

Year 7

Knowledge

Organisers

Term 2

Year 7 3D

Forming a pinch pot



1. Begin with a ball of clay. Push your thumb into the center. Then pinch up the walls

2. Turn the piece as you pinch. This will help you to keep an even thickness in the walls of the piece. Walls should be no thinner than your "pinkie", no thicker than your "pointer".



3. Double check that the walls and bottom have an even thickness.
4. Gently pat the bottom on a flat surface to create a flat spot on the bottom of the piece



The walls of the foot should be "uniform" that means that the walls should have the same thickness all the way up to the top.



Facial Features in clay



Keywords

Ceramics: Art of making objects out of clay to produce pottery and sculpture.

Clay: Stiff, sticky kind of earth that is used in ceramics. It is wet, and it hardens after drying or heating.

Wedging: Kneading the clay with hands to force out air pockets and create a uniform texture.

Pinch: a hand building technique which uses the fingers to gently pinch the clay to shape it into a bowl or other forms.

Coil building: a hand building technique, using the hands to roll out rope shaped lengths of clay (coils). The clay extruder can also be used to make coils. They may be any size but must be consistent with one another to build pottery. The coils are wrapped together on top of one another to form the sides of pottery.

Slab building: a hand building technique using rolling pins to roll out sheets of clay. These can be cut to form patterns and assemble into forms.

Score, Slip, Stick and Smooth: a joining technique where the edges to be attached are roughened up and "glued" with liquid clay (slip), then blended together.

Slip: watered down clay (becomes soft and slippery).

Kiln: a furnace or oven made of ceramic used to fire or "heat" ceramic objects. A kiln may be electric, gas, or wood-burning and reach temperatures in excess of 2,500 degrees.

Glaze: In ceramics, a thin, glossy coating fired into pottery or vases.

Plastic stage: a stage when clay is workable, pliable clay.

Leather Hard: condition of raw clay where it has lost most of its moisture, but it is still able to be joined or carved.

Green Ware: Pottery that has not been fired but dry.

Bisque Ware: Clay has been fired once in a kiln.

Earthen Ware: (Glaze Ware) Clay has been fired (low fire) a second time in a kiln.

Surface Decoration

Surface Decoration Techniques in Ceramics

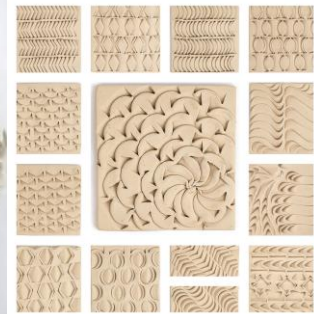
Carving

Removing areas of clay around a design, to create a raised surface.



Appliques

Creating separate forms and attaching them to the surface.



Joining Clay



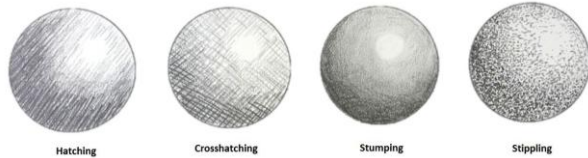
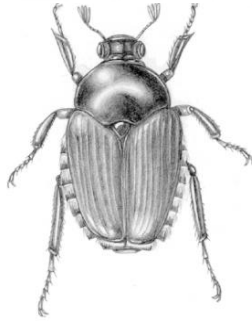
ATTACH CLAY TO CLAY BY USING THE 4 Ss:

1. **Score** both pieces with a pointy tool.
2. Apply **Slip** (glue-like clay-water mixture).
3. **Stick** the pieces together with a wiggle.
4. **Smooth** all your seams.

Year 7 2D



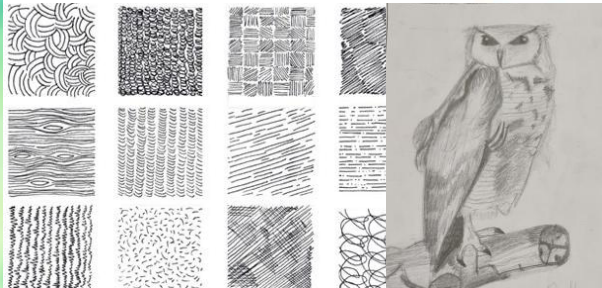
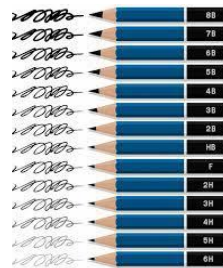
Making your drawings look realistic requires a range of tones. The harder you press with your pencil the darker the tone, the lighter you press the lighter the tone. Go in one direction



Blending stumps are used to blend tone in smoothly.

Grades of Pencils-

Pencils come in different grades, the softer the pencil the darker the tone. Use different pencils to create varied tone in your work



Keywords

Tone - Tone is the lightness and darkness of a colour

Texture – Texture creates the feeling of an object and makes it more interesting.

Shading – Shading is a technique using dark or light colours to give the impression of shape.

Mark Making – Mark making is experimenting with lines and shapes to make different textures and tones

Tonal Colour – Tonal colour is when you blend harmonising/related colours together going from light to dark.

Primary Colours– Primary colours are those that cannot be made from mixing other colours. Red, blue and yellow.

Secondary Colours– Secondary colours are made by mixing the primary colours. Green, purple and orange.

Complementary Colours – Complementary Colours are those which are opposite to each other on the colour wheel, e.g red and green. You DO NOT mix these – They look good next to each other.

Harmonising Colours/Related colours – Colours next to each other on the colour wheel, they work in harmony. Examples of harmonising colours are orange and red. You DO mix these together.

Warm Colours – Colours that make you feel warm and make you think of warm things, like red, orange and yellow for the fire or the sun.

Cold Colours – Colours that make you feel cold and made you think of cool things, like blue, green and purple for ice or cold water.

Balance – Balance is when the artwork has equal focus on both sides and looks evenly arranged.

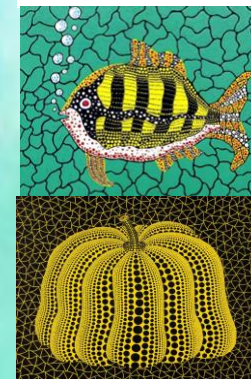
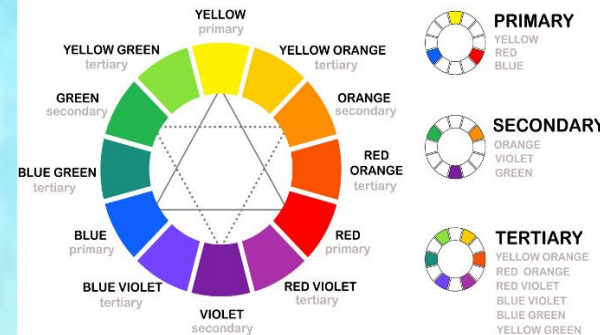
Symmetry – Symmetry is when something is the same on both sides, mirrored or equally balanced.

Proportion - the comparative measurements or size of different parts of a whole.

Contrast – Contrast is created by using opposites near or beside one another such as a light next to dark or a rough texture next to smooth.

Refinement – Refinement is when you go over your work, improving it in some way and trying to make it better. For example, you could neaten up your shading or colour, or make your lines sharper and more crisp.

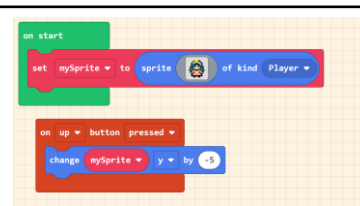
Colour pencil techniques



Artist Info -Yayoi Kusama is a Japanese contemporary artist who creates immersive sculptures and installation art that people can step inside. She uses polka dots and pumpkins throughout her work, with flat colours that appear to clash. She struggles with her mental health but finds creating her art relieves her symptoms.

Input	The process of entering data or information into a computer.
Output	The process of receiving data or information out of a computer after it has been processed.
Sprite	A 2D image or animation that is used in a game.
Sequence	The order in which instructions are executed in a program or algorithm.
Variable	A location in the computer's memory that stores a value that can change.
Constant	A location in the computer's memory that stores a value that cannot change.
Assign	The process of giving a variable a value.
Selection	A decision-making process in a program that allows computer to make a choice based on conditions.
Condition	A logical statement that can be either true or false.
Logical Operators	Symbols that perform logical calculations on values (E.g. + - × ÷ < >)
Iteration	The process of repeating a set of instructions, or steps, in a computer program.
Efficient	Completing a task in a computer program using the least amount of processing power and memory possible.
Index	The numerical location of an item in a list (array).
Item	The numbers or strings stored in a list (array).
Array	A data structure that stores multiple values in a list.

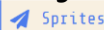
In Make Code Arcade code is written using blocks. Each block is colour coded depending on its purpose. Blocks are connected and will execute in this sequence depending on their trigger.



In our codes we use variables to store information we want to use; these can be anything from the names of our Sprites to the score in a game. Variables must have sensible and unique identifiers (names) and in MakeCode Arcade can be created or accessed from the Variables menu.



Images are a big part of our programming, from Sprites to backgrounds these give personality to our programs. We can make or change the image of our Sprites from the Sprite menu, make sure you have a good name for your Sprite to avoid confusion!

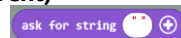


We can make or change the background from the Scene menu.

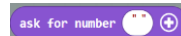


We can ask the user for an input in two ways depending what type of input we want:

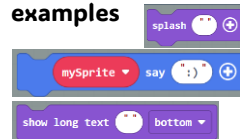
- String (Text)



- Number



There are many ways to output, here are some examples



Whenever we need to make a decision in our code, IF statements are what we need to use.

IF checks whether the condition is true or false. If true it will execute the code immediately following it. If false it will skip to the next Else If or Else section below it, if none are present it simply carries on with the rest of the blocks in the group.

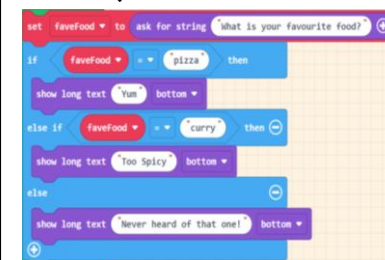
ELSE IF follows an IF statement if we would like to check additional conditions.

ELSE comes at the end of the selection block and will run the code below it if all other IFs and ELSE IFs above are false.

These can be found under the Logic menu:



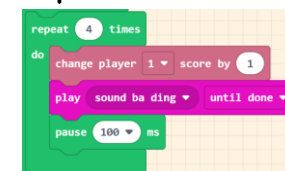
An Example



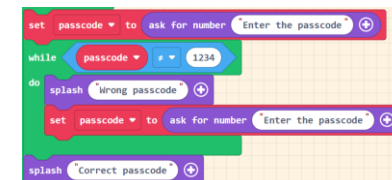
Iteration is used when we want to repeat (loop) code. This will repeat sections of the code without needing to write it multiple times. This makes our code easier to read and check for errors (debug), as well as saving us time when coding.

There are two types of loop:

- Count Controlled: Where the loop will repeat a set number of times.



- Condition Controlled: Where the loop will continue forever until a condition is met or is forced to stop.



These can be found under the Loops menu:



Cyber Bullying	Cyber bullying is a form of bullying or harassment which is committed on a range of digital devices and online.
Privacy	The right of an individual to control how their personal information is collected, used, and shared.
Exploitation	Treating someone unfairly in order to benefit from them, usually at the cost of the individual.
Interactive	Software which accepts and responds to input from users.
Exposition	A comprehensive description and explanation of an idea, theory or backstory.
Bystander	A person who is standing near and watching something that is happening but is not involved in it.
Consistent	Staying the same throughout.
Hyperlink	A clickable element that takes you to another location on the same document or another webpage.
Usability	How easy something is for users to learn and use.

Cyber Bullying
If the bullying is happening at school – Talk to your parents or carers and your teacher. If you feel you can't speak to your teacher, maybe a friend can do it for you.
If the bullying is happening online – Tell a trusted adult – your parents or carers, or a teacher. You can report abusive posts on social media platforms. You can also report abuse to CEOP (Child Exploitation and Online Protection Centre).






Every time we share something online, we add a bit more information about ourselves to the online world, including posting a photo or liking someone's video. The trail of information we create when we share things online is called our 'digital footprint'. People we know, and don't know, can see our digital footprint and use it to learn more about us, meaning people can see things online or learn things about us we don't want them to see or know.






How can I protect my privacy online? – You can take control of your digital footprint by using privacy settings. Privacy settings help you to choose who can see what you post and share. Privacy settings are usually located under 'Settings' or 'My Account' on devices, apps and websites.

Most young people have online lives, just as real as their offline lives. They chat on WhatsApp, share pics on Shapchat, post on Instagram. A post can go viral and reach millions overnight. The appeal of the online world is also what makes it dangerous. Any post, no matter what it is, is open to bullying, abuse and threats.

Online exploitation is when someone uses their power to make a child do sexual or criminal things online. It's never OK for someone to make you uncomfortable. If someone is doing things that make you feel uncomfortable or if someone tries to force you to do something, you could be experiencing sexual exploitation and abuse.

Powerpoint is a presentation-based piece of software that uses graphics, videos, etc. to make a presentation more interactive and interesting. The software comprises of several tools that are useful for us to make our interactive story.

TOOLS	Description
	Found on the Home Tab of the toolbar. This adds a new slide to your presentation; the arrow allows you to browse possible formats.
	Found on the Home Tab of the toolbar. This allows you to change the font colour of any highlighted text. Pressing this without highlighting any text will only change the colour of any text written after.
	Found on the Home Tab of the toolbar. This allows you to change the font and size of any highlighted text. Pressing this without highlighting any text will only change the colour of any text written after.
	Found on the Home or Inset Tabs of the toolbar. This allows you to add a variety of shapes and "action buttons" to your presentation. The Shape Format tab when you click one of these shapes allows you to change its design.
	Found on the Inset Tab of the toolbar. This allows you to insert a text box allowing you to add text to your slide.

TOOLS	Description
	Found on the Insert Tab of the toolbar. This allows you to insert images to your slide, either from ones saved on your computer, ones pre-installed in Powerpoint or from the internet.
	Found on the Animations Tab of the toolbar. This allows you to add an animation to any selected object.
	Found on the Transitions Tab of the toolbar. This allows you to add animations between slides.
	Found on the Slide Show Tab of the toolbar. This starts you presentation from the beginning. It is useful to test your Powerpoint regularly to make sure it functions as intended.
	Found on the Design Tab of the toolbar. This allows you to change the design of the background of your Powerpoint.

Binary	Also known as base 2. It is the language of a computer and consists of only two values, 0 and 1.
Denary	Also known as base 10 and decimal. It is the number system that we use and consists of 10 digits 0 to 9.
Hexadecimal	Also known as base 16. It is the number system used by computer programmers consisting of 16 digits 0-9 and A -F
Conversion	The process of changing something from one for to another for example converting from binary to denary.
Bit	The smallest unit of data, represented by either a 0 or a 1
Byte	A unit of measurement for data, made up of 8 bits.
Nibble	A unit of measurement for data, made up of 4 bits. 2 nibbles make a byte. When convert to hexadecimal we need to split the number into nibbles

To convert from Base 10 to Base 2 we need to use our binary place value table

Starting from the left and working right we check if the column header goes into our number. If it does, we place a 1 in the column and continue along the table with the remainder of our number. If not, we place a 0 and continue to the next column.

Ex3
Convert 37 into a binary number.

128	64	32	16	8	4	2	1
0	0	1	0	0	1	0	1

One 32 goes in 37, remainder 5
Zero 16s go in 5
Zero 8s go in 5
One 4 goes in 5, remainder 1
Zero 2s go in 1
One 1 goes in 1, remainder 0

So, 37 in binary is 100101

Ex4
Convert 123 into a binary number.

128	64	32	16	8	4	2	1
0	1	1	1	0	0	1	1

One 64 goes in 123, remainder 59
One 32 goes in 59, remainder 27
One 16 goes in 27, remainder 11
One 8 goes in 11, remainder 3
Zero 4s go in 1
One 2 goes in 3, remainder 1
One 1 goes in 1, remainder 0

So, 123 in binary is 1110011

To convert from Base 2 to Base 10 we need to identify the place value of the 1s that make up the binary number.

The right most digit is the 1s column, the next to the left is 2s, then 4s, then 8s, and so on increasing by a factor of 2 each time. To calculate the denary number, we add up the column heading that contain a 1.

Ex1
Convert 101011 into a denary number.

128	64	32	16	8	4	2	1
		1	0	1	0	1	1

32 + 8 + 2 + 1 = 43

Ex2
Convert 10110 into a denary number.

128	64	32	16	8	4	2	1
			1	0	1	1	0

16 + 4 + 2 = 22

To convert from Base 2 to Base 16 we need to split the binary byte in 2 groups of 4 bits.

Draw out the following table

8	4	2	1	8	4	2	1
1	1	0	1				

Place each half of your binary byte into the table and calculate the value each half gets you. Remember 10 = A, 11 = B, 12 = C, 13 = D, 14 = E, 15 = F. Concatenating these two values together gives us our Base 16 number.

To convert Base 16 back to Base 2 we need to separate our two parts. Turn each into a binary number using the table. Concatenating these two groups of 4 bits gives us our Base 16 number.

Ex5
Convert 1101 0011 into a hexadecimal number.

8	4	2	1	8	4	2	1
1	1	0	1	0	0	1	1

8 + 4 + 1 = 13
13 is D
2 + 1 = 3

So, 11010011 in hexadecimal is D3

Ex6
Convert 4F into a hexadecimal number.

8	4	2	1	8	4	2	1
0	1	0	0	1	1	1	1

4 = 0100
F is 15
15 = 1111

So, 4F in binary is 0100 1111

KS3 Drama

Knowledge Organiser

Year 7 –

The Boy at the Back of the Class

Terminology and Techniques

Text/ Script	The written drama piece/script.
Still Image/ Tableaux	A ‘frozen picture’ that tells a story. Costume and props are needed, and physicality used to show emotion.
Improvisation	To perform quickly in response to something without any planning.
Protagonist	The main character in a piece of drama.
Thought Tracking	An exercise that allows the inner thoughts of a character or role to be heard out loud. The participant is asked to say their characters thoughts and feelings at specific points during their acting.
Plot	The storyline of a piece of drama.
Scene	A sequence of continuous action in a play.
Rehearse/ Rehearsal	A practice or trial performance of a play.
Flashback	Enacting a moment from a character’s remembered past, this can help gain an understanding of the character and provide a ‘back story’.
Entrances & Exits	Where a character enters and exits their scene.
Level(s)	How the actors sit, kneel or stand on stage, to show status.
Multi-role	When an actor plays more than one role.

Physical Skills

Facial Expressions	Using the face to express that character's feelings and emotions
Gesture	An expressive movement of the body, or something that is said or done to show a feeling, i.e., a wave.
Posture	The position of the body to communicate a character, i.e., standing hunched over to show you are older.
Body Language	The way in which our bodies communicate our character’s attitudes. Using your body to show emotion or hidden feelings.
Gait	The way you walk to show your character and emotion, i.e., shuffling feet to show nervousness

Vocal Skills

Projection	Using the voice so that all the audience can hear.
Tone	The way that you speak, using ‘intonation’ to add feelings, emotions or sub-text.
Pace	The speed in which an actor delivers their lines.
Pause	Pausing lines to create dramatic effect such as tension.
Pitch	The ‘highness’ or ‘lowness’ in the tone of voice.

We can't really afford to do any of those things now, because when I was six years old, my dad died in a car crash. Sometimes I worry that I'm forgetting him, even though I miss him every day. But when I think hard and dive right down into the deepest part of my brain, he's still there. He was the funniest dad anyone could ever have. He used to be a carpenter and loved to build things out of whatever he could find.

This is what Dad looks like in my memory:



I was surprised because I had never thought about Ahmet having a brother or a sister. I thought he was like me and didn't have any. His sister wasn't at our school. In the picture, she looked smaller than him, so maybe she was in day care.

"But in Syria, there is big war," said Ahmet, and he pointed to Ms. Hemsı again, who held up another picture. This one showed buildings on fire and bombs dropping from a plane and lots of people lying on the ground and other people holding guns.



Josie stopped chewing her hair and looked at me and then looked back at the drawing again. And from behind, I heard someone whisper, "Whoa! He's seen a real bomb AND a real gun!"

"Because of war, my family...run away," said Ahmet, as his lion eyes became big and round and watery. "We went...on mountain and rivers...and carry bags and cat."

This time, Ms. Hemsı held up a picture showing a family crossing mountains and rivers, and in the sky, birds that were crying. In the picture, Ahmet had drawn himself carrying a red backpack with a black stripe on it, just like the one he had now. That was when I knew why he loved it so much and why he cried when it had been filled with Brendan the Bully's horrible baked beans. He had carried it all the way from his house and over a mountain, which meant it was lots more important and lots more special than any of our bags.



"Then nowhere safe, so we get on boat on big sea."

This time, Ms. Hemsı held up a drawing of a boat. But the boat wasn't like a normal boat with sails and pointy ends and wooden sides. This one was flat and round and was orange on the sides—just like the ones I had seen on the news that didn't have any bathrooms on them. And inside the boat were lots of people, all wearing vests that made them look like puffin birds. But there was someone in the water, too, and he had a bubble coming out of his mouth saying, "HELP ME."

Everyone leaned forward in their chairs and tried to read the labels Ahmet had put over some of the people's heads. I saw "Me" and "Mum" and "Dad," but there wasn't one for "Sister" or "Cat." I know cats don't like water because Josie has a cat and she says it screams whenever it rains and always wants to stay inside. So maybe Ahmet's cat didn't want to get into the boat. And maybe his sister didn't want to leave it behind, so she stayed behind to look after it. This was the boat picture:

The novel follows a young girl (the narrator) whose class gets a new student named Ahmet, a refugee from Syria. He sits quietly at the back of the classroom and doesn't speak much at first. The other students are curious about him, and the narrator and her friends soon learn that he has been separated from his family.



“Then we are in another country, called Greece,” said Ahmet. “We live in tent with lots of people who run away like me. They come from lots of country like Afghanistan and Pakistan and Eritrea.”

The next picture showed a flag with blue and white stripes and a white cross in a blue corner, and next to it were lots of tents and people everywhere sitting next to fires and sleeping on the floor. In this picture, only the words “Me” and “Dad” could be seen. Ahmet’s mum must be sleeping inside one of the tents.



“Then we walk long time...in lots of country. It was cold, and we sleep on floor. And then we stay in France.”

This time, Ahmet pointed to the next picture with his finger and showed us the railroad tracks he had drawn. On it were people carrying suitcases and children, and all of them were walking to a wall with barbed wire on the top. Everyone looked sad. And in the corner, there were army tanks and soldiers holding guns, and all the guns were pointing at the people with the suitcases and children.

Ms. Hemsî held this drawing up for longer than any of the others, because Ahmet was looking at it and didn’t seem to want to stop staring at it.



“Then I come here...and come to school. I like here...no bombs. It safe and I like new friends and teacher and play soccer.”

Ahmet stood and stared at everyone, and everyone stared back. Mrs. Khan blew her nose loudly, and Ms. Hemsî put the drawings down and gave Ahmet a hug.

“Thank you, Ahmet,” said Mrs. Khan, standing up and putting a hand on his shoulder. “Everyone, let’s give Ahmet a huge round of applause for being so brave and for sharing his story with us.”

Character List -

Ahmet

A quiet, kind boy who is a refugee from Syria. He sits at the back of the class and has been separated from his family. As the story goes on, we learn he is brave and has been through a lot.

The Narrator (main girl)

Friendly, curious, and determined. She wants to help Ahmet and is the one who brings the group together. She shows strong empathy and leadership.

Tom

A loyal and practical friend. He helps come up with plans and supports Ahmet throughout the story.

Josie

Kind and caring. She is very supportive of Ahmet and helps organise ways to help him.

Michael

Funny and energetic. He adds humour but is also a good friend who stands up for what is right.

Brendan the Bully

A classmate who is unkind and prejudiced towards Ahmet. He represents the negative attitudes the group must challenge.

Mrs Khan (the teacher)

A supportive and understanding teacher who encourages kindness and helps the class welcome Ahmet.



Title: Greek Myths and Legends and A Mid-Summer Night's Dream

Act One:

Theseus (Duke of Athens) prepares to marry **Hippolyta** (Queen of the Amazons). He is approached by **Egeus** who complains his daughter refuses to marry the suitor of his choice, **Demetrius** and that he should be allowed to assert the law of Athens: to kill **Hermia** for her disobedience or send her to live in a nunnery. **Theseus** tells **Hermia** she should obey her father, but she refuses, secretly plotting to run away with her love **Lysander**. She confides in **Helena** who is in love with **Demetrius** therefore tells him so that they can pursue the lovers together. Meanwhile, a group of actors discuss a play they will perform at the royal wedding.

Act Two

Oberon and **Titania** (King & Queen of the fairies argue over a changling boy. **Oberon** plans to get revenge by asking his servant **Puck** to pour love potion on Titania's eyelids so that she will fall in love with the first thing she sees on opening her eyes. **Oberon** observes **Demetrius** dismissing **Helena** and tells **Puck** to give him a dose of the potion too. **Puck** pours the love potion onto **Lysander's** eyes by mistake who wakes and sees **Helena**, falling in love with her and following her through the woods. **Hermia** wakes to find **Lysander** is gone.

Act Three

The actors rehearse and **Puck** turns **Bottom's** face into the head of a donkey. The other actors run away but **Titania** wakes and falls in love with **Bottom**. **Oberon** is confused when he sees **Helena** and **Lysander**. Realising **Puck's** mistake, he pours love potion onto **Demetrius's** eyes who wakes and sees **Helena** so that now both men are in love with **Helena**. **Helena** believes the men are mocking her. **Lysander** and **Demetrius** challenge each other to a duel. **Puck** places an antidote on **Lysander's** eyes as he sleeps.

Act Four

Oberon orders **Puck** to remove **Titania's** love spell and return **Bottom's** head to normal. **Theseus** and **Egeus** find the lovers in the wood and **Demetrius** declares that he now loves **Helena**. **Theseus** suggests that the two pairs of lovers get married on the same day that he marries **Hippolyta**. **Bottom** re-joins his fellow actors.

Act Five

The play is performed to the audience's amusement and the fairies bless the marriages.

Tier 2 Vocabulary

Patriarchy	A system of society where men hold all the power
Consent	Agreement to do something or permission for something to happen.
Hierarchy	A system where people are ranked in order of importance
Unrequited	A feeling of love which is not returned
Disobedience	Refusal to obey the rules

Tier 3 Vocabulary

Dialogue	A conversation between two or more characters.
Analysis	The act of examining something in detail.
Dramatic irony	Where the audience knows more than all or some of the characters on stage
Soliloquy	A character speaking out their personal thoughts out loud to themselves on stage
comedy	A play characterised by its humorous tone

Greek Mythology:

-Use your Greek Mythology booklet to find out the answers to these questions:

1. Who was 'Mother of Earth'?
2. What does Prometheus translate to?
3. What did King Midas wish for?
4. What was released when Pandora opened the box?





Grammar

Capital Letters:

Capital letters (also called upper case) are letters used at the beginning of a sentence and for a proper noun. **T**hey may also be used at the beginning of the important words in a title or sign. Always capitalise the personal pronoun **I**.

Full Stops:

Full stops are used to end a sentence. They indicate that a point has been made and that we're now ready to move onto the next sentence. Like other punctuation marks, they show us how to read sentences - they show us when the sentence ends.

Commas:

Commas can be used to separate items in a list. *E.g. Robbie is a sweet, caring and polite boy. Commas are also used to separate extra information in a sentence.*

X Avoid Splicing

This is when two sentences are joined together without using a full stop or conjunction. *E.g. David dragged his feet to the shop, he was in a foul mood.*

Apostrophes

Contraction apostrophes are used when two words are joined together by shortening them. An apostrophe is used where the missing letter would normally go to combine the two words.

***Do not** would become **don't**.*

Apostrophes of possession show that something belongs to someone or something.

Sarah's book.

For pronouns ending 's' add the apostrophe after the 's' E.g. *James' book.*

Subject-Verb Agreement:

A **subject** and a **verb** must agree with each other. If the subject of a sentence is singular, then the verb must also be singular. If the subject of a sentence is singular, then the verb must also be singular. If the subject of a sentence is plural, then the verb must also be plural.

She walk to the market.
X She walks to the market. ✓

They was playing netball. X
They were playing netball. ✓

Tenses:

Tense is a way of showing when an action happens - whether it's in the past, present, or future.

There are three main tenses:

- **Present tense:** It shows something that is **happening now** or **happens regularly**.

Example: *"I **play** football **every weekend**."*

- **Past tense:** It shows something that **already happened**.

Example: *"I **play** football **yesterday**."*

- **Future tense:** It shows something that **will happen later**.

Example: *"I **will play** football **tomorrow**."*

Tenses help us know when things happen, and they change depending on whether we're talking about the past, present, or future!

FRENCH Je me présente Y7 SB1 – Name & Greetings

Bonjour !

Hello

Salut !

Hi

Bonsoir

Good evening

Au revoir

Goodbye

À bientôt

See you soon

A demain

See you tomorrow

A plus tard

See you later

Bon week-end

Have a good weekend

Ça va ?

How are you?

Ça va très bien merci

I'm very well thank you

Ça va bien merci

I'm well thank you

Ça va

I'm okay

Comme ci comme ça

so-so

Ça va mal

I'm bad

Revise this vocabulary by
creating a conversation
between yourself and friend:

Comment t'appelles tu ?

What are you called?

Je m'appelle..

I am called...

Mon nom de famille est...

My surname is...

Je suis...

I am ...

Mon surnom est...

My nickname is...



FRENCH Je me présente Y7 SB2 – Age, Days, Months & Birthday

Quel âge as-tu ?

How old are you?

J'ai ... ans

I am ... years old

J'ai onze ans

I am 11 years old

J'ai douze ans

I am 12 years old

Les jours de la semaine

The days of the week

lundi

Monday

mardi

Tuesday

mercredi

Wednesday

jeudi

Thursday

vendredi

Friday

samedi

Saturday

dimanche

Sunday



Quelle est la date de ton anniversaire?

When is your birthday?

Mon anniversaire c'est le..

My birthday is the ...

1st premier /1 un

2 deux

3 trois

4 quatre

5 cinq

6 six

7 sept

8 huit

9 neuf

10 dix

11 onze

12 douze

13 treize

14 quatorze

15 quinze

16 seize

17 dix-sept

18 dix-huit

19 dix-neuf

20 vingt

21 vingt-et-un

22 vingt-deux

23 vingt-trois

24 vingt-quatre

25 vingt-cinq

26 vingt-six

27 vingt-sept

28 vingt-huit

29 vingt-neuf

30 trente

31 trente-et-un

32 trente-deux

janvier

January

février

February

mars

March

avril

April

mai

May

juin

June

juillet

July

août

August

septembre

September

octobre

October

novembre

November

décembre

December

FRENCH Je me présente Y7 SB3 – Hair & Eyes

J'ai les cheveux...

I have ... hair

blonds
blonde
noirs
black
bruns
brown
châtain
light brown
gris
grey
roux
red/ginger

et...
and
longs
long
mi-longs
mid-length
courts
short
raides
straight
ondulés
wavy
frisés
curly
rasés
shaved

J'ai les yeux...

I have ...eyes

bleus
blue
verts
green
marron
brown
gris
grey
noisette
hazel



Je suis...

I am...

assez
quite
très
very

grand/grande
tall
petit/petite
small

Je porte des lunettes

I wear glasses

Je me présente Y7 SB4 – Personality



Je suis

I am

un peu

a bit

assez

quite

très

very

MASCULINE

timide
shy
amical
friendly
bavard
chatty
marrant
funny
intelligent
intelligent
sportif
sport
créatif
creative
généreux
generous
 paresseux
lazy
travailleur
hard-working

FEMININE

timide
shy
amicale
friendly
bavarde
chatty
marrante
funny
intelligente
intelligent
sportive
sport
créative
creative
généreuse
generous
paresseuse
lazy
travailleuse
hard-working



FRENCH Y7 SB5 – Parle-moi de ta famille - Family

Dans ma famille il y a ...
In my family there is/are...

Chez moi, il y a ...
In my house, there is/are...

Chez nous, il y a ...
In our house, there is/are...

J'habite avec...
I live with...



(cinq) personnes
(five) people
mon père
my dad
mon beau-père
my step-dad
mon grand-père
my granddad
mon frère
my brother
mon demi-frère
my step/half brother
mon oncle
my uncle
mon cousin
my cousin
ma mère
my mum
ma belle-mère
my step-mum
ma grand-mère
my grandma
ma sœur
my sister
ma demi-sœur
my step/half sister
ma tante
my auntie
ma cousine
my cousin
mes parents
my parents
mes grands-parents
my grandparents

J'ai un frère
I have a brother
J'ai un grand frère
I have a big brother
J'ai un petit frère
I have a little brother

J'ai une sœur
I have a sister
J'ai une grande sœur
I have a big sister
J'ai une petite sœur
I have a little sister

J'ai un frère jumeau
I have a twin brother
J'ai une sœur jumelle
I have a twin sister

j'ai deux frères
I have two brothers

j'ai trois sœurs
I have three sisters

je n'ai pas de frères et sœurs
I don't have any brothers and sisters
je suis fils unique (m)
I am an only child (m)
je suis fille unique (f)
I am an only child (f)

qui s'appelle...
who is called...

qui s'appellent...
who are called...

FRENCH Ma Maison Y7 SB6 – Où habites-tu? – Where do you live?

Dans le passé

In the past

Il y a trois ans

Three years ago

Maintenant

Now

Dans le futur

In the future



j'habitais

I used to live

j'habite

I live

je voudrais habiter

I would like to live

je vais habiter

I am going to live

un (grand) appartement

a (big) apartment

un chalet

a chalet/cabin

un château

a castle

un grand immeuble

a big block of flats

un bâtiment

a building

une (grande) maison

a (big) house

une (petite) maison

a (small) house

une maison jumelle

a semi-detached house

une maison individuelle

a detached house

une ferme

a farm

moderne

modern

confortable

comfortable

laid

ugly

douillet

cozy

neuf

new

spacieux

spacious

moderne

modern

confortable

comfortable

laide

ugly

douillette

cozy

neuve

new

spacieuse

spacious

au bord de la mer

at the seaside

en ville

in town

en banlieue

in the suburbs

dans un village

in a village

dans un quartier

in a neighbourhood

à la montagne

in the mountains

à la campagne

in the countryside

dans la capitale

in the capital

dans une région

in a region

dans le nord de la France

in the north of France

dans le sud de la France

in the south of France

dans le nord-ouest de

l'Angleterre

in the north-west of

England

dans le sud-est de

l'Angleterre

in the south-east of England



Year 7- Geography: Assessment 2 Knowledge Organiser



Key Words (The Town and City)

In this section of the exam, you will have to fill in the definitions of five of these key words. Each one will be worth two marks. Each bracket below represents one mark from the definition.



Settlement: (A place where people live) (example; village, town or city)



Tropical Storm: (an intense low pressure weather system)(which brings severe wind and torrential rain)



City: (A large settlement) (lots of services like shops, universities, airports and lots of people) (example; London with 8.9mill people).



Inner City: (Area or zone surrounding the city centre)(Usually contains cheaper housing, narrower, busy roads, bus and train stations)



Frontal Rainfall: (Sometimes known as a depression)(rainfall which occurs where a warm and cold air mass meet)



Sustainable: (living in a way which is good for people and the environment) (now and in the future)



Social: (Things to do with society)(social features include population, housing, education and health)



Economic: (Things to do with the economy)(features such as jobs, wealth, trade and infrastructure)



Infrastructure: (The building blocks of our country)(includes roads, rail, broadband, airports etc.)



Rural: (The open countryside)(areas containing fields, lakes and nature)



Urban: (The built-up town or city)(areas with buildings, homes, roads or businesses)

Weather Hazards

In this section of the exam, you will have to answer some questions ranging between two and six marks

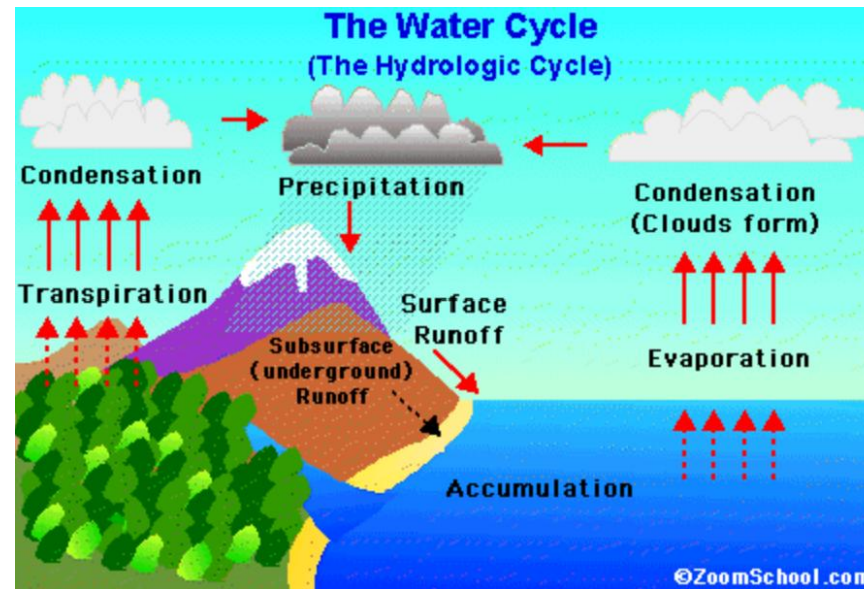


Weather: (The day-to-day conditions of the atmosphere around us). (Weather changes all the time)(It includes temperature and rainfall).



Climate: (The long-term average weather).(Climate is what we would expect the weather to be like in a given place in a given season).(E.g. the UK has warm summers and mild, wet winters).

Learn the water cycle (see diagram below)



Tropical Storms

Tropical storms are huge intense areas of low pressure. They form because of the water cycle in an area of the world either side of the Equator known as **The tropics**.

They require certain conditions to form:

1. The ocean temperature must be at least 27° C.
2. It must be far enough from the Equator to allow the storm to rotate.
3. It must be in a part of the world where certain winds called the trade winds meet.



Weather Hazards:

These are examples of extreme weather which is out of the ordinary and can include drought (long period of dry weather), snow and ice, storms, prolonged rainfall, gale-force winds.

You will need to know how to **explain how** weather can cause problems for people. For example, look at the headline below:



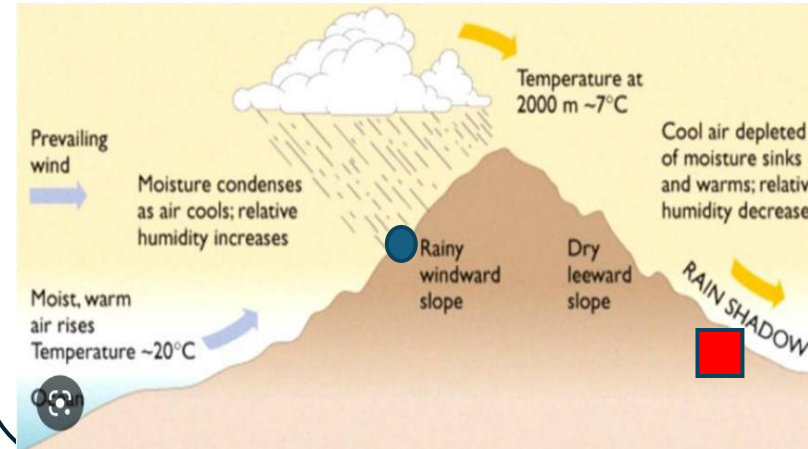
“Drought brings hosepipe-ban to south-west England”.

Explaining how means you have to talk about the exact ways that one thing can result in another. So, if the question asked: “**Explain how** drought can cause problems for people using the headline to help.” Then here is what you must do:

- Think about the direct side-effects of drought – what does it cause? E.g. garden plants and farmer’s crops can die from too little water. *Notice how I have been precise about what is affected and how the drought affects it.*
- Then think about how these direct effects might have knock-on effects; e.g. a shortage of farmer’s crops can cause a rise in the price of food in the supermarket.
- Finally link it to the headline; e.g. To avoid higher prices in the shops water companies can ban households from using hosepipes. This is to make sure water is available for more important uses such as growing crops.

Please note the EXPLAIN HOW question, you do in the test, may not be about drought. This is just an example of the ‘EXPLAIN HOW’ skill required.

Relief Rainfall = This type of rainfall is common in the UK, especially in the north where the land is much higher.



Relief Rainfall happens when warm, moist air is forced to rise over mountains. As it rises, it cools and condenses forming clouds. It then rains.

- = This place gets lots of rain. (relief rainfall)
- = This place lies in the rain shadow so gets less rainfall.

World Map – Continents and Oceans





History Exam 2 Revision Sheet

Topics: Wars of the Roses, Henry VIII and Medieval Life



Henry VIII

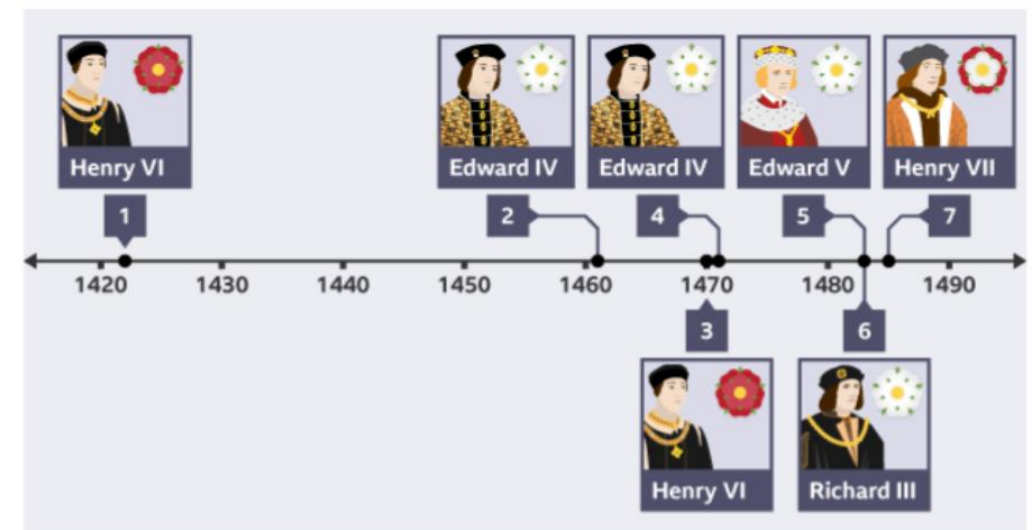
Henry was a Tudor and had six wives called Catherine of Aragon, Anne Boleyn, Jane Seymour, Anne of Cleves, Catherine Howard and Katherine Parr . (In order) they were divorced, beheaded, died of illness, divorced, beheaded and survived him.	Henry was a warrior king . Henry's two main enemies were France and Scotland. He fought the French in the Battle of the Spurs in 1513 and won. This battle cost the country a lot of money.	Henry's hobbies when he was younger were hunting, gambling and dancing . He would only spend about an hour a day on government business. Most of the time, Henry's Lord Chancellor ran the country for him .
Sometimes, if the policies of the Lord Chancellor and the government ministers were unpopular with the people Henry would execute them, even though they were carrying out his orders!	Henry was given the title, Defender of the Faith in 1521 by the Pope because he wrote a book criticising the man who was starting the Protestant church in Germany, called Martin Luther.	When Henry was born, he was not the heir to the throne. His older brother Arthur was destined to be King. Arthur married Catherine of Aragon but died five months later. When he died, Henry became next in line to the throne and married Catherine of Aragon .
In 1530 Henry wanted to divorce Catherine of Aragon so that he could marry Anne Boleyn. As a Catholic, the only person who could allow him to get a divorce was the Pope. The Pope refused his request. This was called " The King's Great Matter ."	Thomas Cromwell – worked as Henry's Chief Minister to solve his "Great Matter." This clever man-made huge changes to English government and the Church.	1532 – Anne Boleyn became pregnant but wasn't married to Henry. If they weren't married when the baby was born it would be illegitimate (couldn't inherit the throne of England).
1533 – Henry married Anne Boleyn before the baby was born. It was a girl – Elizabeth . Henry's son, Edward was born in 1538. His mother was Jane Seymour.	1534 – Supreme Head of the Church . Cromwell persuaded England's parliament to pass the Act of Supremacy which made Henry Head of the English Church.	1534 – England was still a Catholic country, but its churches were controlled by the King instead of the Pope.
Cromwell promised Henry he would make him the richest monarch in Europe . He did this by closing down monasteries to take their land and wealth. He had a valuation made of the wealth of all monasteries. This was called the Valor Ecclesiasticus .	Lots of monks and nuns refused to accept Henry was now in charge of the Church and they stayed loyal to the Pope. This gave Cromwell an excuse to close the monasteries.	Jousting was a favourite hobby of Henry's until he was knocked off his horse! Henry VIII was musical and could also speak a number of foreign languages .



Medieval Life

Peasants lived in a hut made of Wattle (sticks woven together) and Daub (mud, dung and straw). In the hut was a large fire for cooking on. To allow the smoke out there was a small hole in the roof but the house would often still be smoky . Peasants would share their small, one roomed hut with all their family and 1/3 of the room would be taken up by animals which stayed in the house too!
Medieval peasants would work all year round. In the Spring , animals would be moved off the meadow and the earth would be fenced off to allow the grass to grow . They would then break up the land with their feet to prepare it to sow seeds . August was the busiest month for peasants as they had to collect the harvest in full sun. This involved using scythes and sickles to cut the crops which was extremely hard work. During the harvest, peasants would have to work many extra hours to collect all the crops, but didn't get any extra pay .
Medieval medicine was not very advanced. Doctors did not know that germs caused disease which meant they could not treat patients correctly. Some thought disease was a punishment from God , and the only way to feel better was through prayer and living a better life. There were only 1200 hospitals in England and Wales which were run by monks and nuns who did not try and heal the ill but rather looked after them through prayer . Barber surgeons would carry out surgeries. These were people who cut hair but also performed basic surgery like blood letting and teeth pulling .

Monarchs during the Wars of the Roses





Revision tips:

- Highlight the key information in each of the boxes and read over it several times.
- Try and memorise the key information by writing it out on revision cards/in mind maps. Then cover them over and try and test yourself. OR record yourself saying out loud the key information on your phone, then play it back to check if you have remembered it all.
- Once you've tried all of this, give the sheet to someone at home and ask them to test you.

IMPORTANT INFORMATION:

Your exam will be in THREE sections.

1. The first section is a **FACT TEST** and you will need to learn all the information on the revision sheet to help you to answer the questions
2. The second section will be about **CHRONOLOGY** and will test your knowledge of the information on the revision sheet.
3. The third section will ask you to **EXPLAIN** what Medieval Life was like. You will need to include in your explanation good **factual detail**.

ALL factual detail needed to be able to answer this question well is in the boxes above on this revision sheet which you need TO MEMORISE.






*You must remember to use PEE in your explanation: **P= Point** **E= Evidence** **E=Explanation***



Year 7 Assessment Window 2: Music

Key Terms Revision List

These key terms have been covered across your music lessons since Christmas. Spend time revising and consolidating these key terms in preparation for your music assessment during Assessment Window 2. **Create mind maps, cue cards or a method of your choice to help you learn and remember.**

Key term:	Definition
Ascending melody	Moving upwards in pitch.
Descending melody	Moving downwards in pitch.
Dotted rhythm	This can help provide a 'bouncy' feel to the music.
Crescendo	Gradually getting louder.
Diminuendo	Gradually getting quieter.
Major key	This helps provide a happy feeling to the music.
Minor key	This helps create a sad feeling to the music.
Ritardando	Gradually slowing down.
Accelerando	Gradually speeding up.
Glissando	A continuous slide upwards or downwards between the notes.
Treble Clef 	This tells us to use our right hand when playing the music on piano.
Time signature 	This tells us how many beats per bar .
Stave	This is what the music is written on and tells us what pitch each note is played at .
Crotchet 	This note is worth the value of 1 beat .
Minim 	This note is worth the value of 2 beats .
Semibreve 	This note is worth the value of 4 beats .

Key terminology:

Lamb of God: A title of Jesus linking his sacrifice on the cross to the lamb at Passover.

Resurrection: The belief that after his death Jesus rose back to life.

Consecrated: Blessed and made holy.

Real Presence: Belief that Jesus is really in the bread and wine of the eucharist.

Blessed sacrament: term that refers to the body and blood of Jesus in the eucharist.

Paschal mystery: The belief that Jesus' suffering, death, resurrection and ascension saved humans from sin.

Eucharist: The most important sacrament where Catholics can experience the Real Presence of Christ through receiving his body and blood.

Passover: A Jewish festival that celebrates God saving the Jewish people from slavery in Egypt.

Transubstantiation: The process by which the bread and wine become the body and blood of Jesus at the moment of consecration.

Sacraments: Outward signs of inward grace, also the name of the ceremonies that contain these signs.

Grace: God's free gift of love.

What happened at the Last Supper?

- Preparation for the Meal:** Jesus sent Peter and John to prepare for the Passover meal in a special room in Jerusalem.
- Jesus and the Disciples Gather:** When the meal began, Jesus sat with His twelve disciples and shared the Passover meal with them.
- Jesus Foretells His Betrayal:** During the meal, Jesus announced that one of the disciples would betray Him, causing sadness and confusion among them.
- Jesus Breaks Bread:** Jesus took the bread, gave thanks, and broke it, saying, *"This is my body, given for you. Do this in remembrance of me."*
- Jesus Blesses the Cup:** He took a cup of wine, gave thanks, and said, *"This cup is the new covenant in my blood, which is poured out for you."*

How is Passover and the Last Supper connected?



<u>Passover</u>	<u>Last Supper</u>
Moses was called by God.	Jesus was sent by God
The Jews were freed from slavery.	Humanity is freed from sin.
The lamb was the sacrifice.	Jesus was the sacrifice.
The lamb's blood was on a wooden door.	Jesus' blood was on a wooden cross.
Moses freed the Jewish people.	Jesus frees the whole of humanity.
Moses' victory was a one-off event.	Jesus' victory lasts for all time, for eternity.



CHRISTIAN RESPONSES TO WORLD HUNGER

- Pray for those who are hungry around the world.
- Charity work and events – organise, take part in or donate to charities that support those who are hungry around the world e.g) Mary's Meals.
- Share the message by supporting government policies that support helping the poor and hungry.



Scan this QR code to watch a video about Passover.

Sacraments

Sacraments of Initiation = Baptism, Confirmation & Eucharist

Sacraments of Healing = Reconciliation & Anointing of the Sick

Sacraments at the Service of Communion = Holy Orders & Matrimony

Scan this QR code to find out more about each sacrament.



Creatio ex nihilo

The Latin phrase for “creation out of nothing”

Creationism

The belief that the Bible accounts of creation are literally true

Eternal

Exists beyond time and has no beginning or end

Faith

Personal commitment to God, which includes trusting and obeying God

God

The one supreme being, who creates and sustains everything

Imago Dei

A Latin phrase meaning “in the image of God”, the idea that humans reflect God’s nature

Omnipotent

The belief that God is all powerful

Benevolent

The belief that God is loving

Prayer

The way in which humans communicate with God

Sin

To go against God’s law

Stewardship

The duty to care for something; the world and everything in it



Genesis Creation Story

Both stories tell of how creation came to be. They were written by different groups of authors who were inspired by God. They show the belief that all life comes from God and God is the creator.

Genesis 1 - The opening sentence of Genesis reveals the following about God - “**In the beginning God created ...**” This suggests that God existed before time itself, and that God is an eternal being. God is placed outside of time and space. This suggests that before God created the world there was nothing. This means that God’s creation comes from nothing. This is known as ‘**creatio ex nihilo**’.

Genesis 2 - Genesis 2 focuses more on the creation of humans. Like Genesis 1, it reminds Catholics that all life comes from God. When God breathed life into to Adam, this was not meant to be taken literally, but to show how close God can be to humans. The quality of God being close to humans and acting in the world is known as **immanence**. Both Bible stories tell us that God is the **creator**. The authors of the accounts of creation show God’s closeness to creation, the authors write in a way so that readers will be moved by God’s care and tenderness.

How can Christians be good stewards of the earth?

Christians can be good stewards by looking after God’s creation, using their time wisely, and making choices that honour God. This includes caring for the environment, managing time well through a balance of work, rest and prayer, and using their talents to help others in the community. They also show stewardship by being responsible with money—avoiding greed, giving to charity, and spending ethically—and by caring for people in need. Many Christians link these actions to teachings such as Genesis 2:15 about caring for the earth and the Parable of the Sheep and the Goats, which teaches that helping others is a way of serving God.

Scripture/Sources of Wisdom

“...rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground...” – Genesis 1

“In the beginning God created ...” – Genesis 1

“Then God said, “Let us make man in our image, after our likeness. And let them have dominion over the fish of the sea.” – Genesis 1

“So, God created man in his own image, in the image of God he created him; male and female he created them” – Genesis 1

“The Lord God formed a man from the dust of the ground and breathed into his nostrils the breath of life.” – Genesis 2

“You are free to eat from any tree in the garden; but you must not eat from the tree of the knowledge of good and evil.” – Genesis 2

“Then the Lord God made a woman from the rib he had taken out of the man.” – Genesis 2

Scientific view on the origins of the universe

The **Big Bang Theory** is an idea that around 14 billion years ago, the universe began with the expansion of a hot, dense point energy. As the energy cooled, it went through a series of changes, before becoming atoms which were necessary for all life to form.

Evolution – **Charles Darwin’s** theory suggests that all living things change over time to suit their environment. E.g. giraffes have long necks to reach the leaves on trees.





2 - What are the common properties of metals and non-metals?

Metals are shiny, good **conductors** of electricity and heat. They are solid at room temperature (except mercury). They have high melting points, are **malleable, sonorous, ductile**, and have high density.

Non-metals are not shiny, poor conductors of electricity and heat. They can be solids or gases at room temperature (bromine is a liquid). They have low melting points, are **brittle**, not sonorous, and have low density.

1 - How do we write symbols for elements?

Elements are made up of only one type of atom.

There are around 100 elements, all listed on the periodic table.

Element symbols follow these rules: one-letter symbols are capitalized, and two-letter symbols have the first letter capitalized and the second in lowercase.

3 - What are elements made of?

Atoms are the basic units of elements, with a nucleus and energy levels. Atoms contain subatomic particles:

Protons (+1 charge, mass 1) Nucleus

Neutrons (0 charge, mass 1) Nucleus

Electrons (-1 charge, tiny mass) Energy Shells

Atoms have equal protons and electrons.

5 - What are compounds and how are they formed?

Compound: A substance formed when two or more elements are chemically joined.

In a chemical reaction **atoms** are re-arranged, and a new substance is made



The reactants are always on the left-hand side of the arrow and the products are always on the right-hand side of the arrow:

Reactants \rightarrow Products

6 - What does a chemical formula tell us?

Compound Names:

- ide: Made of two elements (e.g., copper chloride: copper and chlorine).

- ate: Contains oxygen (e.g., sodium carbonate: sodium, carbon, and oxygen).

Chemical Formulas:

- Small number to the bottom right of an element's symbol shows the number of atoms.

- No number means one atom.

- Formulas have more than one capital letter.

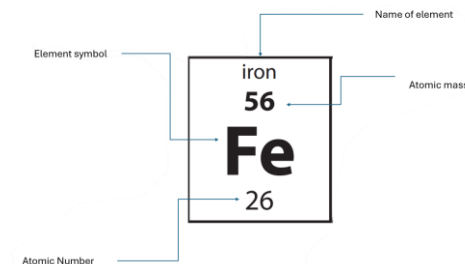
4- What do the numbers on the periodic table tell us?

Periodic Table: Elements are ordered by atomic number.

Atomic Number: The number of protons in the nucleus.

Relative atomic mass = The number of protons + number of neutrons

Number of neutrons = Relative atomic mass - number of protons



Glossary

Atom: Made up of protons, neutrons and electrons

Conductor: A material that is good at transferring energy either electrically or thermally.

Ductile: Can be drawn into wires without breaking.

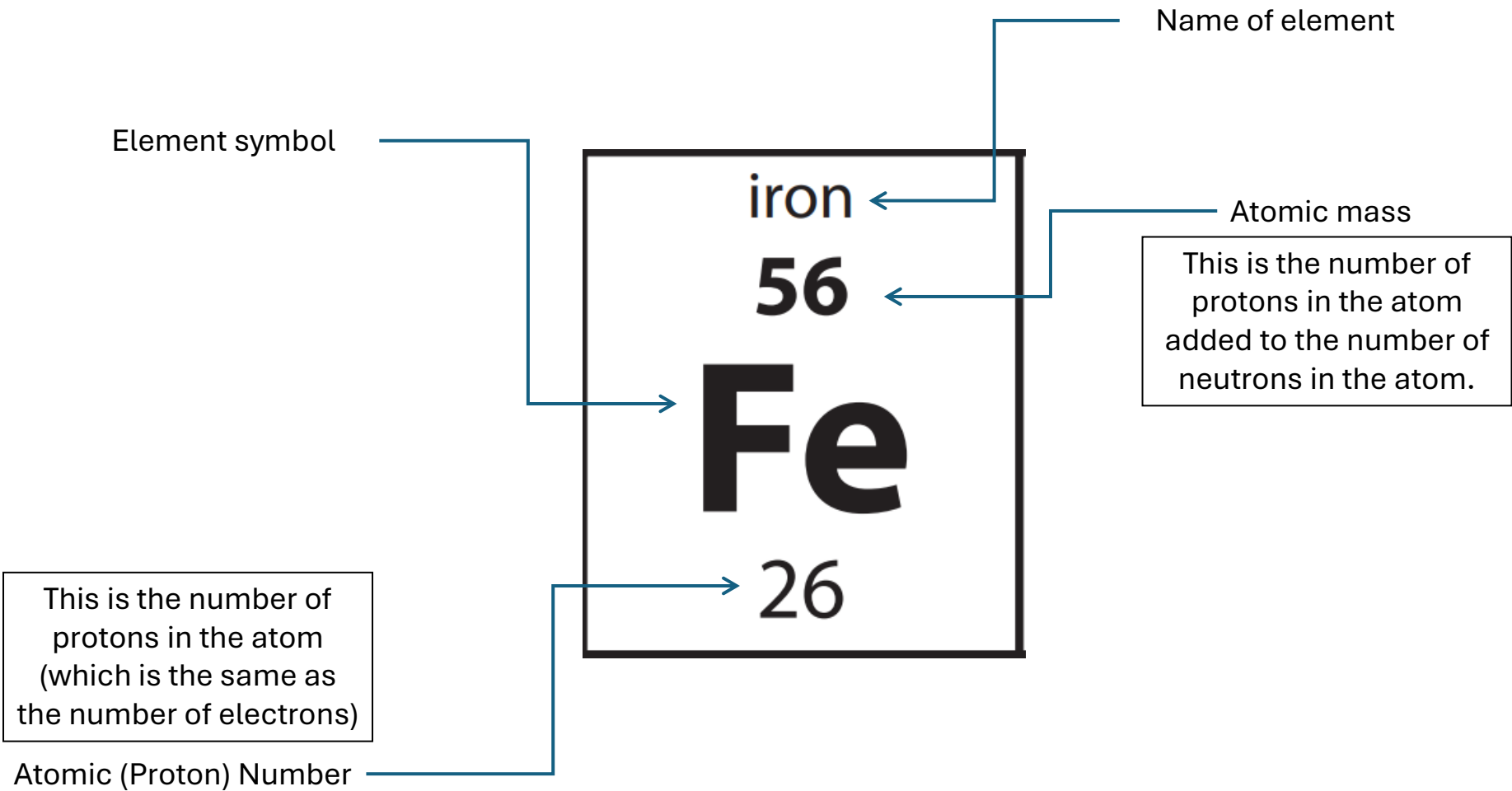
Sonorous: Makes a ringing sound when hit.

Malleable: Can bend without breaking.

Brittle: Shatters easily

Nucleus: Centre of the atom

Energy Shells: Surround the nucleus of the atom





8 - What is needed for **combustion**?

Combustion is the scientific name for burning.

Combustion is carried out to release energy from a **fuel** when it burns.

The fire triangle shows what is required for **combustion**.

If one of the side of the fire triangle are removed the fire will go out.



9 - What are the products of burning **fuels**?

A **fuel** is a substance that releases useful heat energy when it is burnt. This causes the temperature to increase.

When **combustion** occurs in plenty of oxygen it is called **complete combustion**. The products of **complete combustion** are carbon dioxide and water.

The general equation for **complete combustion** of a **fuel** is:



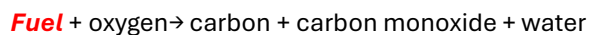
Limewater is a chemical that can be used to show the presence of carbon dioxide.

10 - What is the effect of oxygen on **combustion**?

If a **fuel** burns with a lack of oxygen it is called **incomplete combustion**.

The products of **incomplete combustion** are: carbon, carbon monoxide and water.

The general equation for **incomplete combustion** of a **fuel** is:



Solid carbon produced is called **soot**. **Soot** a black solid.

Carbon monoxide is a dangerous gas. It has no taste, smell or colour. If you breathe in too much carbon monoxide your red blood cells will carry the carbon monoxide instead of oxygen. This means less oxygen gets to your body cells.

11 - How do you investigate the energy in **fuels**?

A **fuel** is a substance that releases useful energy, such as heat energy when it is burnt.

The longer the carbon molecule the more energy released when burnt.

We measure the volume of a liquid using a measuring cylinder in cm^3 .

We measure temperature using a thermometer in $^{\circ}\text{C}$.

12- What is produced when metals burn in air?

When a metal burns in air it reacts with oxygen to form a metal oxide.

This can be shown with this general word equation:

Metal + Oxygen \rightarrow Metal Oxide



13- How do we test for an unknown gas?

There are three gases that we can identify using gas tests: hydrogen, oxygen or carbon dioxide.

The test for hydrogen uses a burning splint held at the open end of a test tube of the gas. Hydrogen burns rapidly with a pop sound.

The test for oxygen uses a glowing splint inserted into a test tube of the gas. The splint relights in oxygen.

The test for carbon dioxide uses an aqueous solution of calcium hydroxide (lime water).

When carbon dioxide is shaken with or bubbled through limewater the limewater turns cloudy.

14-What is **thermal decomposition**?

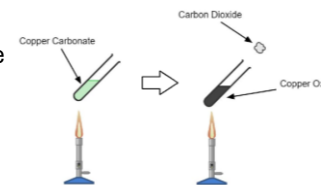
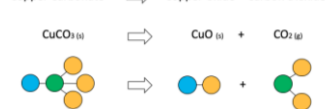
Thermal decomposition is using heat to breakdown a substance.

When metal carbonates thermally decompose they produce a metal oxide and carbon dioxide.

The general word equation for the reaction is:

Metal Carbonate \rightarrow Metal Oxide + Carbon Dioxide

e.g.



Glossary

Combustion – scientific name for burning.

Fuel – a substance that releases useful heat energy when burnt.

Complete Combustion – burning of a fuel occurs in plenty of oxygen.

Limewater – chemical that turns cloudy in the presence of carbon dioxide.

Incomplete Combustion – burning of a fuel occurs with little/no oxygen.

Thermal Decomposition – using heat to break down a substance.

Soot – solid carbon produced from incomplete combustion.

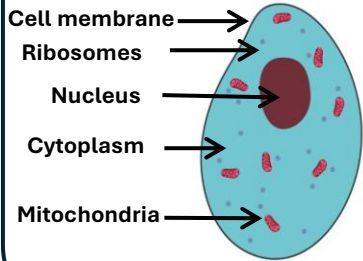


1 – What are the life processes? All living organisms...

Movement	Move on their own
Respiration	Break down sugar to release energy
Sensitivity	Detect/sense changes
Growth	Increase in mass
Reproduction	Produce more offspring
Excretion	Remove waste products
Nutrition	Need nutrients

2 - What is inside animal cells?

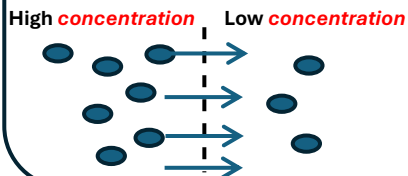
Animal cells contain **organelles** which have a function.



Cell membrane – controls what enters and leaves the cell
Ribosomes – where proteins are made
Nucleus – Contains genetic information and control the activities of the cell
Cytoplasm – where most chemical reactions happen
Mitochondria – where respiration happens

3 - How do substances move in and out of cells?

Substances move in and out of the cell, through the cell membrane, by **diffusion**. It is made of a **partially permeable** membrane.



-Oxygen and glucose moves **into** the cell for respiration

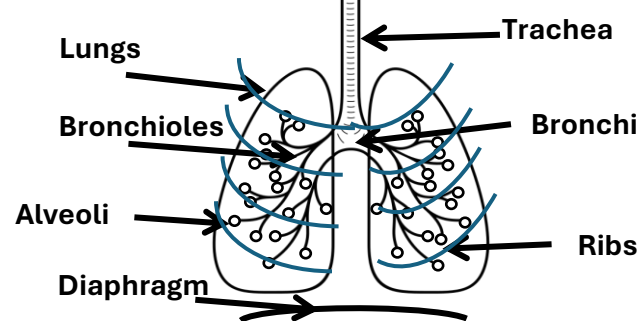
-Water and carbon dioxide moves **out** of the cell

4 - Do all animal cells look the same?

Different animal cells have different **functions** (jobs) in the body. To help them do these jobs they have different **adaptations**.

Specialised cell /Function	Adaptations
Red blood cell Transport oxygen around the body	-No nucleus -Biconcave disc shape
Muscle cell Contract to bring about movement	-Many mitochondria
Nerve cell Carry messages as electrical impulses around the body	-Very long axon
Sperm cell Fertilise the egg cell for reproduction	-Long tail -Many mitochondria -Enzymes in its head

6 - What happens in the breathing system?



Gas exchange happens at the alveoli. The **ribs** protect the lungs.

5 - What is the difference between cells, tissue and organs?

Cells in multicellular organisms are arranged into levels of organisation to form an entire organism.

Cells – The basic building blocks of living organisms.



Tissues – A group of similar cells that perform a specific job.



Organs – A group of different tissues that perform a specific job.



Organ systems – A group of different organs that perform a specific job.



Organism – an entire living thing e.g. an animal or plant.

Key Word	Definition
Organelle	A part of a cell.
Gas exchange	The movement of oxygen into the blood and carbon dioxide into the lungs by diffusion.
Partially permeable	Allows some substances to pass but not others.
Diffusion	Diffusion is the movement of particles from an area of high concentration to an area of low concentration across a partially permeable membrane.
Concentration	The amount of particles in a given volume.
Adaptation	A feature that helps a cell do its job.



7- How does exercise affect your breathing rate?

The breathing system transports oxygen from the air to the bloodstream, where it is carried to cells for **respiration**.

To meet this demand:

- Heart rate increases to pump blood faster.
- Breathing rate increases, taking more breaths per minute.
- Breath volume increases, making each breath deeper.

These changes allow more oxygen to enter the bloodstream at the **alveoli** and be delivered to muscle cells.

This energy is needed for muscle contraction and movement during exercise.

8- What are digestive enzymes?

Your body needs different food groups for different reasons

Food Group	Function	Good Sources
Carbohydrates	Provide energy for the body	Bread, pasta, rice, potatoes
Proteins	Needed for growth and repair	Meat, fish, eggs, beans
Fats	Needed for energy storage	Butter, nuts, oils, cheese

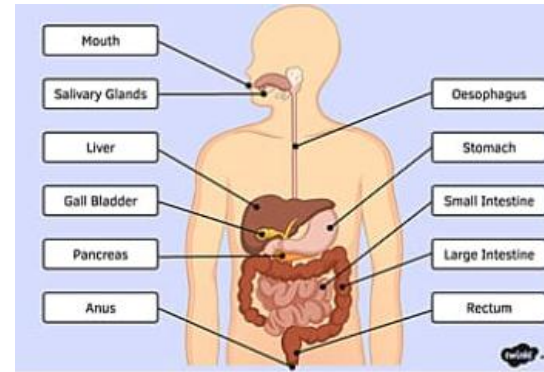
Enzymes are involved in the breakdown of food. Different enzymes have different shapes which allow them to break down different molecules.

Enzyme	Substrate (What it breaks down)	Broken down into
Amylase	Starch (carbohydrate)	Glucose (sugar)
Protease	Protein	Amino acids
Lipase	Fats (lipids)	Fatty acids and glycerol

7- What happens in the digestive system?

Food is broken down in **digestion**

- **Mouth:** Food is chewed and broken down by teeth.
- **Oesophagus:** Tube connecting the mouth to the stomach.
- **Stomach:** Food is broken down and acid kills bacteria.
- **Small intestine:** Food is digested, and nutrients are absorbed into the blood.
- **Large intestine:** Water is absorbed from undigested food, forming solid waste.
- **Rectum:** Stores solid waste (faeces) until it's excreted.
- **Anus:** Where faeces exits the body.



Glossary

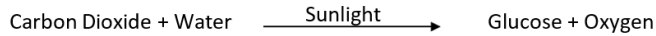
- **Respiration** is the process that uses oxygen to release energy from glucose. The more energy that we need, the more respiration we need to do.
- **Alveoli** are tiny air sacs in the lungs where gas exchange occurs.
- **Digestion** is the breaking down of large food molecules into small food molecules.
- **Enzyme**- a protein that speeds up the rate of a reaction



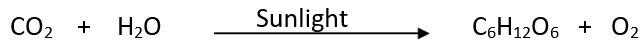
10- What happens in photosynthesis?

Plants make their own food during **photosynthesis**.

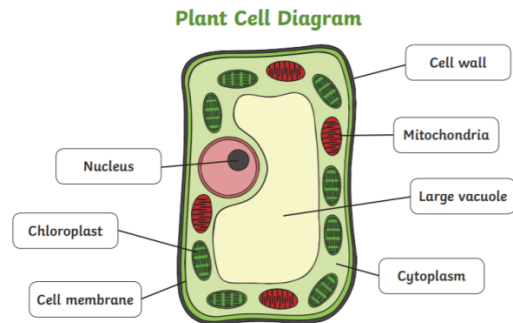
The word equation for photosynthesis is



The symbol equation for photosynthesis is



11- Are plant cells the same as animal cells?



Plants also have cells, tissues, organs and organ systems.

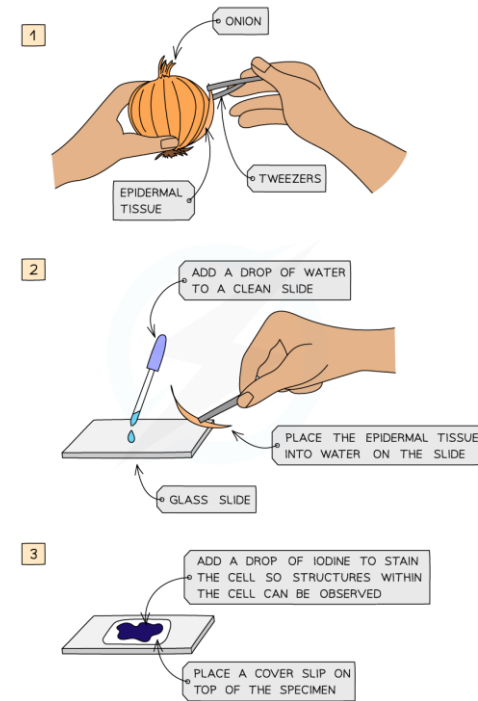
These plant organs you need to know summarised below

Plant Organ	Function
Flower	Contains structures needed for reproduction
Leaf	Where most photosynthesis happens
Roots	Collect water and minerals from the soil
Stem	Transports water and minerals from the roots

12- How can we use a microscope to see cells?

In school we use **light microscopes** to look at cells.

You completed a practical to observe cells using a light microscope.



Glossary

- **Photosynthesis** the process by which green plants and some other organisms use light energy to convert carbon dioxide and water into glucose and oxygen.
- **Light microscope** uses lenses to produce a magnified image of an object.



1- What are the energy stores?

- There are eight energy stores. (GEEKM NCH)
- Gravitational Potential - when objects are raised above the ground
- Elastic Potential - when objects are squashed or stretched
- Electrostatic - when charged particles build up on an object
- Kinetic - all moving objects
- Magnetic - objects that are magnetic
- Nuclear - stored in the nucleus of atoms and released during nuclear reactions
- Chemical - stored in bonds between particles and released when particles react
- Heat(Thermal) - all hot objects.



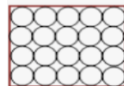
2- What happens in an energy transfer?

- The law of conservation of energy says that energy is neither created nor destroyed, only transferred.
 - As energy is transferred it moves from one store to another - so one energy store decreases and another energy store increases.
- E.g. When an apple falls from a tree the gravitational potential energy store decreases and the kinetic energy store increases

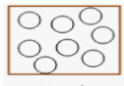


3- What is the difference between states?

- Properties of the three states of matter:
- Solids: Hard, fixed shape, cannot flow, cannot be compressed
- Liquids: shape of bottom of container, flow, cannot be compressed
- Gases: Flow, take the shape of the container, can be compressed
- Arrangement of particles of the three states of matter:
- Solids: Particles are close together in a regular arrangement
- Liquids: Particles are close together in a random arrangement
- Gases: Particles are far apart in a random arrangement



Solid



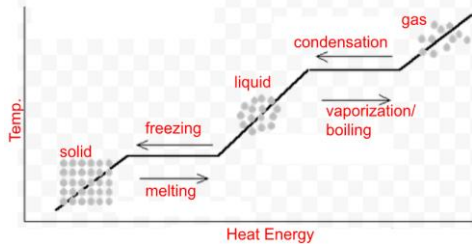
Liquid



Gas

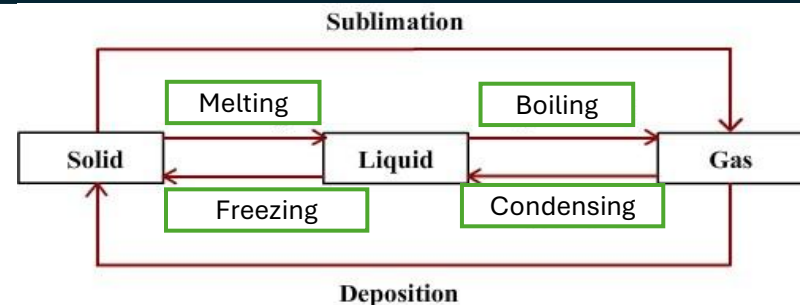
4- What happens to substances when they are heated?

- Heating a substance causes either the temperature of the substance to increase or the substance to change state.
- When a substance changes state: As the particles move faster the forces of attraction between the particles are overcome causing a change in state. As this happens the temperature of the substance does not change.
- Melting is when the state changes from a solid to a liquid.
- Boiling is when the state changes from a liquid to a gas.
- Melting point: The temperature at which a substance changes from solid to liquid.
- Boiling point: The temperature at which a substance changes from liquid to gas.



5- What happens to substances when they are cooled?

- When substances are cooled, energy is transferred to the heat energy store of the surroundings.
- If the particles move too little, the forces between the particles strengthen. This can cause the substance to change state.
- Forces: As a substance cools, the kinetic energy of its particles decreases. The particles move more slowly and come closer together. The strength of the forces between particles increases.
- Freezing: when the state changes from liquid to solid.
- Condensing: when the state changes from gas to liquid.



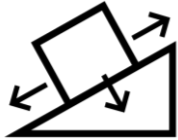


6 – What can a force do?

- Forces can cause energy to be transferred from one store to another.



- Arrows are drawn to represent the **direction** and **size** of the force applied to the object.



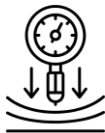
- Forces can change the **shape**, **speed** and **direction** of an object.



- Contact forces require objects to **touch** each other to transfer energy.
- Non-contact forces **do not** require the objects to touch to transfer energy.



- Forces are measured using a **Newton** meter.



7 – What is a non-contact force?

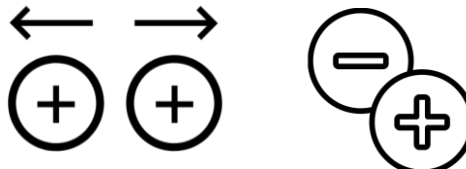
- Gravitational: Attractive force caused by **gravity** where objects of mass are pulled together. E.g. Apple falling from a tree or planets orbiting the sun. The **bigger the mass the bigger the force**.



- Magnetic: **Attractive** or **repulsive** between magnetic objects. Magnets have a north and south pole. Opposite poles attract, like poles repel. Magnetic force gets weaker with distance.

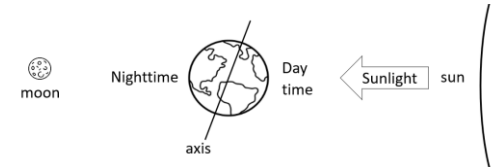


- Electrostatic: **Attractive** or **repulsive** force between charged objects. Charges are positive or negative. Opposite charges attract, like charges repel. E.g. Rubbing a balloon on hair, the charged balloon is attracted to the hair.

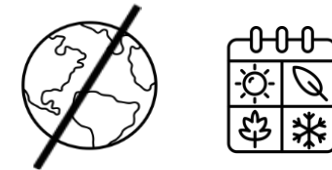


8 – What is the earth's place in the solar system?

- The Earth takes **24 hours** to spin on its axis. It is daytime for the side of the Earth that faces the sun. It is nighttime for the side of the Earth that faces away from the Sun.



- The Earth has **one moon** that orbits due to gravitational force.
- The Earth's axis is **tilted**. This causes parts of the Earth to have **seasons**.



- The Earth's centre is made of **iron** which is **magnetic**. Compasses use the Earth's magnetic force.

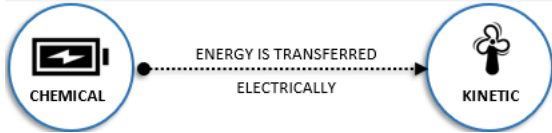


- The **sun** is at the **centre** of our solar system. The time it takes a planet to orbit the sun is called a **year**. It takes the Earth **365** days to orbit the Sun. All of the planets in our solar system orbit the Sun at different distances, therefore, they have different lengths of year.

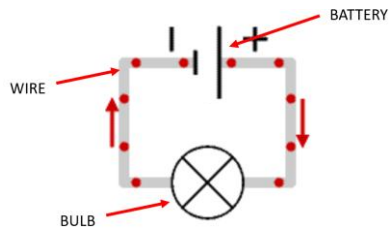


9 – What happens when energy is transferred electrically?

- Electricity can cause energy to be transferred from one store to another.



- Energy is transferred electrically by **tiny charged particles called electrons**.
- These particles transfer energy from one part of an electrical circuit to another.



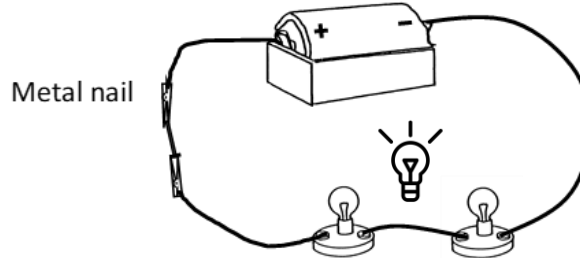
- The amount of charged particles that flow is called electrical **current** which is measured in **Amps (A)** using an **ammeter**.



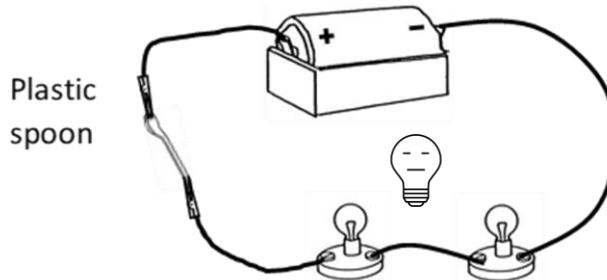
- In a **closed** circuit, the **current flows** continuously from the positive terminal to the negative terminal of the power source. In an **open** circuit, **no current flows** because the continuous path is interrupted.

10 – What is the difference between a conductor and an insulator?

- Conductors** are materials that are **good** at transferring energy electrically such as metals e.g. copper, iron and aluminum.

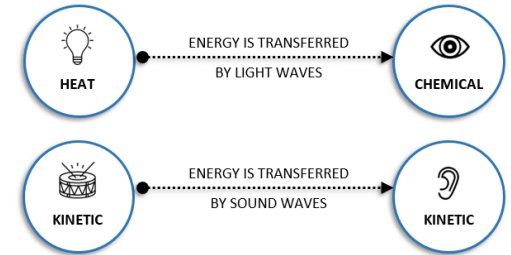


- Insulators** are materials that are **bad** at transferring energy electrically. Such as plastic, rubber, wood, paper.



11 – What is a wave?

- Waves cause energy to be transferred from one store to another.
- Waves transfer **energy** without transferring **matter** (without particles moving from one place to another).
- There are many different types of waves including **light** waves and **sound** waves.



- Some waves need particles to travel through, but not all do.
- Light waves travel **don't need particles** to travel.
- Light waves travel at **300,000,000 m/s** in a **vacuum**.
- Sound waves **do need particles** to travel (to carry the vibrations).
- Sound waves travel at **330 m/s** in **air**.
- Sound waves cannot travel through a vacuum because there are no particles to pass on the vibrations.
- Light waves travel much faster than sound waves in air. This is why we see lightning before we hear the thunder.

SPANISH Me Presento Y7 SB2 – Age, Days, Months & Birthday

¿Cuántos años tienes?

How old are you?

Tengo ... años

I am ... years old

Tengo once años

I am 11 years old

Tengo doce años

I am 12 years old

Los días de la semana

The days of the week

lunes

Monday

martes

Tuesday

miércoles

Wednesday

jueves

Thursday

viernes

Friday

sábado

Saturday

domingo

Sunday



¿Cuándo es tu cumpleaños?

When is your birthday?

Mi cumpleaños es el...

My birthday is the ...

1 uno

2 dos

3 tres

4 cuatro

5 cinco

6 seis

7 siete

8 ocho

9 nueve

10 diez

11 once

12 doce

13 trece

14 catorce

15 quince

16 dieciséis

17 diecisiete

18 dieciocho

19 diecinueve

20 veinte

21 veintiuno

22 veintidós

23 veintitrés

24 veinticuatro

25 veinticinco

26 veintiséis

27 veintisiete

28veintiocho

29 veintinueve

30 treinta

31 treinta y uno

32 treinta y dos

de...

of...

enero

January

febrero

February

marzo

March

abril

April

mayo

May

junio

June

julio

July

agosto

August

septiembre

September

octubre

October

noviembre

November

diciembre

December

SPANISH Me Presento Y7 SB3 – Hair & Eyes

Tengo el pelo...
I have ... hair

rubio
blonde
negro
black
marrón
brown
castaño
brown
gris
grey

y...
and...
liso
straight
largo
long
corto
short
ondulado
wavy
rizado
curly
de punta
spiky

Tengo los ojos...
I have ...eyes

azules
blue
verdes
green
castaños
brown
grises
grey
marrones
brown



Soy...
I am...

bastante
quite
muy
very

alto/alta
tall
bajo/baja
small

Llevo gafas

I wear glasses

Soy pelirrojo/pelirroja

I am red haired

Me Presento Y7 SB4 – Personality

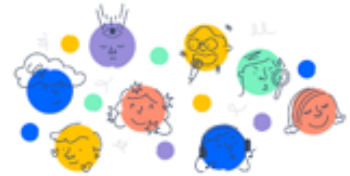


Soy
I am

un poco
a bit

bastante
quite

muy
very



MASCULINE

tímido
shy
amistoso
friendly
molesto
annoying
creativo
creative
generoso
generous
aburrido
boring
perezoso
lazy
hablador
talkative
deportista
sport
inteligente
intelligent

FEMININE

tímida
shy
amistosa
friendly
molesta
annoying
creativa
creative
generosa
generous
aburrida
boring
perezosa
lazy
habladora
talkative
deportista
sport
inteligente
intelligent

SPANISH Me Presento Y7 SB5 – Háblame de tu familia - My Family

En mi familia hay...

In my family there is/are...

En mi casa hay...

In my house, there is/are...

En nuestra casa hay...

In our house, there is/are...

Vivo con...

I live with...



(cinco) personas

(five) people

mi padre

my dad

mi padrastro

my step-dad

mi abuelo

my grandad

mi hermano

My brother

mi hermanastro

my step/half brother

mi tío

my uncle

mi primo

my cousin

mi madre

my mum

mi madrastra

my step-mum

mi abuela

my grandma

mi hermana

my sister

mi hermanastra

my step/half sister

mi tía

my auntie

mi prima

my cousin

mis padres

my parents

mis abuelos

my grandparents

tengo un hermano

I have a brother

tengo un hermano mayor

I have a big brother

tengo un hermano menor

I have a little brother

tengo una hermana

I have a sister

tengo una hermana mayor

I have a big sister

tengo una hermana menor

I have a little sister

tengo un hermano gemelo

I have a twin brother

tengo una hermana gemela

I have a twin sister

tengo dos hermanos

I have two brothers

tengo tres hermanas

I have three sisters

no tengo hermanos

I don't have any brothers and sisters

soy hijo único (m)

I am an only child (m)

soy hija única (f)

I am an only child (f)

que se llama...

who is called...

que se llaman...

who are called...

SPANISH - Mi Casa Y7 SB6-¿Donde vives? – Where do you live?

En el pasado
In the past
Antes
Before

Ahora
Now

En el futuro
In the future

vivía
I used to live

vivo
I live

me gustaría vivir
I would like to live

en un chalet
in a luxury villa

en un piso
in a flat/apartment

en un edificio
in a building

en una casa
in a house

en una casa adosada
in a semi-detached house

en una granja
on a farm



antiguo
old
moderno
modern
bonito
pretty
feo
ugly
lujoso
luxurious
pequeño
small
grande
big

antigua
old
moderna
modern
bonita
pretty
fea
ugly
lujosa
luxurious
pequeña
small
grande
big

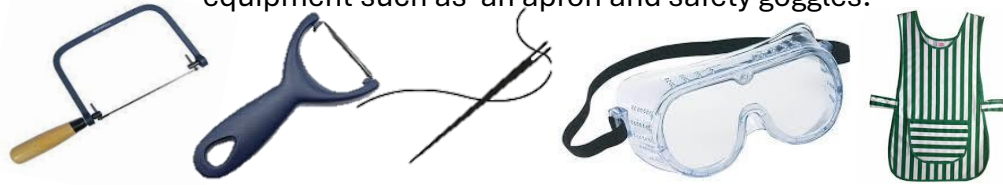
en un barrio
in a neighbourhood
en un pueblo
in a town
en una ciudad
in a city
en una región
in a region
en la capital
in the capital
en el campo
in the countryside
en la costa
on the coast
en las montañas
in the mountains
en las afueras
on the outskirts
en el norte de España
in the north of Spain
en el sur de Inglaterra
in the south of England
en el noroeste de España
in the north-west
en el sureste de Inglaterra
in the south-east of England



YEAR 7- EXAM 2 KNOWLEDGE ORGANISER



Design Technology involves working with a range of **tools** and materials across a range of skill areas. For example, a coping saw and MDF in engineering materials, a needle and felt in textiles, a peeler with an apple in food and a laser cutter with acrylic in CAD/CAM. It is important that we follow health and safety rules and wear protective equipment such as an apron and safety goggles.



We **analyse products and modify products** through each area of Design Technology. **Modification** is when we look closely at a **design idea** or product and give our opinions on things that have worked well and things that need improving.

Revision check list

I can measure and convert cm in mm

I can present a 2d design idea

I can use sketch and annotation to modify a product

I can analyse an existing product

I can evaluate a product

I can use Maths skills within a technology setting

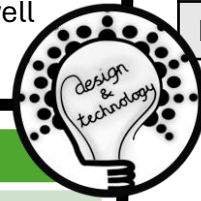
I can explain about materials within DT

I can explain about safety in DT

QR Codes Designing



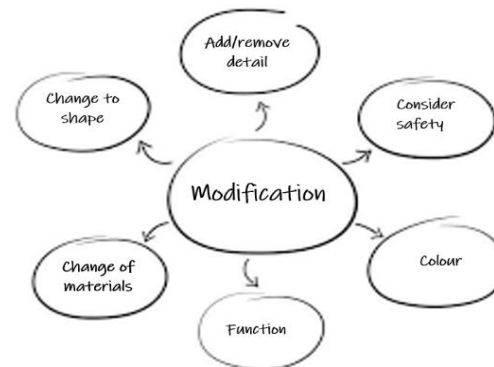
Properties of material



DT involves **measuring** and using math's skills when shaping materials and making products.. Remember to measure **accurately** and understand the difference between mm and cm..

Material	Properties
MDF	Smooth Surface – Good for painting and decorating. Cheap - low expense Easy to Cut – Great for making shapes but creates lots of dust.
Acrylic	Available in sheet, rod Transparent or Coloured Smooth and Shiny – Has a glossy finish. Brittle – Can break if dropped or hit hard.
Felt	Soft and Flexible – Feels warm and bendy. Doesn't Fray – Edges don't come apart easily when cut. Cuts easily – easy to shape. Available in a range of colours–

Within Design Technology we **design** new products. It is important when **designing** that we present our designs well with neat sketching and shading. **Designing** is not just about the drawing. It is important that we **annotate** our designs using notes that explain our ideas fully and consider things like materials, sizes, function and client



When designing you should always try to remember the **PAC Checklist:**
Presentation
Anotation
Colour

