div 10 = 50$$

$$30\% \rightarrow 50 \times 3 = 150$$

$$1\% \rightarrow 500 \div 100 = 5$$

$$2\% \rightarrow 5 \times 2 = 10$$

$$32\% = 150 + 10 \\ = 160\text{g}$$

Calculating a percentage – calculator:

Calculate 32% of 500g:

$$\text{Value} \times (\text{percentage} \div 100) \\ = 500 \times 0.32 \\ = 160\text{g}$$

Examples

Percentage change:

A dress is reduced in price by 35% from £80. What is its **new price**?

$$\text{Value} \times (1 - \text{percentage as a decimal}) \\ = 80 \times (1 - 0.35) \\ = £52$$

A house price appreciates by 8% in a year. It originally costs £120,000, what is the **new value** of the house?

$$\text{Value} \times (1 + \text{percentage as a decimal}) \\ = 120,000 \times (1 + 0.08) \\ = £129,600$$

- 1) Write the following as a decimal multiplier: a) 45% b) 3% c) 2.7%
- 2) Calculate 43% of 600 without using a calculator
- 3) Calculate 72% of 450 using a calculator
- 4a) Decrease £500 by 6%
- b) Increase 65g by 24%
- c) Increase 70m by 8.5%

ANSWERS
1a) 0.45 b) 0.03 c) 0.027
2) 258
3) 324
4a) £470 b) 80.6g c) 75.95m

Key Words

Major
 Minor
 Key Signature
 Chromaticism
 Composer
 Ground Bass
 Sequence
 Motif
 Harpsichord
 Chord
 Sharp
 Flat
 Solo
 Duet
 Trio
 Orchestra

**Year 8 Terms 3 & 4: What makes a great composer?**

Shaping my musical toolkit

Musical Elements

Dynamics	<i>(volume)</i>
Rhythm	<i>(duration of notes)</i>
Tempo	<i>(speed)</i>
Context	<i>(background info)</i>
Structure	<i>(sections)</i>
Melody	<i>(organisation of pitches)</i>
Instrumentation	<i>(instruments & voices)</i>
Texture	<i>(layers)</i>
Harmony	<i>(chords & key)</i>

Note Durations

	Minim (2beats)
	Crotchet (1 beat)
	Quaver (½ beat)
	Semiquaver (¼ beat)

Composers & Pieces

• Pachelbel (1653-1706)	Canon in D
• Bach (1685-1750)	Tocatta & Fugue
• Mozart (1756-1791)	Eine Kleine Nachtmusik
• Beethoven(1770-1827)	Moonlight Sonata
• Chopin (1810-1849)	Funeral March
• Tchaikovsky (1840-1893)	Dance of the Sugar Plum Fairy

Periods of musical History









- Baroque Era – 1650-1725.
- Classical Era – 1725-1810.
- Romantic Era – 1810-1900.
- 20th Century Era – 1900 onwards.









Instruments & Techniques

Strings	(Violin, Viola, Cello, Double Bass)
Woodwind	(Flute, oboe, clarinet, bassoon)
Brass	(Trumpet, French Horn, Trombone, Tuba)
Percussion	(Timpani, Bass drum, Snare drum, triangle, maracas, bells)
Harpsichord	(keyboard instrument from the Baroque era, before piano)
Pizzicato	(plucking strings)

Knowledge Organiser

PE Term 3: Movement at joints

Anatomical Movements		
1	Flexion 	Decreasing the angle at the joint. 
2	Extension 	Increasing the angle at the joint. 
3	Adduction 	Limb moves towards the mid-line of the body. 
4	Abduction 	Limb moves away from the mid-line of the body. 

5	Rotation 	A circular movement around a fixed joint. 
6	Circumduction 	When the limb moves in a circle. 
7	Dorsi Flexion 	Bending the foot up towards the shin. 
8	Plantar Flexion 	Bending the foot downward towards the ground. 

✦ How do religions practice their faith?

Knowledge Organiser



Key terms

Agape

Unconditional love for God and mankind.

Atonement

Doctrine of how humans are forgiven, redeemed and reconciled through the death of Christ.

Baptism

Christian sacrament representing entrance into the Christian faith.

Church

The Holy people of God, the body of Christ or a building where Christians worship.

Worship

An expression or adoration and praise for God.
May involve prayer, listening to sermons, or playing music.

Liturgical: Follows a set structure and established rituals, the same every time. E.g. The Eucharist.

Non-liturgical: Does not follow a set text/ritual.
No set prayers, people take turns to preach.
Seen as modern and appeals to young people.

Informal: Type of non-liturgical; spontaneous.
Focuses on importance of the Holy Spirit.
Resembles worship practiced by Christians in the first decades. Christians can gather anywhere, not just at Church.

Private Worship: Takes place individually, forms a personal relationship with God. Become popular in modern times as more freedom.

Baptism

Baptism

Believers are washed with water to remove sin and become part of the church community.

Infant's Baptism

Promises made on child's behalf by godparents and parents. Welcomes them into the church and washes away original sin. Cross is drawn on their head with oil, the child is dressed in white and a Paschal candle is lit.

Believers Baptism

An adult has chosen for themselves to follow Christianity and they are fully immersed into water to represent cleansing sin and rising up to a new life with Christ.

Baptists only practice this form of baptism as children are too young to understand the meaning



How do religions practice their faith?

Knowledge Organiser

Key terms

Prayer

Communicating with God, either silently or through words of praise, thanksgiving or confession, or requests for God's help or guidance.

Sacrament

Rites and rituals through which the believer receives a special gift of grace. 'An outward sign of an inward grace'.

Secular

Something that is not connected with religion or impacted by religious or spiritual concepts.

Worship

Act of religious honour or devotion.

Celebrations

Christmas

Celebration of the birth of Jesus, where God became human, with a period of time called advent that begins 4 Sundays before. Seen as a time of peace + goodwill.

Christians celebrate it with nativities, Christingle services to show Jesus as the light of the world, carol concerts, exchanging cards, decorating houses, family meals and exchanging gifts.

Easter

Holy Week: Palm Sunday - arrival in Jerusalem, palm leaf crosses exchanged. Maundy Thursday - Last meal with disciples and washed their feet, some priests do this now. Good Friday - death on the cross, mourning.

Easter Sunday: Day of Jesus' resurrection, remembrance and celebration services, cards and Easter eggs are given.

The Church Community

Church in the Local Community

A place of worship and support. Religious events e.g. prayer meetings, baptisms and marriage. Non-religious events e.g. toddler groups, food banks, youth clubs.

The Worldwide Church

Church Growth: Up to 2.5 billion Christians worldwide. Books translated into 123 languages.

Mission: Calling of a group or individual to spread their faith; through preaching, or humanitarian work. Evangelism: Many Christians are evangelical, they believe it is important to spread the 'good news' of Christianity with others so that they might be saved.

Year 8 Block 3 Biology Knowledge Organiser Evolution

Revision guide Pgs: 26-29

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

KPI 9.1: Identify variation between individuals of a species and state the differences between species, describing the difference between continuous and discontinuous variation.

DNA

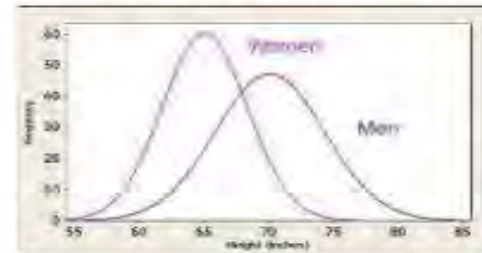
- All the instructions to make organisms are kept in coded form on a very long molecule called DNA.
- DNA is kept in the nucleus of every cell.
- The molecule is so long it is twisted and folded into tiny structures called chromosomes so it can fit inside the nucleus.
- It has a ladder like structure and is a double helix.
- A short length of chromosome which codes for a characteristic is called a gene.
- There are four bases in DNA: A, T, C, G. A only pair with T, C only pair with G.
- As the sequence of the bases differ, the protein produced differ. This accounts for many variations.



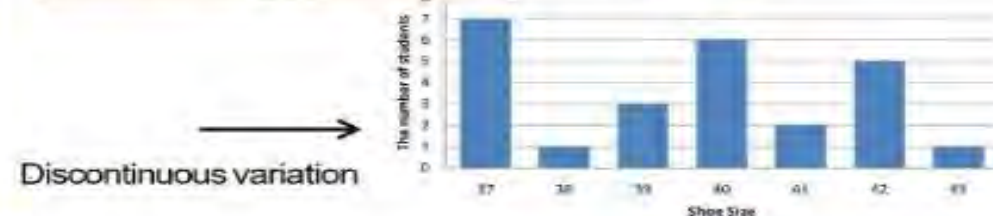
Key Terms	Definition
DNA	Molecule that carries all the instructions needed for an organism
Gene	A short length of DNA that has the information for a characteristic
Chromosome	A structure containing DNA found inside the nucleus of a cell
Variation	Differences between living organisms of the same species
Continuous variation	Differences that can take any value, e.g. height
Discontinuous variation	Differences that can only take set values, e.g. blood groups

Measuring variation

- Continuous variation is variation that can take any value (e.g. height or weight).
- Continuous variation should always be shown on a line graph.
- Discontinuous variation is variation that can only take set values (e.g. shoe size or blood group).
- Discontinuous variation should always be shown on a bar chart.



← Continuous variation



→ Discontinuous variation

Variation

- The differences between living things of the same species is known as variation.
- Variation can be caused by differences in genes or differences in the environment.
- Some variation is caused by a mixture of both genes and environment.

Year 8 Block 3 Biology Knowledge Organiser Evolution

Revision guide Pgs: 26-29

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

KPI 8.2: Explain how variation allow organisms to compete, and the way this drives natural selection

Organisms compete for resources like food, water, mates, space, light, and minerals.

There are 2 types of competition. Interspecific competition is between individuals of different species and Intraspecific competition is between individuals of the same species.



Organisms have special features known as adaptations to help them survive in their environment. For example polar bears are white so they are camouflaged in the snow.

Variation

Variation can be caused by genes e.g. eye colour and your blood group. It can also be caused by environment which means the food you eat, the chemicals you're exposed to, the way you're brought up. Often variation is a combination of genes and environment e.g. intelligence and weight. Genetic variation always gives rise to discontinuous data where there is a limited set of data e.g. tongue roller or non roller. Continuous data can be of any value and is caused by genetic and environmental factors.

Natural selection

Natural selection states that there is variation within a species. Some adaptations are better than others. Those with the best adaptations survive, and the others die.

The survivors can reproduce and have offspring.

Their offspring inherit the genes for the best adaptations, so the organisms population changes over time. This is survival of the fittest. Charles Darwin came up with this theory in the 1800's.



Key Terms	Definition
Adaptation	Something which helps an organism to survive in their environment, e.g. humps for storing water
Habitat	The environment that an organism lives in

Adaptation

- Every animal has evolved gradually over millions of years to become well suited, or adapted, to its habitat.
- These adaptations are specific to the environment of the animal and are essential for survival.
- An animal must be able to find food, breed and navigate its way around its habitat if it is to survive.

Year 8 Block 3 Knowledge Organiser Chemical reactions

Revision guide Pgs: 45-48 + 51-54 (48-51 + 54-57 higher)

<https://www.bbc.com/bitesize/subjects/znxtyrd>

Acid & metal Reactions

When an acid and a metal react together we form a metal salt and hydrogen.

Metal + acid → metal salt + hydrogen

Magnesium + hydrochloric acid → magnesium chloride + hydrogen

Metal carbonate & acid reactions

When an acid and metal carbonate are reacted together they form metal salt, water and carbon dioxide

Metal carbonate + acid → metal salt + water + carbon dioxide

Copper carbonate + hydrochloric acid → copper chloride + water + carbon dioxide

Tests for carbon dioxide and hydrogen

CO₂ – Carbon Dioxide

1. Lit splint is extinguished (goes out) in the presence of CO₂ gas.
2. lime water turns from colourless to cloudy.

H₂ – Hydrogen

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

Naming compounds

When naming compounds the Periodic Table shows the different elements that are in a compound.

In metal and acid reactions the compound made is called a salt and it has 2 parts to its name: 1st from the metal, 2nd from the acid.

Hydrochloric acid → chloride salts

Nitric acid → nitrate salts

Sulphuric acid → sulphate salts

Eg

Sodium chloride

Sodium nitrate

Sodium sulphate

Group 1 – Alkali Metals reactivity

Reactivity increases going down group 1.

Element	Observations
Lithium, Li	Fizzes steadily, slowly becomes smaller until it disappears
Sodium, Na	Melts to form a ball, fizzes rapidly, quickly becomes smaller until it disappears
Potassium, K	Quickly melts to form a ball, burns violently with sparks and a lilac flame, disappears rapidly, often with a small explosion

Thermite reaction:



Iron oxide + Aluminium → Aluminium Oxide + Iron

Aluminium is higher than Iron in the reactivity series so it displaces iron from iron oxide.

Thermite is used to weld train rails together.



Year 8 Block 3 Knowledge Organiser Chemical reactions

Revision guide Pgs: 45-48 + 51-54 (48-51 + 54-57 higher)

<https://www.bbc.com/bitesize/subjects/znxttyrd>

Chemical and physical properties

Elements in different groups have their own properties. Physical properties refer to physical characteristics such as how their colour and their states. Chemical properties refer to how the elements react when they form new bonds.

Reactivity Series:

The reactivity series is the order of metals based on their reactions with water, air and acid. We can use this to predict the products in a reaction.

	Potassium	most reactive
	Sodium	
Electrolysis	Calcium	
	Magnesium	
	Aluminium	
	Carbon	
	Zinc	
Reduction	Iron	
	Tin	
	Lead	
	Hydrogen	
	Copper	
Native	Silver	
	Gold	
	Platinum	least reactive

In displacement reactions the metal that is higher up the reactivity series will form a salt.

For example:

Magnesium + copper sulphate → magnesium sulphate + copper

The magnesium is higher up the reactivity series so it displaces copper and takes its place.

Zinc sulphate + copper → no reaction.

Copper is lower down the reactivity series so it does not displace zinc.

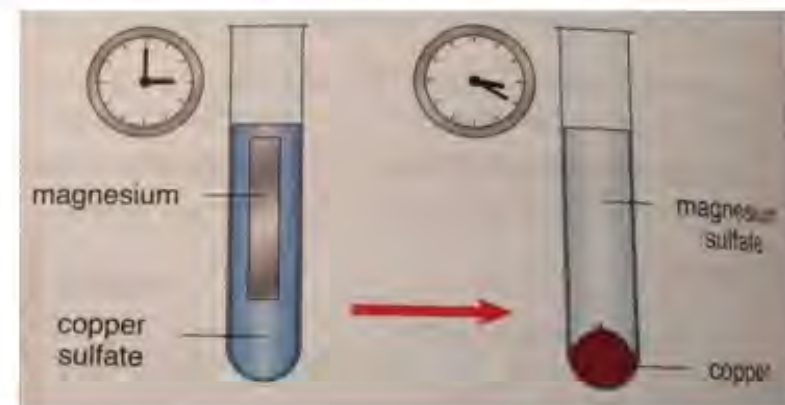
Key Word	Definition
Displacement	A reaction where a more reactive metal take the place of a less reactive metal.
Reactivity	A description of how quickly or vigorously a material reacts.
Reactivity series	A list with metals that shows how reactive they are

Displacement Reactions

Eg. Magnesium + copper sulphate → magnesium sulphate + copper

We use displacement reactions to determine the reactivity series.

The more reactive metal displaces the less reactive metal.



Metal Extraction

We use the reactivity series to help us decide how to extract metals from their ores.

Anything below hydrogen is found on its own (native) eg gold

Anything below carbon is reduced using carbon eg zinc

Anything above carbon is extracted using electrolysis eg sodium



8.7 Present tense holidays

Year 8 Spanish Knowledge Organiser

The present and future tenses

The Near Future :

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

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

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

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

Mañana - tomorrow

La semana próxima - next week

El fin de semana que viene - next weekend

El próximo mes - next month

El año que viene - next year

En dos años - In two years

There are three types of verbs in Spanish and in their infinitive form they end in:

-ar -er -ir

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

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

Example:

Descansar = **to** rest Comer = **to** eat vivir = **to** live
 Descanso = **I** rest Comemos = **we** eat viven = **they** live



8.7 Present Holidays - Spanish Vocab List

¿Dónde vas?	Where do you go?
Voy	I go
a París / a Londres	to Paris / to London
a Francia	to France
a España	to Spain
a Inglaterra	to England
a Escocia	to Scotland
a Irlanda	to Ireland
a Gales	to Wales
a Portugal	to Portugal
a Pakistán	to Pakistan
a Polonia	to Poland
a Somalia	to Somalia
al Caribe	to the Caribbean
al Reino Unido	to the UK
a los Estados-Unidos	to the States
a los Países Bajos	to the Netherlands
¿Qué visitas?	Where do you visit?
Visto / <u>Visitamos</u>	I visit / We visit
la playa	The beach
la piscina	The swimming pool
el centro	The town centre
el museo	The museum
el mercado	The market
el estadio (de fútbol/rugby)	The (football/rugby) stadium
el parque de atracciones	The theme park
los monumentos	The monuments
las tiendas	The shops
los cafés	The cafés
los restaurantes	The restaurants
la oficina de turismo	The tourist office

¿Dónde te alojas?	Where do you stay?
Me alojo en / Me quedo en	I stay in
un hotel (de cinco estrellas)	A (five star) hotel
un camping	A campsite
un apartamento	An apartment
una caravana	A caravan
una tienda	A tent
un albergue juvenil	A youth hostel
una caravana estática	A static caravan
en casa de mis abuelos	At my grand-parents'
un parador	A state-owned luxury hotel
una pensión	A B&B
¿Cómo viajas?	How do you travel?
<u>Viajo / Viajamos</u>	I travel / We travel
a pie	by foot
en bici	by bike/pushbike
en moto	by motorbike
en coche	by car
en tren	by train
en barco / en crucero	by boat / by <u>cruiseship</u>
en metro	by tube
en autocar	by coach
en autobús	by bus
en avión	by plane
¿Qué tiempo hace?	What is the weather like?
<u>Hace buen / mal tiempo</u>	It is good /bad weather
Hace calor/frío	It is hot/cold
Hace sol	It is sunny
Hace 25 grados	It is 25 degrees
Llueve	It is raining
Nieva	It is snowing
Hay viento	It is windy
Hay nubes	There are clouds

¿Qué haces...?	What do you do...?
Descansar	To rest
*Divertirse (me divierto)	To have fun (I have fun)
Tomar el sol	To sunbathe
Visitar monumentos	To visit monuments
*Ir a la playa	To go to the beach
*Ir al restaurante	To go to the restaurant
*Ir de compras	To go shopping
*Dar un paseo	To go for walks
Sacar/tomar fotos	To take photos
Comprar recuerdos	To buy souvenirs
*Hacer deporte	To do (play) sports
*Hacer deportes acuáticos	To do water sports
Bailar en la discoteca	To dance in the club
¿Dónde está...?	Where is it...?
Está lejos	It's far
Está cerca	It's nearby
Está a <u>cinco</u> minutos	It's <u>5</u> minutes <u>away</u>
Está a <u>300</u> metros	It's <u>300</u> metres <u>away</u>
Siga todo recto	Go straight on
En el semáforo siga todo recto	At the traffic lights go straight on
En la rotonda gira a la derecha	At the roundabout turn right
Gira a la izquierda	<u>Turn left</u>
Gira a la derecha	<u>Turn right</u>
Tome la primera	Take the first
Tome a segunda	Take the second
Cruza el puente	Cross the bridge

Year 8 Textiles Knowledge Organiser



Textiles Hierarchy of Key words

Tier 3
'Academic' keywords.

analyse
embellishment
Woven/ bonded/ knitted
Free machine embroidery

Plain seam
sustainable
function
develop

Tier 2
Valuable keywords used in most lessons every lesson.

contrast
compare
context
effect

Complementary colours
environment
fastening
embroidery
equipment
iron
appliqué
improve

Tier 1
Basic keywords used in almost every lesson.

colour
pattern
thread

design
machine
line
theme
Fabric

shape
Texture
tone
sew

REMEMBER!

Any practical work you do at home, take photos and this can be classed as homework if there is evidence in your homework book!

Decorative Textile Techniques

Applique is the method of sewing pieces of fabric onto other fabric bases in beautiful designs. You can stitch the applique pieces by hand as well as by sewing machine.



Spray dyeing creates a speckled, graffiti effect on fabric. Try not to spray too close as it will not have the same effect on the fabric.



Dyeing involves adding colour to the fabric by way of soaking it in a solution of dye. You can dye a fabric fully or partially; Batik, tie and dye, shibori dyeing are all variations of dyeing fabric to bring about beautiful patterns on fabric surface.



Rubbings use natural textures to create interesting designs on to fabric, layer different colours to make your design more original.

Shaving foam marbling is a method of creating a marble effect, using shaving foam and acrylic paints. You can mix colours together to create a colourful design. Be careful not to overmix as this could result in to getting an all over brown colour.



Decorative stitches are created by selecting different stitch settings on a sewing machine, these are good to use in different colours to match your creative work. They can be sewn in a curved line as well as just sewing straight.



The 4 Rs of sustainability

The UK wastes around £1 billion of clothing each year, which effects the environment we live in. A way to support the environment is to follow the four Rs of sustainability at home.

Recycle – Making unwanted clothing in to something new i.e. Jeans in to shorts.

Reduce – Buy high quality clothing which will last for longer.

Repair – If there is a rip or hole in your clothing, fix it by hand sewing it or adding a patch.

Reuse – If you no long want your clothing, donate it to a sibling or local charity shop.

Use these in your writing and speaking

Use connectives to link each paragraph!	Explain an idea: <ul style="list-style-type: none"> Although Except Unless However Therefore 	Sequencing: <ul style="list-style-type: none"> Firstly Secondly Next Finally Since
Adding to: <ul style="list-style-type: none"> Furthermore Also As well as Moreover 	Cause and effect: <ul style="list-style-type: none"> Thus So Therefore Consequently 	Contrasting: <ul style="list-style-type: none"> Whereas Instead of Alternatively Otherwise Then again
To empathise: <ul style="list-style-type: none"> Above all Ultimately Especially Significantly 	To compare: <ul style="list-style-type: none"> Likewise Equally In the same way Similarly 	Give examples: <ul style="list-style-type: none"> Such as For example In the case of As revealed by For instance

Sentence starter phrases

Most people would agree...

Only a fool would think...

We all know...

A sensible idea would be...

The fact is that...

Surely you would agree that...

Without a doubt...

I am certain that...

Some people might argue...

However...

Also...

DESCRIBE

I believe that...

I think that...

The main idea is...

EXPLAIN

This means that...

Therefore...

This maybe because...

JUSTIFY

This is positive because...

This is negative because...

It is useful/not useful because...

ANALYSE

One strength is...

One weakness is...

One argument is...

EVALUATE

One advantage is...

One disadvantage is...

The best option is...

COMPARE AND CONTRAST

One similarity is...

One difference is...

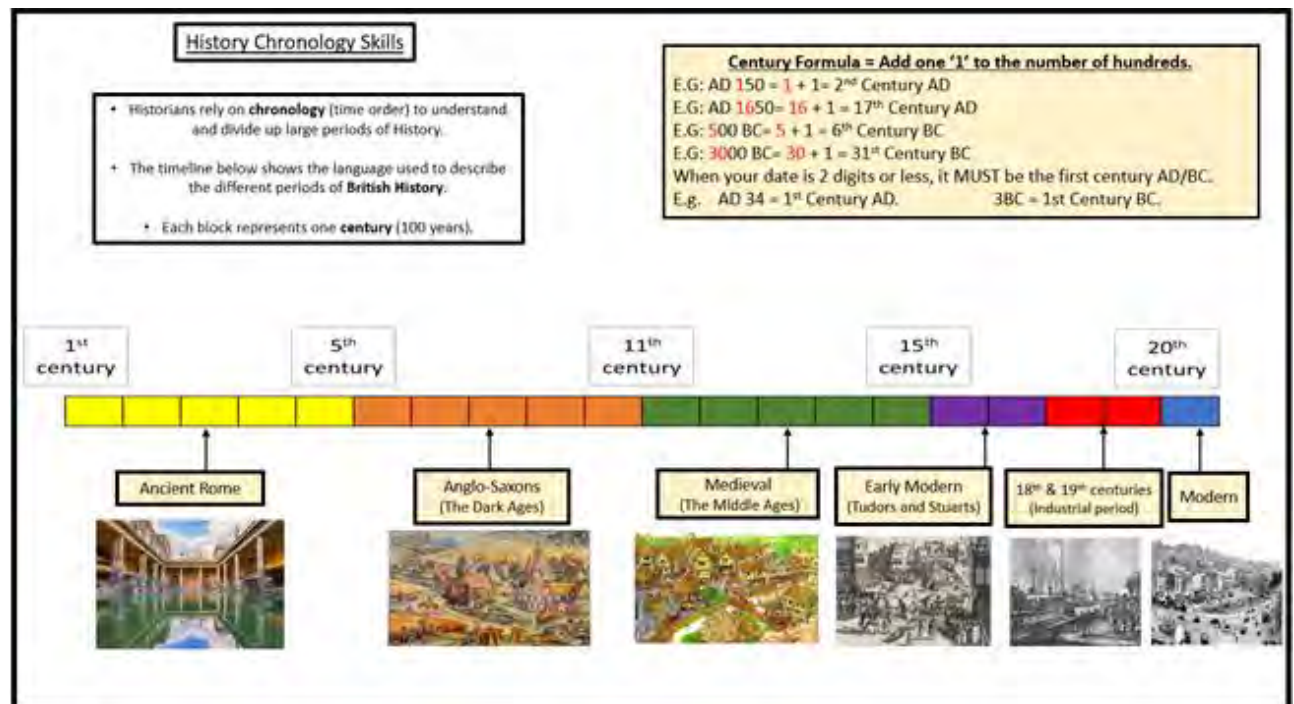
On the other hand...

History Chronology Skills

- Historians rely on **chronology** (time order) to understand and divide up large periods of History.
- The timeline below shows the language used to describe the different periods of **British History**.
- Each block represents one **century** (100 years).

Century Formula = Add one '1' to the number of hundreds.E.G: AD 150 = 1 + 1 = 2nd Century ADE.G: AD 1650 = 16 + 1 = 17th Century ADE.G: 500 BC = 5 + 1 = 6th Century BCE.G: 3000 BC = 30 + 1 = 31st Century BC

When your date is 2 digits or less, it MUST be the first century AD/BC.

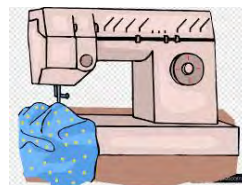
E.g. AD 34 = 1st Century AD. 3BC = 1st Century BC.

Use these in your writing and speaking in DT



Design and Technology Keywords

Food and Nutrition	Design and Technology	Textiles
Caramelisation	Carbon footprint	Plain seam
Aeration Amino acids	Planned Obsolescence	analyse sustainable
Plasticity Shortening	Iterative Design Tolerance	embellishment
Coagulation Denaturation	Technology Push Anthropometrics	Woven/ bonded/ knitted
Emulsification Gelatinisation	Consumer Social Footprint	Free machine function
Pasteurisation	Ergonomics Forming Processes	embroidery develop
Unsaturated Protein	Aesthetics Target Market	Complementary colours
Radiation Saturated	Properties Deciduous	contrast environment
Conduction Carbohydrates	Automation Coniferous	fastening
Digest Deficiency	Automation Functionality	compare embroidery
Cross-contamination Convection	Primary Source Sustainability	iron equipment
Micro-organisms	Continuous Improvement	context appliqué
Flavour Claw grip	Cost Customer	effect improve
Texture Aroma	Materials Annotation	colour design shape
Nutrients	Safety Product	machine
Appearance Bridge hold	Design Environment	pattern line Texture
Mix Smell	User Prototype	theme tone
		thread Fabric sew



Sentence Starters - DT

- I have designed...because*
- My project was about...*
- I found... during my research*
- My design is suitable for...*
- I have learnt how to...*
- The most enjoyable part of my project was....*
- The area I found the most challenging was...*
- Equipment I have used include...*
- I would improve my work by...*
- I am pleased with my finished product because...*

Sentence Starters- Food and Nutrition

- In order to work hygienically/safely I made sure I*
- I worked safely when in the kitchen by...*
- If I could improve any skill, I would improve...because...*
- Overall, I am happy/unhappy with my progress/dish because....*
- The texture of my dish is... this is because...*

Sentence starters- Textiles

- I have designed....*
- The context of my design is...*
- My research is useful because...*
- By researching, I am able to.....*
- By researching I have found out....*
- I researched into....*
- My design is suitable for.....*
- My design is based upon...*
- I have planned to..*
- The order I will work in is...*
- The most enjoyable part of m project was...*
- The area I found most challenging was...*
- I am most pleased with...*
- I am pleased with my finished project because...*
- Equipment I used was...*

The periodic table of the elements

1	2											3	4	5	6	7	0			
		Key relative atomic mass atomic symbol <small>name</small> atomic (proton) number																	1 H <small>hydrogen</small> 1	4 He <small>helium</small> 2
7 Li <small>lithium</small> 3	9 Be <small>beryllium</small> 4											11 B <small>boron</small> 5	12 C <small>carbon</small> 6	14 N <small>nitrogen</small> 7	16 O <small>oxygen</small> 8	19 F <small>fluorine</small> 9	20 Ne <small>neon</small> 10			
23 Na <small>sodium</small> 11	24 Mg <small>magnesium</small> 12											27 Al <small>aluminium</small> 13	28 Si <small>silicon</small> 14	31 P <small>phosphorus</small> 15	32 S <small>sulfur</small> 16	35.5 Cl <small>chlorine</small> 17	40 Ar <small>argon</small> 18			
39 K <small>potassium</small> 19	40 Ca <small>calcium</small> 20	45 Sc <small>scandium</small> 21	48 Ti <small>titanium</small> 22	51 V <small>vanadium</small> 23	52 Cr <small>chromium</small> 24	55 Mn <small>manganese</small> 25	56 Fe <small>iron</small> 26	59 Co <small>cobalt</small> 27	59 Ni <small>nickel</small> 28	63.5 Cu <small>copper</small> 29	65 Zn <small>zinc</small> 30	70 Ga <small>gallium</small> 31	73 Ge <small>germanium</small> 32	75 As <small>arsenic</small> 33	79 Se <small>selenium</small> 34	80 Br <small>bromine</small> 35	84 Kr <small>krypton</small> 36			
85 Rb <small>rubidium</small> 37	88 Sr <small>strontium</small> 38	89 Y <small>yttrium</small> 39	91 Zr <small>zirconium</small> 40	93 Nb <small>niobium</small> 41	96 Mo <small>molybdenum</small> 42	[98] Tc <small>technetium</small> 43	101 Ru <small>ruthenium</small> 44	103 Rh <small>rhodium</small> 45	106 Pd <small>palladium</small> 46	108 Ag <small>silver</small> 47	112 Cd <small>cadmium</small> 48	115 In <small>indium</small> 49	119 Sn <small>tin</small> 50	122 Sb <small>antimony</small> 51	128 Te <small>tellurium</small> 52	127 I <small>iodine</small> 53	131 Xe <small>xenon</small> 54			
133 Cs <small>caesium</small> 55	137 Ba <small>barium</small> 56	139 La* <small>lanthanum</small> 57	178 Hf <small>hafnium</small> 72	181 Ta <small>tantalum</small> 73	184 W <small>tungsten</small> 74	186 Re <small>rhenium</small> 75	190 Os <small>osmium</small> 76	192 Ir <small>iridium</small> 77	195 Pt <small>platinum</small> 78	197 Au <small>gold</small> 79	201 Hg <small>mercury</small> 80	204 Tl <small>thallium</small> 81	207 Pb <small>lead</small> 82	209 Bi <small>bismuth</small> 83	[209] Po <small>polonium</small> 84	[210] At <small>astatine</small> 85	[222] Rn <small>radon</small> 86			

* The elements with atomic numbers from 58 to 71 are omitted from this part of the periodic table.

The relative atomic masses of copper and chlorine have not been rounded to the nearest whole number.





These websites will help you with homework, reading around the subject and revision

English

<https://www.sparknotes.com/> - *Macbeth, A Christmas Carol, An Inspector Calls*

<https://app.senecalearning.com/> - *Macbeth, A Christmas Carol, An Inspector Calls, Power and Conflict Poetry*

<https://www.bbc.com/bitesize> - *Macbeth, A Christmas Carol, An Inspector Calls*

Maths

<https://corbettmaths.com/>

<https://vle.mathswatch.co.uk/vle/>

<https://www.mathspad.co.uk/>

Science:

<https://www.bbc.com/bitesize>

<https://www.senecalearning.com/>

<https://www.memrise.com/>

Geography

Time for Geography - videos (mainly focused on physical processes)

Bitesize

Cool Geography

History

Seneca Learning

BBC bitesize - use Edexcel resources for GCSE.

Art Websites

<https://www.tate.org.uk/>

<https://www.bbc.co.uk/bitesize/subjects/z6f3cdm>

<https://www.incredibleart.org/>

Computer Science and IT.

www.mrahmedcomputing.co.uk

Drama

<https://youtu.be/VeTpob9LBM8>

<https://youtu.be/wlSEU13mRBE>

<https://www.bbc.co.uk/bitesize/guides/zsf8wmn/revision/1>

DT:

<http://www.mr-dt.com/>

<http://technologystudent.com/>

<https://www.senecalearning.com/>

PE

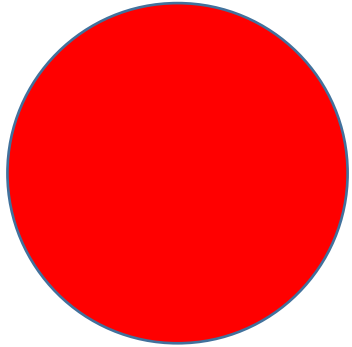
<https://www.bbc.com/bitesize/examspecs/ztrcg82>

<https://sites.google.com/view/ocrgcseperevision/home>

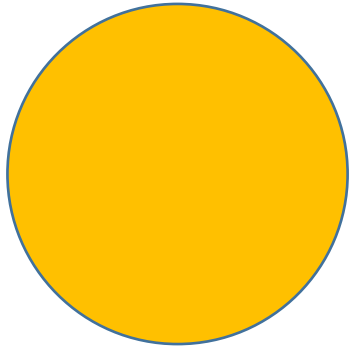
RS

KS3 <https://www.bbc.co.uk/bitesize/subjects/zh3rkqt>

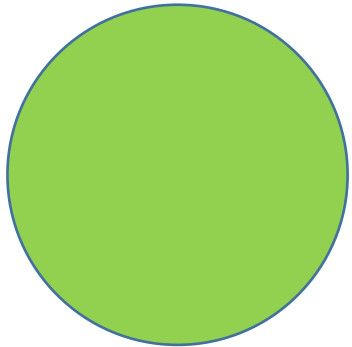
How would you describe your learning in this lesson?



I don't understand the learning in this lesson and would like some help



I am not confident with the learning in this lesson so might need some extra help.



I am confident with the learning in this lesson and can work independently

Timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
Tutor time					
Lesson 1					
Lesson 2					
Break					
Lesson 3					
Lesson 4					
Lunch					
Lesson 5					
Lesson 6					