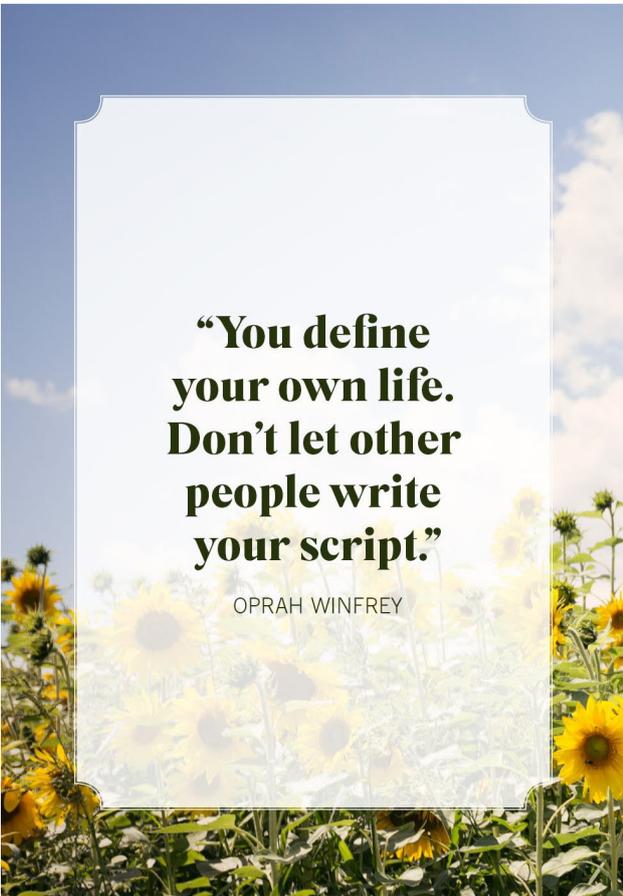




**Year 7**

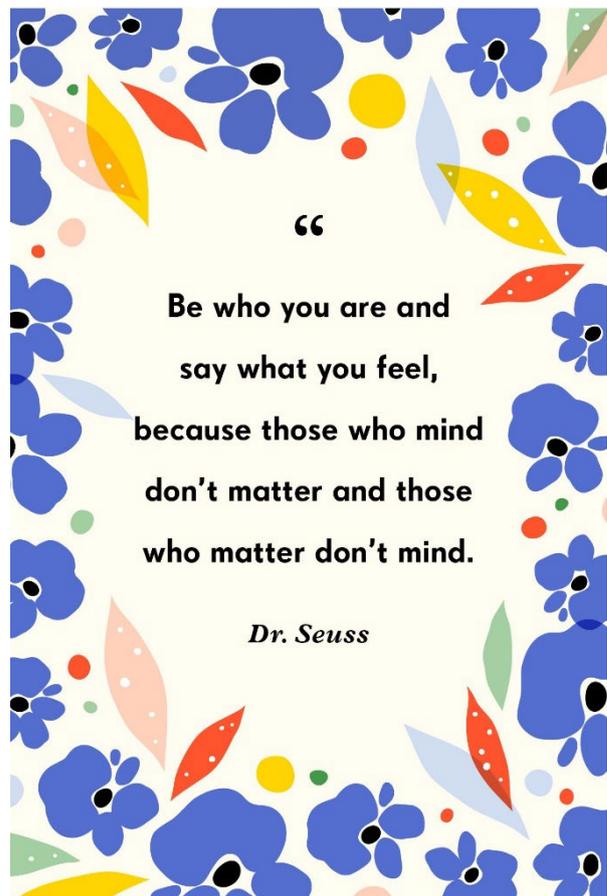
**Knowledge Organiser**

**Cycle 3 – 2023/24**



**“You define  
your own life.  
Don’t let other  
people write  
your script.”**

OPRAH WINFREY



“

**Be who you are and  
say what you feel,  
because those who mind  
don’t matter and those  
who matter don’t mind.**

*Dr. Seuss*

# CREATIVE

---

- **Art**
- **Drama**
- **Music**

**Cycle 3 in Art will focus on: Mythical Creatures**

You will be researching the mythical creatures of **Ancient Greece** and the **Chinese Dragon**, making a **research page** and then **designing and creating** your own **mythical creature model**

This cycle we will be developing an understanding of **mythical creatures** from different cultures, and the wider role that myths play in society, linking back to our learning on **Symbolism** in cycle 2.

Further into the project you will begin to **design and create your own mythical creature model**, choosing how you will do this from a few options.

Key words and definitions	
<b>Symbolism</b>	The use of symbols to represent ideas or qualities
<b>Culture</b>	The ideas, customs, and social behaviour of a particular people or society
<b>Fantasy</b>	An idea with no basis in reality
<b>Hybrid creature</b>	A creature that is composed of parts of two or more animals or species, they are a common occurrence in the myths and legends of many cultures
<b>Research</b>	To gather and record relevant information about a specific thing
<b>Inspiration</b>	The process of being mentally stimulated to do or feel something, especially to do something creative
<b>Design</b>	A plan or drawing produced to show the look, function or workings of an object before it is made
<b>Fantasy</b>	A traditional story which often involves supernatural creatures or events. These stories play an important role in the culture they are from, sometimes functioning as <b>symbolic</b> morality tales
<b>Model</b>	A three-dimensional representation



It is really important that you spell the art terms correctly. Take some time to learn the spellings of these words.

# Mythical Creatures

The **Chinese Dragon** is a legendary creature in **Chinese Mythology** and **culture**. Historically, the Chinese dragon was seen as a symbol of **Imperial power** and is now seen as a symbol of **Chinese culture, good luck, prosperity and harmony**.



The Chinese Dragon



## Significance of Myths

Early civilisations created myths to make sense of what was happening in the world around them and to **symbolise** things that made their **culture** unique from others.

Myths often feature battles between Gods, humans and **mythical creatures** and were designed to teach about **the importance of courage, intelligence and the distinction between right and wrong**. The use of **symbolism** in myths to **signify right and wrong** can be linked to the idea of a **morality tale**.

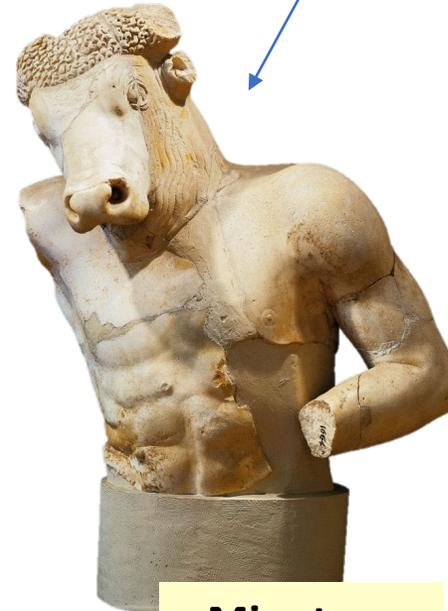


Chimera

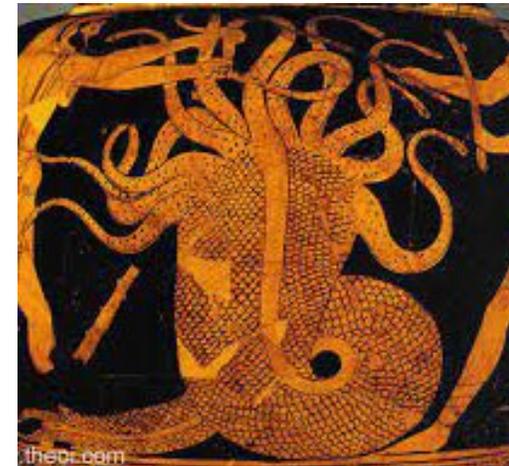


Medusa

## Ancient Greek Mythical Creatures



Minotaur



Hydra

Cycle 3 in Drama will focus on: The style of Commedia Dell’Arte. You will look at the historical context of the style and the main (stock) characters, including their physicality and personality.

Key words and definitions Commedia Dell’Arte	
<b>Characterisation</b>	The act of using key drama skills when in role to portray a character consistently and successfully.
<b>Genre</b>	A style of category of performance.
<b>Stock Characters</b>	The main or recurring characters from a drama.
<b>Relationships</b>	The way characters respond to and interact with others.
<b>Melodrama</b>	A genre of performance characterised by exaggerated characters. Facial expression and movement.
<b>Commedia Dell’Arte</b>	Is a genre of theatre that translates as ‘Comedy of Arts’ and originated in Italy in the early 16 <sup>th</sup> century.
<b>Influence</b>	Modern comedies that are directly related to Commedia.
<b>Lazzi</b>	Lazzi is the plural of Lazzo. A Lazzo is a comedic routine or moment. A Lazzo can also include a character’s catchphrase, or action associated with them.
<b>Gromalot</b>	How the characters communicate. It’s a nonsense, gibberish language that the audience can understand by the way the actors use their physicality
<b>Status reversal</b>	When the power shifts from master to servant, if only for a short time.
<b>Improvisation</b>	To make something up on the spot. Unrehearsed.

### Commedia Dell’ Arte

Commedia dell’arte, (Italian: “Comedy of the Arts”) is an Italian theatrical form that flourished throughout Europe from the 16th through the 18th century. Outside Italy, the form had its greatest success in France.

The first recorded commedia dell'arte performances came from Rome as early as 1551. Commedia Dell'Arte were the first paid company recorded. They would perform outdoors in temporary venues, often using the Promenade Theatre style for their audiences.

Commedia Dell’Arte used ensemble acting and the work was heavily improvised. The stock characters usually represented social types and were very exaggerated. The plots were frequently borrowed from the classical literature.

The Masters and Servant wore masks. These masks were used to help with the performance because they help bring the characters to life.

Why do we study this in drama?

Commedia Dell’Arte is arguably one of the most influential genres you will study at PCSA. As you learn more about the topic you’ll begin to realise just how important it is to modern day comedy, even in TV. Much loved characters such as ‘Del Boy’, ‘Roy and Moss’ ‘Mr Bean’ and everyone from the Simpsons can be characterised from Commedia Characters.



Pantalone – Master

Bird like head movements.  
Hands behind his back or pointing at someone.  
Leads with the nose.



Arlecchino – Servant

He is a bit of a dim-wit, silly, simple minded person and perpetually hungry.  
He leads with his shoulders and arms.



Zanni – Servant

The lowest servant.  
Likes to play tricks on his masters. He looks like he is in awe of everything.  
Leads by his knees.



Capitano – Master

He is a show-off, making out he is clever, brave, and quick-witted but in actual fact he is cowardly and foolish. He is also a good singer and musician. He leads from his chest.



Dottore – Master

Somehow in a position of power.  
Not very bright.  
Leads with his stomach.



Columbina - servant

She is flirtatious, efficient and a carefree servant who is intelligent enough to have achieved a higher status. She is also affectionate and entertaining, with no desire to be rich.



Performance skills used in Commedia:

**Posture:** Each character is identified by how they stand.

**Gesture:** Specific and appropriate to each stock character.

**Facial Expression:** Very exaggerated and clear to the audience.

**Voice:** A key drama skill and will involve a great deal of vocal variety.

**Movement:** Characters have specific movements that relate to their posture.

**Relationships:** Understanding how each character interacts with others.

**Cycle 3** in Music will focus on traditional **FOLK** music. We will study the importance of cultural traditions within the British Isles and the main instruments used.

Key words and definitions	
<b>Fiddle</b>	The name for a violin in the folk tradition
<b>Folk</b>	Music performed by custom over time
<b>Jig</b>	A piece of music that accompanies a lively dance
<b>Sea shanty</b>	A sailors work song
<b>Celtic</b>	Folk music originating from Scotland and Ireland.
<b>Gaelic</b>	Traditional language spoken in Scotland and Ireland
<b>A capella</b>	Singing without instrumental accompaniment
<b>A round</b>	A minimum of 3 voices singing the same melody, starting at different times
<b>Ceilidh</b>	A party with folk music, singing and dancing.
<b>Chord</b>	A group of notes played together
<b>Strum</b>	Playing chords rhythmically

This unit will draw upon skills and knowledge developed in the previous year.

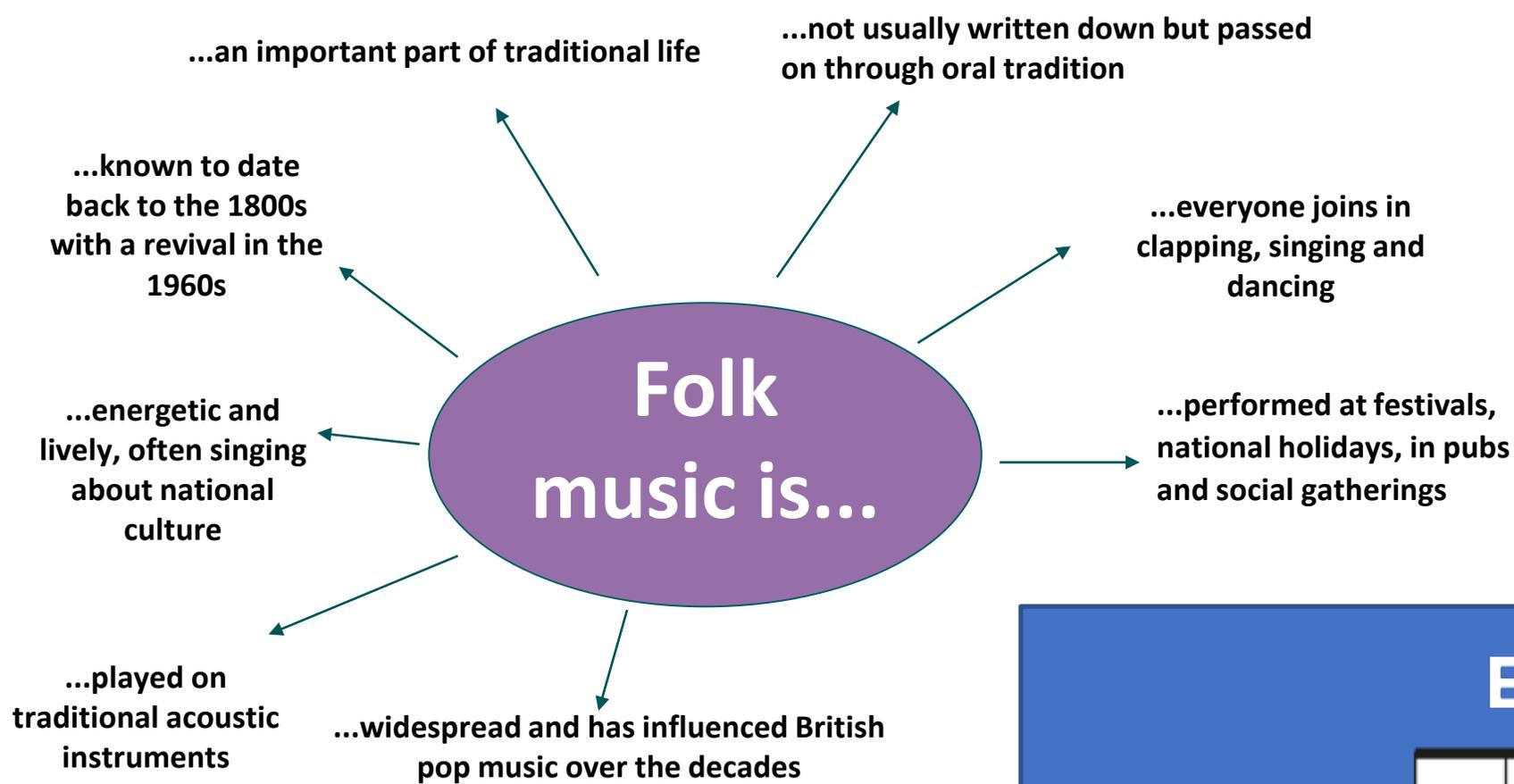
We will develop our ability to understand musical styles and describe the factors that influenced their inception.

These skills will be important for developing your understanding of musical history and will prepare you for further study in KS4.

The cycle will conclude with a knowledge test based on your understanding of folk music and a practical assessment to assess the skills you have developed.

**It is really important that you spell the music words correctly. Take some time to learn the spellings of these words.**





**Bellowhead** were an English contemporary folk band. They played traditional dance tunes, folk songs and shanties. Bellowhead's band members played more than 20 instruments between them and all eleven performers provided vocals.

- CAREERS: Music Festival Organiser**
- There are hundreds of folk festivals that take place all over the UK.
  - Managing an event like this requires good organisation, communication and planning skills.
  - Advertising for events requires publicity in local communities and online
  - The average salary for an events manager is £40k

**Ukulele Chords**

This cycle we will be learning two new chords

**Em**

		1
	2	
3		

**D**

2	1	3

# DESIGN & TECHNOLOGY

---

- **Design & Technology**
- **Food & Nutrition**

## Natural Woods

During this topic you will learn the types, properties, structures and uses of the main natural and manufactured boards.

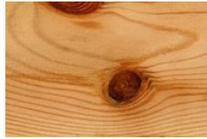
Wood is an organic material that is the main substance in the trunk and branches of a tree. Wood prepared for use in building and carpentry is known as timber.

**Hardwoods** – most come from broad-leaved, deciduous trees (trees that shed their leaves annually). They are generally low growing and are therefore usually more scarce and expensive than softwoods.



**Softwoods** – come from coniferous trees that have long needle-like leaves and are generally found in cold climates. They are quick growing and can therefore be replaced quicker than hardwoods.



Oak	Mahogany	Beech	Balsa	Pine	Cedar
Very strong, heavy, durable and hard. Attractive grain.	Hard, strong, easy to work & resistant to rot. Expensive.	Hard, tough, strong and finishes well.	Very light & soft, but has great strength-to-weight ratio.	Easy to work with, reasonably strong. Lots of knots.	Natural oils make it durable and resistant to weather.
					
Flooring Furniture Whisky barrels	Flooring Fine furniture Jewellery boxes	Laminated furniture Children's toys Flooring	Surfboard cores Air craft and model making	Furniture Construction Door frames	Outdoor furniture Sheds Fencing

## Manufactured boards

Woodchips broken down into pulp (small fibres), mixed with glue and compressed.

### Plywood

- Very strong in all directions; often stronger than solid wood.
- Outside layers are finished with a higher-quality veneer.
- Must always include an odd number of layers with the grain running in alternating directions.
- **Used in construction, furniture.**
- **Comes in water-resistant marine grades used in boats.**



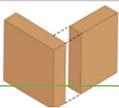
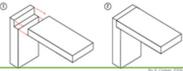
Alternate layers of wood (veneers) are glued together at 90 degrees to each other.

### Medium density fibreboard (MDF)



- Has a smooth surface, which makes it easier to paint and finish. (often with higher-quality veneer).
- Denser than other manufactured boards.
- Produces hazardous dust (work in ventilated area).
- **Used in flat-pack furniture, storage units.**

Manufactured boards are made from fibres, chips, blocks or sheets of wood bonded together with adhesives.

Key word	Definition
<b>Hardwood</b>	Broad leaf trees, slow growing, generally more expensive than softwoods.
<b>Softwood</b>	Needle shaped leaves, faster growing, generally cheaper than hardwoods. Coniferous.
<b>Evergreen</b>	Keep their leaves all year round.
<b>Deciduous</b>	Trees that lose their leaves in winter.
<b>Coniferous</b>	Conifer trees (softwoods) Have their seeds in cones.
<b>Varnish</b>	Used in wood finishing applications where the natural tones and grains in the wood are intended to be visible.
<b>Butt joint</b>	 <p>The most basic and simple wood joint to construct. Made with only two pieces of timber that are butted together at the ends. The weakest wood joint, held together with glue, nails, screws or dowel.</p>
<b>Lap joint</b>	 <p>Similar to the butt <b>joint</b> however one of the ends of the timber has a groove cut out of it to create much better holding strength.</p>
<b>Grain</b>	 <p>A pattern of fibres seen in a cut surface of wood.</p>
<b>Knot</b>	 <p>Appear in the trunk where branches died. Knots are imperfections that cause living wood grain to grow around them.</p>
<b>Dowel</b>	 <p>Used to reinforce wood joints.</p>

1. 	2. 
3. 	4. 
5. 	6. 
7. 	8. 
9. 	10. 

Tool name	Use	Tool name	Use
1. <b>Try square</b>	Marking 90° angles	6. <b>File/s</b>	Removes fine amount of material from work.
2. <b>Tenon saw</b>	Cutting straight lines in wood.	7. <b>Rasp</b>	Coarse file used for shaping wood or other material.
3. <b>Coping saw</b>	Cutting curves in wood and plastic.	8. <b>Sanding disc</b>	Sanding and finishing wood.
4. <b>Bench hook</b>	Helps hold wood in place whilst cutting.	9. <b>G clamp</b>	Holding work down whilst cutting or gluing.
5. <b>Wood vice</b>	Holding working whilst cutting/filing.	10. <b>Steel rule</b>	Measuring material in cm/mm.

During this cycle you will learn the safe use of equipment; basic practical cookery skills; safety and hygiene.

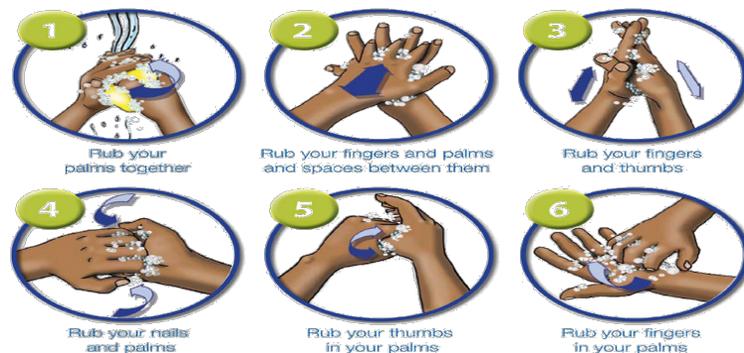
Key words and definitions:	
Hazard	Something dangerous
Control	To make a hazard safer
Safety	Reducing the risk of accidents
Hygiene	Keeping food clean and preventing bacterial growth
Evaluation	Looking back at what you have done and assessing it
Boiling	100°C, large bubbles
Simmering	95°C, small bubbles
Bridge hold	Make a bridge with one hand to hold veg/fruit, picture overleaf
Claw grip	Make a claw with one hand to hold fruit/veg, picture overleaf



## Theory work: Safety and Hygiene

- Roll up long sleeves
- Tie up long hair
- Stack the stools
- Wash hands in warm soapy water
- No nail varnish
- Short nails
- Put on an apron
- Make sure your work surface and equipment are clean
- Throw away food you drop on the floor
- If you need to sneeze or cough, move away from the food to do it
- If you touch your hair, cough or sneeze, wash your hands again
- Keep your work area free of rubbish
- Wash up properly in hot soapy water
- Dry equipment thoroughly
- Keep high risk foods in the fridge

Wet your hands under warm running water and apply soap.



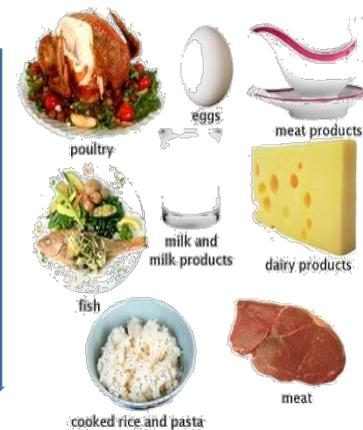
Dry your hands thoroughly with a paper towel or clean towel.



### Conditions for bacteria to grow:

- Food
- Moisture
- Warmth
- Time

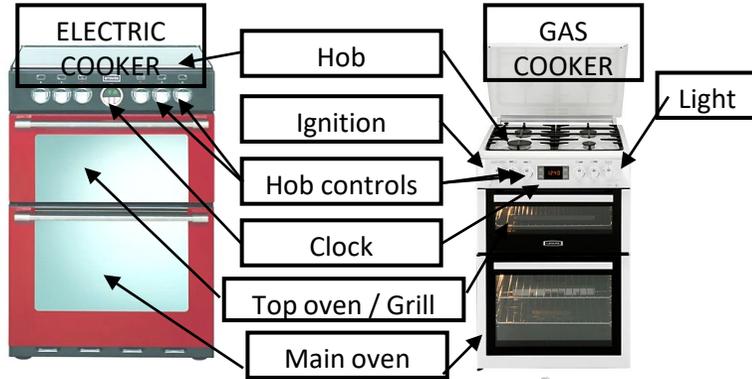
### High Risk Foods:



In a Food room you need to be able to identify hazards while you are working and make them safe.

Everyone in the room is responsible for their own safety and the safety of the rest of the class.

### Theory work: Equipment



Teaspoon  
Dessert spoon  
Table spoon



### Practical work:

#### Peeling and Chopping:

- Focus and concentrate
- Keep your eyes on the knife
- Peel downwards and away from your hands
- Check your knife is the right way up
- Use bridge or claw grip
- Keep peelings OFF the chopping board
- Keep raw meat and fish well away from other foods
- DO NOT leave knives in the washing up bowl

#### Using the oven:

- Pre-heat before cooking food
- Use oven gloves
- Keep trays level
- Do not put food on the bottom of the oven
- Turn off after use

#### Using a liquidiser:

- DO NOT plug in until you are ready to use
- Make sure your hands are dry
- Fill max 2/3 way
- Check jug is locked on
- Check lid is properly on
- Keep your hand on the top when turned on
- Pulse for 5 seconds max per time
- Turn off and unplug after use
- Wash up jug and lid only and watch out for spikes

#### Boiling 'v' Simmering

- Boiling is a higher temperature than simmering (100°C compared to 95 °C).
- Boiling liquids have big bubbles, whereas simmering liquids have little bubbles.



#### Using the grill:

- Open the door
- Leave the door OPEN
- Pre-heat before cooking food
- Check food frequently
- Turn off after use

#### Washing up:

- Stack dishes next to the sink
- Use hot soapy water
- Use a dishcloth or a brush
- Check equipment is clean
- Put washed equipment on the draining board
- Dry up with a clean dry tea towel
- Put clean dry equipment away from any remaining dirty equipment
- Return equipment to cupboards

#### Using the hob:

- Choose a ring the same size as your pan
- Keep the pan handle to the side
- Be careful that pan and lid handles are not hot
- Once food is up to temperature, reduce the heat
- Use a lid whenever you can
- If you are stirring food make sure your spoon is in contact with the bottom of the pan
- Check on the food often
- Adjust the temperature when necessary
- Turn off after use

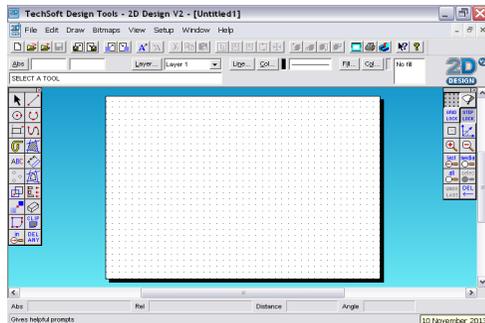
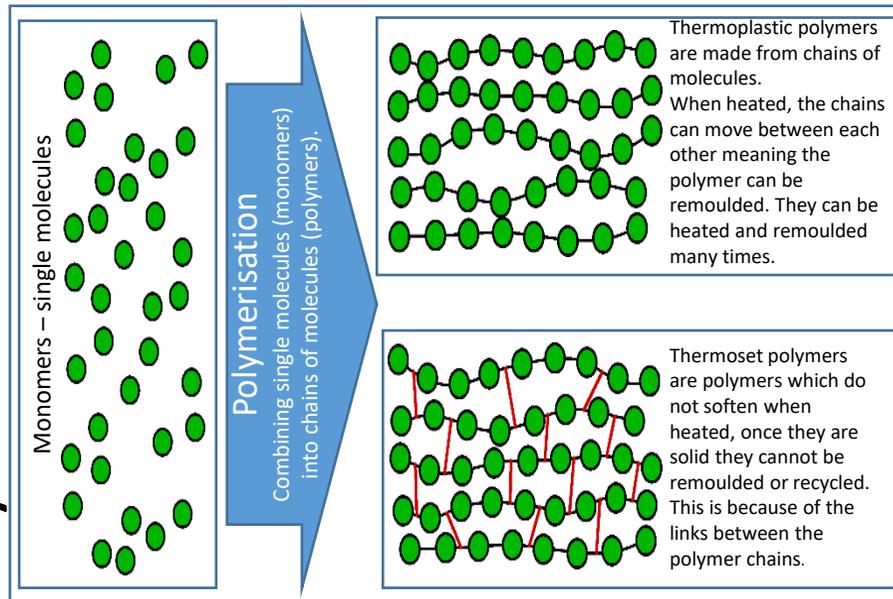
## Polymerisation

### Where do polymers come from?

Polymers are often referred to as ‘plastics’, this is because of their property of *plasticity* (mouldable). The majority of polymers used in modern products are *synthetic*, although natural polymers do exist.

Synthetic polymers are often made from crude oil, a non-renewable fossil fuel. Although some polymers are being developed which are made from renewable sources such as vegetable oils, this is still a very small proportion of the polymers used to make products.

The process of manufacturing polymers is called **polymerisation**.



**CAD**  
Computer Aided Design  
e.g. 2D Design Tools  
**CAM**  
Computer Aided  
Manufacture e.g. Laser  
Cutter

There are two categories of polymers, **thermosetting plastics** and **thermoplastics**. Thermoplastics soften when they are heated so they can be reshaped many times, thermoset plastics cannot.

Thermoset plastics	Thermoplastics
Polyester Resin	Acrylic (Polymethyl methacrylate/PMMA)
Epoxy Resin	ABS (Acrylonitrile butadiene styrene)
Urea Formaldehyde	Low-density polythene (LDPE)
Melamine Formaldehyde	High-density polythene (HDPE)
	Polyvinyl chloride (PVC)
	High density polystyrene (HDPS)
	High impact polystyrene (HIPS)
	Polypropylene (PP)

Key word	Definition
Plasticity	The ability to be pressed or moulded into shape.
Hard	The resistance to indentation or scratching.
Brittle	Shatters easily under pressure or vibration.
Toughness	The ability to withstand impact..
Flexible	The ability to allow some flex or movement without snapping.
Insulator	A material which does not conduct electricity or heat.
Sustainability	The impact that using the material has on the environment.



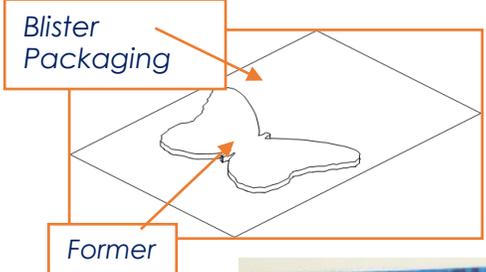
Laser  
Cutter



Recycling Symbol	Definition
 Mobius Loop	Indicates an object is <b>capable</b> of being recycled.
 The Green Dot	Shows the producer has made a financial contribution towards the recovery and recycling of packaging.
 PET Plastics	Identifies the type of plastic resin used to make the item using a number between 1 and 7.
 Paper	Paper or board is made from a minimum of 50%, 75% or 100% genuine waste paper and/or board fibre.
 Waste Electricals	Waste electrical items can be recycled.
 Age Warning	Unsuitable for children that are younger than three years old.
 Tidy Man	A reminder to be a good citizen, disposing of the item in the most appropriate manner.

During this topic you will learn the purpose of packaging and relevant symbols.

Thermoplastics
<ul style="list-style-type: none"> <li>• Can be heated and reshaped.</li> <li>• Can be recycled.</li> <li>• Poly Vinyl Chloride (PVC)</li> <li>• High impact polystyrene (HIPS)</li> </ul>



**Scales of measurement**  
 mm = millimetre  
 cm = centimetre  
 m = metre



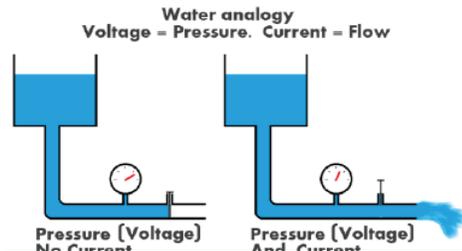
Recycling Symbol	Definition
 Lion Mark	Product has been made by a company who believes in making good quality, safe toys.
 CE Mark	Product meets all the requirements of the European legislation and can be sold within the EU.
 British Kite Mark	Product conforms to the relevant British Standards.

**Purpose of packaging**

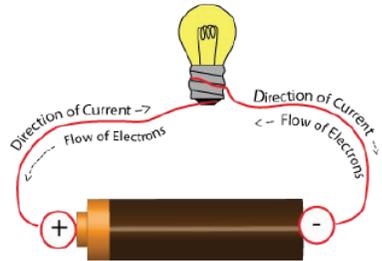
- Protecting from impact and all outside interference.
- Ensuring food inside is going to be hygienic.
- Extending the shelf life or the freshness of the content.
- To identify the product.
- Printed Information for customers.
- To keep the product together to contain it.
- Easier for storing and transporting.

During this topic you will learn about electronic components and circuit construction. You will also learn how vacuum forming is used to manufacture a casing for your design.

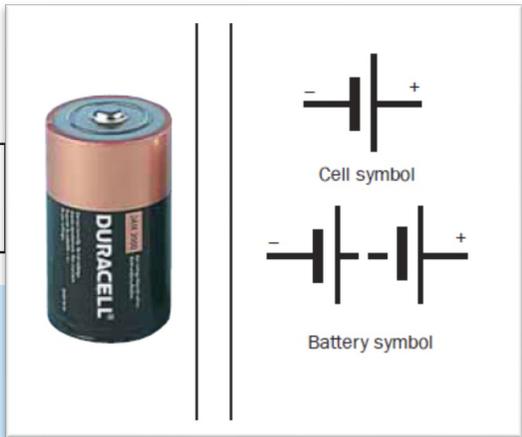
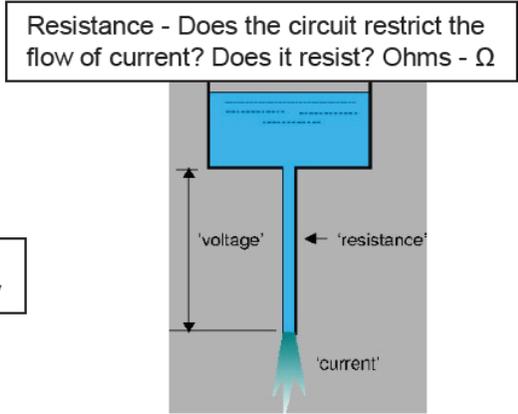
## The Basics



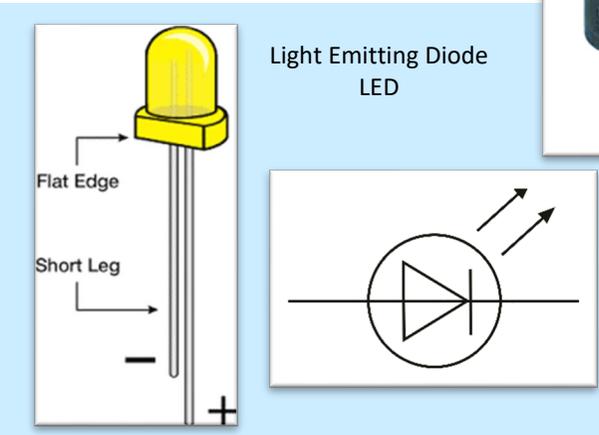
Voltage - Electrical charge. How much 'oomph' is available. Measured in Volts - V



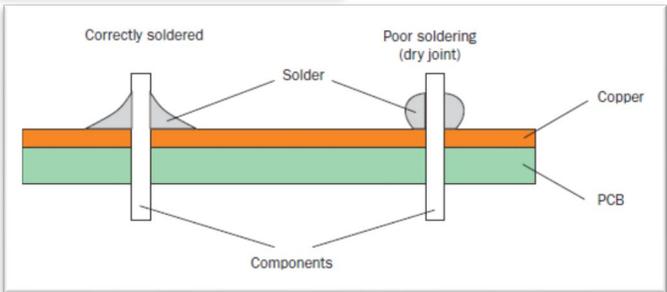
Current - The flow of electrons in a circuit. How fast/much 'oomph' is being used. Measured in Amps - I



Circuit Symbol	Component Name
	Motor
	Resistor
	Switch
	Wires Crossing
	Wires (Joined)



## Dry Solder Joints



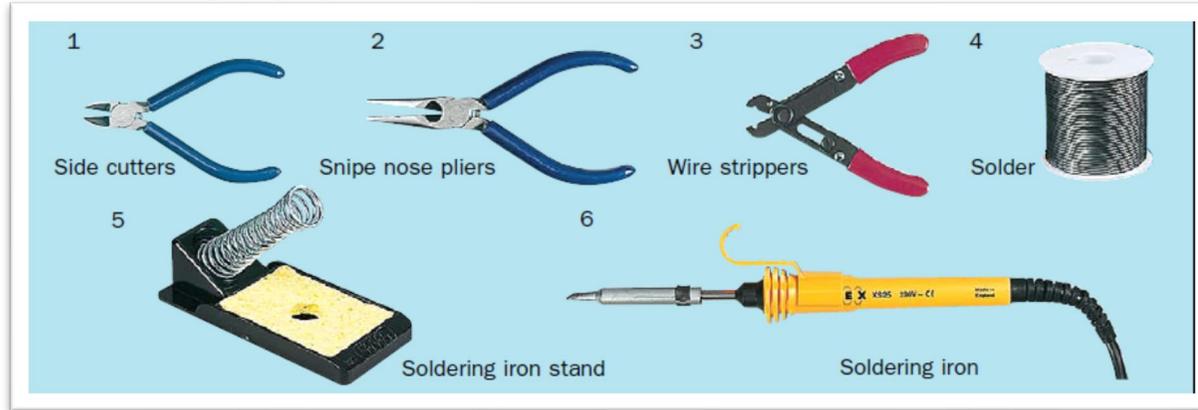
## Soldering

Soldering is the method we use to join electronic components together. Solder is a metal alloy of tin (60%) and lead (40%), that becomes molten at around 200C. Solder contains flux that helps the join form correctly.

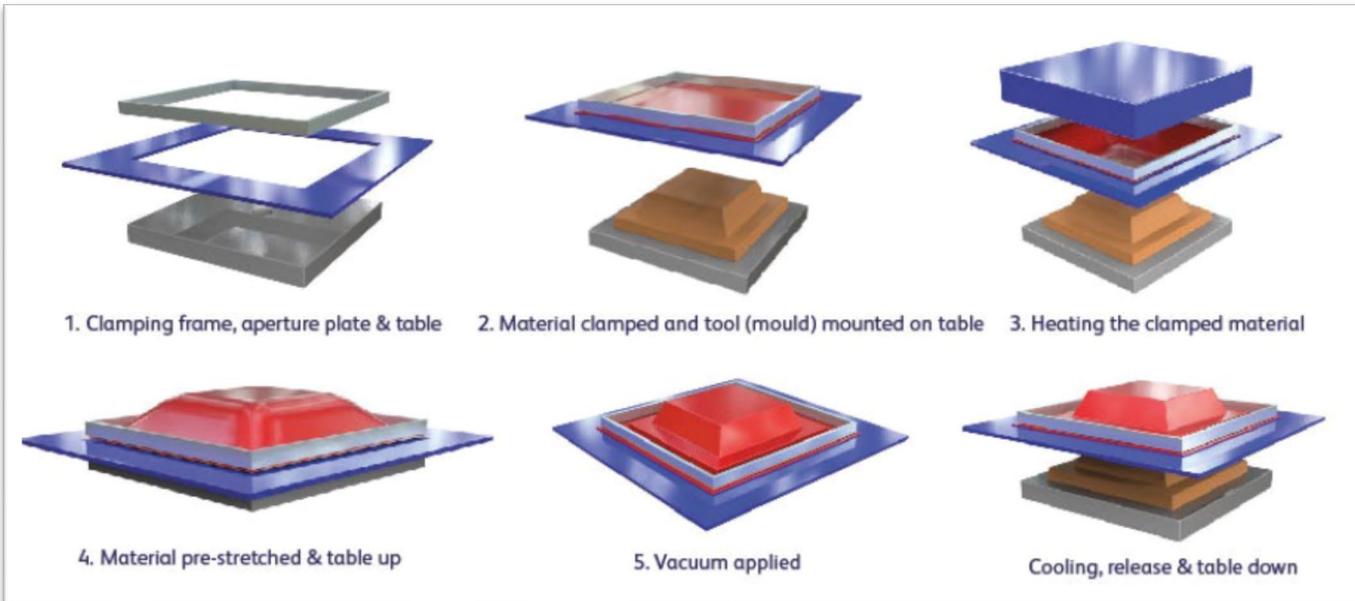
## The Soldering Process

1. Collect soldering equipment.
2. Make sure the sponge in the stand is damp.
3. When the soldering iron has reached its temperature, clean the tip on the sponge.
4. Place a small amount of solder on the tip of the soldering iron. This is called tinning and helps the transfer of heat from the soldering iron to the components.
5. Place the soldering iron against the two parts to be joined and hold it there for a few seconds.
6. Touch the solder against the two components so that just enough solder runs onto both.
7. Remove the solder and then the soldering iron and allow to cool before you attempt to move it.
8. Cut off any excess using the cutters.

## Soldering Equipment



## The Vacuum Forming Process – the Basics



### Thermoplastics

- Can be heated and reshaped.
- Can be recycled.
- Poly Vinyl Chloride (PVC)
- High impact polystyrene (HIPS)

### Thermoset Plastics

- Can only be heated and shaped once.
- Cannot be recycled.



# ENGLISH

---

# The Tempest by William Shakespeare

**Context – The play was written by William Shakespeare at some point between 1610 and 1611.**

**Shakespeare’s Time** – Shakespeare wrote his plays at the time of two monarchs: Queen Elizabeth I and King James I. The Tempest is likely to have been the last play wrote entirely by Shakespeare, and was known to have been performed in the winter of 1612-1613 in celebration of the daughter of James I – Elizabeth. Shortly afterwards, in 1613, Shakespeare retired from London theatre and returned to Stratford.



Elizabethan England and Italy –Shakespeare frequently engaged with Italy in his plays, leading many to believe that he travelled there between the late 1580s and early 1590s. Italy was a place that Shakespeare’s contemporaries would have had a keen interest in; it was already an advanced and beautiful place for travel. Shakespeare’s depictions of many areas of Italian life at the time are deemed largely accurate.



**Magic/ the Supernatural** – At the time of Shakespeare, before science and technology were able to answer many of our questions about the world, belief in magic and the supernatural was extremely strong. There is no doubt, therefore, that some of the ideas in the play would have been taken very seriously, such as the Prospero’s ability to develop magical understanding, and the black magic used by the evil witch Sycorax. James I was a believer in witches, leading to many old women being burnt on stakes.

**Patriarchal Society** –Society throughout the Middle Age and at Shakespeare’s time was patriarchal – women were considered inferior to men. This was also the case in much of Europe, including Italy. Women belonged to their fathers (or brothers if their fathers had died) and then their husbands, and so Miranda, for example would have been expected to obey the commands of her father. This is most evident as does not strictly choose her husband, as her father brings them together.



**The Colonial Era** – At the time that the play was written, Shakespearean audiences would have been interested in the efforts of English (and other European) settlers to colonise distant lands around the world. These ideas are prevalent in the play, as almost every man who sets foot on the island dreams of ruling it. Prospero’s belittling of Caliban is similar to the behaviour of settlers to natives.

**Sources** – Unlike many of Shakespeare’s plays, the basic plot outline of The Tempest is considered to be predominantly original. It is influenced by travel literature of the time, however, particularly the account a tempest in Bermuda that almost destroyed a fleet sailing from the UK to the US. At the time, it was far more common for ships to become destroyed or damaged by severe weather.

**Main Characters – Consider what Shakespeare intended through his characterisation of each of the below...**

**Prospero** – Prospero is the lead protagonist in the play, the father of Miranda, and the brother of Antonio. Prospero was the Duke of Milan, however at the beginning of the play he is marooned on an island with his daughter, having been usurped by his brother and Alonso, King of Naples. Prospero has spent twelve years on the island honing his magical powers in order to punish and forgive his enemies. Prospero is often read as representing Shakespeare.

**Miranda** – Miranda is the daughter of Prospero, and is just under 15 years old at the outset of the play. She was brought to the island at an early age, and so the only other people that she knows are her father and Caliban. This isolation has led to her becoming a trusting and non-judgmental person. She is a kind, compassionate character, who is loyal to her father. However, she is also extremely passive, as is evident through the arrangement of her marriage.

**Quote:** My library was dukedom large enough. (I.ii)

**Quote:** ““O, I have suffered / With those that I saw suffer!” (I.ii)

**Caliban** – Caliban is the son of the deceased witch Sycorax. He is a servant of Prospero on the island, yet he believes that the island rightfully belongs to him, and has been stolen by Prospero. Caliban is often referred to as a ‘monster’ as the other characters, and contrasts Prospero’s other, more airy servant, Ariel. At times he appears eloquent and sensitive, yet he can also be uncouth and brutal. He is frequently associated with the earth (‘springs...bogs, fens, flats’)

**Ariel** – Ariel is Prospero’s spirit helper. Whilst he is almost always referred to as ‘he’ in analysis of the play, his gender is actually left ambiguous by Shakespeare. Ariel was rescued from the witch Sycorax by Prospero, and as a result, is Prospero’s willing helper, carrying out almost any task that Prospero desires. He is omnipresent and a shape-shifter, rendering him useful for wreaking mischief everywhere at the wish of Prospero.

**Quote:** “This island's mine, by Sycorax my mother, Which thou tak'st from me. When thou cam'st first,” (I.ii)

**Quote:** “Will be here with mop and mow. Do you love me, master? No?” (IV.i)

**Alonso and Ferdinand** – Alonso is the King of Naples, who aided Antonio in usurping Prospero’s position as Duke of Milan twelve years prior to the play. It seems that he was swayed by Antonio’s flattery. He is emotional and flippant, however he does become aware of the consequences of his actions. Ferdinand is his son and heir, who falls in love with Miranda at first sight. He is as pure and naïve as her, bowing to servitude to win her father’s approval.

**Antonio and Sebastian** – Antonio is Prospero’s brother. He is both power-hungry and foolish. Twelve years prior to the play, he convinced Alonso to aid him in usurping Prospero as the Duke of Milan. Similarly, Sebastian is Alonso’s younger brother, and harbours desire to conquer Alonso’s throne. They will each other on towards despicable acts, for example when Alonso convinces Sebastian to murder his brother. Neither demonstrates any remorse.

**Quote:** “O, it is monstrous, monstrous! Methought the billows spoke and told me of it;” (III.iii)

**Quote:** “My strong imagination sees a crown Dropping upon thy head. .” (II.i)

## The Tempest by William Shakespeare

Themes – A theme is an idea or message that runs throughout a text	Dramatic Devices in The Tempest		Features of Tragicomedy
<p><b>Justice, Forgiveness, and Repentance</b> – On the surface, The Tempest tells a relatively simple story involving an act that is unjust (Prospero being usurped from his throne) and his attempts to seek justice by regaining power. Some may argue, however, that his view of justice is somewhat subjective, as he sees no issue with enslaving Ariel in Caliban in order to achieve his goals. Regardless, he speaks of the need for and power of forgiveness - "The rarer action is / In virtue than in vengeance" (V.i) Prospero's capacity to forgive others demonstrates the strength of the human spirit, and is a trait glorified by Shakespeare.</p> 	<p><b>Repetition</b></p>	<p>The chant-like repetition in Ariel's songs makes the island seem magical. ('Hark, hark!') Act 1 Scene 2.</p>	<p><b>Playful Language</b> – Puns, quips and vibrant figurative language are written into the text to demonstrate wit.</p> 
<p><b>The Quest for Knowledge</b> – Shakespeare was writing at the height of the Renaissance movement, and Prospero's ceaseless quest for knowledge in The Tempest personifies the ideals of the quintessential 'Renaissance Man.' Prospero's preoccupation with learning is what allows him to be removed from power, showing how he is prepared to lose everything for the sake of learning.</p> 	<p><b>Soliloquy</b></p>	<p>Prospero reveals that he is giving up his marriage in Act 5 Scene 1.</p>	<p><b>Misunderstandings/ Confusion/ Deception</b> – Humour is derived from characters' shrouded perceptions of reality.</p>
<p><b>Men and Monsters</b> – The distinction between man and monster is greyed throughout The Tempest, particularly through the ambiguous nature of the character of Caliban; in different places in the novel he is referred to as a monster, and then as a man. Prospero and Miranda seem to aim to improve Caliban with education and language, yet they see him as inherently diabolical.</p> 	<p><b>Aside</b></p>	<p>Prospero: [Aside] Poor worm, thou art infected (demonstrates that he has planned the event). Act 3 Scene 1.</p>	<p><b>Underlying Critique</b> – Shakespeare ridicules some of the issues in society, e.g. the obsession with power, underlying evil.</p>
	<p><b>Personification</b></p>	<p>Prospero frequently personifies abstract ideas e.g. 'Destiny' and 'Time.' Capitalisation makes them appear human.</p>	<p><b>Happy Ending</b> – Normally involving love or a marriage.</p> 

## The Tempest by William Shakespeare

### Scene-by-Scene Summary – Take note of the key quotations from each scene.

<p>Act 1 Scene 1</p>	<p>A violent storm rages around a ship containing Alonso, Ferdinand, Antonio and Sebastian (amongst others). The Boatswain tells the men to hide beneath deck. They are prepared for death.</p>	<p>When the sea is. Hence! What cares these roarers for the name of king? To cabin! Silence!</p>
<p>Act 1 Scene 2</p>	<p>Prospero and Miranda stand on the shore of an island, having just witnessed the shipwreck. Prospero assures Miranda that no one was hurt. Prospero tells her how he was once the Duke of Milan, but his attention to his studies, gave his brother, Antonio, the opportunity to usurp him, in concert with Alonso. A loyal aide Gonzalo, helped Prospero and the infant Miranda to escape to the island, with food, shelter, and books. As Miranda falls asleep, it becomes clear that Prospero called his spirit friend Ariel to create the storm in the prior act. After Miranda awakes, Prospero calls their servant Caliban. Prospero torments Caliban for his monstrous nature, whilst Caliban laments that the island was once his and how he has been enslaved by Prospero. Ariel brings in Ferdinand who Miranda immediately falls in love with (he reciprocates). Ferdinand is led to imprisonment.</p>	<p>PROSPERO:          The direful spectacle of the wreck, which touched          The very virtue of compassion in thee,          I have with such provision in mine art          So safely ordered that there is no soul—          No, not so much perdition as an hair,          Betid to any creature in the vessel ...</p> <p>CALIBAN          This island's mine, by Sycorax my mother,          Which thou tak'st from me. When thou cam'st first,          Thou strok'st me and mad'st much of me, wouldst          give me...Water with berries in 't, and teach me how</p>
<p>Act 2 Scene 1</p>	<p>On the other side of the island, Alonso, Sebastian, Antonio and Gonzalo search for Ferdinand. Alonso blames himself for arranging the trip to Africa to marry off his daughter. Ariel enters and sends all but Antonio and Sebastian to sleep. Antonio convinces Sebastian to try murder Alonso – as his sister is now far away, Sebastian would be heir to the throne. Gonzalo awakes and alerts the king to the conspiracy, but Antonio and Sebastian concoct a story about hearing a noise that made them draw their swords. Gonzalo is suspicious, but does not challenge the lords directly.</p>	<p>Nor I. My spirits are nimble.          They fell together all, as by consent.          They dropped as by a thunderstroke. What might,          Worthy Sebastian? O, what might—? No more.          And yet me thinks I see it in thy face          What thou shouldst be. Th' occasion speaks thee, and          My strong imagination sees a crown          Dropping upon thy head.</p>
<p>Act 2 Scene 2</p>	<p>Other members of the shipwreck, Trinculo and Stephano meet Caliban, and compare him to the freak shows that they have seen in England. They drink together and Caliban begs to worship Stephano – they mock him as a 'most ridiculous monster.'</p>	<p>I'll show thee every fertile inch o' th' island,          And I will kiss thy foot. I prithee, be my god.</p>

## The Tempest by William Shakespeare

### Scene-by-Scene Summary – Take note of the key quotations from each scene.

<p>Act 3 Scene 1</p>	<p>Ferdinand takes over Caliban’s roles, such as carrying wood, but does so without cursing as it is for the woman that he loves. Miranda enters (as does Prospero, unseen) and Ferdinand stops work. The two flatter one another (even though Miranda tries to heed her father’s advice not to speak to him) and after Ferdinand enthusiastically declares his love, Miranda proposes. Ferdinand accepts and they depart. Prospero steps forward, subdued, as he knew this would happen. He then prepares for his remaining magical business.</p>	<p>O heaven, O earth, bear witness to this sound, And crown what I profess with kind event If I speak true; if hollowly, invert What best is boded me to mischief. I, Beyond all limit of what else i' th' world, Do love, prize, honor you.</p> 
<p>Act 3 Scene 2</p>	<p>Caliban, Trinculo and Stephano continue to wander around the island and drink. Stephano refers to Caliban as ‘servant monster’ and frequently commands him to drink. Caliban tells Trinculo of his poor treatment at the hands of Prospero, however Ariel (unseen) frequently interrupts him. Stephano believes that this is Trinculo, and eventually strikes him. While Ariel looks on, Prospero plots to steal Prospero’s magic books, so that they can kill him, Stephano can be king of the island, and take Miranda as his queen.</p>	<p>Be not afeard. The isle is full of noises, Sounds and sweet airs, that give delight and hurt not. Sometimes a thousand twangling instruments Will hum about mine ears, and sometime voices That, if I then had waked after long sleep, Will make me sleep again;</p>
<p>Act 3 Scene 3</p>	<p>Alonso begins to give up hope of finding Ferdinand. Antonio suggests that this exasperation should provide the perfect opportunity to kill Alonso later in the evening. At this point ‘solemn and strange music’ enters. ‘Strange shapes’ bring a banquet of food along. Prospero enters, too, invisible. Just as the men are about to eat, Ariel appears with a clasp of thunder, and laments Alonso, Sebastian and Antonio for driving Prospero from Milan, and announces that Ferdinand has been taken in revenge. Alonso feels desperately guilty.</p>	<p>O, it is monstrous, monstrous! Methought the billows spoke and told me of it; The winds did sing it to me, and the thunder, That deep and dreadful organ pipe, pronounced The name of Prosper. It did bass my trespass.</p> 
<p>Act 4 Scene 1</p>	<p>Prospero gives his blessing to Ferdinand and Miranda, warning that he take care not to break her ‘virgin knot’ before they are married. Prospero then calls in Ariel, who summons spirits to perform a masque for Ferdinand and Miranda. Prospero then suddenly remembers that Caliban is coming to attempt to kill him. He and Ariel set a trap which drives the conspirators away.</p>	<p>Spirits, which by mine art I have from their confines called to enact My present fancies.</p> 
<p>Act 5 Scene 1</p>	<p>Prospero speaks to the charmed prisoners. He forgives each of them, and commends Gonzalo for his loyalty. As Antonio grieves the loss of his son, Prospero reveals Ferdinand and Miranda. Prospero decides to end his magic, as they prepare to set sail for Naples and Milan.</p>	<p>The pine and cedar; graves at my command Have waked their sleepers, oped, and let 'em forth By my so potent art.</p>

# HUMANITIES

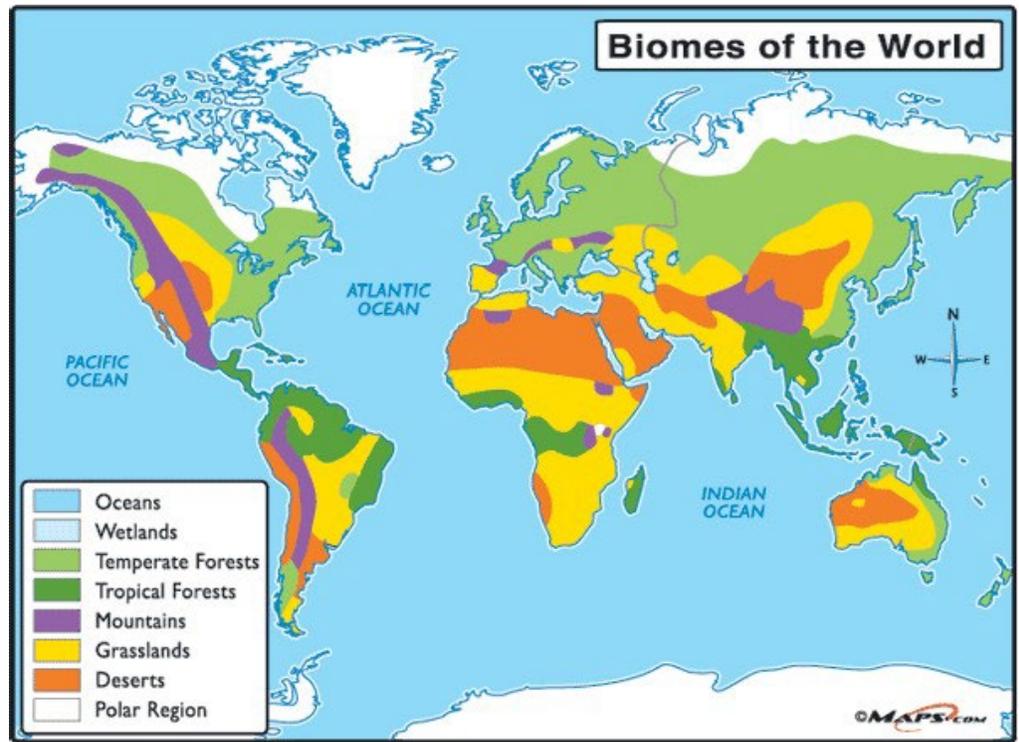
---

- **Geography**
- **History**
- **RE**

**Cycle 3 in Year 7 Geography will focus on:** natural environments. You will start with an overview of world biomes and then focus on the polar (Antarctic) and desert environments. Each lesson will explore the enquiry question – is it possible to survive in hostile environments.

**Key words and definitions**

<b>Ecosystem</b>	Community of organisms and their physical environment
<b>Biome</b>	A large ecosystem
<b>Habitat</b>	Natural home of a living organism
<b>Climate</b>	Average weather recorded over a period of time
<b>Landscape</b>	Visible features of an area of land
<b>Adaptation</b>	When an organism changes to better suit its environment
<b>Food web</b>	Web of organisms that depend on each other for food
<b>Climate change</b>	Change in climate patterns over time due to natural & human factors
<b>Arid</b>	Hot dry climate
<b>Terrain</b>	The ground



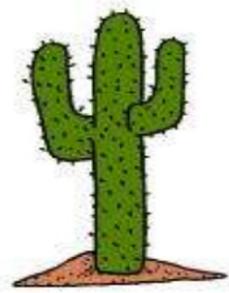
**DESERTS**

**Overview:**

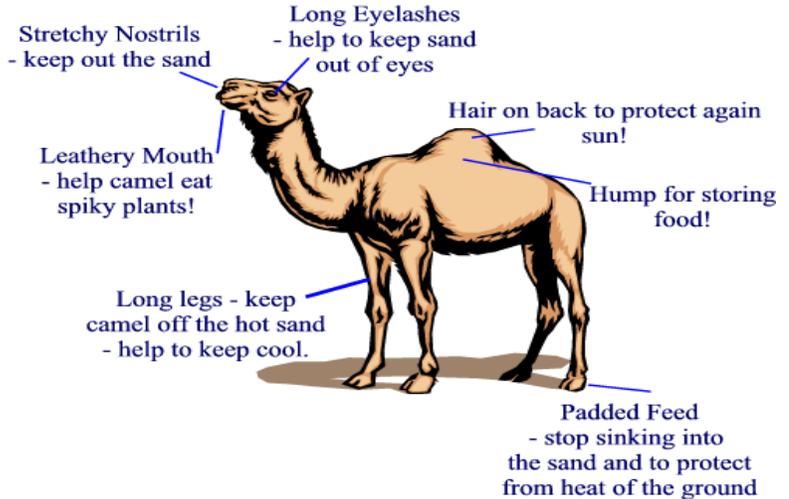
Hot deserts are located along the **tropics**. They are hot because the sun shines intensely.

Plants and animals have adapted to the **arid** conditions.

**Cactus**



1. No leaves – reduce water loss.
2. Small surface area – reduce water loss.
3. Very thick stem – store water.
4. Spines – stop animals eating it.
5. Shallow but extensive roots – absorb water quickly when it rains.



**Human use of the desert:**

Deserts are areas with fragile and limited resources. Despite the harsh conditions people live in desert areas, but their need for food and water presents many challenges. **Las Vegas** is an example of a city which is built in a desert area. Las Vegas is a fast-growing city - the population is expected to double in 40 years. It is located in the Mojave Desert - one of America's smallest and driest deserts, which has 15-25 cm of rain per year. 650,000 people live in the desert. In addition, the Mojave Desert is used by:

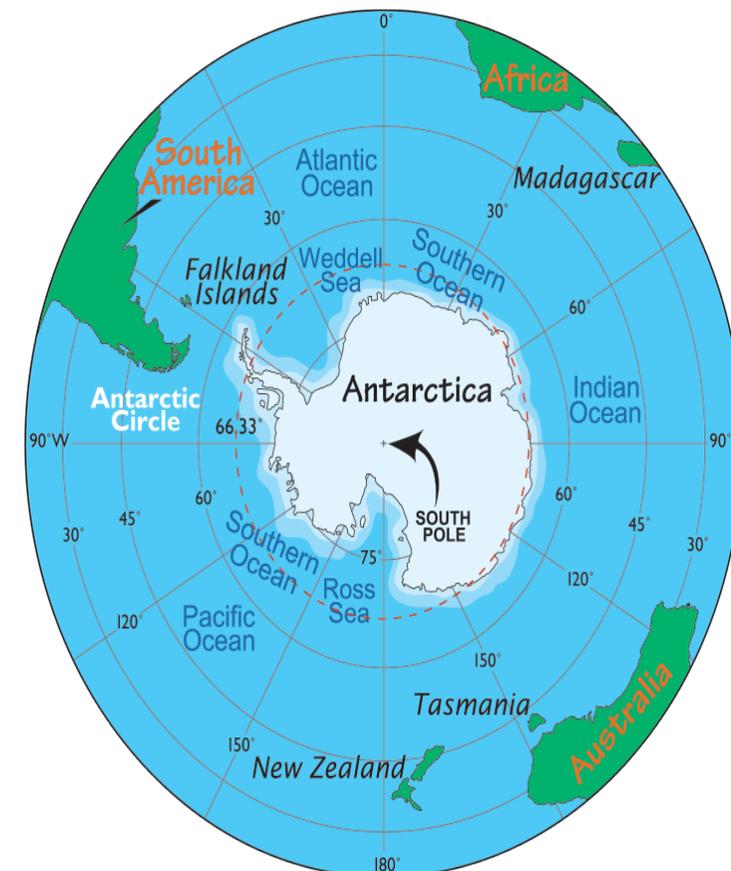
- tourists - visiting areas such as Death Valley
- military, as they test out airplanes and train troops
- hikers and rock climbers
- off-road vehicles - including quad bikes and motorcycles making use of the varied terrain
- solar and wind energy generation
- film makers, attracted by the scenery



Polar Region – Antarctic		
Terrain		<ul style="list-style-type: none"> <li>• The Antarctic is based on a large land continent (Antarctica) covered in ice and snow. Antarctica has several mountains, as well as huge glaciers. Large icebergs can be found at sea.</li> </ul>
Climate and Weather Patterns		<ul style="list-style-type: none"> <li>• Antarctica is the coldest place on Earth. The temperature can reach as low as -89°C!</li> <li>• Worse still, freezing blizzards can take place for days at a time.</li> </ul>
Animals		<ul style="list-style-type: none"> <li>• Emperor penguins are one of Antarctica's most famous residents. A number of seals and birds also live in Antarctica.</li> </ul>

**Main threats to the ecosystem:**

1. Climate change – the warming of the sea and melting of the ice sheets.
2. Pollution – oil and chemicals split at sea. Plastic waste that is thrown away.
3. Tourism – people arriving by boats to visit the area, which damages the landscape and scares the wildlife.
4. Overfishing – overfishing of krill in the oceans significantly reduces the numbers of fish for the penguin population to survive on.



Cycle 3 in History will focus on: Tudor England

Key words and definitions	
<b>Reformation</b>	A time of change – Henry VIII changed the English Church from Catholic to Protestant
<b>Protestant</b>	A Christian who protested against the Catholic Church
<b>Catholic</b>	A Christian who believes in the authority of the Pope
<b>The Pope</b>	Bishop of Rome, Head of the Catholic Church
<b>Puritan</b>	Strict Protestants
<b>Glastonbury Abbey</b>	Religious building which provided work and housing for monks and nuns
<b>Dissolution</b>	Henry VIII's closing down of the monasteries and abbeys
<b>Noble</b>	Someone of high rank with a title like a Duke or an Earl
<b>Indulgences</b>	Buying forgiveness from the Church
<b>Annulment</b>	Ending a marriage by the Church
<b>Poor Law</b>	Help for the poor
<b>Mary, Queen of Scots</b>	Queen Elizabeth I's cousin who was executed in 1587

Tudor England lasted from the Battle of Bosworth in 1485 to the death of Queen Elizabeth I in 1603. It was a time of huge change in England especially in terms of religion. Make sure you know the chronology.

**Understanding what the Tudors can reveal to us about the past.**

When we learn about the Tudor time period we often focus on key areas such as; Power, Military, Religion, Marriage and Society. In this topic we will focus on all of the above alongside a more in-depth study of diversity in Tudor England. This will be really useful information in understanding what life was truly like in Tudor England.

Key dates	
<b>1485</b>	Henry Tudor became Henry VII after Battle of Bosworth
<b>1509</b>	Henry VIII became king and married Catherine of Aragon
<b>1533</b>	Henry VIII married Anne Boleyn
<b>1534</b>	Act of Supremacy - Henry is now head of the Church of England; also called the Break with Rome
<b>1536</b>	Dissolution of the monasteries began; execution of Anne Boleyn; Henry married Jane Seymour
<b>1539</b>	Richard Whiting was executed in Glastonbury
<b>1547</b>	Death of Henry VIII; succession of Edward VI
<b>1553</b>	Death of Edward VI; succession of Lady Jane Grey and then Mary
<b>1558</b>	Death of Queen Mary; succession of Queen Elizabeth I
<b>1587</b>	Execution of Mary, Queen of Scots
<b>1588</b>	The Spanish Armada
<b>1603</b>	Death of Queen Elizabeth I; succession of James Stuart

**There were problems with the Catholic Church in England. Many Protestants complained about:**

1. The Bible was in Latin – if it were in English then people could read it themselves.
2. The Church was too rich. The leader of the country needs the wealth more than the Church.
3. The Church sold indulgences. It was wrong to have to buy forgiveness.

**Henry VIII wanted a divorce, money and power:**

1. Henry VIII broke with the Catholic Church because the Pope refused to annul his marriage.
2. Henry needed money to fight wars. Having Church wealth would give him more money.
3. Henry wanted more power. He did not like that people listened to the Pope’s orders.

**Richard Whiting was a good man but did not approve of the king’s annulment/divorce:**

1. Thomas Cromwell found evidence against Richard Whiting.
2. Thomas Cromwell was an ambitious adviser to King Henry. He wanted to be seen as powerful and popular with the king.
3. King Henry VIII ordered the dissolution of the monasteries. Richard Whiting’s Glastonbury Abbey was one of the last to be dissolved.



What problems did I face? How did I solve them?

**Key words and definitions**

<b>Spain</b>	Elizabeth helped Dutch rebels raid Spanish treasure ships. This made the Spanish King, Philip send an Armada to attack England in 1588. This was defeated but war with Spain continued until 1603. There was no successful Spanish invasion of England but the war cost huge amounts of money.
<b>Religion</b>	She kept Catholics and Puritans (extreme Protestants) under control but neither really liked her Church of England. She sometimes ordered the execution of Catholics who plotted against her. By 1603 the Church of England was strong and stable.
<b>Mary, Queen of Scots</b>	For 19 years, Elizabeth dithered about what to do. This just encouraged more Catholic plots which grew around Mary. She kept Mary imprisoned for 19 years before finally ordering her execution which then ended a major threat to herself.
<b>The Poor</b>	The number of beggars and poor people grew during Elizabeth’s reign. She introduced a Poor Law in 1601 which lasted 250 years! This provided a little help, but Elizabeth didn’t really understand why so many people were becoming poorer.

Cycle 3 in RE will focus on: Islam

Islam is an Abrahamic religion. Islam was developed in the 7<sup>th</sup> century with the founder being the Prophet Muhammad (PBUH)

Key words and definitions

Islam	The name of the religion
Muslims	The name of the followers of Islam
Qur'an	The Holy Book. It is written in Arabic and is infallible (it has never been changed)
Allah	The Arabic word for God
Muhammad (PBUH)	The final prophet
PBUH	Peace be upon him – a saying which shows you are respecting the prophets
Mosque	A holy place of worship
The Five Pillars	Five practices Muslims follow which shows dedication to their faith
Shahadah	A declaration of faith which is recited by Muslims. "There is no God but Allah, Muhammad is His messenger"
Salah	Praying – Muslims pray 5 times a day
Sawm	Fasting (not eating or drinking during daylight hours) during the month of Ramadan
Zakah	Giving 2.5% of wages to charity
Hajj	A pilgrimage (religious journey) to Mecca
Arabic	A language in which the Qur'an is written
Prophet	A messenger chosen by God to deliver God's message

In RE you will notice that there are many very important people. In Islam, Muhammad (PBUH) is central to Islam.

The Story of Islam

- Muslims believe that Abraham is the founder of Islam. Abraham is also the founder of Judaism and Christianity.
- Muslims believe that the Torah (the Jewish Holy book) was changed over time so God sent his message again to a new prophet.
- Muslims believe God sent his message to other prophets, such as Jesus, who's Holy Book was the Gospels.
- Muslims believe that the Gospels were changed over time so God had to resend his message.
- Muslims believe Muhammad was the final prophet God chose to deliver his message to.
- The final message was written down and is known today as the Qur'an. Muslims believe that the words in the Qur'an have never been changed. There is no need for God to choose another prophet to deliver his message to, as God's message is on earth in the form of the Qur'an.

How do Muslims Worship?

- Praying 5 times a day
- Saying prayers in private
  - By living good lives
- Worshipping at the Mosque on a Friday
- Celebrating the festivals such as Eid-ul-Fitr

## The Five Pillars

The Shahadah is the declaration of faith. “There is no God but Allah, Muhammad is His messenger” summarises the core beliefs for Muslims, that they believe in one God and Muhammad was the final prophet. To become a Muslim, the Shahadah is said 3 times in front of 2 other Muslims.

Salah is the pillar of prayer. Muslims pray 5 times a day. Before Muslims pray they wash themselves in a ritual called Wudu. This washing process is completed because Muslims want to be clean in front of God before they pray to Him. All Muslims face the Ka’aba, a black building in Mecca, Saudi Arabia. In a Mosque, a Mihrab (an indentation in the wall) indicates which way Mecca is located.

Sawm is fasting during the month of Ramadan. Muslims do not eat or drink during daylight hours. Muslims do this to remember those who are less fortunate than themselves who often go hungry and to be thankful for what God has provided them with.

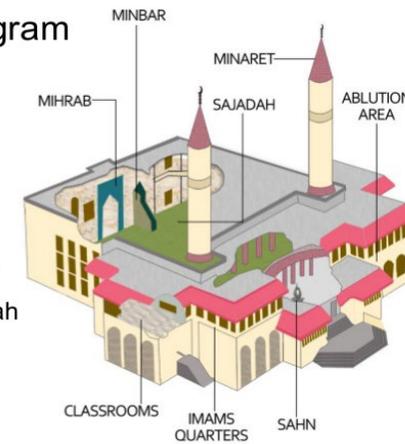
Zakah is performed by all adult Muslims. Muslims give 2.5% of their money to charity (after bills have been paid.) Muslims are able to give more than 2.5% if they wish.

Hajj is a pilgrimage (religious journey) to Mecca, Saudi Arabia. Only Muslims can enter the city as it is a Holy place where Muhammad (PBUH) was born and the Qur’an was revealed on the Night of Power. Muslims take part in many rituals which strengthen their faith, such as circling the Ka’aba 7 times anti clock wise and throwing rocks at the Jamarat Pillars to signify warning off the devil.

## Features of a Mosque

### Mosque Diagram

1. Minaret
2. Dome
3. Entrance
4. Ablution Area
5. Masjid/Sajadah
6. Mihrab
7. Mimbar



## Islamic Festivals – Eid-ul-Fitr & Eid-ul-Adha

### Eid-ul-Fitr

Eid-ul-Fitr, commonly referred to as ‘Eid’, is a festival which celebrated the end of Ramadan. Ramadan is a month of fasting during daylight hours.

During Eid, Muslims celebrate with their families, they have a feast, they pray, share presents, have parties.

### Eid-ul-Adha

Eid-ul-Adha remembers the sacrifice Abraham was willing to make. God asked Abraham to sacrifice his son as a test of his faith. Abraham was willing, but God stopped the sacrifice and replaced Abraham’s son with an animal. To remember Abraham’s dedication to God, Muslims sacrifice an animal during this festival. A third of the meat is eaten by the Muslims who own the animal, a third of the meat is given to family & friends, and a third is given to the poor.

# ICT

---

Cycle 3 in Computing will focus on **Kodu Programming Skills**. Kodu is a 3D game development environment, that is designed to teach you the principles of programming. It allows you to build you own world, its terrain, populate it with characters and props, and then program their behaviours and game rules in a visual programming language.

# Kodu Game Development Tools

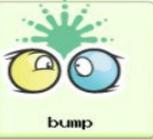
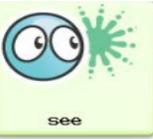
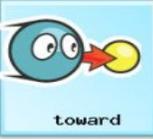


	<b>Home button:</b> will bring up the home menu. Here you can save and load your work.
	<b>Play game:</b> this brings your game to life so that you can test it.
	<b>Move camera button:</b> will let you change the camera angles in the game to make editing easier.
	<b>Object tool:</b> this lets you add objects such as characters, props and features to your
	<b>Path tool:</b> used to create a line for an object to follow.
	<b>Ground brush tool:</b> used to create your world

	<b>Up and down tool:</b> you can create hills and valleys.
	<b>Roughen tool:</b> this can be used to create a spikey or hilly ground, which will help make your world more interesting.
	<b>Flatten tool:</b> will let you make the ground level for your objects to move across.
	<b>Water tool:</b> this lets you add, remove and tint water.
	<b>Delete tool:</b> used to remove objects from your world.
	<b>Change world settings tool:</b> used to modify your world.

Kodu Game Development Keywords

<b>Algorithm</b>	Solution used to solve a problem
<b>Object</b>	Graphic that can be interacted with in the game
<b>Control</b>	Objects can be controlled in your game with a controller or a keyboard.
<b>Condition</b>	Used within actions. For example, IF I touch an apple, add 1 point to my score.
<b>Do</b>	If the “When” condition is met, then the “Do” carries out an instruction
<b>Terrain</b>	Stretch of land in your game.
<b>VPL</b>	Visual Programming Language. Let’s you create programs through the use of graphics.
<b>Event</b>	Something that happens as a result of an action.
<b>Action</b>	Can be added to objects so that the objects become interactive.
<b>Tiles</b>	Small graphical squares that can be combined to create larger graphical images.
<b>Collision</b>	Where one object hits another object in your game.

<b>When</b>			<b>Do</b>		When bump with an apple, grab it
<b>When</b>			<b>Do</b>		When press space key, jump
<b>When</b>			<b>Do</b>	 	When sees a cycle, moves towards it

# Coding with Kodu

## Useful links:

**Download Kodu for free**

<http://www.kodugamelab.com/downloads/>

**Video tutorials**

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



# LANGUAGES

---

- **French**
- **Spanish**

Learning Cycle 3 is a module that will enable you to talk about your hobbies in French. You will be able to conjugate verbs correctly in the present tense and be introduced to terms such as infinitives.

Key words and definitions	
<b>Subject pronouns</b>	Je (I), tu (you), il / elle (he / she), nous (we), vous (you plural), ils/ells (they M / they F)
<b>Nouns</b>	Used to identify a class of people, places or things (French nouns have a different gender. They are either masculine or feminine)
<b>Adjectives</b>	Used to describe a noun
<b>Verbs</b>	A word used to describe an action, state or occurrence, and forming the main part of the predicate of a sentence (such as hear, become, happen)
<b>Adverbs of frequency</b>	Used to say how often someone does something
<b>Infinitive</b>	A verb in its unchanged form / a verb which can be found in a dictionary / a verb which has an ER/IR/RE ending in French (jouer) / a verb which has 'to' in front of it in English (to play)
<b>Present tense</b>	Used to say what someone is currently doing (I do / I play)

lundi, mardi, mercredi,	Monday, Tuesday, Wednesday,
jeudi, vendredi,	Thursday, Friday,
samedi, dimanche	Saturday, Sunday
un, deux, trois, quatre, cinq	1, 2, 3, 4, 5
six, sept, huit, neuf, dix	6, 7, 8, 9, 10
onze, douze, treize	11, 12, 13
quatorze, quinze	14, 15
seize, dix-sept, dix-huit	16, 17, 18
dix-neuf, vingt	19, 20
vingt-et-un, vingt-deux, (etc.)	21, 22, (etc.)
trente, trente-et-un	30, 31

janvier, février, mars	January, February, March
avril, mai, juin	April, May, June
juillet, août, septembre	July, August, September
octobre, novembre, décembre	October, November, December

**Les mots essentiels • High-frequency words**

sur	on
en (été)	in (summer)
quand	when
tout/toute/tous/toutes	all
par (deux fois par semaine)	per (twice a week)
d'habitude	usually
d'abord	first of all
ensuite	then/next
puis	then/next

mais	but
cependant	however
et	and
aussi	also
quelquefois	sometimes
parce que = car	because
c'est	it is
génial	great

## GIVING YOUR OPINION IN FRENCH:

**Studio Grammaire** Page 65

Notice the difference between saying you **do** something and you **like** doing something.

<b>Je joue</b>	I play
<b>J'aime jouer</b>	I like playing
<b>Je regarde</b>	I watch
<b>J'aime regarder</b>	I like watching

J'aime	<b>jouer ...</b>
J'aime beaucoup	<b>regarder ...</b>
J'aime assez	<b>écouter ...</b>
J'adore	<b>retrouver ...</b>
Je n'aime pas	<b>téléphoner ...</b>
Je déteste	<b>faire ...</b>

**Using verbs with nouns and infinitives**

There are three ways you can talk about the activities you do.

present tense verb: **Je joue** au football.  
– I play football.

**j'aime** + noun: **J'aime le football.**  
– I like football.

**j'aime** + infinitive: **J'aime jouer** au football.  
– I like playing football.

adorer (to love) and détester (to hate) work in the same way as aimer.

You can also use aimer with **ne ... pas**, to say what you don't like doing.

**J'adore regarder** la télé, **mais je n'aime pas le sport et je déteste faire** les magasins.

TALKING ABOUT WHAT YOU DO IN FRENCH: (USING VERBS)

**Quand? • When?**

en été	<i>in summer</i>
en hiver	<i>in winter</i>
quand il fait beau	<i>when it's good weather</i>
quand il fait chaud	<i>when it's hot</i>
quand il pleut	<i>when it rains</i>
quand il fait froid	<i>when it's cold</i>

**jouer à**

You use **jouer à** to talk about playing a sport or a game. **à** has a different form with masculine, feminine and plural nouns. (Most sports are masculine singular.)

**Verbs – the present tense**

You use the present tense in French to say what you do or what you are doing.

Most verbs in French are regular **-er** verbs (e.g. *surfer* – to surf, *jouer* – to play, *regarder* – to watch). The endings of regular **-er** verbs all follow the same pattern.

The verb **faire** means to do or make. You use **faire de** to talk about some sports and other activities. **de** changes to **du, de la, de l'** or **des**, according to the noun that follows it.

	singular			plural
	masculine	feminine	before a vowel	
	<b>le</b> judo	<b>la</b> natation	<b>l'</b> équitation	<b>les</b> promenades
Je fais	<b>du</b> roller	<b>de la</b> natation	<b>de l'</b> équitation	<b>des</b> promenades

*faire* is irregular:

**je fais** I do      **tu fais** you do      **il/elle/on fait** he/she does/we do

singular		plural
masculine	feminine	
<b>le</b> rugby	<b>la</b> pétanque	<b>les</b> boules
Je joue <b>au</b> rugby.	Tu joues <b>à la</b> pétanque?	Il/Elle/On joue <b>aux</b> boules.

*regarder* (to watch)

<i>je regarde</i>	I watch (also, I'm watching)
<i>tu regardes</i>	you watch (singular, informal)
<i>il/elle/on regarde</i>	he/she watches/we watch
<i>nous regardons</i>	we watch
<i>vous regardez</i>	you watch (plural and formal)
<i>ils/elles regardent</i>	they watch

Note: *envoyer* (to send) has a slight irregularity: *j'envoie*, *tu envoies*, *il/elle/on envoie*

**Saying 'they' in French**

There are two words for 'they' in French: **ils** for male, **elles** for female. (For a mixture of male and female, use **ils**.) The *ils/elles* form of regular **-er** verbs ends in **-ent**. (The **-ent** ending is silent.)

*Ils téléchargent de la musique.* – They download music.

*Elles jouent sur la PlayStation.* – They play on the PlayStation.

The verbs **être** (to be) and **faire** (to do) are irregular:

*ils/elles sont* – they are      *ils/elles font* – they do

**Learning Cycle 3 is all about free time and leisure. You will learn to talk about activities you like and dislike, what you do and when. You will learn the difference between an infinitive and a conjugated verb.**

Key words and definitions	
<b>Subject pronouns</b> (although you won't use them much in Spanish)	yo (I) / tu (you) / el / ella (he/she), nosotros (we) / vosotros (you (pl)) / ellas / ellos (they (m))/they (f)
<b>Nouns</b>	Used to identify any of a class of people, places, or things. Spanish nouns have a different gender. They are <u>either masculine or feminine</u> .
<b>Adjectives</b>	Used to describe a noun. Comes after the noun it describes and agrees in gender and number.
<b>Verbs</b>	A word used to describe an action, state, or occurrence, and forming the main part of the predicate of a sentence, such as <i>hear, become, happen</i> .
<b>Adverbs of frequency</b>	Used to say how often someone does something.

<b>Me encanta</b>	I love	<b>chatear</b>	<b>to chat online</b>
		<b>escribir correos</b>	<b>to write emails</b>
<b>Me gusta</b>	I like	<b>escuchar música</b>	<b>to listen to music</b>
<b>Me gusta mucho</b>	I like a lot	<b>jugar a los videojuegos</b>	<b>to play videogames</b>
		<b>leer</b>	<b>to read</b>
<b>Me gusta muchísimo</b>	I really like	<b>mandar SMS</b>	<b>to send text messages</b>
<b>Prefiero</b>	I prefer	<b>navegar por Internet</b>	<b>to surf the net</b>
		<b>salir con mis amigos</b>	<b>to go out with friends</b>
<b>Favorito / favorita</b>	Favourite	<b>ver la television</b>	<b>to watch TV</b>
<b>No me gusta</b>	I don't like	<b>Es interesante</b>	<b>It's interesting</b>
		<b>Es divertido</b>	<b>It's fun</b>
<b>No me gusta nada</b>	I don't like at all	<b>Es guay</b>	<b>It's cool</b>
		<b>Es aburrido</b>	<b>It's boring</b>
<b>Odio</b>	I hate	<b>Es estúpido</b>	<b>It's stupid</b>

**porque**  
= because

**When you talk about what you like, you use the infinitive verb:**  
 Me gusta **jugar** al fútbol = I like **to play** football / playing football  
 No me gusta **ver** la televisión = I don't like **to watch** TV / watching TV

**Frequency adverbs:**

**a veces**  
*sometimes*

**de vez en cuando**  
*from time to time*

**nunca**  
*never*

**todos los días**  
*every day*

Use **CUANDO** (when) or **SI** (if) with the weather to add detail about what you do depending on the weather:  
 E.g. Cuando llueve, veo la televisión.  
 When it rains, I watch TV

**¿Qué tiempo hace hoy?**

		
<b>Hace sol.</b>	<b>Está nublado.</b>	<b>Hace calor.</b>
		
<b>Hace frío.</b>	<b>Hace mal tiempo.</b>	<b>Hace viento.</b>
		
<b>Llueve.</b>	<b>Hace buen tiempo.</b>	<b>Nieva.</b>
<b>Está lloviendo.</b>		<b>Está nevando.</b>

TALKING ABOUT WHAT YOU DO IN SPANISH: (USING VERBS)

SKILLS

**Using question words**  
 To take part in a longer conversation you need to know your question words. These are the question words you know already:

¿Qué...?	What/Which?
¿Cuándo...?	When?
¿Dónde...?	Where?
¿Cómo...?	How/What?
¿Cuántos...?	How many?

Questions in Spanish always begin with an upside-down question mark ¿.

¿Qué deportes haces?	What sports do you do?
¿Qué haces cuando llueve?	What do you do when it's raining?
¿Qué haces en tu tiempo libre?	What do you do in your spare time?
¿Qué te gusta hacer?	What do you like to do?

On Monday –  
**El lunes**  
 On Mondays –  
**Los lunes**

**Jugar (to play) is a stem-changing verb. Some people call these 'boot' verbs.**

<b>juego</b>	I play		<b>jugamos</b>	we play
<b>juegas</b>	you play		<b>jugáis</b>	you (plural) play
<b>juega</b>	he/she plays		<b>juegan</b>	they play

There are three types of verbs: **-ar, -er and -ir**. The biggest group is **-ar** verbs. Once you know the pattern, you can apply the rules to new **-ar**.

**hablar to speak**

(yo)	<b>hablo</b>	I speak
(tú)	<b>hablas</b>	you speak
(él/ella)	<b>habla</b>	he/she speaks
(nosotros)	<b>hablamos</b>	we speak
(vosotros)	<b>habláis</b>	you (plural) speak
(ellos)	<b>hablan</b>	they speak

In brackets you can see the pronouns I, you, he/she, we, you, they. Often these are not used in Spanish because the verb endings make it clear who is speaking.

There are two ways of saying 'you' in Spanish. Use the **tú** form when you are talking to one person, and the **vosotros** form when you are talking to more than one person.

**Hacer (to do) is an important irregular verb. The c changes to g in the 'I' form. Learn it by heart.**

<b>hago</b>	I do
<b>haces</b>	you do
<b>hace</b>	he/she does
<b>hacemos</b>	we do
<b>hacéis</b>	you (plural) do
<b>hacen</b>	they do

All these verbs are conjugated in the present tense: Look out for patterns.

Each ending is different depending on who you are talking about.

In Spanish when you talk about what you do, the verb ends with the letter **o**

<b>Juego</b> = I play	<b>canto</b> = I sing
<b>Hago</b> = I do	<b>bailo</b> = I dance
<b>Hablo</b> = I speak	<b>saco</b> = I take
<b>Escucho</b> = I listen	<b>monto</b> = I ride



# MATHS

---

Cycle 3 in **Maths** will focus primarily on your understanding and application of fractions, decimals and percentages. At the beginning of the cycle, we will be focusing on the core skills of converting and comparing the three forms alongside using the four operations with them in problem solving situations. Once you have honed these skills, we will look at a variety of ways of representing data and then begin to look at how we can use our FDP skills to calculate probability in from these representations.

## Sparx Maths

Watch the videos, try the questions.

Unit	Key Sparx clips:
1: Working with fractions	M835, M931, M157, M110
2: FDP problems	M264, M437, M905, M476
3: Representing Data	M829, M834, M945
4. Probability from Diagrams	M419, M941, M718

Key words and definitions	
<b>Numerator</b>	number above the line of a fraction, showing the number of parts of the whole
<b>Denominator</b>	the bottom number in a fraction showing the number of parts the whole is divided into
<b>Equivalent</b>	fractions with the same value
<b>Simplify</b>	to simplify a fraction to its simplest form: to reduce the numerator and denominator in a fraction to the smallest numbers possible
<b>Improper Fraction</b>	the numerator is larger than or equal to the denominator
<b>Mixed Number Fraction</b>	a number written as a whole number with a fraction
<b>Fraction</b>	any part of a group, number or whole
<b>Decimal</b>	An amount expressed as a number with digits beyond the decimal point.
<b>Percentage</b>	A proportion shown as an amount out of 100.
<b>Pie Chart</b>	A chart made up of a circle broken down into sectors that represent portions of data.

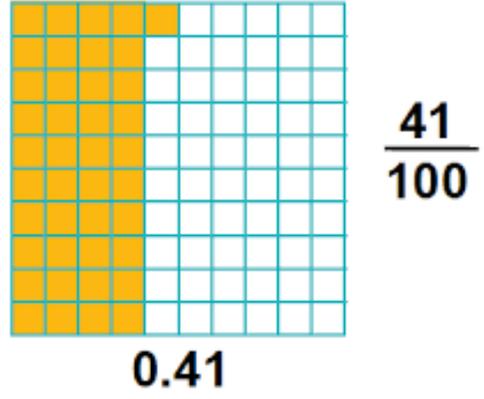
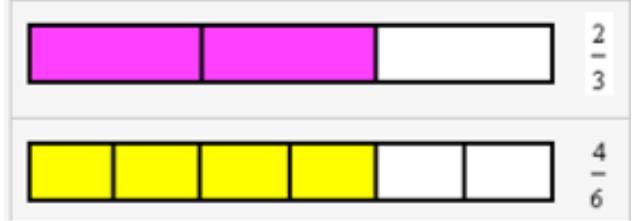
DATA/PROBABILITY – Key words and definitions	
<b>Venn Diagram</b>	Data sorted into overlapping circles, representing qualities or sets.
<b>Set</b>	A group of data.
<b>Denominator</b>	The bottom number of a fraction.
<b>Percentage</b>	A proportion shown as an amount out of 100.

# Cycle 3 Key Concepts

## Fractions, Decimals and Percentages

**Equivalent Fractions** are different fractions that name the same number

The fractions  $\frac{2}{3}$  and  $\frac{4}{6}$  are equivalent.



### Convert Fractions, Decimals and Percents



**Denominator** – number of parts it is split into

**Numerator** – number of parts

When **dividing** fractions turn the second fraction upside and multiply them

E.g.  $\frac{3}{4} \div \frac{1}{3} = \frac{3}{4} \times \frac{3}{1} = \frac{3 \times 3}{4 \times 1} = \frac{9}{4}$

When **adding** and **subtracting** fractions you need a **common denominator** before you can carry out the calculation

When **multiplying** fractions, you need to multiply the **numerators** and multiply the **denominators**

$$\frac{1}{2} + \frac{1}{3} = ?$$

E.g.  $\frac{3}{5} \times \frac{4}{7} = \frac{3 \times 4}{5 \times 7} = \frac{12}{35}$

$$\frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$$

$$\frac{1}{3} \times \frac{2}{2} = \frac{2}{6}$$

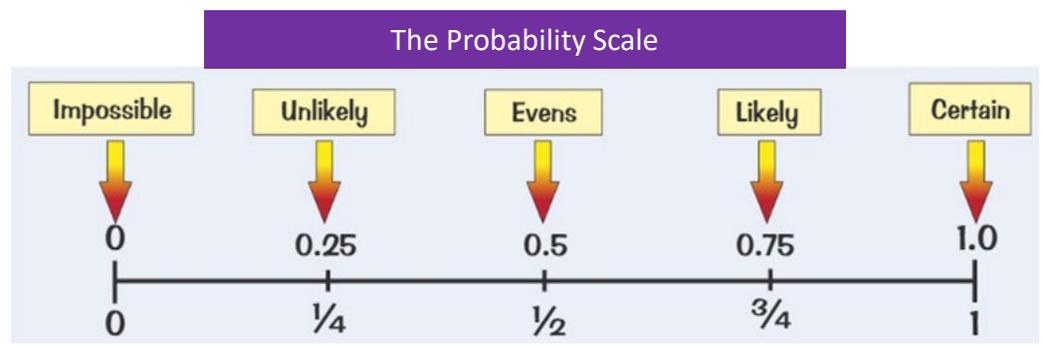
$$2 \frac{3}{4} = \frac{11}{4}$$

$$\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$$

When converting between **mixed number** fraction and **improper fractions** you need to calculate how many of the denominator you have in total

Probabilities are always between 0 and 1, therefore can be represented as fractions, decimals or percentages

## Data and Probability



# PE

---

# Cycle 3 Knowledge Organiser

QR code for basic football rules video



## Basic Rules

**Players:** Only 7 players per side, who all have different positions

**Contact rule:** You can't touch or push any player during the game as it is a non-contact sport. This will result in a penalty pass or if they contact you whilst you are in the shooting circle, you will get a penalty shot.

**Footwork rule:** You are not allowed to move with the ball. When catching the ball the foot that lands first must stay in contact with the floor until ball is passed. If footwork happens a free pass is awarded.

**Obstruction rule:** you must be 1 metre away from the player you are marking before your arms go up and over the ball. If your defender is obstructing you before you shoot, you get a penalty shot.

**3 seconds rule:** You can only hold the ball for 3 seconds before you pass or shoot. If a player holds a ball to long a free pass is awarded.

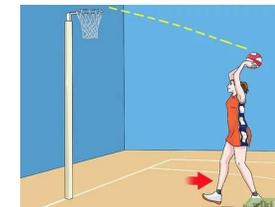
**Centre pass rule:** To start a game and after a goal is scored you go back to the centre pass and players must receive in the centre third.

**Repossession:** If a player drops the ball or bounces the ball and picks it back up again the other team gets a free pass.

**Offside rule:** If you go into a third that you are not allowed in or if any other player than GS GA GK GD go into the shooting circle the other team gets a free pass. If offside happens a free pass is awarded.

**How to score:** A goal is scored when a GA or GS gets the ball into the hoop from within the D.

**Out of court:** If the ball gets knocked out of the court by team A, then team B will gain the throw in.



## Leadership Skills

### Communication

Using language and terminology that others understand E.g. Explaining how to shoot in football with key points

### Organisation

Making sure that people are in the right place for the task set, E.g. Sorting players into even teams so that it is fair

### Adaptability

Making sure that the task set is appropriate for ability of those taking part. E.g. Making something easier to help or more difficult to challenge.

### Creativity

Ensuring practices or games aren't the same each time E.g. Creating different rules in the game to focus on certain skills



# SCIENCE

---

**Heredity and Genetic Information**

**Key words and definitions**

<b>Genome</b>	The genome is the entire set of DNA instructions found in a cell.
<b>Heredity</b>	The passing on of traits from one generation to the next. These traits can be physical, such as eye colour, blood type or a disease, or behavioural.
<b>Reproduction</b>	The <u>biological process</u> by which new individual <u>organisms</u> – “ <u>offspring</u> ” – are produced from the “parent” or parents.
<b>Variation</b>	Small changes in living organisms.

**What’s the big idea?**

Each generation of organisms inherits characteristics from the one before, which arise from genetic information stored in the genome and are affected by the environment.

**Genetic and environmental variation**

Characteristics in an individual organism are caused by both genetic and environmental variation.

For example, the weight of a dog is caused partly by its genes - inherited - and partly by what it eats - environmental. The height of a sunflower is caused partly by its genes and partly by how much light and water it gets.



<b>Genetic only</b>	<b>Environmental only</b>	<b>Genetic and environmental</b>
Eye colour	Tattoos	Height
Blood group	Scars	Weight
Attached ear lobes	Language spoken	Human's hair colour - can lighten in summer or can be dyed
Animal's fur colour	Colour of hydrangea flower - blue in acid soil, pink in alkaline	Size of plant

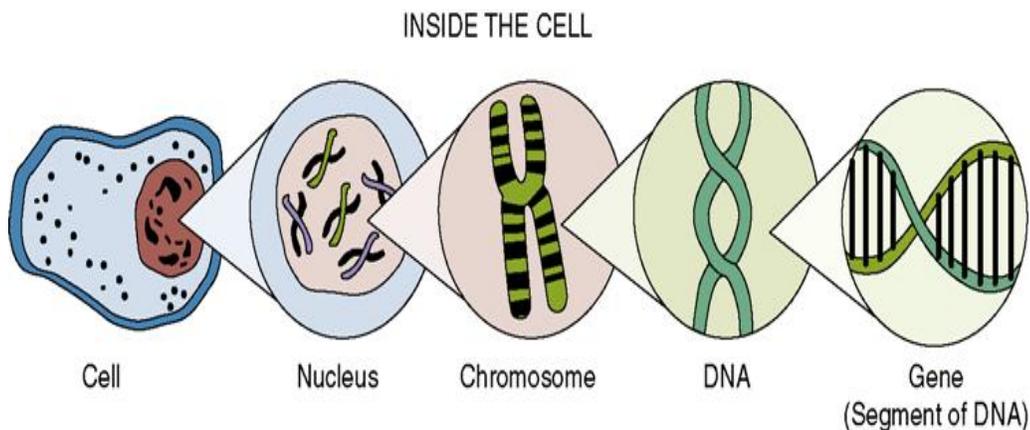
The Structure and Function of the Genome

Key words and definitions

<b>Heredity</b>	The passing on of traits from one generation to the next. These traits can be physical, such as eye colour, blood type or a disease, or behavioural.
<b>Chromosome</b>	A coiled structure of DNA found in the nucleus of cells made from many genes.
<b>DNA</b>	The store of genetic information for all living things, passed from parents to offspring.
<b>Gene</b>	A small section of DNA that gives a characteristic
<b>Genome</b>	The genome is the entire set of DNA instructions found in a cell.
<b>Nucleus</b>	A cell component found in most cells which contains the genetic material (DNA) of the organism and controls the cell's activities.

What's the big idea?

Each generation of organisms inherits characteristics from the one before, which arise from genetic information stored in the DNA of the genome and are affected by the environment.



All of the chromosomes of an organism add up to make its genome. This is one copy of all its DNA. Every human on Earth has a unique genome unless they are identical twins who were made from the same fertilised ovum (egg cell). Non-identical twins were made from two separate sperm fertilising two different ova (egg cells) and so have different genomes.

DNA makes up genes which make up chromosomes which make up the genome. A good model for this is thinking about money. Pennies make up £1 coins which make up £5 notes which make up £20 notes.

# Elements and Compounds

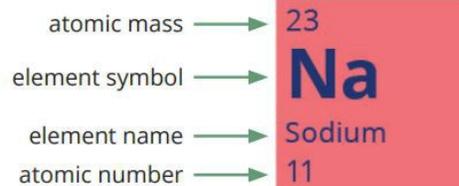
atom	The smallest part of an element that can exist.
bond	An attraction between atoms or molecules that enables the formation of chemical compounds.
chemical formula	A series of chemical symbols showing the number of atoms of each element in a compound.
chemical reaction	A process that involves rearrangement of atoms to produce new substances.
chemical symbol	A letter or series of letters used to represent an element, e.g. C for carbon, Na for sodium.
compound	A substance made up of two or more different elements chemically bonded together.
element	A substance made of only one type of atom.
metal	An element or substance which is typically shiny, malleable and ductile. It typically conducts heat and electricity well.
mixture	A substance consisting of two or more substances not chemically combined together.

## Elements

An element is a substance that cannot be broken down into other substances. The smallest part of an element that can exist is an atom.

Each element is represented by a symbol. The first letter of the symbol is always capitalised, any following letters are lower case.

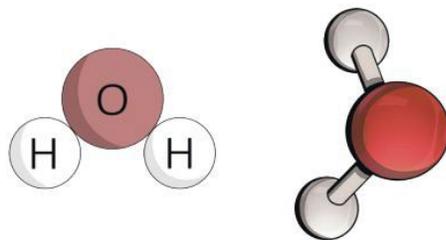
The symbols for the elements are arranged on the periodic table.



## Compounds

A compound is a substance made when two or more elements are chemically bonded together.

A compound can be represented by a diagram. The atoms are shown touching each other or joined by a stick that represents a bond.



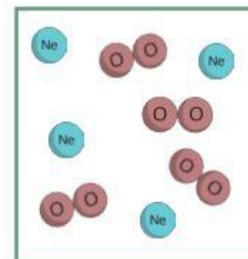
Water is a compound made from one oxygen atom and two hydrogen atoms. Its formula is  $H_2O$ .



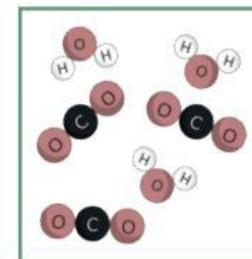
## Mixtures

A mixture is a substance consisting of two or more substances not chemically combined together. You can have mixtures of elements, mixtures of compounds or mixtures containing both.

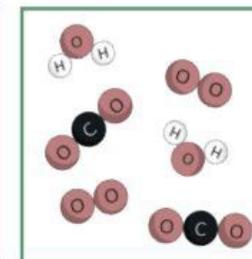
In a particle diagram of a mixture, not all of the molecules shown will be touching each other or be joined by sticks representing the bonds.



mixture of elements



mixture of compounds



mixture of elements and compounds

## Solubility

### Key words and definitions

<b>Solvent</b>	The liquid in which the solute dissolves to form a solution
<b>Solute</b>	A solid substance which can dissolve in a liquid
<b>Solution</b>	A liquid in which a solid substance has been dissolved
<b>Soluble</b>	Able to dissolve in a solvent
<b>Saturated Solution</b>	A solution in which no more a the solutewill dissolve

### Solubility curves

Every solute has a fixed solubility at room temperature. However, the solubility of a solute changes as the temperature of the water changes. The solubility of a substance in water at different temperatures can be displayed using a solubility curve. Solubility curves can be used to determine the mass of crystals formed when a solution is cooled.

Each solute has a different solubility at different temperatures and the change in solubility with temperature depends on the solute.

