



BRISTOL  
METROPOLITAN  
ACADEMY

W/C 19 <sup>th</sup> February	Week B
W/C 26 <sup>th</sup> February	Week A
W/C 4 <sup>th</sup> March	Week B
W/C 11 <sup>th</sup> March	Week A
W/C 18 <sup>th</sup> March	Week B
W/C 25 <sup>th</sup> March	Week A

**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 2023-24 Year 8 – Term 4

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
<b>Monday</b>	ICT/DT	MFL
<b>Tuesday</b>	English	English
<b>Wednesday</b>	Science	Science
<b>Thursday</b>	History	Geography
<b>Friday</b>	RS	Music/Art

## Contents

**How to...**Pg 2-3

**Art.....**Pg 4

**Computing.....**Pg 5

**Drama.....**Pg 6 - 7

**DT.....**Pg 8

**English.....**Pg 9 - 10

**Food.....**Pg 11

**French.....**Pg 12 -13

**Geography.....**Pg 14

**German.....**Pg 15

**History.....**Pg 16

**Maths.....**Pg 17 - 18

**Music.....**Pg 19

**PE.....**Pg 20

**RS.....**Pg 21 - 22

**Science.....**Pg 23 - 26

**Spanish.....**Pg 27- 28

**Textiles.....**Pg 29

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 25<sup>th</sup> 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.

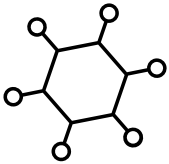
# Home Learning Strategies to help you revise

## Brain Dump



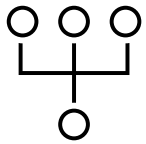
*Write down everything you know about a certain topic on a page. Use your KO to add extra notes in a different colour.*

## 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



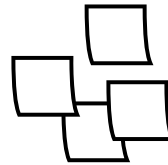
*Learn the key words associated with a topic and commit the word and spelling to memory. Test yourself or ask someone else to test you.*

## 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 Our Environment



## Keywords:

Climate Change  
Graffiti  
Extinction  
Environment  
Habitat  
Street Art

**Content:** In this project you will develop knowledge of environmental issues.

**Understand-** what inspired artists to create their work and how to critically analyse their work.

**Develop skills-** in observational drawing, colour theory, painting and visual communication.

**Outcomes-** Art works inspired by environmental issues and the Artists you have studied.

**Andy Warhol's "Endangered Species"** series includes 10 silkscreen prints. The animals were listed on the endangered at the time they were made in 1983. Andy Warhol made these prints to raise awareness about the endangered species. Andy Warhol is a famous artist from the Pop Art movement. He used images found in popular culture and used an industrial printing method to make his work.



## A R T I S T S



**NeverCrew** are a Swiss based street artist duo; Christian Rebecchi and Pablo Togni. The mural above 'Exhausting Machine' was created for the Vancouver Mural Festival in 2016. Nevercrew's art work explores the issues of climate change and pollution and the effect it is having on nature. You can find more information about their work at their website. <https://nevercrew.com/about>

Zoom

In colour theory, a **tint** is a mixture of a colour with white, which reduces darkness, while a **shade** is a mixture with black, which increases darkness.



**Complementary colours** are pairs of colours that contrast with each other more than any other colour, and when placed side-by-side make each other look brighter.







## 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 hate
- 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!



Line Bender



Pillar Drill



Fret Saw



File



Soldering Iron

Practice your tonal drawing skill here

### Develop Ideas with Sketches

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



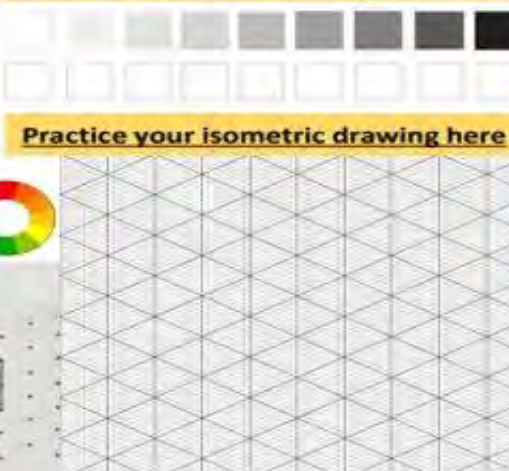
Practice your isometric drawing here

### Isometric Drawing Shows Objects at 30°

- 1) Isometric drawing can be used to show a 3D picture of an object.
- 2) It doesn't show perspective (things don't get smaller in the distance), but it's easy to get dimensions right.
- 3) There are three main rules when drawing in isometric:

- + Vertical edges are drawn as vertical lines.
- + Horizontal edges are drawn at 30°.
- + Tilted edges appear as parallel lines.

This drawing shows how an isometric axis is used.  
You could use plain paper and a 30/60° set square instead.



### Electrical Systems Involve Circuits

- 1) All electrical systems need to have a complete circuit to make them work. Here's a simple circuit:

The circuit isn't complete yet! — there's a gap at the switch. When you press the switch down you make a complete circuit. An electric current flows and the lamp comes on.



You can draw diagrams of electrical circuits using symbols. To represent the components, a set of standard symbols is used.

- 2) The materials you use in a circuit have to be conductors — 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 ductile.
- 3) Insulators (e.g. PVC) don't let electricity through, so they're used to coat the outside of wires.
- 4) Voltage from a power cell (a battery) or the mains pushes the electric current around a circuit.
  - Makes power is used for non-portable products like radios and televisions.
  - Batteries are used in portable products. There are disposable batteries and rechargeable ones.
  - Rechargeable batteries are more expensive than disposable batteries, but can be recharged in the long run as you don't need to keep replacing them. They're built in to some products, e.g. mobile phones.

- 5) Resistors are used to reduce 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 ( $\Omega$ ). A larger resistance means less current flows.

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

### Night Light Circuit Diagram



CAD = Computer Aided Design  
CAM = Computer Aided Manufacture

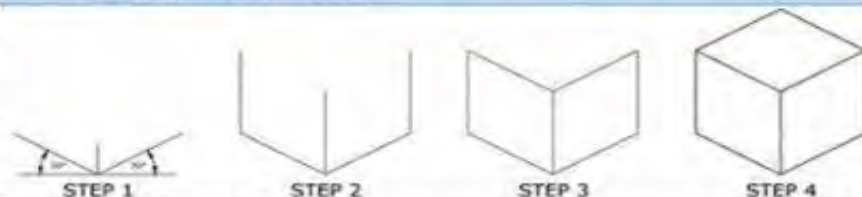
### Use modelling to improve your design

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.

### 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.

1. 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.
2. Record how the design develops – take photos of your models.
3. 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

<b>The Woman in Black</b> 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.
<b>The Tell-tale heart</b> 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.
<b>The Red Room</b> 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.
<b>Frankenstein</b> 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 Werewolf  
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;
- Prevents 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

**Macro-nutrients**

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

**Fat-soluble vitamins**

Fat-soluble vitamins (vitamins A, D, E and K) are mainly found in animal fats, vegetable oils, fatty foods, liver and oily fish.

While your body can store some vitamins for a while, you don't need to eat foods containing them every day.

**Water-soluble vitamins**

Water-soluble vitamins (vitamins 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 (iron, calcium and iodine) amongst many others, 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 eclairs.

**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 food or contaminated food. Some foods may contain certain microorganisms, which can become harmful.

**Symptoms of food poisoning:**

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

**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; lentil soup 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
<b>Food Spoilage</b>	The bacteria <i>Clostridium botulinum</i> 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.



## Present tense holidays Year 8 French

### 8.7 Knowledge Organiser

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

**-er -ir -re**

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

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

#### Examples:

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

## The present and future tenses



### The Near Future :

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

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

### Going to or living in a country

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

#### Examples :

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



## 8.7 Present Holidays - French Vocab List

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

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

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

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

Quel temps fait-il ?	What is the weather like?
Il fait beau/ il fait mauvais	It is good /bad weather
Il fait chaud/ froid	It is hot/cold
Il y a du soleil	It is sunny
il fait 25 degrés	It is 25 degrees
Il pleut	It is raining
Il neige	It is snowing
Il y a du vent	It is windy
Il y a des nuages	There are clouds

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

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



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



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

<b>Positive</b> More people have access to clean water and medical care in cities	<b>Negative:</b> 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





# Typical holidays Year 8 German Term 4 vocab. list

<b>Wohin fährst du</b> Ich reise ... Ich fahre... nach Berlin/ London nach Frankreich nach Spanien nach England nach Schottland nach Irland nach Polen nach Deutschland nach Österreich nach Wales nach Italien in die Schweiz in die Türkei in die Karibik nach Amerika	<b>Where do you travel?</b> I travel... I go ... To Paris / to London To France To Spain To England To Scotland To Ireland To Poland To Germany To Austria To Wales To Italy To Switzerland To Turkey To the Caribbean To the States	<b>Wo bleibst du?</b> Ich bleibe in..... einem Hotel einer Ferienwohnung auf einem Campingplatz einer Jurte einem Wohnwagen einem Zelt einer Jugendherberge einem Mobilheim bei meinen Großeltern	<b>Where do you stay?</b> I stay in.. A hotel A holiday flat A campsite A yurt A caravan A tent A youth hostel A static caravan At my grand-parents'	<b>Was machst du in den Ferien?</b> Sich entspannen (ich entspanne mich) Spaß haben/es macht Spaß sich sonnen Denkmäler besuchen zum Strand gehen ins Restaurant gehen einkaufen gehen spazieren gehen Fotos machen Souvenirs kaufen Wassersport machen	<b>What do you do on holidays?</b> To relax (I relax) To have fun (it is fun) To sunbathe To visit monuments To go to the beach To go to the restaurant To go shopping To go for walks To take photos To buy souvenirs To do water sports
<b>Wie fährst/reist du?</b> zu Fuß mit dem Fahrrad mit dem Motorrad mit dem Auto/Wagen mit dem Zug mit dem Schiff mit der U-Bahn mit dem Reisebus mit dem Bus mit dem Flugzeug mit der Straßenbahn = by tram mit der Fähre = by ferry	<b>How do you travel?</b> On foot By pushbike By motorbike By car By train By boat By tube/underground By coach By bus By plane	<b>In der Stadt</b> Ich besuche Wir besuchen der Supermarkt die Brücke das Schwimmbad das Eisstadion die Stadtmitte das Kino das Museum das Theater das Verkehrsamt das Einkaufszentrum das Freizeitzentrum der Markt das Stadion der Freizeitpark das Krankenhaus die Monumente die Geschäfte die Kirche der Bahnhof	<b>In the town</b> I visit... We visit... The supermarket The bridge The swimming pool The ice rink The town centre The cinema The museum The theatre The tourist information office The shopping centre The leisure centre The market The stadium The theme park The hospital The monuments The shops The church The train station	<b>Wo ist...?</b> Es ist weit Es ist in der Nähe Es ist 5 Minuten von hier entfernt Es ist à 300 Meter entfernt Gehen Sie geradeaus An der Ampel Zum Kreisverkehr Gehen Sie links Gehen Sie rechts Nehmen Sie die erste/zweite Straße über die Brücke	<b>Where is...?</b> It's far It's nearby It's 5 minutes away It's 300 metres away Go straight on At the traffic lights To the roundabout Go left Go right Take the first / second road over the bridge
				<b>Wie ist das Wetter?</b> Es ist schön Es ist heiß Es ist sonnig Es ist kalt Es ist 25 Grad Es ist schlecht Es regnet Es schneit Es ist windig Es ist wolzig Es gibt einen Regenbogen	<b>What is the weather like?</b> It is good weather It is hot It is sunny It is cold It is 25 degrees It is bad weather It is raining It is snowing It is windy It is cloudy There is a rainbow



Why are we learning about this?

The British Empire covers over 400 years of British History. It was the largest empire in history. We are going to learn how the British Empire impacted different locations around the world and how the legacy of the empire still impacts peoples' lives today.

Key Events

1	<b>1500s</b> - England begins to establish itself as a naval power and looks to control more land.
2	<b>1612</b> – East India Company began a small empire of trading posts in India.
3	<b>1770</b> – Captain James Cook landed his ship in Australia
4	<b>1807</b> - Slave trade outlawed (but does not outlaw slavery itself)
5	<b>1833</b> - Slavery abolished in British Empire
6	<b>1842</b> – Britain took control of Hong Kong after the opium wars with China
7	<b>1857</b> - Rebellion in India (Indian Mutiny). British government took over India from the East India Company, start if the British Raj.
8	<b>1901</b> – Australian independence from the British Empire.
9	<b>1919</b> – The Amritsar massacre takes place in India.
10	<b>1947</b> – Indian gains independence from the British Empire.
11	<b>1919</b> - British government massacred a peaceful gathering at Amritsar, India.
12	<b>1947</b> - India and Pakistan given independence.
13	<b>1997</b> - Hong Kong was handed back to China.



The British Empire was so large it was said: "the sun never sets on the British Empire"

## History Year 8 Term 4

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

Why did Britain want an Empire?Trade (and money)

The British could make huge amounts of money from trading across the Empire. They could also access resources which otherwise were not available to them.

Warfare

The British used soldiers from around the Empire in their army.

Political power and influence

The British became one of the most powerful countries in History. Even today, Britain is far more powerful than it's size suggests.

Religion

The British tried to spread Christianity across the Empire, often ignoring local religions and cultures.

Key Terms

14	Aboriginals	The people native to Australia. They have lived there for over 60,000 years
15	The British Raj	Period of British rule in India after 1857. From the Hindi word for reign.
16	colony	A country that is controlled by an empire. E.g. India, South Africa, Australia, Canada.
17	Commonwealth	A group of countries that were once part of Britain's Empire that associate with each other today.
18	empire	When one country rules over other countries. E.g The British Empire.
19	mutiny	Disobeying or fighting against the leaders in charge.
20	native	Some from an area.
21	opium	An addictive illegal drug from the juice of the opium poppy.
22	partition	The action or state of dividing or being divided into parts.
23	Sepoy	An Indian soldier serving under British orders.

History Skills Focus

Similarities and differences	We will be explaining how <b>similar and different</b> the impacts of the British Empire were on different colonies.
Consequence	What were the results/impacts of the British Empire on the colonies.



**Keywords**

**Percent:** parts per 100 — written using the % symbol

**Decimal:** a number in our base 10 number system. Numbers to the right of the decimal place are called decimals

**Fraction:** a fraction represents how many parts of a whole value you have.

**Equivalent:** of equal value

**Reduce:** to make smaller in value

**Growth:** to increase/ to grow

**Integer:** whole number, can be positive, negative or zero

**Invest:** use money with the goal of it increasing in value over time (usually in a bank)

**Fraction/ Percentage of amount**

Remember:

$\frac{10}{100}$ of £60 = £6
$\frac{30}{100}$ of £60 = £18
$\frac{60}{100}$ of £60 = £36

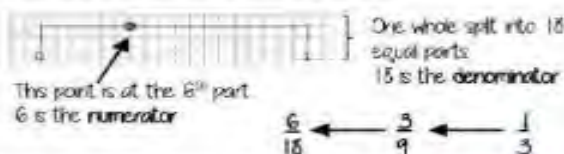
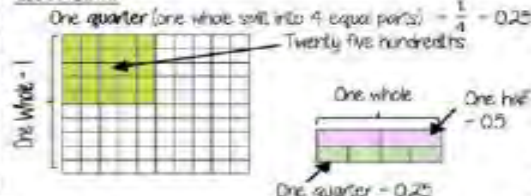
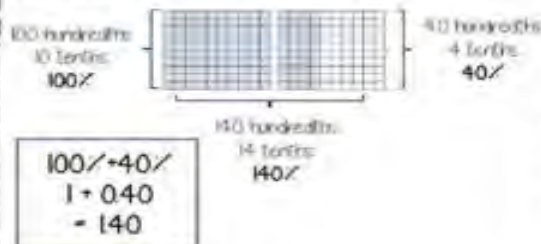
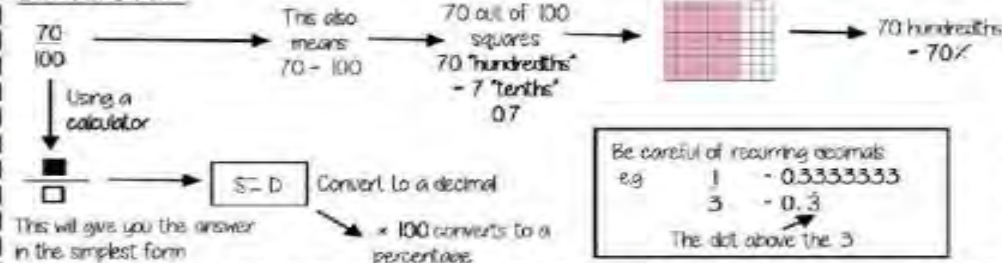
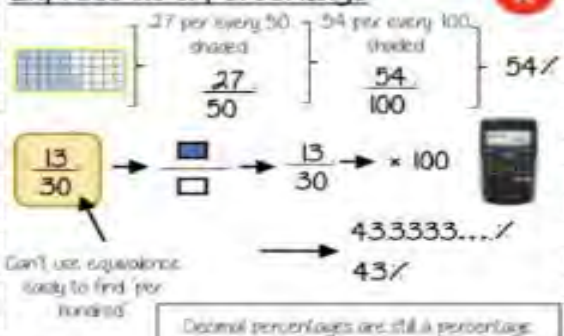
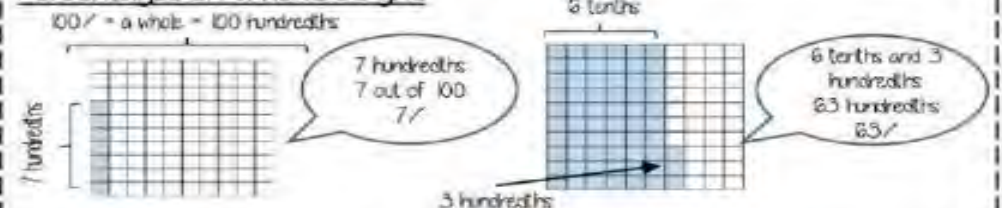
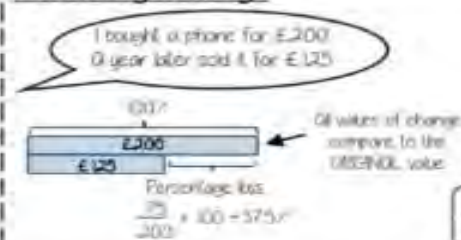
Remember:

$\frac{3}{5} = 60\% = 0.6$

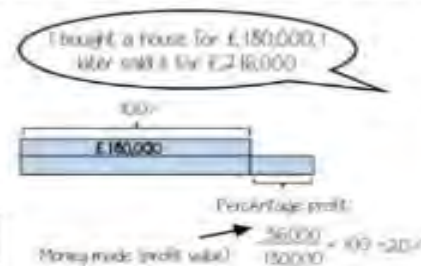
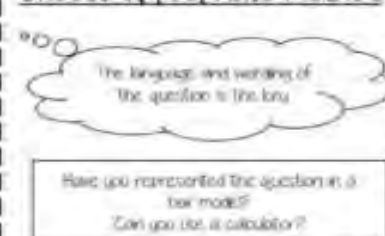
$60\% \text{ of } £60 = 0.6 \times 60 = £36$

**Fractions — on a diagram**

The denominator is represented by EQUALLY sized parts — this is split into quarters

**Fractions — on a number line****Quarters****Convert FDP < and > 100%****Convert FDP****Express as a percentage****Percentages on a hundred grid****Percentage change**

$$\frac{\text{Difference in value}}{\text{Original value}} \times 100$$

**Choose appropriate method**

- Do all calculations in the same unit (often the smaller measurement)
- Read for the units of your answer
- Do all conversions of units at the same time
- Represent your answer rationally where possible



# Great Composers

**Symphony** – A long piece of music played by an orchestra, divided into 3 or 4 sections  
**Motif** – A short memorable melody  
**Ballet** – A classical performance combining Dance and Music  
**Programme Music** – Music that tells a story and paints a picture in the listeners' mind through sound  
**Ostinato** – A short repeating pattern of notes  
**Syncopation** – Playing on a 'weak' beat  
**Call & Response** – When music is repeated by different instruments or musicians

Aaron Copland  
 1900 –  
 1990



Key Work:

- Hoedown  
An American folk dance.

Programme Music:  
music which paints a picture.

Call and Response:  
instruments imitating other instruments.

Syncopation:  
emphasising the weaker beats.

Ostinato: a repeating pattern of notes.

Carl Orff  
 1895 –  
 1982



Key Work:

- O Fortuna

Fortuna: the God of Fate. This piece is a cry to Fortuna saying how merciless and powerful he is.

Vocals: the lyrics are sung in Latin.

Alternating pulse to represent the marching of an army.

Ludwig Beethoven  
 1770 –  
 1827



Key Work:

- Symphony No. 5

A Symphony is a piece of music written for a full orchestra with no soloist.

Motif: a recognisable rhythmic pattern of notes.

Symphony no 5 is based around this motif:

Igor Stravinsky  
 1882 –  
 1971



Key Work:

- The Firebird

The Firebird is a Russian ballet first performed in 1910.

This piece is based around an extended melody.

Gustav Holst  
 1874 –  
 1934



Key Work:

- The Planets

An orchestral suite composed to represent the planets that were known to exist in 1914.

Each planet was linked to a Roman God or Goddess, for example: Mars, Bringer of War, Venus, Bringer of Peace.



# PRINCIPLES OF TRAINING



## Basic – FITT

### **F**REQUENCY

How often you train

### **I**NTENSITY

How hard you train

### **T**IME

How long you train for

### **T**YPE

What type of training you do



FREQUENCY



INTENSITY



TIME



TYPE

## Advanced - SIVRPAR

**SPECIFICITY** – Training should be specific to the individual's sport, activity or fitness goal

**INDIVIDUAL DIFFERENCES/NEEDS** – The programme should be designed to meet the individual training goals and needs

**VARIATION** – It is important to do different activities in training to prevent boredom

**REST & RECOVERY** – A sports performer needs to rest to allow their body to recover and repair

**PROGRESSIVE OVERLOAD** – In order to progress training needs to be demanding enough to cause the body to adapt, improving performance

**ADAPTATION** – How the body reacts to training loads by increasing its ability to cope with those loads

**REVERSIBILITY** – When training stops, training effects are reversed

# How do religions practice their faith?

## Knowledge Organiser

### Key terms

Allah

God in Arabic - the one and only God in Islam.

Five Pillars of Islam

Five duties that every Muslim must follow in order to live a good and responsible life according to Islam.

Medina

The place from which Muhammad established the Muslim community

Mosque

a place where Muslims come together to pray.

Qur'an

The holy book of Islam. Believed to contain teachings from Allah.

Salah

The pillar that focuses on the five daily prayers

### Worship

Within Islam, there are compulsory duties that Muslims must try to carry out. All Muslims follow the Five Pillars of Islam. For Sunni Muslims, the Five Pillars are the core duties of Islam.

**Salah** is the second of the **Five Pillars of Islam**. It is the belief that Muslims should pray five times each day. Prayer is important as it allows Muslims to communicate with Allah, listen to Allah and follow in the footsteps of the prophets.

Prayer is performed five times each day because of what the Qur'an says about prayer: *Establish prayer at the decline of the sun [from its meridian] until the darkness of the night and [also] the Qur'an of dawn. Indeed, the recitation of dawn is ever witnessed. (Qur'an 17:78).*

### Place of prostration

There are over 2.5 million Muslims in the UK and over 1,500 mosques. The mosque is a place to gather for prayers, to study and to celebrate festivals such as Ramadan. It can also be used to house schools and community centres.

The Arabic word for mosque, "masjid", means "place of prostration". The first mosque was the Prophet Muhammad's home in Medina, Saudi Arabia, a 7th-Century house with a large courtyard surrounded by long rooms.

The simplest mosque would be a prayer room with a wall marked with a "mihrab" – a niche indicating the direction of Mecca, which Muslims should face when praying. A typical mosque also includes a minaret, a dome and a place to wash before prayers. Each feature has its own significance.



# How do religions practice their faith?

## Knowledge Organiser

### Key terms

#### Afterlife

Life after death

#### Hadith

a collection of traditions containing sayings of the prophet Muhammad (pbuh)

#### Hajj

the fifth pillar of Islam. It is the pilgrimage to Makkah

#### Muslim Aid

An Islamic charity that provides help to people who are victims of natural or human-made disasters

#### Pilgrimage

a journey made to some sacred place as an act of religious devotion

#### Zakah

The third pillar of Islam. It is the compulsory giving of a set proportion of one's wealth to charity.

### Hajj

Hajj is the Muslim pilgrimage, which it is compulsory for Muslims to undertake at least once in their lifetime as long as they are healthy and can afford it. In order for it to count, a Muslim's journey must take place within the month of Dhu'l-Hijja, the 12th and final month of the Islamic calendar.

### Importance of Hajj

Those completing the Hajj are known as Hajji. Everyone taking part in the Hajj pilgrimage is treated as an equal and there is a great sense of unity. The pilgrimage shows self-discipline and fulfils a religious duty, bringing Muslims closer to God.

Some hadith agree that sins are cleansed by the journey: *He will return as if he were born anew* (Sahih al-Bukhari 26:596).

### Zakah

Zakah is the practice where a Muslim gives 2.5 per cent of their wealth to charity, after they have paid for what is necessary to support themselves and their families. People who are too poor will not be required to suffer hardship to give Zakah.

Muslims give to charity because they see wealth as a loan from Allah. These donations help Muslims to purify their souls by not being greedy. It is said that the giver of the money will receive a "hundred-fold" back in the afterlife.

In countries such as the UK, some Muslims perform Zakah by giving directly to a charity, such as Muslim Aid. Others contribute to collections in the mosque, which then distributes the money to those in need. In Islamic countries, often Zakah is collected as a tax.



## Year 8 Block 3 Biology Knowledge Organiser Evolution

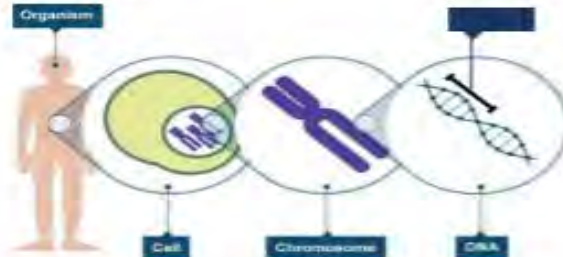
Revision guide Pgs: 26-29

<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 differs. This accounts for many variations.



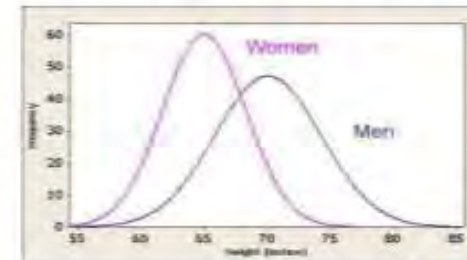
### Variation

- The differences between living things of the same species are 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.

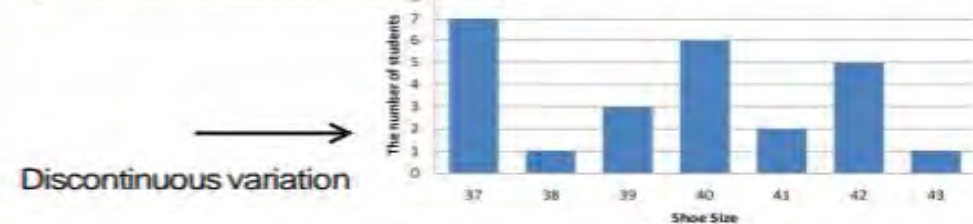
Key Terms	Definition
DNA	Molecule that carries all the instructions needed for an organism
Gene	A short length of DNA that has the information for a characteristic
Chromosome	A structure containing DNA found inside the nucleus of a cell
Variation	Differences between living organisms of the same species
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



## 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

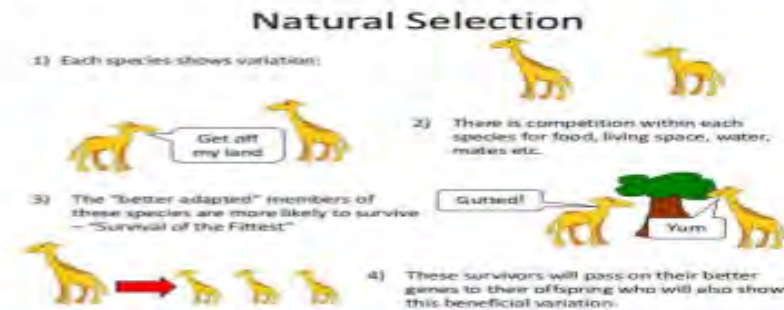
Variation can be caused by genes e.g. eye colour and your blood group. It can also be caused by environment which means the food you eat, the chemicals you're exposed to, the way you're brought up. Often variation is a combination of genes and environment e.g. intelligence and weight. Genetic variation 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/znxytyrd>**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****CO<sub>2</sub> – Carbon Dioxide**

1. Lit splint is extinguished (goes out) in the presence of CO<sub>2</sub> gas.
2. lime water turns from colourless to cloudy.

**H<sub>2</sub> – 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: 1<sup>st</sup> from the metal, 2<sup>nd</sup> 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/zrxtyrd>

### 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  $\rightarrow$  magnesium sulphate + copper

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

Zinc sulphate + copper  $\rightarrow$  no reaction.

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

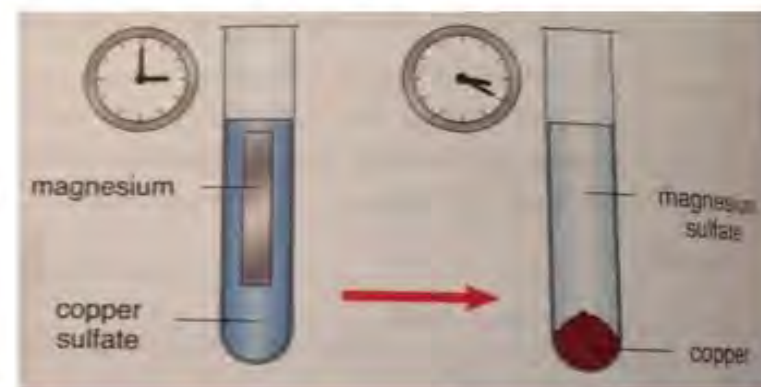
Key Word	Definition
Displacement	A reaction where a more reactive metal take the place of a less reactive metal.
Reactivity	A description of how quickly or vigorously a material reacts.
Reactivity series	A list with metals that shows how reactive they are

### Displacement Reactions

Eg. Magnesium + copper sulphate  $\rightarrow$  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

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

-ar -er -ir

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

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

#### Example:

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

## The 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	Vais	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





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

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

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

¿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 <b>cinco</b> minutos	It's <b>5</b> minutes away
Está a <b>300</b> metros	It's <b>300</b> metres away
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	Turn left
Gira a la derecha	Turn right
Tome la primera	Take the first
Tome a segunda	Take the second
Cruza el puente	Cross the bridge



**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.

**Year 8 Textiles Knowledge Organiser****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 longer want your clothing, donate it to a sibling or local charity shop.

**Textiles Hierarchy of Key words**

'Academic' keywords. Tier 3  Tier 2 Valuable keywords used in most lessons every lesson.  Tier 1 Basic keywords used in almost every lesson.	Plain seam  analyse  sustainable  embellishment  Woven/ bonded/ knitted  Free machine embroidery  function develop
	Complementary colours contrast environment fastening  compare embroidery iron equipment  context appliqué effect improve
	colour design shape  machine  Texture pattern line tone theme Fabric thread sew



# Use these in your writing and speaking

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

## 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...

## Sentence starter phrases

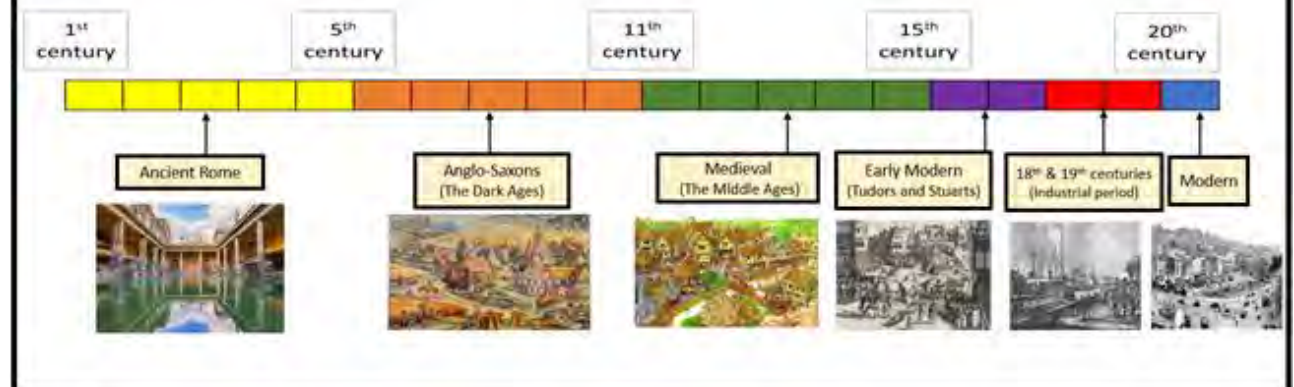
Most people would agree...  
Only a fool would think...  
We all know...  
A sensible idea would be...  
The fact is that...  
Surely you would agree that...  
Without a doubt...  
I am certain that...  
Some people might argue...  
However...  
Also...

## 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 = 2<sup>nd</sup> Century AD  
E.G: AD 1650 = 16 + 1 = 17<sup>th</sup> Century AD  
E.G: 500 BC = 5 + 1 = 6<sup>th</sup> Century BC  
E.G: 3000 BC = 30 + 1 = 31<sup>st</sup> Century BC  
When your date is 2 digits or less, it MUST be the first century AD/BC.  
E.g. AD 34 = 1<sup>st</sup> Century AD. 3BC = 1<sup>st</sup> Century BC.





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



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

\* 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.*















**Subject websites**

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](http://www.mrahmedcomputing.co.uk)

**Drama**

<https://youtu.be/VeTpob9LBM8>  
<https://youtu.be/wISEU13mRBE>  
<https://www.bbc.co.uk/bitesize/guides/zsf8wmn/revision/1>

**DT:**

<http://www.mr-dt.com/>  
<http://technologystudent.com/>  
<https://www.senecalearning.com/>

**PE**

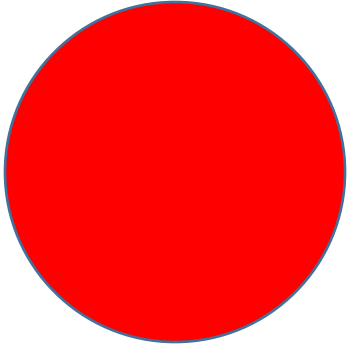
<https://www.bbc.com/bitesize/examspecs/ztrcg82>  
<https://sites.google.com/view/ocrgcseperevision/home>

**RS**

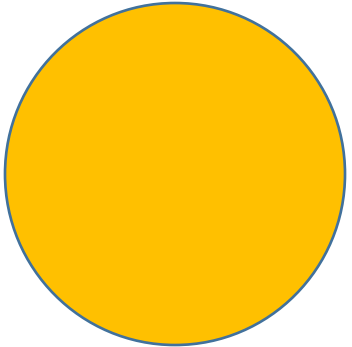
KS3 <https://www.bbc.co.uk/bitesize/subjects/zh3rkqt>



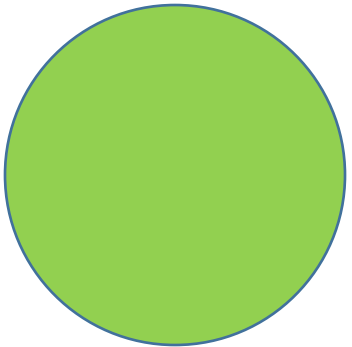
## How would you describe your learning in this lesson?



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					