

Knowledge



Name _____

Form _____





"The best advice I ever got was that knowledge is power and to keep reading."

David Bailey

(research 10 facts about David Bailey)

Year 8 Knowledge Organiser: Term 2A

Instructions for using your Knowledge Organiser

The timetable on the next page tells you which subjects you should be studying on which days (**it doesn't matter if you have that subject on that day or not, you should follow the timetable**).

You are to **use your exercise book** to show the work you have done. Each evening you should **start a new page** and **put the date clearly at the top**.

You need to **bring your KO and exercise book with you EVERY DAY** to school. Your KO and exercise book will be checked regularly in form time.

You will also be tested in your lessons on knowledge from the organisers.



You must use the revision strategy **Look - Say - Cover - Write - Check** to learn the knowledge. You can also use your KOs and book in a number of different ways but you **should not just copy** from the Knowledge Organiser into your book.

Presentation

You should take pride in how you present your work:

- Each page should be **clearly dated at the top right hand side** with the **Subject written in the middle e.g. English**.
- Half way down the page **a line should divide it in two** with **Next Subject e.g. Maths written above** the dividing line.
- Each half of the page should be **neatly filled with evidence of self-testing**. There should be an appropriate amount of work.
- **Failure to show pride in your presentation** or **wasting space on your page** with large writing or starting a number of lines down **will result in a negative ATL**.



Year 8 Knowledge Organiser Homework Timetable

You are expected to **study the subjects shown on your timetable each day**. You need to **spend 20 minutes on each subject** and you will need to **evidence your work in your exercise book**.

WEEK A	Subject 1	Subject 2	Subject 3
MONDAY	English	Spanish	Geography
TUESDAY	Science	Maths	PD
WEDNESDAY	History	Music	Science
THURSDAY	RE	Maths	Food
FRIDAY	Computing	Technology	English

WEEK B	Subject 1	Subject 2	Subject 3
MONDAY	English	Drama	Geography
TUESDAY	Science	Maths	RE
WEDNESDAY	History	PE	Science
THURSDAY	RE	Maths	Spanish
FRIDAY	Computing	Art	English



Reading Log

"The more that you read, the more things you will know. The more that you learn, the more places you'll go"

Dr Seuss

Use this reading log to record the books you read and how long you have spent reading.

Week	MON	TUE	WED	THURS	FRI	SAT	SUN	Book(s) read (title and author)	Time spent reading	Parent comment/signature
Week 1										
Week 2										
Week 3										
Week 4										
Week 5										



Poetry is literary work in which the expression of feelings and ideas is given intensity by the use of distinctive style and rhythm; poems collectively or as a genre of literature.

Key words:

- Feelings/emotions
- Perspective
- Message
- Interpretation
- Analyse
- Infer
- Theme

Poetic techniques:

- **Simile** - comparing two things using as or like.
- **Metaphor** - describing something to be something else.
- **Personification** - giving something non human, a human quality.
- **Alliteration** - a series of words starting with the same letter/sound.
- **Rhyme** - two or more words that have the same sound at the end.
- **Stanza** - a verse within poetry.
- **Structure** - how a poem is put together.



When writing about poetry remember to:

Use evidence:

Use precise evidence to support your ideas and try to embed your quotes where possible.

Use specific language when zooming in:

Break down longer quotes to explore individual words and techniques.

- This noun/verb/adjective implies
- This metaphor gives the impression that
- The use of simile here shows

Tentative language when zooming out:

Use modal verbs like 'might' or 'could' to build a more critical argument.

- The poet might be attempting to.....

Be as specific as possible about how the poetic techniques affect the reader.

Avoid using phrases like:

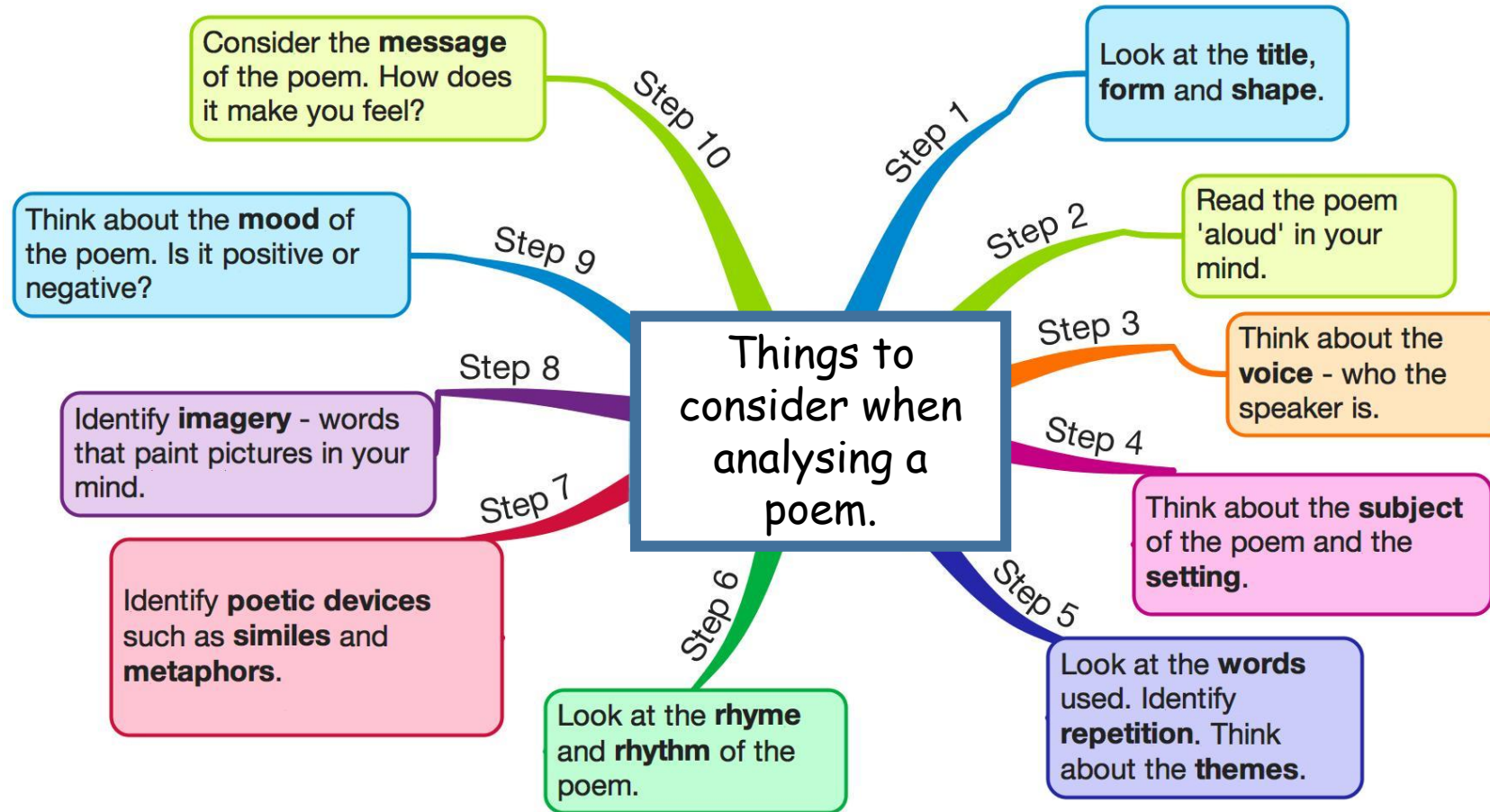
- 'Gives the reader an image'
- 'Sticks in the reader's head'
- 'Has an effect on the reader'

What is Poetry?

- ❖ a type of literature that expresses ideas, feelings, or tells a story in a specific form
- ❖ the art of expressing one's thoughts in verse
- ❖ Uses few words to convey its message
- ❖ Arouses our emotions
- ❖ Poems use imagery or figures of speech to explain feelings or to create a mental picture or idea
- ❖ Suggest action or mood
- ❖ Many poems have a specific rhyme scheme using lines and stanzas
- ❖ Poems can rhyme or not rhyme



Analysing and comparing poems



Comparing poems:

Consider the differences and similarities -

- Do the poems use the same techniques?
- Do the poems share the same feelings?

Themes? Ideas?

- Are they the same type of poem?
- Are they structured in the same way?

Similarities:	Differences:
Likewise	However
Similarly	On the other hand
In the same way	Whereas
As well as	Although
	In contrast



Year 8 Maths - Term 2A

TOPIC - Problem solving at St Cuthbert's.

**K
L
A
P
S**

Key information. Highlight the important information you will need.

List the maths. What maths topic do you need to use. Write them down.

Attach numbers. Relate the problem to one you can already do. E.g $3 \times 4 = 12$.

Picture. Label the diagram with any information that can help you. Draw a picture to help you visualise the problem.

Sensible. Check! Does your answers make sense?

Don't forget

Always show your working out
Never round half way through a question

Keywords:

Sequence	A particular orders in which related things follow each other
Generate	Create a sequence of items by following a particular mathematical sum
Squared	A number multiplied by itself
Percentage	A proportion or share in relation to the whole value
Term	A single number or variable, or several numbers or variables
Indices	How many times to use the number in a multiplication (singular form is index)
Cubed	The number you get when you multiply the square of the number by itself
Equivalent	Something like or equal to something else in number, value or meaning



Sequences

A sequence is a list of things (usually numbers) that go in order, and there is a rule to determine what the next one in the pattern will be.

Sequence:



In an Arithmetic sequence, the different between each of the terms is constant.

1, 4, 7, 10, 13, 16, 19, 22, 25...

This sequence has a difference of 3 between each number

Nth Term

The sequence below has the general rule (Nth term) of $3n-2$
1, 4, 7, 10, 13, 16, 19, 22, 25...

Because the constant difference is 3, we know that it relates in some way to the 3 times table, and then we need to -2, to adjust to the sequence given.

If we know the Nth term we can generate any term we need, by submitting a number for n

So the 100th term in $3n-2$ would be:
 $3 \times 100 - 2 = 298$

Indices

To manipulate expressions involving indices we use rules known as laws of indices. The laws should be used precisely as they are stated-do not be tempted to make up variations of your own.

Rule	Example
$a^m \times a^n = a^{m+n}$	$2^5 \times 2^3 = 2^8$
$a^m \div a^n = a^{m-n}$	$5^7 \div 5^3 = 5^4$
$(a^m)^n = a^{m \times n}$	$(10^3)^7 = 10^{21}$
$a^1 = a$	$17^1 = 17$
$a^0 = 1$	$34^0 = 1$
$\left(\frac{a}{b}\right)^m = \frac{a^m}{b^m}$	$\left(\frac{5}{6}\right)^2 = \frac{25}{36}$
$a^{-m} = \frac{1}{a^m}$	$9^{-2} = \frac{1}{81}$
$a^{\frac{x}{y}} = \sqrt[y]{a^x}$	$49^{\frac{1}{2}} = \sqrt{49} = 7$

Fractions, Decimals and Percentages

Fractions, decimals and percentages are all ways of expressing parts. Below the table shows how to convert between 3 different formats

	divide the top by the bottom		x 100	
FRACTIONS	=	DECIMALS	=	PERCENTAGES <small>(out of one hundred)</small>
$\frac{1}{4}$	=	0.25	=	25%
$\frac{3}{5}$	=	0.6	=	60%
$\frac{2}{5}$	=	0.4	=	40%

Key Facts

This table shows some of the key equivalencies that you will need to know. Notice that $\frac{1}{3}$ is a recurring decimal, and so the equivalent percentage is also written as a recurring number

Decimal	Percentage	Fraction
0.5	50%	$\frac{1}{2}$
0.25	25%	$\frac{1}{4}$
0.75	75%	$\frac{3}{4}$
0.2	20%	$\frac{1}{5}$
0.1	10%	$\frac{1}{10}$
$0.\dot{3}$	$33.\dot{3}\%$	$\frac{1}{3}$



Using a Calculator:

Convert 62% to a decimal = 0.62

Then multiply by 350

Both methods are valid, but remember you might be asked to work out a percentage of an amount on a Non Calculator Paper, and some questions might be too complex and a calculator will come in handy!

Percentages

When finding the percentage of an amount by hand, there are 3 key facts that you need:

Percentage	Equivalent Fraction	To find %
50%	$\frac{50}{100} = \frac{1}{2}$	Divide by 2
10%	$\frac{10}{100} = \frac{1}{10}$	Divide by 10
1%	$\frac{1}{100}$	Divide by 100

Using this we can now find out any %
Find 62% of 350

$$50\% = 175$$

$$10\% = 35$$

$$1\% = 3.5$$

$$2\% = 7$$

Add these values together to make 62% = 217

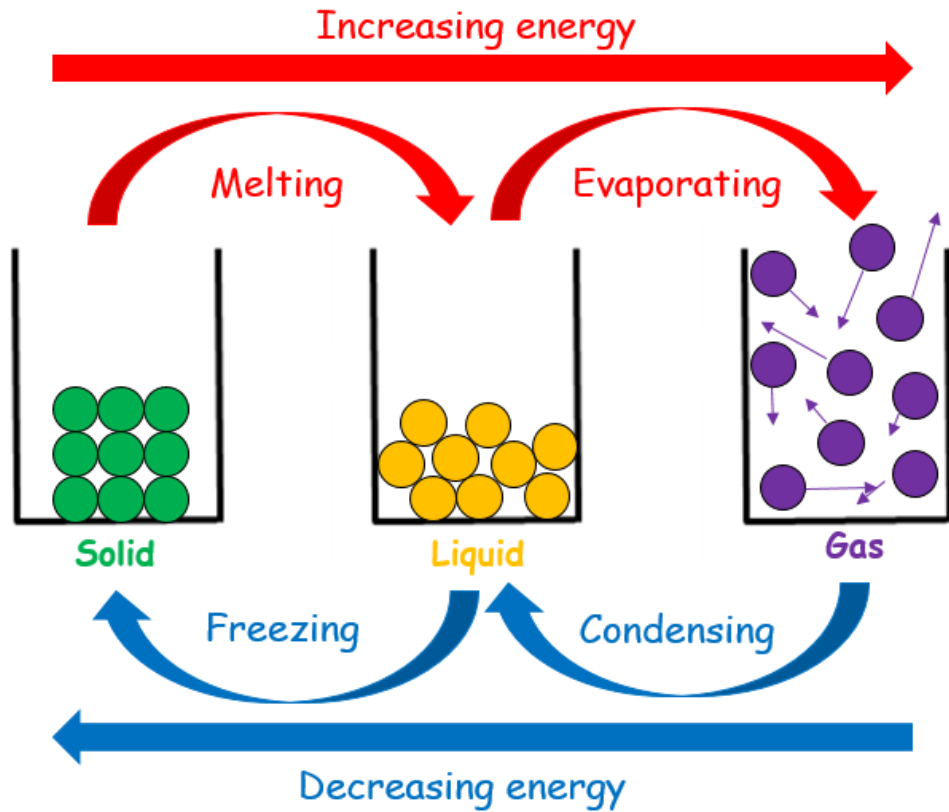


Key Words

Solid	State of matter where the particles are packed closely together in fixed positions.
Liquid	State of matter where particles are close together in a random arrangement.
Gas	State of matter with large volumes of space between particles.
Melting	Change of state from a solid to a liquid.
Evaporation	Change of state from a liquid to a gas.
Freezing	Change of state from a liquid to a solid.
Condensation	Change of state from a gas to a liquid.
Sublimation	Change of state from a solid directly to a gas.
Deposition	Change of state from a gas directly to a solid.
Volume	The amount of space that an object or substance occupies.
Thermal energy store	Energy stored in an object due to its temperature.
Kinetic energy store	Energy stored in an object due to its motion.



States of Matter



Solid ■

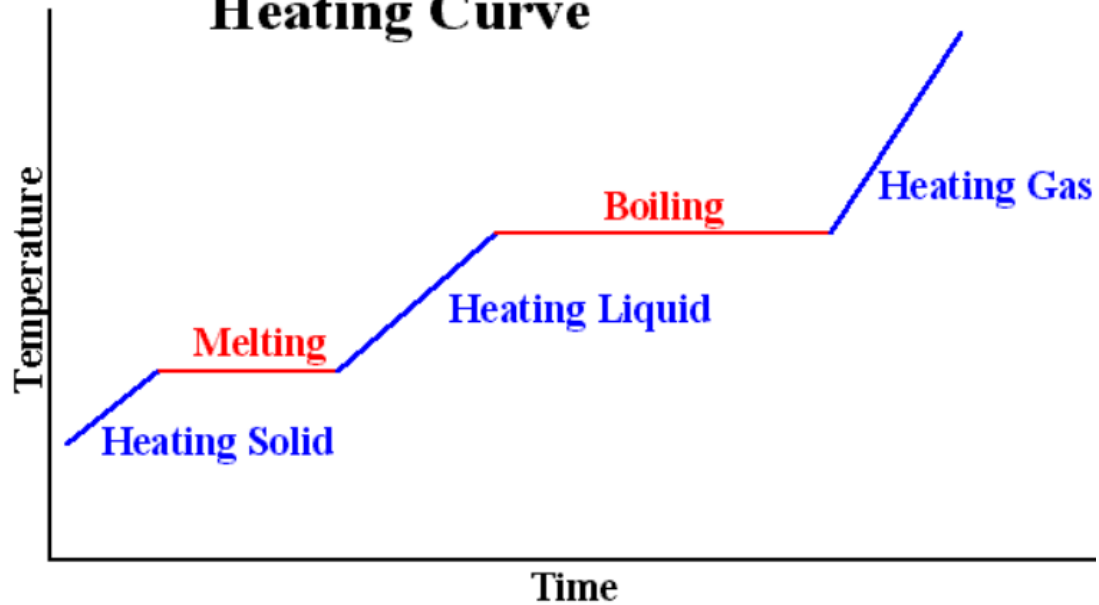
Liquid ■

Gas ■

Particles move in random directions and speeds	Has a fixed volume and a fixed shape.	Flows easily spreading out into open spaces.	Can be easily compressed (squashed)
Cannot be compressed (squashed).	Has a fixed volume, but not a fixed shape.	Can flow and take the shape of its container.	Particles vibrate in a fixed position.
Does not have a fixed volume or a fixed shape.	Does not flow.	Strongest forces of attraction between particles	Weakest forces of attraction between particles

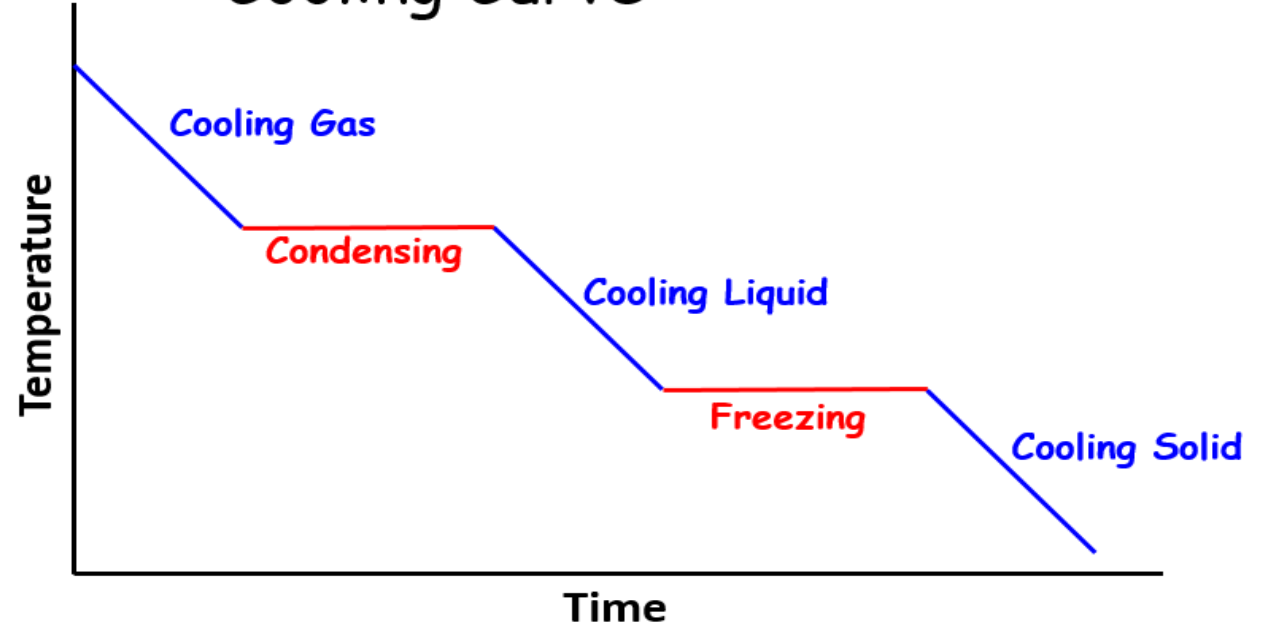


Heating Curve



Overall temperature increase in the substance

Cooling Curve

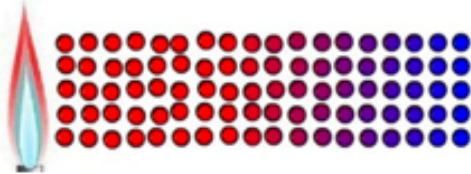
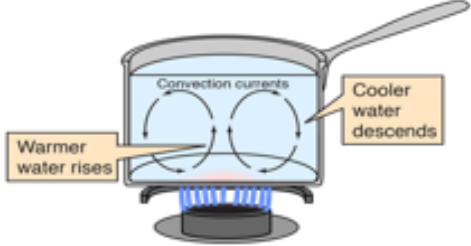
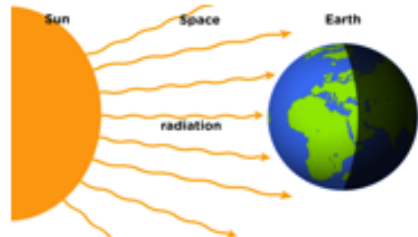


Overall temperature decrease in the substance

The **blue lines** indicate where the change in energy store is being used to change the temperature of the substance. The **red lines** indicate where the change in energy store is being used to change the state of the substance.



Methods of Heating

Method	Definition	Diagram	Example
Conduction	The transfer of heat by direct contact and vibrations from a hotter object to a cooler one.		Touching a hot saucepan and burning your finger.
Convection	The transfer of heat by fluid motion from a hotter object to a cooler one.		A radiator heating a room on a cold day.
Radiation	The transfer of heat by waves from a hotter object to a cooler one.		The sun warming us in the morning.



Types of energy	Store or transfer	Description of store or method of energy transfer
Gravitational	Store	Any object above ground level has energy in this store.
Thermal	Store	All objects have energy in this store.
Kinetic	Store	An object that is moving stores this energy.
Chemical	Store	If a chemical reaction releases energy then it's in this store.
Nuclear	Store	The nucleus of an atom releases energy from this store.
Elastic	Store	Any stretched object has energy in this store.
Electrostatic	Store	Two objects that have charges have energy in this store.
Magnetic	Store	Two magnets have this store of energy.
Radiation	Transfer	This happens when energy is transferred by wave.
Electrical	Transfer	This happens when a moving charge does work.
Heating	Transfer	When energy is transferred from different temperature objects.
Mechanical	Transfer	This occurs when force does work on an object.



Energy Efficiency

The energy efficiency of a device can be calculated using the following formula:

$$\text{Energy Efficiency} = \frac{\text{Useful Output Energy}}{\text{Total Input Energy}}$$

$$\text{Energy Efficiency} = \frac{\text{Useful Power Output}}{\text{Total Power Input}}$$

Equation for Specific Heat Capacity

$$E = m \times c \times \theta$$

- E is the energy transferred in joules, J
- m is the mass of the substances in kg
- c is the specific heat capacity in J / kg °C
- θ ('theta') is the temperature change in degrees Celsius, °C

Key Words

Specific heat capacity	Energy needed to raise the temperature of 1kg of a substance by 1°C
Efficiency	The proportion of energy converted usefully
Mass	How much matter an object is made of
Power	The rate of energy transfer



Year 8 Religious Education - Term 2A: What was Jesus' message for us?

Big Questions:

- What do we learn about God, and ourselves from Jesus' parables?
- What was Jesus' message in the Sermon on the Mount? How can it be lived out by us?
- How did Jesus treat the marginalised in society, and how can we follow his example?
- Why and how was Jesus tempted, and why is this story important today?



Key words	Definition
Incarnation	'made into flesh' - Jesus is the incarnation = God made into flesh / a human
miracles	Events that cannot be explained by science; they are believed to be the work of God. Jesus performed many miracles.
parable	An earthly story with a heavenly meaning. Jesus taught in parables.
ministry	The time Jesus spent teaching, preaching and healing
Lent	The time in the liturgical year when Christians remember when Jesus was tempted in the desert. It is the 40 days which end on Holy Thursday
Sermon on the Mount	Wide ranging teaching of Jesus, found in Matthew's Gospel; it contains the beatitudes , and the Our Father / Lord's Prayer

Section 1:

Jesus taught in parables. These are earthly stories with a heavenly meaning. Jesus used examples and situations that his audience would have been familiar with. The parables teach Christians about Jesus and also about humans and our relationships with God and each other.

Section 2:

A very important piece of teaching of Jesus' is in Matthew's Gospel. It is called the Sermon on the Mount. Jesus sets out how we should treat other people - his teaching is very challenging.

The Sermon on the Mount also contains the Beatitudes. This word comes from the Latin 'beatus' meaning blessed. They explain which groups of people are blessed, or close to God- some of them are surprising.

This is when he gives his disciples the Our Father / Lord's Prayer.

THE LORD'S PRAYER

Our Father,
Who art in heaven,
Hallowed be Thy Name.



Section 3:

Jesus is a really important role model for Christians. Jesus spent time with the outcasts of society - the marginalised people. Today Christians try follow his example.

After his baptism, and before he began his ministry the gospels tell us the Jesus spent time in the desert. During this time he was tempted. The 'temptations of Jesus' tell us a lot about what Jesus was like, and what his mission was. It is a really important story for Christians today, which is remembered during the period in the liturgical year called 'lent'.

Complete the learning homework for each week; work in your yellow book		Jan 22nd 2024	Section 2 & SOWAA 2 and 3
Jan 8th 2024	Key words and definitions	Jan 29th 2024	Section 3
Jan 15th 2024	Section 1 & SOWAA 1	5th Feb 2024	SOWAA 4 and 5

Sources of Wisdom and Authority (SOWAA)

(1) The parable of the sheep and the goats; Matthew 25: 31-46

The parable of the lost son; Luke 15:11-32

this son of mine was dead and is alive again; he was lost and is found

The parable of the Good Samaritan; Luke 10: 25-37 'love your neighbour as yourself'

(2) The Beatitudes; Matthew 5: 3-12

Blessed are ... those who mourn for they shall be comforted'



(3) The Sermon on the Mount; Matthew 5-7

"Do not think that I have come to abolish the Law or the Prophets; I have not come to abolish them but to fulfill them....

...You have heard that it was saidBut I say to you

"This, then, is how you should pray:

'Our Father in heaven,
hallowed be your name,



.....When Jesus had finished saying these things, the crowds were amazed at his teaching, ²⁹ because he taught as one who had authority, and not as their teachers of the law.

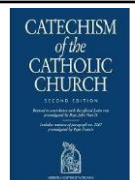
(4) Jesus is tempted ; Luke 4: 1-13

And Jesus, full of the Holy Spirit, returned from the Jordan and was led by the Spirit in the wilderness for forty days, being tempted by the devil.....And Jesus answered him, "It is said, 'You shall not put the Lord your God to the test.'



(5) Christ reveals himself as God's Servant, totally obedient to the divine will.....

By the solemn forty days of Lent the Church unites herself each year to the mystery of Jesus in the desert. **Catechism**



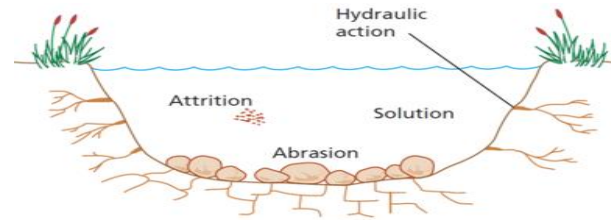
Year 8 Geography - Term 2A: Rivers

Key Vocabulary...

River	A river is a natural flowing watercourse, usually freshwater, flowing towards an ocean, sea, lake or another river.
Long Profile	The shape of the river and its gradient from the source to the mouth.
Erosion	Erosion is the process that breaks things down.
Transportation	The process of carrying or moving sediment downstream.
Deposition	Dropping or settling of sediment.
Flood	Flooding occurs when the river bursts its banks overflowing onto the area surrounding the channel.
Flood Defenses	Management strategies used to protect people and land from flooding.

4 Processes of Erosion

Hydraulic action	This is when the force of water erodes softer rock.
Abrasion	This is when large pieces of bedload material wear away the river banks and bed.
Attrition	This is when the bed load itself is eroded when sediment particles knock against the bed or each other and break, becoming more rounded and smaller.
Solution	This is when finer sediment is dissolved and eroded by the minerals in the water.

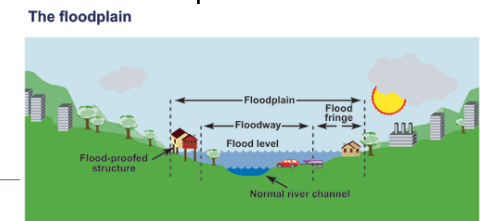


Flood Defences...

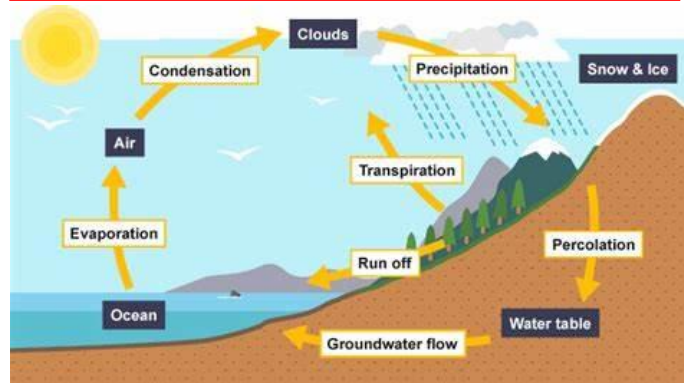
Using man-made structures to change the course of the river in order to prevent it flooding. For example: **Dams, Levees, Channel Straightening**



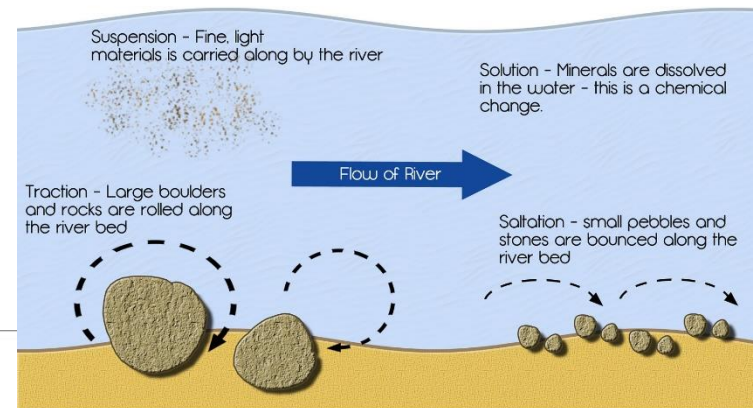
Returning a river to its natural form in order to protect places from flooding. For example: **Flood Plain zoning, river restoration**



Water Cycle



4 Processes of Transportation

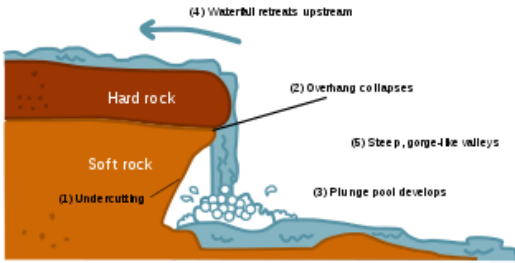


Activity: Preparing for a flood is vital to protect people. Create an information leaflet describing the best way for people to prepare for a flood. Why is it more important than ever for people to have this knowledge?



St Cuthbert's Catholic High School
Live life in all its fullness

Waterfall



Formation of a waterfall:

- The soft rock erodes more quickly, **undercutting** the hard rock.
- The hard rock is left **overhanging** and because it isn't supported, it eventually collapses.
- The fallen rocks crash into the **plunge pool**. They swirl around, causing more erosion.
- Over time, this process is **repeated**, and the waterfall moves upstream.
- A steep-sided **gorge** is formed as the waterfall retreats.

Meander and oxbow lake



A meander is a bend in the river. Meanders usually occur in the middle or lower course and are formed by **erosion** and **deposition**. As the river flows around a meander, the fastest flow is around the outside of the bend. This creates erosion on the outside and deposition on the inside of the bend, which means that the meander slowly moves. If the meander moves so much that the bend becomes very large, the course of the river may change. The meander may be cut off and deposition fills the section that no longer flows. This forms an **ox-bow lake**.

Task...

Define the water cycle.

Name the 4 types of precipitation.

Explain the changes in a river as it moved downstream.

What effect will impermeable surface have on the risk of flooding?

Task...

1. Using the diagram of floodplain zoning. Discuss the advantages and disadvantages of this type of soft engineering.
2. Using the diagram below identify and state the advantages and disadvantages of this type of hard engineering.



Question: "Hard engineering flood management strategies are the most effective"
Evaluate this statement

1. **BUG** the question by boxing the command word and underlining the content you need to write about.
2. List the key vocabulary you will use.
3. Create a plan of what you would write in each paragraph.
4. Practice writing your answer from memory.

Year 8 History - Term 2A: English Civil War



1

Charles I became King of England in 1625 following the death of his father, James I. He married a French princess, Henrietta Maria. This caused concern among some MPs (Members of Parliament), who believed Charles had plans to make England a Catholic country again. England had been a Protestant country since the late 1500s, so this represented another big change after many years of religious upheaval. Charles also believed in the Divine Right of Kings. This was the belief that he had been put in charge of the country by God, so therefore did not need assistance from Parliament in order to make decisions.

2

The war was fought between two armies:

- The Parliamentarians, or 'Roundheads'. They were given this name because they had much shorter haircuts compared to the long, curly wigs worn by Charles and his supporters.
- The Royalists, or 'Cavaliers'. This name comes from the French term *chevalier*, which refers to a knight who rides a horse. The Parliamentarians originally used this term as an insult to the Royalists, but they eventually began to use it to refer to themselves.

There was a split in the country, with people supporting both sides.

Key word	Definition
Civil War	A war between citizens of the same country.
Tyranny	Cruel and unfair government or rule.
Regicide	The action of killing a king.
Execution	the carrying out of a sentence of death on a judged person.
Religion	An organised system of beliefs, ceremonies, and rules used to worship a god or a group of gods.
Protestantism	A form of Christian faith and practice. It began in northern Europe in the early 16th century and was adapted by England under Henry VIII.
Catholicism	Roman Catholicism is the oldest and largest branch of Christianity. The history of the Catholic church begins with the start of Christianity 2,000 years ago.
Puritanism	An extreme form of Protestantism. A religious movement in the late 16th and 17th centuries that wanted to 'purify' and remove any lasting parts of Catholicism from the church.
Parliament	A group of elected individuals who meet to discuss, create and pass legislation (laws).
Rebellion	Opposition (standing up to) to somebody or something in authority.
Revolution	A change in the way a country is governed/led. A significant change or development in a situation.

3



The Battle of Edgehill, 1642 4

The first time the Royalist and Parliamentary forces directly fought each other was at Edgehill, in Warwickshire. Neither side won a convincing victory. Both sides mainly had inexperienced soldiers, which made it difficult for anyone to win the war quickly.

1642 - 1645 5

Charles had some success in the first two years of the war, but the momentum changed when Parliament decided to form a more professional army. Thomas Fairfax became commander-in-chief of the troops and Cromwell was in charge of the cavalry.

The Battle of Naseby, 1645 6

By this time, the Parliamentarians has assembled the New Model Army. Thomas Fairfax led this new, professional army at Naseby. The Royalists were led by Charles and Prince Rupert. Naseby was a decisive victory for Parliament. The Royalists lost over 5,000 men. Much of their equipment and weapons were also captured. The extent of the defeat meant Charles did not have the resources to put up effective resistance. Charles fled to seek support from the Scots, but was handed over to Parliament in exchange for £100,000 in January 1647.



In 1649, King Charles I was put on trial for treason. He was found guilty and sentenced to death. Even though Charles had fought against Parliament, only 59 commissioners signed Charles' death warrant. 7

- Following the defeat of King Charles I in the English Civil Wars, and later his trial and execution, Oliver Cromwell became 'Lord Protector' in 1653.
- Cromwell was a Puritan, a strict Protestant, and made significant changes based on his beliefs.
- Following Cromwell's death, there was a growth in support for a return to monarchy. This led to the Restoration, which saw Charles II become king of England. 8





The Commonwealth

The Commonwealth is made up of 54 independent countries working together to pursue common goals that promote development, democracy and peace.

The Commonwealth spans the globe and includes both advanced economies and developing countries. It encompasses Africa (19 countries), Asia (8), the Caribbean and Americas (13), Europe (3), and the Pacific (11).

All members have an equal say, regardless of their size or economic status. This ensures that even the smallest countries have a voice in shaping the Commonwealth. In the past two decades, countries which have joined include Mozambique, Cameroon and Rwanda.

If you were a world leader write down 5 things you would prioritise, how you would do this and why.

Resources from:

https://thecommonwealth.org/sites/default/files/inline/Fast%20Facts%20on%20the%20Commonwealth_updated18052020%20-%20final_0.pdf

[https://kids.britannica.com/kids/article/European-Union/353111#:~:text=The%20European%20Union%20\(EU\)%20was,and%20the%20rights%20of%20citizens.](https://kids.britannica.com/kids/article/European-Union/353111#:~:text=The%20European%20Union%20(EU)%20was,and%20the%20rights%20of%20citizens.)



The European Union

The European Union (EU) was formed to bring together the countries of Europe. The EU helps its member countries with issues such as trade, security, and the rights of citizens. By 2013 the group had 28 member countries. However, in 2016, one member—the United Kingdom—voted to leave the EU. The country officially left the union on January 31, 2020.

After World War II the countries of western Europe wanted to avoid future wars. Some leaders thought that having their countries work together would help.

The EU currency, or form of money, is called the euro. It was introduced in 1999. Most member countries switched from their own currencies to the euro.

Some countries got into lots of debt and the other EU countries had to help to pay for this debt. Measures were put into place to prevent this from happening again.

In June 2016, 52% of the British public voted to leave the EU. Britain had to negotiate a deal and they eventually left on 31st January 2020 under Boris Johnson's leadership.



Tax:

Taxes are ways that the government can collect money from its citizens to pay for things that the people need, like schools and roads. We pay tax on the things we buy and we contribute when we start to earn money.

[Watch this - Taxes](#)





Analytical Cubism

Analytical Cubism - 1908-12—was about breaking down an object (like a bottle) viewpoint-by-viewpoint, into a fragmentary image. The subject was broken down into flattened planes and sharp angles with a limited colour palette.



As well as painting in the 'Cubist style', Picasso also created sculptures from his explorations of Still Life objects. Here the Cubist influence can clearly be seen in his cardboard sculpture of a guitar. This is something that we will be looking at further in class.



Cubism

Cubism is a style of painting that was developed in the early 1900s. Cubist paintings show objects from many angles at once. Three main artists, **Pablo Picasso** and **Georges Braque**, and **Juan Gris** developed Cubism. They believed that painters should not just present realistic views of subjects. These painters presented artworks which contained many viewpoints on the same 2D picture plane. This revolutionised the Art world and changed the idea of what art 'should look like' and what it should be about. The focus now moving away from realistic representation.





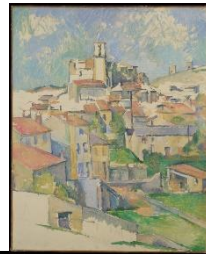
Synthetic Cubism

From around 1912 **Braque**, **Picasso**, and **Gris**, started to use simpler shapes and lines and brighter colours in their artworks. They also began to add **textures** and patterns to their work, often collaging **newspaper** or other patterned paper directly into their paintings. This approach was called **synthetic cubism**.

Influences

The invention of photography in 1839 had a major impact upon the art that was made from that point on. Artists were no longer required to capture a likeness of a person (portrait) and everyday scenes could now be recorded by a camera.

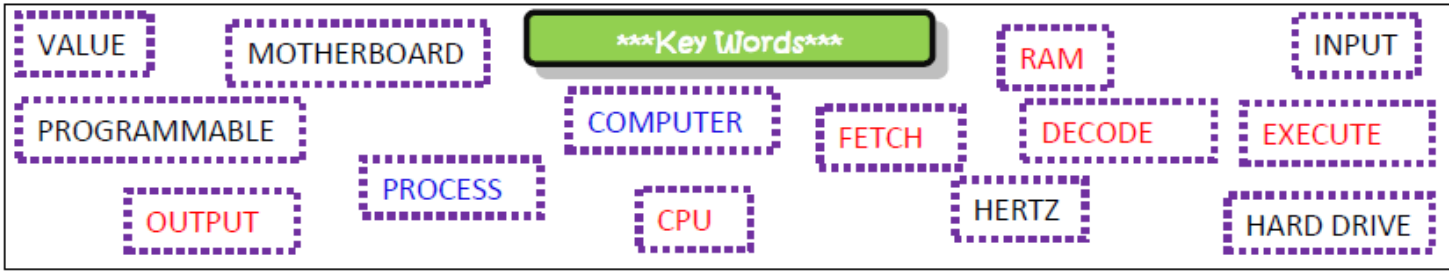
So artists moved away from realistic representations and towards more abstract styles. **Paul Cezanne** was a major influence on the three main Cubist artists, **Pablo Picasso**, **Georges Braque** and **Juan Gris**. He believed that the world could be simplified down into basic shapes. As can be seen in these two landscapes.



Word	Meaning
Abstract	Art that does not attempt to represent external reality, but rather seeks to achieve its effect using shapes, colours, and textures.
Geometric	Art which uses regular lines and shapes.
Simplify	To make something simple and less complicated.
Repetition	Anything that is repeated.
Analytical	Looking carefully at something to see all of its parts.
Synthetic	To synthesize or bring together different elements .



Computer Hardware



1. Parts of a computer you need to know

CPU – The 'brain' of the computer. It does all the processing – *all the thinking!*

RAM – This is where programs are loaded when they are open – think of this as the CPU's '*work station*'.

Hard Drive (Hard Disk) – This is the long term storage for programs and files.

Input Device – A device which sends data to the CPU

Output Device - A device which receives information from the CPU

2. What you need to know about the CPU

Stands for **C**entral **P**rocessing **U**nit.

It is placed on the **motherboard**.

A computer system could not function without one.

The CPU will **FETCH** instructions, **DECODE** instructions, **EXECUTE** instructions.

The speed of the CPU is measure in **HERTZ**, **MEGAHERTZ** and **GIGAHERTZ**

Software

What is Software?

Software is a computer program that provides the computer with a set of instructions telling the computer what to do and how to do it.

There are three types of Software:

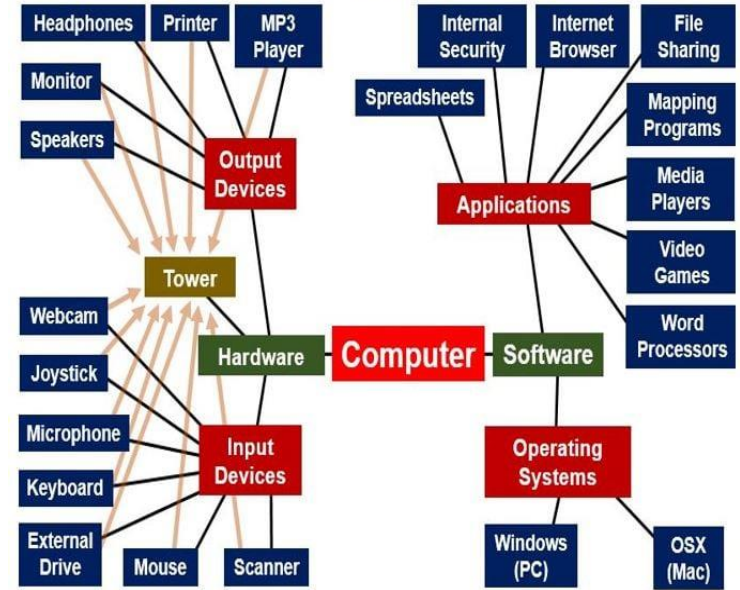
1. Operating Systems
2. Applications Software
3. Utilities



What is hardware and software?

Hardware is the physical parts of the computer and software is the programs that run on a computer.

Hardware vs. Software



What is an Embedded System???

➔ An **Embedded system** is a microprocessor/microcontroller based smart system, constituted of both hardware(electronics must) & software (programming) and designed to perform a set of tasks.



Key vocabulary	Definition
Standard components	An individual part or component, manufactured in thousands or millions, to the same specification.
Microcontroller	A compact integrated circuit designed to govern a specific operation in an embedded system.
Automation	The use of technology to perform tasks with reduced human assistance.
Integrated circuit (IC)	Is an electronic device comprising numerous functional elements such as transistors, resistors, condensers, etc. on a piece of silicon semiconductor.
Alloy	Is a metallic substance composed of two or more elements, as either a compound or a solution.
Iterative design	A design methodology based on a cyclic process of prototyping, testing, analysing, and refining a product or process.
Anthropometrics	The systematic measurement of the physical properties of the human body.
Ergonomic	Relating to or designed for efficiency and comfort in the working environment.
Technology push	When research and development in new technology, drives the development of new products.
Non-finite resource	Are found naturally and can be replaced. Examples include wood, cotton and renewable energy sources such as solar and wind.

Electronics

Scan the QR code to watch a tutorial about Electronics.



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

How to Line Bend

Line Bending

Heat until soft → Bend → Hold until cool

Strip Heater

A piece of thermoplastic sheet material is placed on the strip heater. It is heated until the plastic becomes soft and floppy.

Resistors

FOUR BAND RESISTOR - LOWER TOLERANCE

FOUR COLOUR BANDS

1st BAND	2nd BAND	MULTIPLIER	TOLERANCE	
YELLOW 4	VIOLET 7	RED 00	RED +/-2%	4K7 +/-2%
GREEN 5	BLUE 6	BLACK NONE	GOLD +/-5%	65R +/-5%
BROWN 1	GREY 8	GREEN 00000	SILVER +/-10%	1M8 +/-10%
ORANGE 3	ORANGE 3	ORANGE 000	NONE +/-20%	33K +/-20%

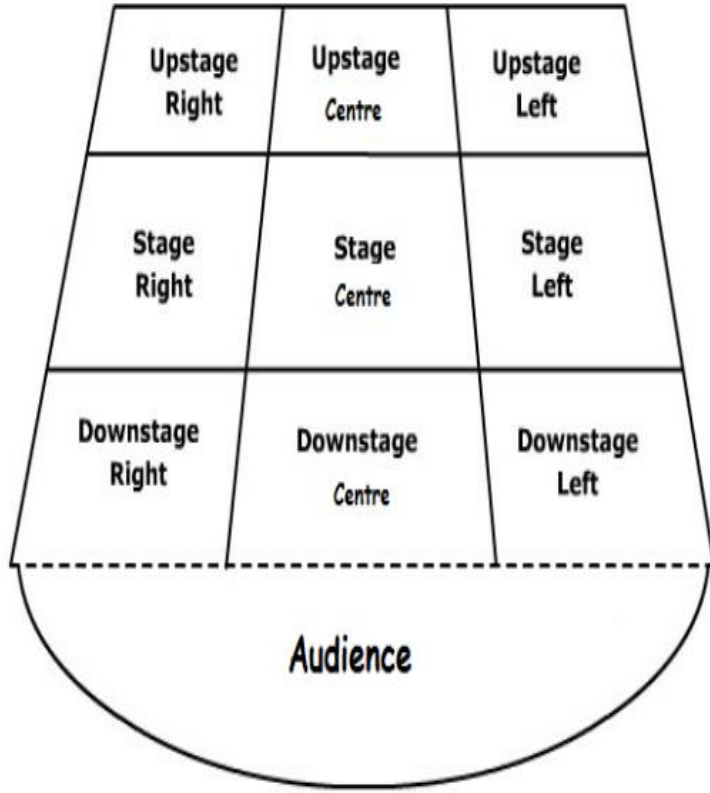
Your Design Specification produced a list of "Goals" or "Target" that you wanted your Final Solution to achieve.

Now that your final idea has been produced you can evaluate the success of it against this list of goals you wrote.

- It is very important to state:**
- If you were able to meet the specification target.
 - Explain HOW well you were able to meet the target.
 - If you were NOT able to meet the Specification explain WHY.
 - Include USER OPINIONS.

Year 8 Drama - Term 2A: Posture, gesture and voice in performance

Key terminology	Definition
Posture	Is the positions of someone's back or body when they are standing or sitting.
Stance	Is the position of someone's legs when they are standing.
Proxemics	Is the distance between two actors.
Use of space	Is how actors use the space around them on stage.
Pace	The speed of your voice.
Pause	A break or deliberate moment of silence in your speech or action.
Tone	Describes the emotion in your voice.
Pitch	Describes how high or low your voice is.
Volume	How loud or quiet your voice is.
Gesture	A deliberate and specific movement that communicated something to an audience.
Mannerism	A repeated or habitual movement in character.
Movement	Using the way that we move to communicate to an audience.



Year 8 Food - Term 2A: Food Choice

Food labelling

Currently the following information must appear by law (mandatory) on food packaging and labelling.

- Name of the food
- Date of minimum durability
- Instructions for use
- The country of origin
- A nutrition declaration
- Ingredients list (descending order of weight)
- Allergen information (in bold)
- Net quantity of the food
- Special storage instructions
- Name and address of the food manufacturer
- Alcohol strength (if more than 1.2% alcohol).

Scan the QR codes to watch a video about food labelling and complete your homework quiz.



SCAN TO WATCH



SCAN FOR QUIZ



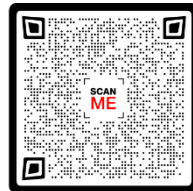
St Cuthbert's Catholic High School
Live life in all its fullness

Key vocabulary	Definition
Dextrin	Starch is broken down into dextrin by dry heat (baking/toasting).
Dextrinisation	Browning that occurs when foods containing starch are exposed to dry heat.
Energy needs	Energy is needed for every function and movement; whether awake or asleep.
Grams	Unit of measurement used in recipes and on nutritional tables.
Glucose	A monosaccharide (simple sugar) found in ripe fruits and vegetables.
Hydration	Supply of water required to maintain the correct amount of fluid in the body.
Hyponatremia	Condition where there is an imbalance of sodium in the body (too little).
Kilocalories	This is the unit used to measure the energy in food.
Portion size	The amount of food that is recommended for one person to eat in one sitting.
Traffic light	Front of label, colour coded nutritional information (red, amber and green).

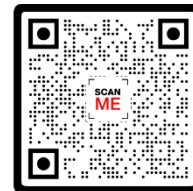
Water in the diet

The Eatwell guide and the 8 tips for healthy living both recommend 1-2 litres of water or drinks made from water per day. The chart shows some of the functions of water in the body.

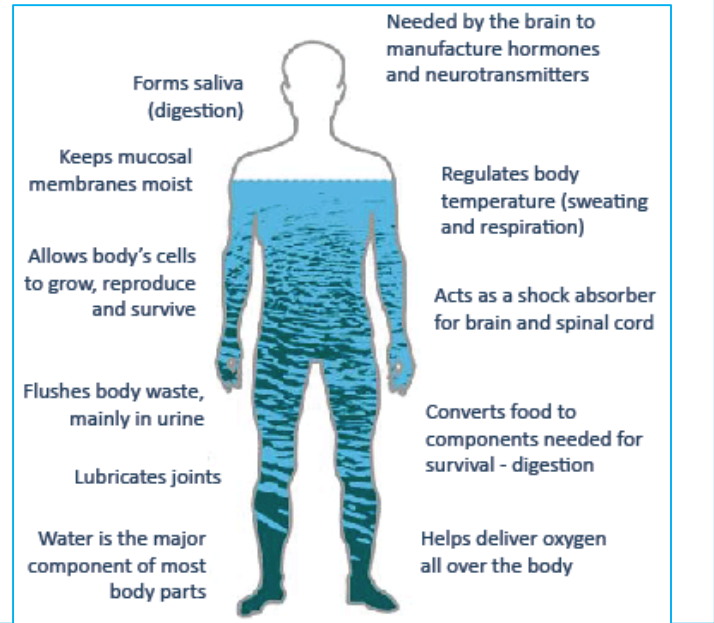
Scan the QR codes to watch a video about hydration and complete your homework quiz.



SCAN TO WATCH



SCAN FOR QUIZ



Year 8 Food - Term 2A: Food Choice

Soup

A food prepared from meat, poultry, fish, vegetables, grains, fruit and other ingredients, cooked in a liquid which may include visible pieces of some or all of these ingredients. Some popular soups include; tomato, lentil, chicken and leek and potato.

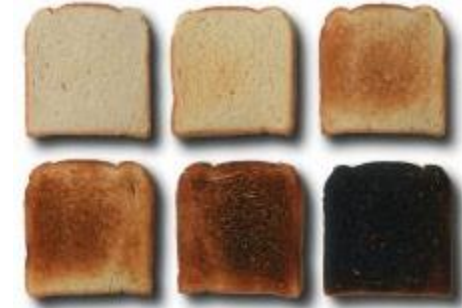


Soup	Country
Minestrone	Italy
Gazpacho	Spain
Pho	Vietnam
Borscht	Russia
Ramen	Japan
Wonton soup	China
Chowder	USA
Goulash	Hungary

Dextrinisation

When starches are exposed to dry heat they break down into sugars called dextrin.

Dextrin is brown which results in food turning brown when baked or toasted. Dextrinisation also changes the taste and smell of food. A typical example is toast. If the food is overcooked, the starch turns to carbon and the food will look black and burnt.



Food choice - reasons why we choose food.

Cost of food	Lifestyles	Healthy eating
Celebration	Enjoyment	Occasion
Culture	Religion	Seasonality
Fashion/trends	Media	Availability





What are learning?	The Elements of Music	What is arranging?	Composition
<p>Arranging and composing are two different types of ways to creating music. For this you will need to develop two different skills. When creating or arranging a song you must develop your knowledge of the elements of music.</p>	<p>Music is made up of basic elements. They are:</p> <ul style="list-style-type: none"> • Tempo - Speed • Dynamics - Volume • Harmony - Simultaneous Notes • Melody - A 'tune' or 'line' • Structure - Order of a Piece • Timbre - Sounds and Instruments • Texture - How different layers 'fit' • Metre - Rhythm Pattern • Rhythm - Patterns of Sound 	<p>Arranging is the art of taking a piece of music and making it your own - or taking a melody and adding different instruments under it such as a rhythm section or even a full horn section. The "arrangement" is then the final product of all the instruments coming together during that one piece of music.</p>	<p>Musical composition, music composition or simply composition, can refer to an original piece or work of music, either vocal or instrumental, the structure of a musical piece or to the process of creating or writing a new piece of music. People who create new compositions are called composers. Composers of primarily songs are usually called songwriters; with songs, the person who writes lyrics for a song is the lyricist. In many cultures, including Western classical music, the act of composing typically includes the creation of music notation, such as a sheet music "score," which is then performed by the composer or by other musicians.</p>



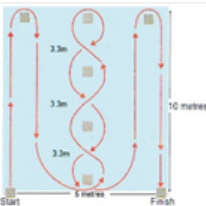
Year 8 Music - Term 2A: Composition and arranging



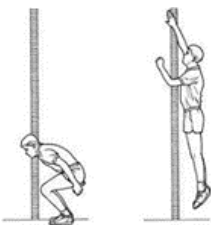
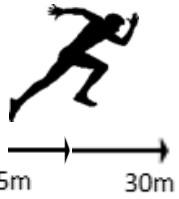
Key Words			How to compose a song
Melody	Rhythm	Phrase	
Pitch	Tonality	Chords	
Dynamics	Stimulus		
Expression			
Structure	Inspiration		
Conductor			
Harmony	Theme		
Timbre	Motif		
Tempo	Movement		

M	A	D	T	S	H	I	R	T
melody	articulation	dynamics	texture	structure	harmony	instruments	rhythm	tempo
the tune	how notes are played	loud / soft and any other volume changes	layers of sound and how they fit together	sections of music and how they are organised	chords used	types of instruments heard	the pattern of notes	the speed

Test	Component Measured	How to complete the test?
Tennis Wall Throw	Coordination	Standing 3m from the wall, throw one handed and catch one handed with the alternate hand.
Illinois Agility Test	Agility	Complete the course as quickly as possible. Start on your front. Run up and down, up and back through cones, then up and down again.
Stork Stand	Balance	Using the stork stand (metal 'S' shaped stand), perform the stork pose for as long as possible. As soon as the foot comes away from the leg or a step off the stand occurs the time stops.
BMI Test	Body Composition	BMI stands for Body Mass Index. It is a measure of body composition. BMI is calculated by taking a person's weight and dividing by their height squared. The higher the number the more overweight you are.



Test	Component Measure	How to complete the test?
30m Sprint test	Speed	Sprint as fast as possible over a 30m distance. The first 5m do not count in your time, this is called a flying start, allowing you to hit full speed, for the full 30m.
Standing Broad Jump	Power	Standing two feet together, perform a standing jump - as far as you can jump. The distance is recorded from the back of the heel. If a step is taken back, the distance is recorded from there.
Sergeant Jump	Power	Also known as the Vertical Jump test. To start, you raise your arm against the wall to record the first measurement. A step is taken into the wall, before performing an explosive jump upwards to record a second measurement. The distance between before measurements is your score.
12 minute cooper run	Cardiovascular Endurance	Cones to be evenly spaced at a set distance. Run for as long as possible until the 12 minutes are finished, whilst counting the markers, to work out the final distance.



Year 8 Spanish - Term 2A

1. Verbos importantes

Verbos para la comida	
Desayuno	For breakfast I have
Como	For lunch I have
Meriendo	For snack I have
Almuerzo	For lunch I have
Ceno	For tea I have

2. La comida y las bebidas

El desayuno (breakfast)			
I have	Tomo	I eat	Como
I drink	Bebo	cereals	cereales
a croissant	un croissant	bread and jam	pan y mermelada
chocolate	chocolate	coffee	un café
bread	pan	coffee with milk	un café con leche
butter	mantequilla	tea	un té
fruit	fruta	hot chocolate	un chocolate caliente
jam	mermelada	orange juice	un zumo de naranja
toast	tostadas	milk	leche

3. La comida y las bebidas

La comida (lunch) y la cena (tea)			
rice	el arroz	soup	la sopa
chicken	el pollo	salad	la ensalada
fish	el pescado	meat	la carne
cheese	el queso	pizza	la pizza
pop	una gaseosa	biscuits	las galletas
ham	el jamón	chips	las patatas fritas
a coke	una coca cola	pasta	pasta
a sandwich	un bocadillo	potatoes	patatas
an omelette	una tortilla	vegetables	verduras
a yoghurt	un yogur	crisps	patatas fritas
an ice-cream	un helado	water	agua



Year 8 Spanish - Term 2A

4. Los adverbos de frecuencia

Forming regular adverbs

-ly = mente

Take the adjective - make it feminine -
add mente

Desafortunadamente - unfortunately

Normalmente - normally

Generalmente - generally

Tristemente - sadly

Frecuentemente - frequently

Rápidamente - quickly

Lentamente - slowly

6. Verbos deportistas

Sporting verbs

Ganar - to win

Perder - to lose

Empatar - to beat

Marcar un gol - to score a goal

Jugar - to play

Hacer - to do

Ir - to go

Entrenar - to train

Participar - to take part

Mantenerse en forma - to stay in shape

Jubilar(se) - to retire

Llevar - to wear / carry

5. Verbos en presente y el pasado

Normally (present)		Recently (past tense)		In the past (when I was younger)	
I eat	Como	I ate	Comí	I used to eat	Comía
I play	Juego	I played	Jugué	I used to play	Jugaba
I drink	Bebo	I drank	Bebí	I used to drink	Bebía
I go	Voy	I went	Fui	I used to go	Iba
I do	Hago	I did	Hice	I used to do	Hacía
It is	Es	It was	Fui	It used to be	era

7. Las actividades deportistas

Common sporting activities

Jugar al / a la / a los - to play

Baloncesto - basketball

Fútbol - football

Tenis - tennis

Hacer alpinismo - to do mountain climbing

Esquí- skiing

Vela- sailing

Natación- swimming

Equitación- horse riding

la gimnasia- gymnastics

el piragüismo - canoeing

el kayak- kayaking

Atletismo- athletics

el ciclismo - cycling

Nadar - to swim

Patinar - to skate

Ir a pescar - to go fishing

Ver un partido - to watch a match

Participar en un torneo - to take part in a tournament

Ir a entrenamiento - to go training

El deporte de equipo - team sports

El deporte individual - individual sport



Notes

A series of horizontal dotted lines for writing notes.



Notes

A series of horizontal dotted lines for writing notes.





St Cuthbert's Catholic High School

Live life in all its fullness