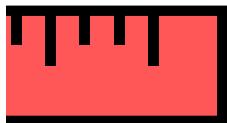


HOME-LEARNING



YEAR 9



HALF TERM 6



"ALTHOUGH NO ONE CAN GO BACK AND MAKE A
BRAND-NEW START, ANYONE CAN START FROM NOW
AND MAKE A BRAND-NEW ENDING."

CARL BARD



Core Values

Our school community is built on three important values which underpin all we do.
We believe that great learning comes from:

Politeness

- We treat every person and thing as we want to be treated
- We are respectful, polite and courteous at all times
- We help others at all times

Hard-work

- We never give up
- We remain positive so that we have the strength to persevere with even the hardest work
- We do what it takes, for as long as it takes

Honesty

- We are true to ourselves and others and we do not make excuses
- We look to ourselves to see what needs to be done.

What is learning?

A big part of learning is about getting knowledge to go into your long-term memory and then using this knowledge. Our brains will only remember knowledge in the long term if we think really hard about it. Just reading, or highlighting does not make our brains work hard enough. We must practise remembering things – this will feel difficult at the time but worth it in the end.

What is a knowledge organiser?

A knowledge organiser is a document that contains key facts and information. A knowledge organiser will not include every possible fact on a topic; it will include facts needed to understand the main points. Knowledge organisers make knowledge clear. So, even if a learner misses a lesson, they have a constant point of reference.

Why are knowledge organisers good for learning?

Research shows that our brains remember things more efficiently when we know the ‘bigger picture’ and can see the way that ‘nuggets’ of knowledge link. Making links helps information move into our long-term memory. A knowledge organiser shows linked facts on a single topic.

Knowledge organisers can be used for retrieval practice (practising remembering things). Regular retrieval of knowledge helps us remember more effectively with our long-term memory. Developing our long-term memory is a vital first step. Without knowledge we have nothing to work with, nothing to think about! Retaining knowledge over time is essential.

To help us understand learning better, Gateacre students and staff have created a series of videos that explain how memory works and what we can do to make it stronger. Follow the QR code or the [Learning to Learn](#) link to view them.



How can you best use your knowledge organiser?

There are many ways you can use a knowledge organiser. The most important thing to say, however, is ‘use it’. Owning one does not make you remember facts... **you must practise** if you are to improve at anything! There will be mistakes – this is how you learn. Ultimately, the best way to remember things is to try and remember facts that you can’t quite remember instantly... practice, practice and practice.

Here are some ways you could try to improve your **long-term memory** – they are all based on making you **think**, getting you to **test your memory**. That way your memory will get stronger:

Hide and seek

Read through a small section of your knowledge organiser (three or four key words), cover the facts and try to write out as much as you can remember. Check your answers and correct them if needed. Then choose your next words or check ones you have already done again.

Quiz

Test your memory by asking someone to quiz you on facts from your knowledge organiser. Write down your answers and see how many you get right. Correct any facts you get wrong.

Teach it!

Teach and explain to someone your key facts – you could even test them!

Back to front

Write down a fact from memory and then compose a question that would lead to that answer.

Sketch it

Draw pictures /diagrams to represent each of the facts or dates (time lines, flow diagrams, or labelled pictures are great ways of remembering parts of a system or orders of events).

Repackage it (from memory)

Create a mind map that brings different facts together under one title. Check that your key words are spelt correctly... or, take a key word and create a sentence that uses it.

Take pride in how you present your work. Each page should be clearly labelled with an underlined date. There should be at least one page of work.

Always check your answers and correct anything you got wrong.... You are allowed to get things wrong... That is how you learn! Getting yourself to think is the key!

Do not just copy a knowledge organiser out – that would not help learning and would only waste your time! Make sure you are having to think!



What does effective home-learning look like?

Here are some essential points to remember and some examples to see.

- Long term memories are created when you have to think. Simply copying does not help you remember. Testing yourself will make you think and remember
- The process of reflection and self-assessment is important if you are to fix mistakes. Do not worry about getting things wrong as long as you check, fix it and try again

All these learners have **read, thought, tested themselves** and then **checked** their work. They will start to develop long term memory which they can then use in the future.

Thursday 25th November 2021
revision ~
Spanish - R+L - 26/11/21 test.

voy - I go ✓
Escocia - Scotland ✓
Divertido - fun ✓
Nadé - relax ✗ swim ✗
y - and ✓
porque - because ✓
Fui - I went ✗ I was ✗
prefiero - prefer ✓
pero - but ✓ 13
Avión - plane ✓ 16
vamos - we go ✓
Visité - visited ✓
es - it is ✓
Compré - I bought ✓
Aburrido - boring ✓
España - Spain ✓

need to learn ~
fui - ✗ I was
nadé - swim
vamos - we go

normalmente voy a Grecia - normally I go to Greece
Voy en avión con mi familia - I go by plane with my family.
El año pasado fuimos a Estados Unidos - Last year I went to USA ✓

Inter - between ✓
Example - Interquartile range means the difference between quartiles ranges with data set. ✓
History
1. The 3 Conquerors were:
• Harold Godwinson - King of Norway
• Harold Godwinson - Earl of Sussex ~~Wessex~~
• William - King of Normandy
Date
2. The battle that happened before the Battle of Hastings is the Battle of Stamford Bridge ✓
3. Archers are soldiers who shot with bows and arrows ✓
4. Cavalry are soldiers on horses ✓
Music
Metaphonic - One melody, nothing else ✓
Polyphonic - Many melodies at once ✓
Homophonic - One main melody with support

Geography - Types of Geography		
Physical: natural things: • Mountains • Deserts • Rivers • Oceans • Rainforests • Seas	Human made by mankind: • Landmarks • Buildings • Where we live • Population • Cultures	Environmental: How humans interact: • Population • Climate Change • Global Warming

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Maths [Hegarty Maths On-Line]	Computing	English [Supported by Educake Tasks]	Art	
History	Food/Drama	Geography	Science	
Music	Spanish	Dt	Active Lifestyles/RS	

Where subjects share a slot it is for **you** to decide which one **you** know less about - which one should **you** revise?

You decide which one to do, or you could, of course, revise both.

Literacy: Do take time to engage with the **Listen Project**. Developing our vocabulary is immensely important if we are to develop as learners.

The **listen Project** is an opportunity to listen to interesting ideas, facts and make our vocabulary better. You can do this **at any point** within the week.

Remember, you can always do more. Challenge yourself to be the best you can be!

The 'Listen' Project #1



SCAN ME

How to use the 'Listen' Project

Start Here

Being read to is a vital part of learning - hearing words that we are unfamiliar with, ideas that we don't understand yet and thoughts we haven't had a chance to think.

Even simple stories create links from one idea to the next. The fairy tales we heard when we were babies give us the first step to understanding the adventure stories we read in school.

Take time out and listen...

Step 1 - Click the link and listen.

You can follow the text as you are read to or just listen.

Step 2 - Check the text.

Have a look at the texts. There are three pieces of writing.

The first piece may appear to be very simple, maybe even too young for you. These stories are some of the first we hear and often start our journey to understanding more complicated ideas.

The second text may be something you recognise or have read yourself. Is there a link to the first story?



Step 3 - What's the connection?

The final step is to think about what links these texts and stories together?

Where have you thought about these ideas before?

Do you think about any of these ideas in school?

You can go back and listen to the texts being read as many times as you like.



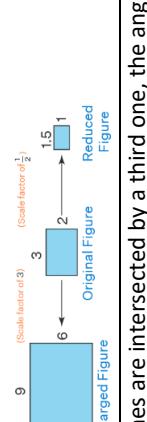
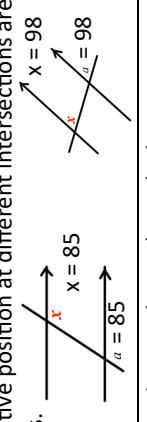
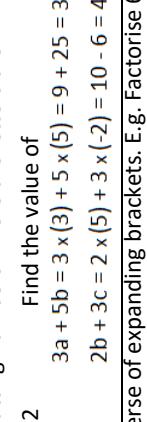
SCAN ME

The 'Listen' Project #1

Your Maths Home Learning has two parts:

Mathematics

- Part 1 is: Copy the definition of the key word and diagrams into your Home Learning Book, then use these to complete the task
 Part 2 is: Access www.hegartymaths.com → Watch the video , making notes in your book → Complete the assigned quiz

Week	Key Word	Definition	Task	Hegarty Task
5th June	Scale factor	Scale factor is the number which is used to change the size of a figure without changing its shape. It is used to increase or decrease the size of an object. 	What is the scale factor of the following shapes	651
12th June	Corresponding (angles)	When two parallel lines are intersected by a third one, the angles that occupy the same relative position at different intersections are called corresponding angles. 	Find the value of x: 	483
19th June	Substitution	Substitution means putting numbers where the letters are: If $a = 3$ $b = 5$ and $c = -2$	If $a = 6$ $b = 10$ and $c = -4$ Find the value of $3a+5b =$ $2b+3c =$	781
26th June	Factorise	Factorising is the inverse of expanding brackets. E.g. Factorise $6t + 10$. Look for a number which is a factor of both 6 and 10, which is 2, so 2 goes in front of the bracket. $2(.....)$. Divide 6t by 2 to get the first term inside the bracket. $2(3t.....)$. The + does not change and the last term is $10 \div 2 = 5$ So the answer is $2(3t + 5)$	Factorise the following expressions: 10x + 8 = 16y - 6 = 20e + 10 =	168
3rd July	Coefficient	A coefficient refers to a number with a variable. It is usually an integer that is multiplied by the variable and written next to it.	State what are the coefficient of the following: $3x$ $5t + 4$ $6w - 4 = 1$ $4x + 5y - 3$	Memri
10th July	Transformation		Transformations change the size or position of shapes. Congruent shapes are identical, but may be reflected, rotated or translated. Scale factors can increase or decrease the size of a shape.	650



History KNOWLEDGE ORGANISER

Topic: How did anti-Semitism in Nazi Germany escalate to the Holocaust?

YEAR 9
HT 6

Overview

Overview	Removal of Rights	Segregation	Extermination
The Holocaust was a genocide that took place during World War II, in which up to 17 million people were systematically exterminated by Nazi Germany and its collaborators. Around 6 million Jews were killed, in addition to Romanis peoples, ethnic Poles and Slavs, homosexual men, and many other groups. The Holocaust happened after several phases of anti-Semitism in Nazi Germany.	The Nuremberg Laws (1935) meant that Jews were fired from jobs, forced to wear a yellow Star of David, stripped of German citizenship, and banned from German schools, amongst many other measures.	Jews were forced out of their homes and into ghettos . The ghettos were filthy, with poor sanitation, and were extremely overcrowded. Food supplies were low, and so many people starved to death. 	Victims were sent to concentration camps , where many were forced to work in hellish conditions, where many died. Others were sent to the gas chambers. Later, camps opened for the sole purpose of extermination.

Key People

Adolf Hitler (1889-1945)	Adolf Hitler was a German politician who was the leader of the Nazi party. Chancellor of Germany from 1933-1945, and the Führer of Germany from 1934-1945. As Germany was unstable following World War I, Hitler began to gain a base under threat from 'inferior' Jews, disabled people, and other minorities. When he gained power in 1933, Hitler immediately began implementing policies to ensure an 'ethnic cleansing' of Germany - making him the chief initiator of the Holocaust. Seeking 'Lebensraum' (living space) for Germans, he also ordered the invasion of Poland in Sep 1939 which triggered World War II, the deadliest conflict in history. He committed suicide on 30th Apr 1945, with his wife, as the war was lost.		Heinrich Himmler (1900-1945)	Anne Frank was a German-born Jewish girl, who wrote a diary about the time that her family fled Germany and hid in an attic, in Amsterdam in the Netherlands. After years in hiding, they were arrested, and taken to concentration camps. Anne died of Typhus in Bergen-Belsen , only weeks before the concentration camps were liberated. The only survivor from her family, Otto, (her father) published her diary after her death. It has now become one of the most well-read texts in history.		Oskar Schindler (1908-1974)	Oskar Schindler was an SS officer and member of the Nazi party, who is credited with saving 1,200 Jews during the Holocaust. He initially employed Jews in the interests of profit, but soon developed relationships with them and showed initiative, courage, and dedication to save them. At the end of the war, he escaped capture, dying a free man in Brazil years later.	
Food	Dr Josef Mengele was an SS officer and physician in Auschwitz concentration camp. He performed many deadly human experiments on prisoners, gaining the nickname 'The Angel of Death'. He was also involved in the selection of prisoners for death, which others reported he 'seemed to enjoy'. At the end of the war, he escaped capture, dying a free man in Brazil years later.		Work	Most prisoners worked outside doing heavy duty jobs such as factory or construction work. They often had to walk miles to work. Due to the insufficient food they were given, and widespread disease, many became too weak to work. They were then shot by SS soldiers .				

Important Events and Life in the Concentration Camps

	Germany is defeated in World War I	Hitler Rises to Power	The Warsaw Ghetto	Prisoners Arrive at Auschwitz	The Final Solution	Camps Liberated	Hitler's Suicide	Germany Surrenders	Deportation and Transportation	Clothes	Food	Work
	After WWI, many Germans were angry, many did not approve of the Treaty of Versailles , which placed blame with Germany. The country was also poor in the post-war era, going through an economic depression .											
	Jews were forced out of their homes and into ghettos . The ghettos were filthy, with poor sanitation, and were extremely overcrowded. Food supplies were low, and so many people starved to death. 	Hitler provided a perfect platform for Hitler to grasp power, promising to make Germany strong again. With strong leadership and oratory (speaking) skills, he rose to become Chancellor of Germany .	The Warsaw Ghetto was the largest of all the Jewish ghettos in German-occupied Europe during WWII. 400,000 Jews were imprisoned in only 1.3sq mi of space. 	The Auschwitz was first constructed to house Polish political prisoners, who began to arrive in May 1940. From early 1942, Auschwitz II became a major extermination site. 1.3 million people were sent there, of whom 1.1 million died.	The 'Final Solution' was Nazi Germany's plan for the genocide of all Jews. This resulted in the deadliest phase in which 2/3 of the Jews across Europe were killed.		With the Germans facing defeat, Hitler married his long-time love Eva Braun on 29 th April. The next day, they committed suicide, reportedly by gunshot, although historians are unsure.		Prisoners were treated like cattle, herded onto crowded trains and locked inside for days as they travelled. Most had no light, food or drink, and only a bucket to use as a toilet.	After being separated from their families, during registration prisoners had their clothes stripped, their heads shaved, and were given a striped uniform and striped cap to wear.	Prisoners, received very little, if any, food. Wotey soup was a common lunch meal, with stale bread sometimes provided for dinner.	Most prisoners worked outside doing heavy duty jobs such as factory or construction work. They often had to walk miles to work. Due to the insufficient food they were given, and widespread disease, many became too weak to work. They were then shot by SS soldiers .
	Victims were sent to concentration camps , where many were forced to work in hellish conditions, where many died. Others were sent to the gas chambers. Later, camps opened for the sole purpose of extermination. 	Poor and disheathed post-war Germany provided a perfect platform for Hitler to grasp power, promising to make Germany strong again. With strong leadership and oratory (speaking) skills, he rose to become Chancellor of Germany .	The Warsaw Ghetto was the largest of all the Jewish ghettos in German-occupied Europe during WWII. 400,000 Jews were imprisoned in only 1.3sq mi of space. 	The Auschwitz was first constructed to house Polish political prisoners, who began to arrive in May 1940. From early 1942, Auschwitz II became a major extermination site. 1.3 million people were sent there, of whom 1.1 million died.	The 'Final Solution' was Nazi Germany's plan for the genocide of all Jews. This resulted in the deadliest phase in which 2/3 of the Jews across Europe were killed.		With the Germans facing defeat, Hitler married his long-time love Eva Braun on 29 th April. The next day, they committed suicide, reportedly by gunshot, although historians are unsure.		Prisoners were treated like cattle, herded onto crowded trains and locked inside for days as they travelled. Most had no light, food or drink, and only a bucket to use as a toilet.	After being separated from their families, during registration prisoners had their clothes stripped, their heads shaved, and were given a striped uniform and striped cap to wear.	Prisoners, received very little, if any, food. Wotey soup was a common lunch meal, with stale bread sometimes provided for dinner.	Most prisoners worked outside doing heavy duty jobs such as factory or construction work. They often had to walk miles to work. Due to the insufficient food they were given, and widespread disease, many became too weak to work. They were then shot by SS soldiers .

Timeline				
Key Terms		Tasks		
1933 – Adolf Hitler comes to power.	1935 – The Nuremberg laws took over the rights of Jews.	<p>Aryan Race: Adolf Hitler thought that people of Northern European descent were a superior (better) race to all others known as the Aryan Race.</p> <p>Auschwitz: The largest of the German Nazi concentration camps and extermination centers. Over 1.1 million men, women and children lost their lives here</p> <p>Axis troops: ...A military group including Nazi Germany, Italy and Japan who fought against the Allies (which included Britain) in the Second World War.</p> <p>Bergen-Belsen: A Nazi concentration camp in northern Germany. It was originally established as a prisoner of war camp.</p> <p>Concentration camps: A place where people are concentrated and imprisoned without trial. Inmates are usually exploited for their labour and kept under harsh conditions.</p> <p>Extermination camps: Extermination camps were used by the Nazis from 1941 to 1945 to murder Jews and other groups including Roma and Sinti.</p> <p>Genocide: The deliberate killing of a large number of people from a particular nation or ethnic group with the aim of destroying that nation or group.</p> <p>Ghettos: Ghettos were often enclosed districts that isolated Jews by separating Jewish communities from the non-Jewish population. Conditions in ghettos were terrible with a lack of food and high levels of disease.</p> <p>Holocaust: The mass murder of Jewish people under the German Nazi regime during the period 1941-5. More than 6 million European Jews, as well as members of other persecuted groups such as Romani, gay people, and disabled people, were murdered at concentration camps such as Auschwitz.</p> <p>Nazi death squads: Carried out mass shootings of Jews in Eastern Europe.</p> <p>Nuremberg Laws (1935): Antisemitic (against Jews) and racist laws that were introduced in Nazi Germany to separate Jews from other German citizens.</p> <p>SS soldiers: The black-uniformed soldiers of the Nazi Party. SS soldiers were used as guards at concentration and extermination camps.</p> <p>The "Final Solution": The "Final Solution to the Jewish question" was the official codename for the murder of all Jews within reach in Europe.</p> <p>The Allies: The countries that fought with Britain in the First and Second World Wars.</p> <p>Warsaw Ghetto: The largest of the Nazi ghettos during World War II. It was established in November 1940.</p>	<p>Task 1 Look at the ‘Overview’ section on the page above. Create a flowchart to show how anti-Semitic policies (actions against Jews) developed between 1933-1945.</p>	<p>Task 2 Look at the ‘Important Events and Life in a Concentration Camp section’ section on the page above. Choose the part you find the most shocking and, using the descriptions and facts, explain why you are most shocked by this event.</p>
1939 – The Germans occupy Poland, and force Jews to leave their homes. WWII begins.	1940 – Jews put into concentration camps. Mass murder begins.	<p>Task 3 Create a 10-question quiz based on your knowledge organiser. Use this quiz to test someone you know. If they don’t know the answer, teach them!</p>	<p>Task 4 Go to the video <i>Survivor Testimony</i> near the bottom of the page. After you have watched this complete the ‘Test your knowledge and inference skills’ 3 questions. You can red pen your inferences by clicking ‘show answer’.</p>	
1941 – Germany attacks the Soviet Union. Jews across Western Europe are forced into ghettos.	1942 – Nazis discuss the ‘Final Solution’ of killing all European Jews.	<p>https://www.bbc.co.uk/bitesize/topics/zk94jxs/articles/ztg8mdp3/revision/1</p>	<p>Task 5 Read through BBC Bitesize – <i>The Holocaust</i> and complete the 10-question quiz at the end to test your knowledge.</p>	
1944 – Nazis take over Hungary and begin deporting 12,000 Jews a day.	1945 – Nazis are defeated by the Allies to end WW2. The concentration camps are liberated.	<p>https://www.bbc.co.uk/bitesize/guides/zggmdp3/revision/1</p>	<p>Task 6 Scan the QR code to test your knowledge.</p>	

Watch some Samba in action!

<https://www.youtube.com/watch?v=RP5r2wi98aA>

or use QR code below

A MUSICAL SUMMARY

Brazilian Samba is:

- includes **call and response** sections
 - made up of **layers of ostinato** rhythms
 - is often very **syncopated** (off beat rhythms)
 - The stops and starts are controlled by a leader using a whistle

Polyrhythm: two different rhythms played



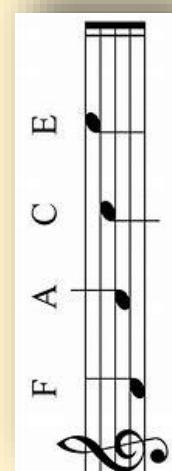
Samba instruments:

Surdo Timbale Agogo Be Claves



SPACE NOTES

STAVE – the 5 lines that music is written on.



TASK

Revise each box by number.
This page is a summary of some of the important key words this year.

1

Symbol	Name	Number of beats
○	Semibreve	4 beats
♩	Minim	2 beats
♪	Crotchet	1 beat
♪♪	Quaver	$\frac{1}{2}$ beat each
♪♪♪	Semiquaver	$\frac{1}{4}$ beat each

6

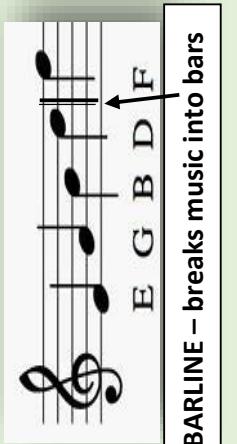
Composers	Composers	Composers
Chopin Liszt Brahms	Haydn Mozart Beethoven	J. S. Bach Handel Vivaldi

HISTORY 4.

- - -

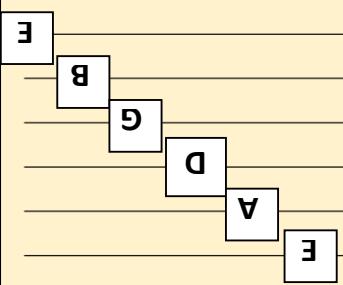
HARMONY	Major – positive Minor – Negative Chromatic – tense	DYNAMICS	Forte – loud Piano – quiet Crescendo – getting gradually louder	TEMPO	Allegro – fast Adagio – slow Accelerando – getting gradually faster	RHYTHM	Ostinato – repeated Syncopation – off beat Polyrhythm - two different rhythms played at the same time
3.							

3



LINE NOTES

Tuning the open strings



Year 9 - Pasta

Pasta is a type of food typically made from an dough of wheat flour mixed with water or eggs, and formed into sheets or other shapes, then cooked by boiling or baking.

Dried Pasta

Dried pasta is made from durum wheat flour and water. The dough is needed to develop the gluten and make it strong. It is rolled multiple times before being cut into shapes. The high gluten levels give the pasta a strong structure when dried.

Fresh Pasta

Fresh pasta substitutes water for eggs. The fat from the egg makes the pasta more tender. The durum wheat is not needed as the egg whites provide protein for a strong structure.

Cooking Times

Dried pasta takes longer to cook (9-11 minutes) as the starch granules need to rehydrate fully first.

If fresh pasta is fully hydrated, it cooks in boiling water very quickly (2-3 minutes)

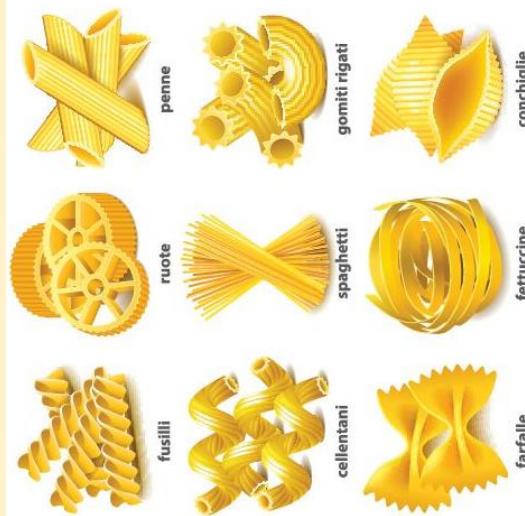
Pairing with Sauces

Fresh pasta has a tender consistency with a buttery flavour, pairing well with creamy cheese sauces.

Dried pasta has a firmer bite so is best cooked al dente and best paired with oily and meaty sauces.



Different Pasta Shapes



Weekly Tasks

Week 1 – Discuss why fresh pasta should be kept in the fridge and has a shorter shelf-life.

Week 2 – Research and list as many pasta shapes as you can find.

Week 3 – List some pasta dishes you have tried and the pasta type/shape that was served.

Week 4 – Using the graphic to the right, create a step by step guide to making and shape fresh pasta.

Week 5 – Discuss the advantages and disadvantages of fresh pasta.

Week 5 – Discuss the advantages and disadvantages of dried pasta.





Computing Department Knowledge Organiser: Year 9 Tinkercad

Introduction to Tinkercad



Tinkercad is an online application (software) used for Computer Aided Design. Just take a look around you. Almost everything you see started off as a 3D model in CAD software. Using specialist tools and techniques, you can design just about anything in CAD software, then using specialist machinery, you can make it. 3D models designed in CAD software can be printed using a 3D printer.

What is CAD?

CAD stands for Computed Aided Design. Computer software is used to design 3D models and these 3D models can be made into physical objects. Furniture, cars and buildings are just some examples of what can be designed using CAD?

Tinkercad Keywords

Align	to place or arrange (things) in a straight line. To use the Align tool, select at least two objects by Shift left-clicking on them or by dragging a box around them. Once selected, click on the Align icon at the top. Simply move your mouse over a node (the black dots) to preview the move.
Dimensions	a measurable extent of some kind, such as length, width, or height. In its simplest form: a line describes one dimension, a plane describes two dimensions, and a cube describes three dimensions.
Duplicate	to make or be an exact copy of. To duplicate an object, use Ctrl + D and then drag it out or use the arrow keys.

Group	to combine two or more shapes into a part. Do this by selecting them and then choosing the Group icon at the top.
Handle	the little squares that appear on the shape when you select it that allow you to resize it by pulling and pushing them.
Scale	to change the size of an object so that its dimensions are proportional to the original size. You can do this by holding down the Shift key while pushing and pulling the handles to resize.
Workplane	the large, blue grid where you create your designs. You can drag out new workplanes onto the surfaces of your shapes for easier stacking and more precise measuring.



Computing Department Knowledge Organiser: Year 9 Tinkercad

Tinkercad Workplane



This is what the Tinkercad workplane looks like.

You can access Tinkercad at home for free by visiting this website:
<https://www.tinkercad.com/>

Task 1: Tinkercad Tools

Draw these Tinkercad tool symbols into your home learning book and describe what they do:





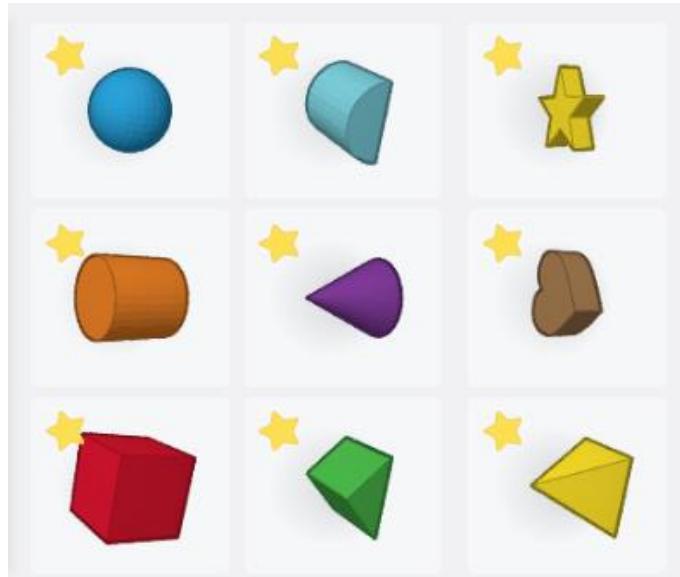
Computing Department Knowledge Organiser: Year 9 Tinkercad

Task 2 Key Word Definitions

Read the Tinkercad keywords, cover them and try to write an accurate definition into your home learning book, check your definition against the definition in the knowledge organiser.

Task 3 Design Task

In your home learning book, design a keyring that contains your name that could be made in Tinkercad. Think about the 3D shapes that you could use to create the keyring and any decorations that you would like to add. Colour in or label your keyring.





Stage positioning



CURRENT TOPIC:

AP2 & Lighting Design

New Skill/Technique/Knowledge

■ Retrieval

YEAR 8

AT A GLANCE

Stage positioning	
Knowledge/ skill	Definition
Hot seating	A character is questioned by the group about his or her background, behaviour and motivation.
Stage positioning	Stage positions are used to help keep track of how performers and set pieces move during rehearsal and performance. All nine positions on stage are from the perspective of the performer.
Teacher in role	The teacher plays a role. They may ask questions of the students, perhaps putting them into role as well.
Levels	Using different heights or levels onstage creates visual interest. It can also help to ensure that the audience see all of the action. Levels can be used to suggest status - meaning the power or authority one character has over another and can also be used to suggest various locations.
Improvisation	A very spontaneous performance without specific or scripted preparation.
Thought Track	A character speaks out loud about his/her inner thoughts at a particular moment in the drama.
Movement	Where we move to on and around the stage avoiding the blocking another actor.
Physical Theatre	Physical theatre is a well-known genre of theatrical performance that encompasses storytelling primarily through physical movement.
Transitions	This is the process in which something changes from one state to another
Flashback	A flashback is an interjected scene that takes the narrative back in time from the current point in the story.
Narration	A commentary delivered to accompany a performance.
Slow Motion	Performing in manner whereby the action appears much slower than in real life.

Tasks

Label the plain stage provided with the following:
Upstage, Downstage, Stage Left, Stage right, Wings, Centre Stage and Apron

Week 1

Using the lighting design knowledge you have so far – make a quiz about the different types of lights that exist.

Week 2

Create a quiz! Using the revising methods you have learnt over this past year – revise the vocal and physical skills section in particular!

Week 3

Sketch out the stage types and try and match the title of them to each one!

Week 4

Access the GCSE Drama Bitesize portal and prepare for your GCSE Drama journey.

Week 5

Lighting Terminology:

VAIN

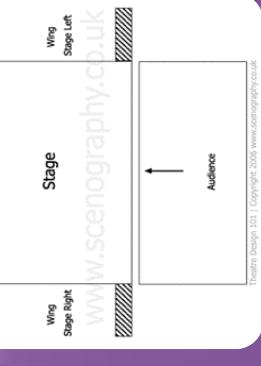
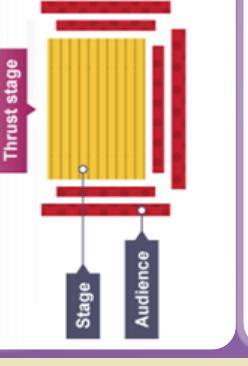
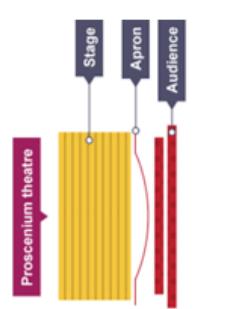
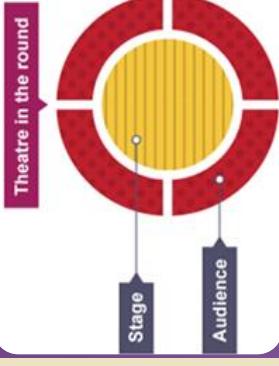
• VISIBILITY: Actor's eyes, mouth, body.

• ATMOSPHERE: Mood, location, weather, season, time.

• IMAGE: Selective visibility, stage picture.

• NARRATIVE: Helping to tell the story through lighting changes. e.g. time passing.

Stage Types



← Coloured gels can be added to the front of some lanterns so that they throw coloured light onto the stage. Some can also be fitted with what is known as a gobo. This is a sheet inserted on a frame at the front of the light with a design cut into it. It filters the light, creating a picture effect on the stage. For example, a gobo could be used to create a dappled lighting effect to look like the leaves of a forest, or could be cut to create strips of light onstage which look like the bars of a prison. This example is a YELLOW gel with star shaped Gobos.



Spot → has a hard-edged effect, used to light characters or elements on the stage. Coloured filters can be used with this lamp.



← Fresnel - used for a softer edged effect, with a diffusing lens in front of the lamp. It's useful for good overall light when used with others. Coloured filters can be used with this lamp.



Flood → produces a clear wide-angled light, but there's little control over the spread of the light. Coloured filters can be used with this lamp.



← Strobe - a flashing light, used for special effects. It's often used to give the effect of old movies. It produces a jerky effect on the movements of actors when used on its own.



Parcan → used for general cover and can hold a gel or gobo in order to project colour or shapes onto the stage.



← Barn Doors - Adjustable flaps used to shape the light and how it is projected onto the stage.



Birdie → A miniature lantern ideal for hiding in small parts of a set or along the downstage edge of the stage. Provides a surprisingly bright soft-edged pool of light.

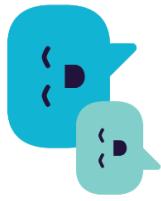
Role and responsibilities	
Theatre Maker	A performer is an actor or entertainer who realises a role or performance in front of an audience.
Performer	An actor who studies another's role so that they can take over when needed.
Understudy	A person who works backstage either setting up technical equipment such as microphones or rigging lights before a production or operating technical equipment during a performance.
Technician	A director is in charge of the artistic elements of a production. A director will often have the initial creative idea ('concept') for a production, will work with the actors in rehearsal, and will collaborate with designers and the technical team to realise this idea in performance.
Director	The Stage Manager is in charge of all aspects of backstage, including the backstage crew. They will oversee everything that happens backstage before, during and after a performance. During the rehearsal period, the Stage Manager and their team will make sure that all props are found or made, scene changes are rehearsed and smooth, and all other aspects of backstage are prepared. They are also in charge of the rehearsal schedule.
Stage manager	

Well done Year 9 on an absolutely fantastic year. You have shown a real growth in knowledge in Drama – Good Luck for Year 10!



Spanish

Go to languagenut.com or download the app from the app store/google play store.
Log in with the username and password given to you by your teacher.
Your weekly task will appear in the "assignments" section.

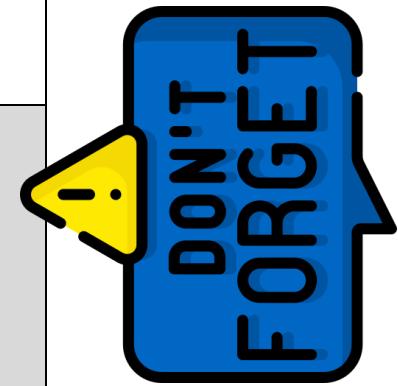


Tuesday 6 th June	Complete the assigned tasks practising health vocabulary.
Tuesday 13 th June	Complete assigned tasks practising jobs vocabulary.
Tuesday 20 th June	Complete assigned task practising directions vocabulary.
Tuesday 27 th June	Complete assigned tasks on jobs.
Tuesday 4 th July	Complete assigned tasks on sports.
Tuesday 11 th July	Complete assigned tasks on food.

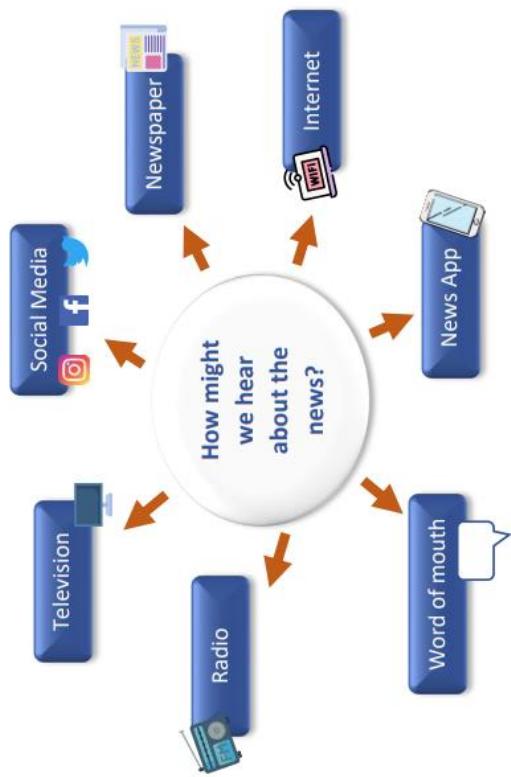
If you're accessing Languagenut from a tablet or computer, you can browse through other sections and practise other skills.

Click "high school" and either "vocab practice", "exam skills" or "sentences and chunks" and practise away!

You get points for each activity you complete and the Top 10 students in the school with the most points at the end of each month will get a prize off Mrs. Foy!



Knowledge Organiser: News Reporting



What can we learn from the news?
We can learn all about things happening in the world but what can we learn from the news?

- Things that interest us
- Things we want to change and influence
- How we react and respond to different news stories
- How other people react and respond
- How a range of news content makes us feel
- That opinions, feelings and ideas can be influenced and change
- How we feel about something cannot be wrong.

Key Vocabulary

Biased – having an opinion about an issue and not considering other options.

Breaking news – new information about an event that is currently happening or developing.

Correspondent – a journalist, who works for a media outlet and usually reports on a specific topic such as business, sport etc.

Coverage – the attention given to a news story by media.

Hot off the press – newly printed or published.

International – relating to or affecting two or more nations.

Journalist – a person who writes for newspapers, magazines or news websites or prepares news for broadcast.

Local/regional – a particular part of the country.

Media – the main means of mass communication.

National – the whole of the UK.

Paparazzi – a freelance photographer, who follows celebrities to get photos of them.

Sensationalism – presenting news stories in a way that causes public interest and excitement.

Source – a place, person or thing from which something originates or can be found.

Key Vocabulary
caption: A title or brief explanation that goes alongside a photo, illustration or cartoon.
direct speech: Direct speech directly repeats what has been said by the speaker. Direct speech needs to follow special punctuation rules.
fact: Something that is known or proven to be true.
past tense: Writing about something that has already happened.
quote: Repeating or copying the exact words that were written or said by a person.
reporter: The person who is reporting on the event. This is the person who has written the newspaper report.
third person: Writing from another person's point of view or as an outsider looking in.

Home Learning Tasks – News Reporting

Week 1 - TV NEWS REPORTING

Watch a television news bulletin. Select one of the reports featured and make notes on the following:

- What has happened,
- Where it happened
- Who is involved?
- Why the event took place
- Any information available about how the event took place.

Week 3 - WHERE DOES NEWS COME FROM?

The following are the **main areas** of life in which we expect to find news stories. For each category below, think of at least one event or situation which could make a news story in your own society.

Conflicts	e.g. War in Ukraine
Disaster and Tragedy	
Progress and Development	
Crime	
Money	
Religion	
The Underdog	
Famous People	
Weather	e.g. Imminent heatwave
Health	
Sport	
Entertainment	
Food and Drink	

Week 4 – Open Questions

Imagine you were interviewing the queen. Think of 10 open ended questions that you would like to ask her. Remember that open questions are ones that do not have a yes or no answer.

Week 6 TEAMWORK	Use the internet to research and write 10 essential teamwork skills that will help you to work successfully in your groups in order to complete your assessment task.
	

Week 5 – PUBLIC SPEAKING RESEARCH

Scan the **QR Code** below to research and make notes on how to become a confident, compelling Speaker. 

Week 2 – NEWSPAPER REPORT

Using your TV News research above, write the opening paragraph of an article for your local newspaper. Include the 5Ws and an appropriate headline.

Renewable and non-renewable energy

Non-renewable resources: Non-renewable resources can only be used once and can not be replaced e.g. coal, oil and gas.

Renewable resources: Renewable resources can be used over and over again e.g. solar, wind power or Hydroelectric power.

Types of energy

Coal: non-renewable. Found in Wales, Scotland and England

17 power stations in the UK. Could last until the 22nd century

Advantages: one of cheapest ways to generate electricity
Oil: non-renewable. Found in the North Sea. 2 power stations in the UK. Oil reserves until the middle of the 21st century

Advantage: easy to transport by pipeline or ship

Gas: non-renewable. Found in North Sea and Irish Sea. 36 power stations in the UK. Gas will last until late 21st century

Advantage: easy to transport by pipeline

Nuclear: non-renewable. Uranium is used to power nuclear stations. Found in Canada. 11 power stations in the UK. All but one nuclear power stations will be shut down by 2023

Advantage: Nuclear fusion does not create carbon dioxide but does produce nuclear waste.

Hydroelectric Power: renewable, Need to be by large lakes or reservoirs above sea level. 7 schemes in the UK. Unlikely to be a huge increase in HEP in the future.

Advantage: High cost to build but cheap to run

Wind energy: renewable. Found anywhere windy. Over 290 wind farms in the UK
Advantage: sustainable and environmentally friendly

Natural Resources Knowledge Organiser Year 9

Problems associated with fossil fuels

Global Warming

The fossil fuels give off carbon dioxide gas when they burn. And this is making the Earth warm up. We call it **global warming**.

It will lead to severe storms and floods, famine, and other disasters

Acid rain

Other gases also form when fossil fuels burn. Some are acidic, and can damage your lungs. The gases dissolve in the rain to give acid rain.

Other pollutants

The burning fuels give off smoke, soot and other particles that get everywhere, including into your lungs.

And more...

We can harm the environment when we dig up, and move, the fossil fuels. For example, oil spills do a lot of damage.

Money problems

The world is using more and more fossil fuel every year, as its population grows, and countries develop.

So countries are competing with each other to buy fossil fuels. And this is pushing up prices.

When the prices of fossil fuels rise, so do other prices. We have to pay more for things like food, clothing and petrol. It affects everyone. The poorest are hit hardest.

Chernobyl Disaster

- Chernobyl is located in Ukraine
- April 25th 1986, a nuclear reactor exploded releasing radioactive material into the atmosphere.
- Resulted in thousands of people
- Being evacuated from their homes,
- Dying from illnesses related to radiation and polluting water.

Tasks- if you complete all 6, repeat and add further detail

Task 1: Revise the key definitions non renewable and renewable. Cover and try to write your own definitions.

Task 2: Look over the types of energy. Cover and create a spider diagram, writing down as many different types that you can remember. Then add some information about the advantages of each type of energy.

Task 3: Use Google to find out about some of the disadvantages of each energy type from task 2 and add these disadvantages to the spider diagram.

Task 4: Read over the column on problems with fossil fuels. Then create a diagram showing how the Greenhouse Effect works linking it up with Global warming. Use your learning from Science to also help you complete this. You can also use Google to help you if needed.

Task 5: Extension. Read over the facts on the Chernobyl Disaster. Use Google to research it further

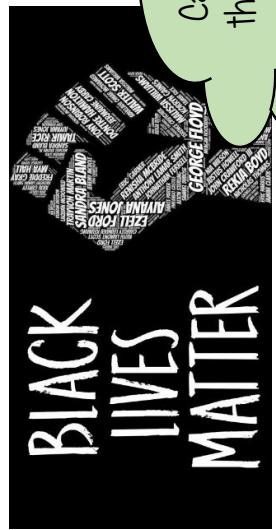
Then write a diary account, imagining you were one

of the workers on the day of the disaster- describe

what happened; what you saw and how you felt.

Task 6: Answer this question- What type of energy should we use in the UK? Justify your answer.

BLACK LIVES MATTER



KEY WORDS

GEORGE FLOYD	Died in May, 2020. His death by a police officer was filmed and shown globally. It sparked worldwide condemnation and protest.	WILLIAM WILBERFORCE	A Christian politician who lead the fight to end slavery
PROTEST	A statement or action expressing disapproval of something	EQUALITY	The state of treating people as equals, fairly and without prejudice
REPARATION	Making amends for a past wrong	QUAKERS	A Christian group who advocate non-violence and equality
WHITE PRIVILEGE	A system whereby white people have an advantage over other ethnic groups	DISCRIMINATION	Treating someone unfairly based on a difference e.g. race, religion, gender
RACISM	Treating someone unfairly because of their race	JUSTICE	Receiving fair reward or punishment for an action

SOME
TASKS
FOR YOU
TO
COMPLETE

Create a mind map on the facts and effects of racism

Draw a symbol for each key word

Investigate an organisation that campaigns for fairness

Research a news event about racism or unfairness

Write a persuasive argument against racism (using religious quotes)

STATISTICS

A person of BAME background is:

- 3 times more likely to be arrested than a white person
- Less likely to hold a top management job (only 1.5% of top managers are BAME)
- More likely to be a victim of a hate crime (43% increase in hate crimes in 2015)

THE CHURCH & SLAVERY

- The Church of England profited from slavery through donations and shares in businesses involved in the trade
- Many prominent Christians were slave owners

BUT

- William Wilberforce and other Christians challenged the trade and brought it to an end
- Jesus taught love, freedom and equality for all people regardless of race

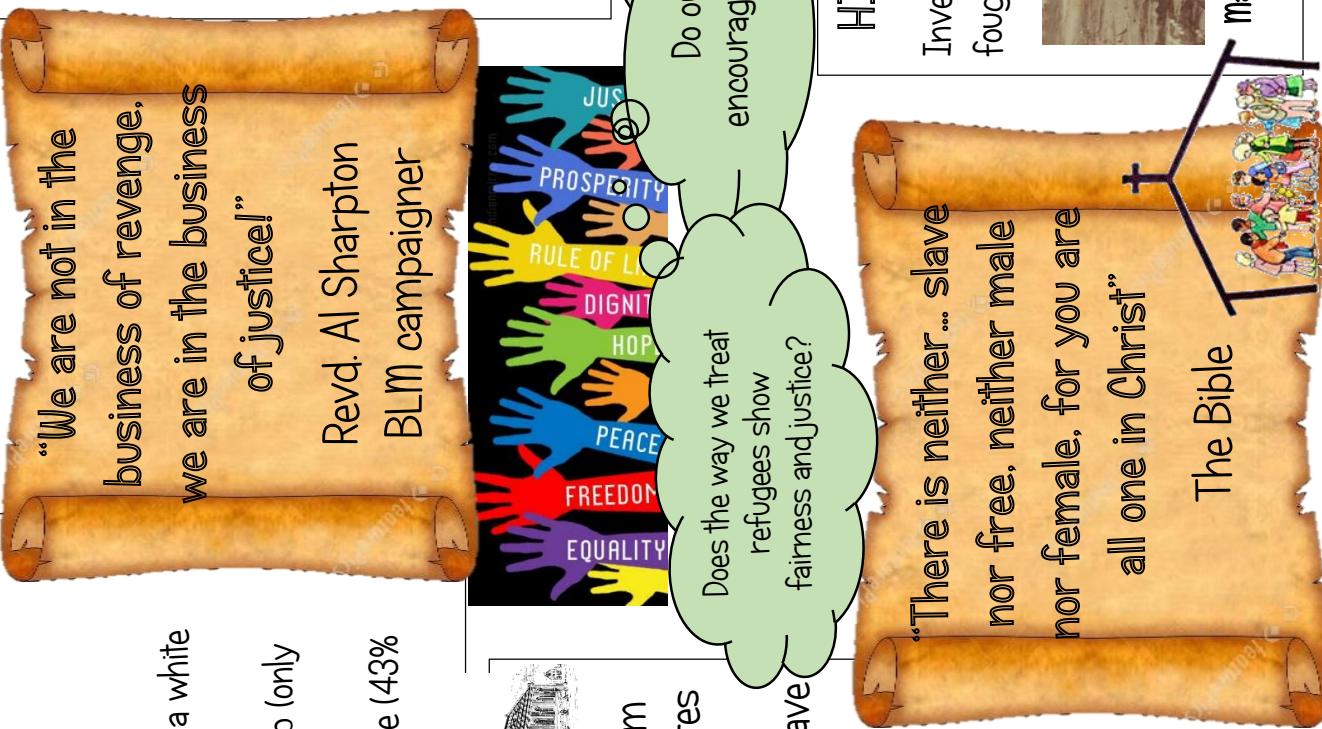
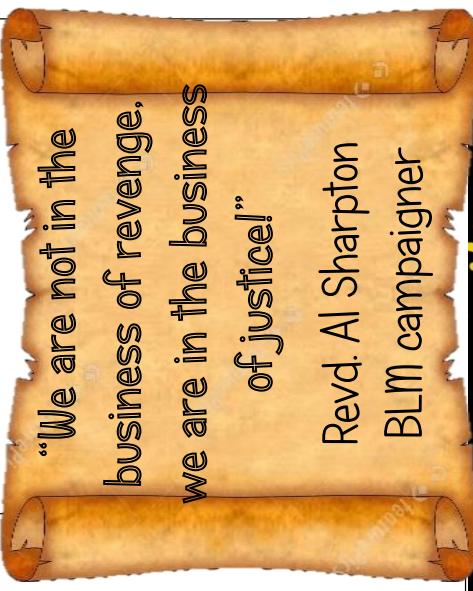
“We are not in the business of revenge, we are in the business of justice!”

Revd. Al Sharpton
BLM campaigner



Do our shopping habits encourage modern day slavery?

Does the way we treat refugees show fairness and justice?



THE EFFECTS OF RACISM

- Loss of confidence in yourself and others
- Wasted talent and opportunities
- Broken communities
- Anger, frustration and resentment
- Depression and feelings of low self-worth which may lead to suicidal thoughts



HIDDEN HISTORY

Investigate the life of someone who has fought for equality without recognition. e.g..

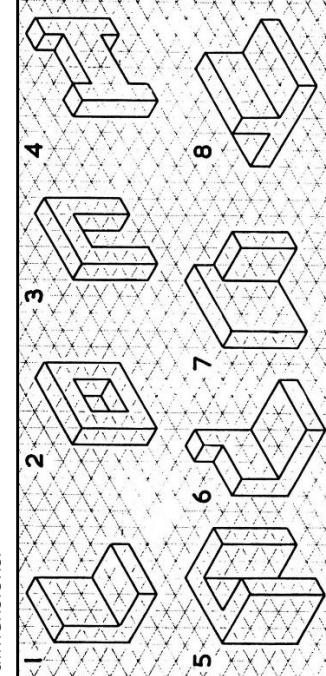


Steve Biko

Mary Seacole

Emily Davison

Steve Biko

 <h2>DESIGN TECHNOLOGY KNOWLEDGE ORGANISER</h2> <p>Topic: Wooden Storage Box</p>	<h3>My Tool Box</h3>  <p>Tenon Saw – Used to cut straight cuts in wood.</p>	<h3>Focused topics</h3> <p>Product analysis is a form of primary research and involves looking at existing products, working out how they were made and seeing what features might be useful to any possible new design. Product analysis can often be referred to as ACCESS FM.</p> <table border="1" data-bbox="465 749 1068 1298"> <tbody> <tr> <td></td><td>Aesthetics</td><td></td><td>Cost</td><td></td><td>Customer</td><td></td><td>Environment</td><td></td><td>Size</td><td></td><td>Safety</td><td></td><td>Function</td><td></td><td>Material</td></tr> </tbody> </table>		Aesthetics		Cost		Customer		Environment		Size		Safety		Function		Material	<h3>Key Terms</h3> <p>Aesthetics - how humans perceive and judge objects according to their attractiveness</p> <p>Computer aided design (CAD) The process of creating a 2D or 3D design using computer software.</p> <p>Composite material - materials composed of two or more component parts.</p> <p>Medium-density fibreboard (MDF) – an engineered wood product made from wood fibres and resin binder (glue)</p> <p>Plywood – is a composite material. It is composed of individual plies/veneers of wood. It is very strong due to the way the plies are put together. The grain of each ply is positioned at ninety degrees to the pieces of ply above and below it.</p> <p>Standard component – an individual part or component, manufactured in thousands or millions, to the same specification</p> <h3>Tasks</h3> <p>Task 1: Cover the knowledge organiser then write down all the tools you have learnt. Check and red pen mistakes.</p> <p>Task 2: Do the same as task 1 for Key words & definition.</p> <p>Task 3: Complete a product analysis of a product you have around your home using the ACCESSFM words</p> <p>Task 4: Draw two tools and write what they are for.</p> <p>Task 5: Create a quiz based on task 1, 2 or 3. Get someone to test you.</p> <p>Task 6: Create a mind map for the information you remember and red pen anything you've forgotten.</p> <p>Task 7: Teach it. Create a task that can be used to teach some of the information from here.</p> <p>Isometric drawing is way of presenting designs/drawings in three dimensions.</p> 
	Aesthetics		Cost		Customer		Environment		Size		Safety		Function		Material				
	<h3>My Tool Box</h3>  <p>Scroll-Saw/Hegner-Saw – Used to cut complicated shapes in thin material.</p>	 <p>Metalwork Vice – Used to secure material while working on it (cutting, filing sanding etc.)</p>	 <p>Pin Hammer – Used to knock panel pins and small nail into wood.</p>																



ART KNOWLEDGE ORGANISER

Topic: Celebrities in Art (Responding to the work of Argadol) Creating your own Celebrity inspired artwork

YEAR 9 Term 3b Creating a Personal response.	Key Literacy Vocabulary:
	<p>History/Context:</p> <p>During this term, you will continue to explore the theme of 'Celebrities' and create your own artwork in response to French Pop Artist 'Argadol'. You will produce your own drawings in the style of Argadol and create a piece of artwork based on a celebrity of your choice. Your aim will be to use symbols, text and images in the background which capture your celebrity's identity. You will continue to work using a variety of techniques and materials and incorporate Argadols' distinct style in your work.</p> <p>A personal response is 'an outcome or final task' produced to support the work and theme you have been exploring in your art lessons. This outcome is created by using materials, techniques and processes that link to your artist and your theme. Your personal response (final outcome) should link to the theme you've been working on and show a clear connection to your artist and theme. It solidifies previous research and development created throughout the year as well as demonstrate the art skills and techniques you've already learnt. You will be encouraged to show more independence in your artwork this term. You will carry out your own research and select your own materials to create your final piece inspired by Celebrity Culture and the work of Argadol.</p>
<p>Home Learning tasks:</p> <p>Week 1: Practice key literacy vocab 1-6 - look, cover, write, check, correct x 3. Read the sentences again and check for understanding.</p> <p>Week 2: Practice key phrases 6 -13 - look, cover, write, check, correct x3. Read the sentences again and check for understanding.</p> <p>Week 3: Select/choose a celebrity you admire. This could be a Pop Star, Actor/Actress/Sportsperson/Author/Musician, any celebrity that who you admire. In your home Learning Book, create a visual mind map to explore your chosen celebrities' identity. You may want to draw images, pictures and symbols as well as use text/words to describe and capture the identity of your celebrity. Make your mind map as creative and descriptive as you can.</p> <p>Week 4: In your Home Learning book, produce a series of sketches/doodles and drawings using a variety of different materials from your mind map. You could use biro, pencil, colour pencil, felt tip pens etc. Your aim is to create a background in the style of Argadol which captures the identity of your celebrity. Create your own patterns to decorate your doodle background further.</p> <p>Weeks 5/6: Print or find an image of your celebrity and glue down onto a page in your Home Learning Book. Now copy some of your images, motifs and symbols into your background in the style of Argadol to create a small piece of artwork using his techniques and processes: Drawing and Collage. You may want to use additional collage to develop your artwork. Watch the video to help and inspire you.</p>	<p>1: CONTEXT: Context refer to the meaning of an artwork</p> <p>2: UNDERSTANDING: You will show an understanding of something when you demonstrate what you have learnt through your work.</p> <p>3: CONNECTION: A connection is a link made between/to another person, subject or media in your work.</p> <p>4: INQUIRE: To inquire means to investigate, by looking into and sourcing information</p> <p>5: PROCESS: Process refers to the steps undertaken to achieve something</p> <p>6: RESPONSE: an artistic reaction to previous work produced.</p> <p>7: EXPRESSIVE: Expressive is when a particular thought or feeling is portrayed in a piece of artwork</p> <p>8: APPEARANCE: Appearance refers to the way that artwork looks</p> <p>9: OBJECTIVE: artwork that depicts easily recognizable subject matter.</p> <p>10: INTERPRETATION: Interpretation demonstrates the way that an artist has translated what they have learnt 11: REFINE: to develop/amend/improve your idea further.</p> <p>12: OUTCOME: the personal response (piece of work) you produce, relating to your theme and artist.</p>
<p>Week 5: Patterns</p> <p>Use this example to help your layout of your mind map. Put your celebrities name in the middle of your mind map.</p>	<p>Example of a celebrity inspired piece of artwork using collage and drawing techniques</p> <p>Week 6: Creating</p> <p>To help you create your Pattern page</p>
<p>Week 3: Mind Map artwork</p>	<p>"I love classic rock and my dream was to be a musician, but I didn't make it. Music still plays a crucial role in my art. I always paint while listening to music." Argadol.</p>

**WE ARE USING
WE**



TASSOMAI!

Week Four

Create a mind map/spider diagram of information you remember from the topics:

- Atomic Structure and the Periodic Table
- The particle Model

Once you have completed the mind map use your previous home learning booklets to make sure you aren't missing important information.

Week Two

Create a mind map/spider diagram of information you remember from the topics:

- Cell Biology
- Domestic Electricity

Once you have completed the mind map use your previous home learning booklets to make sure you aren't missing important information.

The summary should include:

1. No more than 40 words
2. And should be written in full sentences.

Week Six

Using your Home Learning book as guidance create detailed instructions on how to complete a full set of food tests.

Food tests included are:

- Starch
- Glucose
- Lipids
- Proteins.

Instructions should include equipment list and step by step methods.

Using your Home Learning book as guidance create a detailed story of what happens to a cheese sandwich when eaten.

Begin at the mouth and give descriptions of organs and processes that happen within the average human body.

Draw a diagram of the digestive system to compliment your work.

The QR code links to further information found on BBC Bitesize



Have you completed your 4 daily goals?

Complete 4 daily goals each week to ensure success in Science! 😊

Home learning tips:

1. Answer any questions in full sentences.
2. Take your time reading through your knowledge organiser.
3. Read the task twice.
4. Ask your teacher in your next lesson if you are unsure about anything.
5. Not sure which week to do? Ask your teacher!

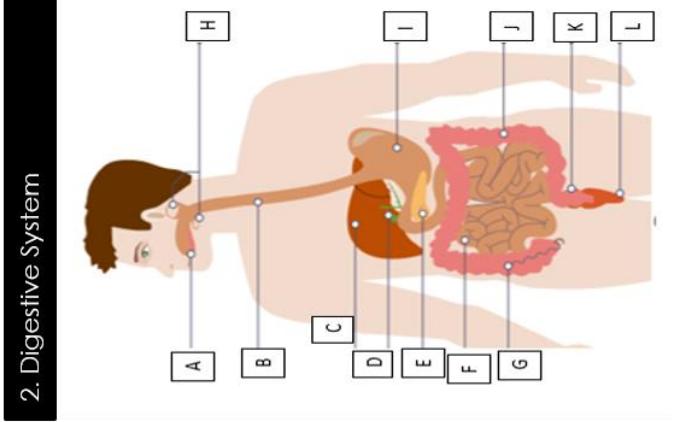
Biology Topic 2: Organisation

1. Principle of organisation		Examples
Level	Definition	
Cell	Basic building blocks of all living organisms	Cheek Muscle
Tissue	Group of cells with a similar structure and function	Glandular Epithelial
Organ	A group of tissues performing specific functions	Stomach Pancreas
Organ system	A group of organs which work together to form organisms	Digestive system

3. Enzymes			
1	Enzyme	A biological catalyst. One type of enzyme does one specific reaction	
2	Active site	The area of the enzyme with the specific shape to make the reaction happen with the substrate(s)	
3	Substrate	The chemical(s) which are involved in the enzyme catalysed reaction	
3		Products	Denature
2		Caused by:	When an enzyme has its shape changed so it no longer works
1	Enzyme-substrate complex		Temperature • pH

2. Digestive System

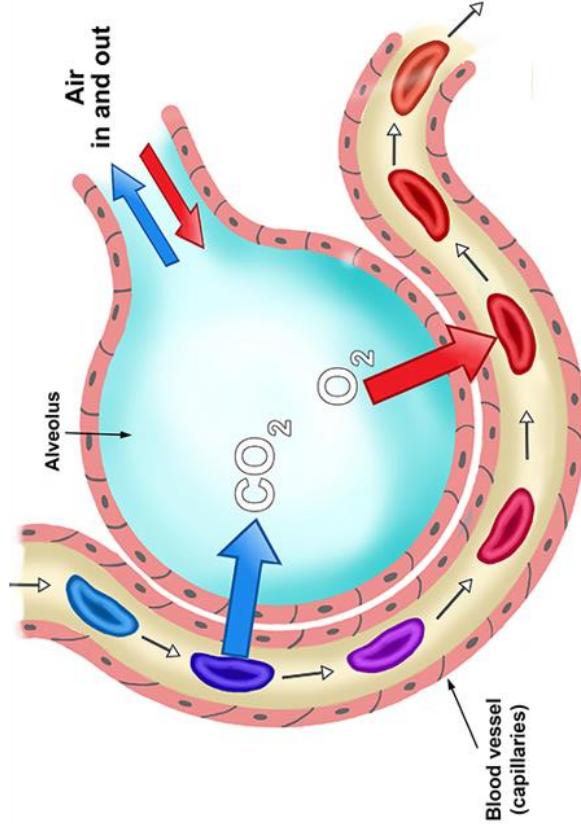
Mouth: mechanical breakdown/chew food	G	Appendix: useless organ which harbours bacteria (good and bad)
Oesophagus (gullet): push chewed food to stomach	H	Salivary Glands: produce saliva with amylase enzymes to breakdown starch
Liver: makes bile	I	Stomach: Partial digestion of food/mechanically churns food with HCl and protease enzymes
Gall Bladder: stores bile which breaks down fats (lipids) and neutralises the HCl(stomach acid)	J	Large Intestine: re-absorption of water
Pancreas: production of digestive enzymes	K	Rectum: muscular section of the large intestines
Small Intestine: absorption of small soluble particles	L	Anus: where faeces leaves the body



3. Types of enzyme

Name	Breaks down	Into	Produced in
Carbohydrase (eg amylase)	Carbohydrates (eg starch)	Simple sugars	Mouth Pancreas Small intestine
Protease	Protein	Amino acids	Stomach Pancreas Small intestine
Lipase	Fats (lipids)	Fatty acids and glycerol	Pancreas Small intestine

5. Adaptation to gas exchange: Alveoli

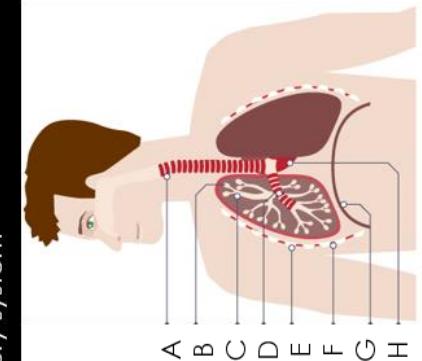


Thin walls	Capillary wall one cell thick
Moist layers	From mucus in alveoli
Large surface area	Many alveoli
High concentration gradient	Blood enters with low O ₂ and high CO ₂

Name	Breaks down	Into	Produced in
Carbohydrase (eg amylase)	Carbohydrates (eg starch)	Simple sugars	Mouth Pancreas Small intestine
Protease	Protein	Amino acids	Stomach Pancreas Small intestine
Lipase	Fats (lipids)	Fatty acids and glycerol	Pancreas Small intestine

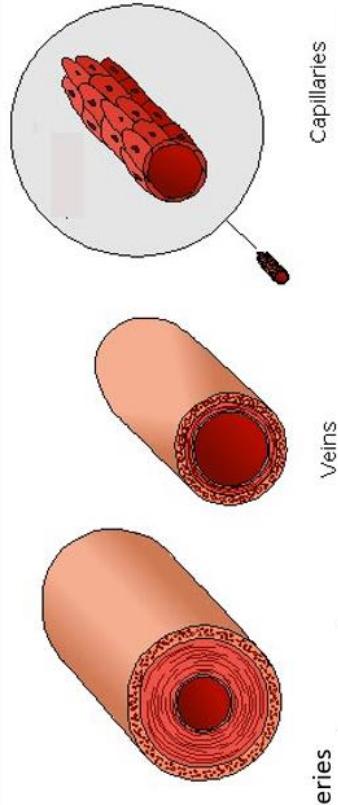
4. Respiratory system

A	Trachea
B	Alveoli
C	Bronchiole
D	Right bronchus
E	Ribs
F	Intercostal muscles
G	Diaphragm
H	Heart

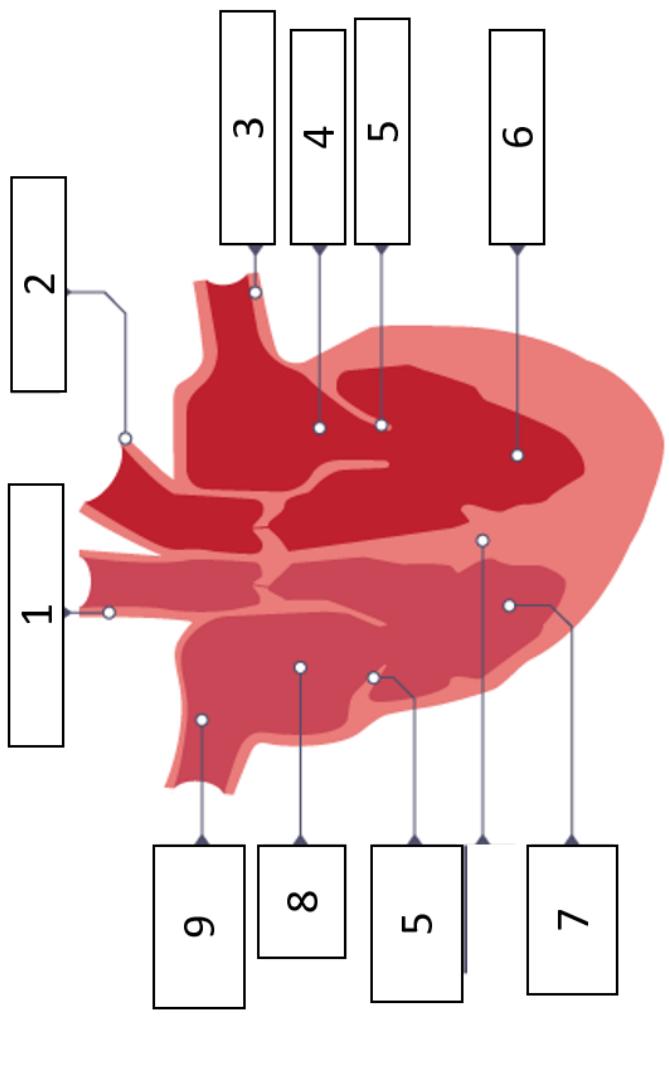


6. Blood vessels

Name	Lumen (hole) size	Walls	Muscles
Arteries	Small	Thick	Yes
Veins	Large	Thin	No
Capillaries	Very small	1 cell thin	No



7. The heart	
1 Pulmonary artery	Carries deoxygenated blood to the lungs
2 Aorta	Carries oxygenated blood to the body
3 Pulmonary vein	Brings oxygenated blood from the lungs
4 Left atrium	Pushes blood to left ventricle
5 Heart valve	Prevents backflow of blood
6 Left ventricle	Pumps blood to body
7 Right ventricle	Pumps blood to lungs
8 Right atrium	Pushes blood into right ventricle
9 Vena cava	Brings deoxygenated blood from body



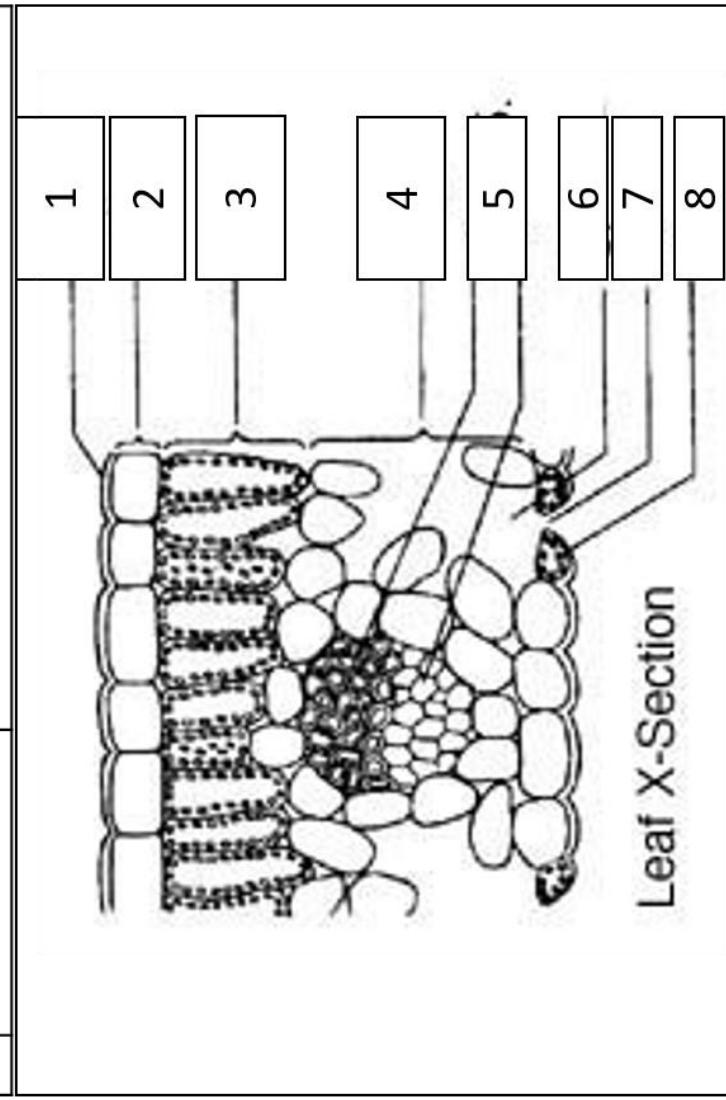
Remember – *VAVAVAVA* for the structure of the heart and path the blood flows!

8. Blood	
Component	Function
Red blood cell	Carries oxygen
White blood cell	Fights infection
Platelets	Blood clotting
Plasma	Liquid that contain the other components and dissolved substances like urea

9. Coronary heart disease (CHD)	When fatty material builds up and stops the flow of blood to the heart muscle
Coronary arteries	The arteries that supply the heart muscle
Stent	A mesh tube used to keep the coronary arteries open
Statins	Drugs used to reduce blood cholesterol preventing (CHD)
Faulty valve	When the blood flows in the opposite direction through the heart. Will need replacing with biological or mechanical valve
Heart transplant	When a donor heart is used to replace a faulty heart
Artificial heart	Short term mechanical heart used while waiting for a transplant

10. Health issues	
Health	A state of physical and mental well-being
Disease	An abnormal condition that gives specific symptoms
Communicable disease	A disease which can be transferred
Non-communicable disease	A disease which can not be transferred
Lifestyle factors	Factors which can increase the chances of developing a non-communicable disease (eg smoking, diet, drugs, carcinogens)
Carcinogen	A substance which increases the risk of developing cancer
Cancer	A group of cells that divide uncontrollably
Benign tumour	A type of cancer contained within one area. It does not invade other parts of the body
Malignant tumour	A type of cancer which can invade other tissues and cause secondary tumours

11. Leaf structure and functions		
	Name	Function
1	Waxy cuticle	Protective layer
2	Epidermis	Prevents water loss
3	Palisade mesophyll	Contains a lot of chloroplasts. Site of photosynthesis
4	Spongy mesophyll	Full of air spaces to allow oxygen and carbon dioxide to diffuse
5	Vein	Contains xylem and phloem
6	Air space	Allows gases to pass through
7	Stomata	Hole for gases to move in and out of the leaf
8	Guard cells	Control the opening of stomata



Leaf X-Section

12. Plant veins

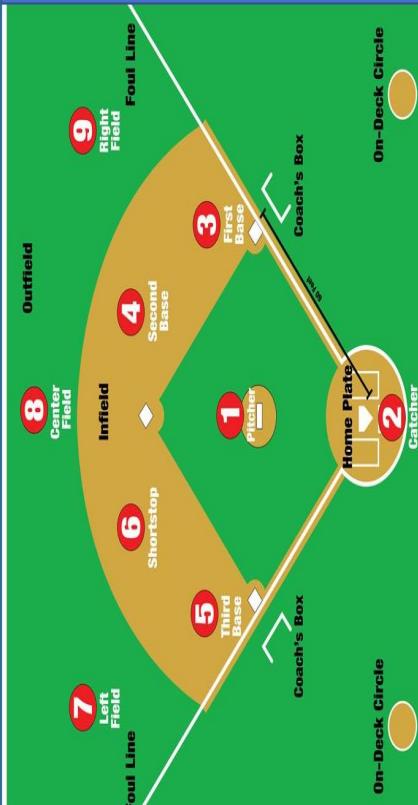
Name	Carries	Direction	Name of process
Xylem	Water and mineral ions	From roots to leaves	Transpiration
Phloem	Sugar ('food')	From leaves to roots	Translocation

13. Factors affecting transpiration

Factor	Affect of increasing factor	Reason
Temperature	Increases transpiration	Water evaporates and diffuses faster
Humidity (amount of water in air)	Decreases transpiration	Less space in air around leaf for water to diffuse into
Air movement	Increases transpiration	Concentration gradient maintained
Sunlight	Increases transpiration	Stomata are open to let in CO ₂ so more water escapes

SOFTBALL

Look at the image on the right.
Draw the softball playing area out and mark the areas using your memory



Game Overview

OFFENSE (BATTING): Each batter has three chances ('strikes') to hit the ball, which must be thrown by the Pitcher through the **'strike zone'**. If the batter hits, they run to First Base, unless the ball goes outside the Foul Lines (a 'foul ball'), which counts as a strike (except as a third strike), or if the ball is caught in the air (an 'out'). If they make it to first base, or beyond, before the defense throws the ball there, they are **'safe'**. Batters are entitled to proceed directly to first base (known as a 'walk') if the Pitcher throws four bad pitches ('balls'), which they do not swing at, or if a pitch hits the batter.

OFFENSE (RUNNING): The player on a base is called a '**'runner'**'. Only one runner can be safe on each base, so they must advance if there are runners approaching behind them. A player who comes up to bat can advance the runners by hitting the ball or taking a 'walk'. If the runner is touched ('tagged') with the ball between the bases, they are out. Players score when they reach Home Plate safely. If the ball is hit over the fence touch the ball between the bases, they are out. Players score when they reach Home Plate safely. If the ball is hit over the fence

Strike Zone

(a 'home run') then the batter, and all runners, proceed around to Home Plate.

DEFENSE: The defense uses a variety of techniques to try and prevent the offense from scoring. The Pitcher tries to get batters out by throwing three 'good' pitches that the batter is unable to hit. If a hit is made, the defenders try to prevent the batter from making it to first base, either by catching the ball in the air or throwing the ball to First Base before the batter reaches it. If the Batter makes it to First Base or beyond, they try to tag them with the ball between bases. Alternatively, they may throw the ball to a base that a runner has been forced to advance toward by another runner behind them, getting them out. Once the defense makes three outs, they become the offense.



Batting technique

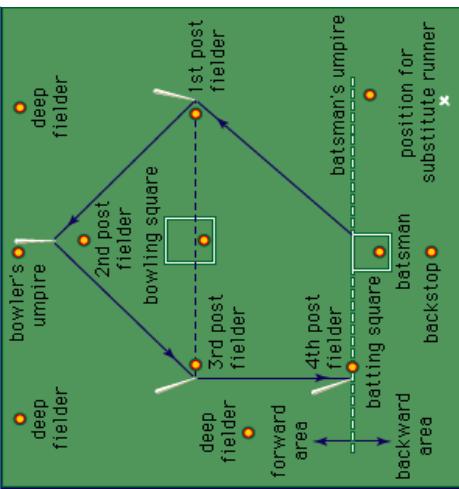
- If the ball is hit backwards in rounders, how many bases can the batter run?
- How many points is a full rounder?
- List 4 possible ways of being out in both softball and rounders

Batting technique

If the batter reaches the 2nd or 3rd post in one hit he scores half a rounder. Batter reaching the 4th post in one hit scores a full rounder. Runner reaching the 4th post on a no ball scores 1 rounder.

ROUNDERS

Look at the image below.
Draw the softball playing area out and mark the areas using your memory



- If the ball is hit backwards in rounders, how many bases can the batter run?
- How many points is a full rounder?
- List 4 possible ways of being out in both softball and rounders

- True or False:
- When playing softball ou can be caught out on a foul ball?
 - There are only 2 scoring methods in rounders
 - You can not be tagged out in softball



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