



ST. ANNE'S
R.C. HIGH SCHOOL

Year 7

NAME:

Form Group:

SPRING TERM 1

SUBJECT KNOWLEDGE ORGANISERS

You will definitely enjoy what you've worked hard for—
you'll be happy; and things will go well for you

Proverbs 128:2

History / Information

Pop Art is an art movement that started in the 1950s and became popular in the 1960s. It was inspired by everyday objects like soup cans, comic books, and advertisements. Artists wanted to show how popular culture could be just as artistic as traditional paintings. Some famous Pop Art artists include Andy Warhol, who painted colourful pictures of soup cans and Marilyn Monroe, and Roy Lichtenstein, known for comic-style art with bold dots and bright colours. Pop Art used fun, bold designs and made art feel more modern and connected to the real world around us.

Key Words

1. **Pop Culture** – Everyday things people enjoy, like music, TV, movies, and ads.
2. **Consumerism** – The focus on buying and selling products in society.
3. **Advertising** – Images or messages used to sell things, often used as inspiration in Pop Art.
4. **Screen Printing** – A method of printing designs, used by artists like Andy Warhol.
5. **Icon** – A famous person or symbol, like Marilyn Monroe or a Coca-Cola bottle.
6. **Repetition** – Showing the same image or pattern multiple times.
7. **Abstract** – Art that doesn't look exactly like real life but focuses on shapes and ideas.
8. **Contrast** – Strong differences in colours or designs to catch attention.

Support

Below are videos with more information surrounding Pop Art & Roy Lichtenstein.



Pop Art History



Roy Lichtenstein
Information

Pop Art Characteristics

1. **Bright and Bold colours** – Pop Art often features vibrant, eye-catching colours.
2. **Inspiration from Popular Culture** – It uses imagery from everyday life, like advertisements, comic books, celebrities, and consumer products.
3. **Flat Imagery and Simple Shapes** – Pop Art avoids complex depth and focuses on clean, flat, graphic styles.
4. **Irony and Humor** – It often plays with humor and satire, poking fun at consumer culture.
5. **Repetition** – Repeated patterns or images are a common element.
6. **Everyday Objects as Art** – It elevates ordinary items, like soup cans or soda bottles, to the status of fine art.

Research Page Criteria

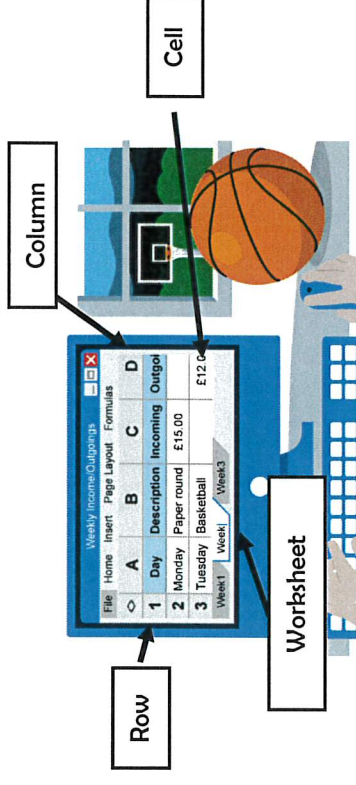
1. **Creative Background** - Linking the background to the style of art or making it look similar to the work of the artist.
2. **Study Piece** - Recreating a piece of artwork as accurately as you can.
3. **Information** - Information about the artist, time period, art style that is written in full sentences and in your own words.
4. **Title** - A clear and readable title that is creatively displayed in the style of the artist or art style.
5. **Images of artwork** - Including images of artwork of the art style or artist so that viewers can visually see and understand the artwork you are presenting.

Year 7 Spreadsheet (Data Handling)

A spreadsheet file is made up of one workbook and multiple worksheets. Worksheets appear as tabs at the bottom of a workbook. They can be reordered and renamed.

Key Terms

Spreadsheet	Model	Cell	Formula	Function	Conditional formatting
Row	Column	Formatting	Macro	Graph	Pivot table



Sorting cell data

The A-Z feature automatically orders data in ascending/descending order or alphabetically.

Filter

The filter tool refines the data, to only show you the data that you need for a particular task

Independent Learning Tasks

Can you think of any examples of data that might be stored in a spreadsheet?

Why might we store data in a spreadsheet INSTEAD of keeping the data in a book or in a word document?

What jobs might use a spreadsheet regularly?

Why do we format a spreadsheet?



SCAN ME

Cell formatting

To access a cell's formatting options, right-click on the cell and click 'Formatting options'. A dialogue box with the following tabs will appear:

- number – tell the spreadsheet what type of data the cell contains, eg currency, percentage, date, time, etc
- alignment – align the text in the cell vertically (top, bottom or middle), horizontally (left or right) or at an angle
- font – change the font used, text size and colour
- border – add a solid, dotted, dashed or coloured border to the cell

Formulas

Formulas are usually simple calculations, eg adding two or more numbers together. They always start with an equals sign

$$=a1+b1$$

Functions

Functions make more complex calculations. Simple and regularly used functions include:

- SUM – adds values in selected cells
- MIN – finds smallest value
- MAX – finds largest value
- AVERAGE – finds the average value
- COUNT – counts how many of the cells have numbers in them

$$=sum(a1:a5)$$

$$=min(a1:a5)$$

$$=max(a1:a5)$$

$$=average(a1:a5)$$

$$=count(a1:a5)$$

Advanced functions

- IF – change the value of a cell if something is true, eg if a customer's total bill is over £100, deduct 10% from their bill.
- COUNTIF – adds up cells that meet a certain rule, eg count the number of students that achieved level 6.
- VLOOKUP – matches contents of a cell with an answer, eg how much is a pepperoni pizza?

Y7 Construction

Knowledge Organiser

Postcard questions!

- What is the difference between all 3 stop buttons around the room?
- What tool is for cutting curves and which for straight lines?
- What is the brown circle sometimes seen on wood?

Skills you will learn
Marking and measuring
Cutting Skills (Coping or Tenon Saw)
Drilling with the Pillar/Bench Drill
Using the Chisel and Mallet for your joint
Safety in the workshop
Adding the border to the picture frame
Theory work & drawing in 1 point perspective



Hardwood V Softwood! Scan the QR code to revise some information -

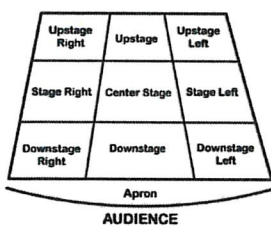


When drawing in one- point perspective you should stick with four main line types:

Example types of line:	Name	Example types of line:	Name
	V _ _ _ _ _		C _ _ _ _ _
	P _ _ _ _ _		H _ _ _ _ _

Y7 – The Pied Piper

KEYWORDS	Unit Overview
Freeze Frame - A still image where the action is 'frozen'	You will learn many new Drama techniques and apply them to the story of The Pied Piper. You will use your knowledge to try different ways of acting out the story, using your understanding of plot, and characters to inform their choices. 
Thoughts Aloud - When a frozen character speaks out loud to the audience conveying their thoughts or feelings	
Narration - When one or more people speak directly to an audience giving information about the action or characters	
Role Play – Acting out a scene with speech and movement.	
Marking the Moment – Picking the most important moments of a piece and “marking” them with a Drama technique.	
Narrator-Where an actor/s tells the audience what is happening on the stage	
Devising-Creating a Drama piece such as a role play	
Characterisation – performing a different part of a play	

STAGING			
STAGE DIRECTIONS 	Proscenium Arch Describes the frame that surrounds the stage. All the audience face the same way. The stage is raised. The seating is often tiered. 	In The Round The audience sit around the stage on all sides. Performers enter and exit through the audience on walkways. 	Thrust Stage Sticks out into the audience, who sit on three sides. There is a back wall that can be used for hanging backdrops and large scenery. 

WHAT DO YOU THINK?
What skills are needed to create a good role play?
Why are facial expressions and body language even more important in a freeze frame?
How does the role of the narrator improve a role play?

SUPPORT		
 Watch the story as a cartoon	 The real Pied Piper of Hamelin Story	 How to use a narrator effectively in your piece of Drama

English Year 7 Knowledge Organiser HT4 – Identity

Key words	Unit Overview
Splendour	 identity Our identity is individual to us but is also influenced by the people around us and the environment we live in. In this topic we are studying poetry and reading autobiographies to influence our own writing about who we are and what is important to us.
Enjambment	
Personification	
Critique	
Discriminate	

What do you think?
Why do writers choose to use poetry to express their ideas?
Why are sonnets a popular form of poetry?
Why are people interested in reading about other people's lives?

What is a sonnet?	
Upon Westminster bridge analysis	
Death Be Not Proud analysis	
The Lynching analysis	

Perform your poem for the Poetry
By Heart competition!

POETRY BY
HEART



KEYWORDS

Versatile -Ability to be used for more than one purpose.

Eatwell guide -A healthy eating model showing the types and proportions of foods needed in the diet.

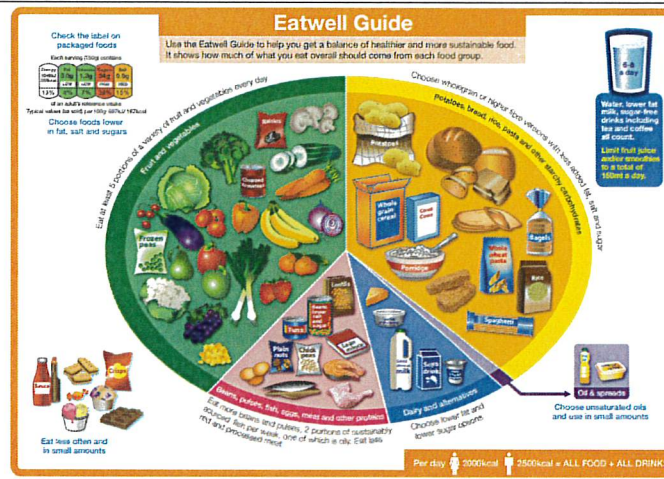
Hygiene- Cleanliness and clean conditions to maintain health and prevent disease spread.

Sensory-Human testing of the taste, smell, texture and appearance of a food product.

Modified -Making changes to something e.g. a recipe

Cross Contamination- The transfer of bacteria from one food to another, from humans, animals other food or equipment.

Heat Transfer – The way heat moves from one area to another through conduction, convection and radiation.



CLEANING

Cleaning kills bacteria

- Wash hands before, during and after food preparation
- Wash all worktops, utensils, chopping boards and equipment
- Rinse unwashed salad, fruit and vegetables

COOKING

Cooking kills bacteria
Food needs to be heated to a steaming hot with the temperature reaching

- 60 degrees Celsius for 45 minutes
- 65 degrees Celsius for 10 mins
- 70 degrees Celsius for 2 minutes
- 75 degrees Celsius for 30 seconds
- 80 degrees Celsius for 6 seconds

CHILLING

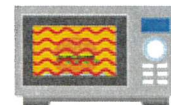
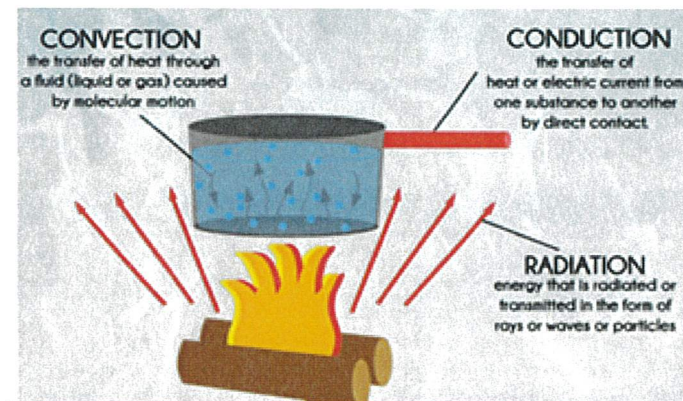
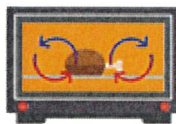
Chilling prevents microbial growth.

- Cool food to below 5 degrees Celsius as quickly as possible and defrost food in the fridge
- Fridge =- 0 degrees – 5 degrees
- Freezer = 15 degrees or below

CROSS CONTAMINATION

Bacteria are transferred from one object to another

- Keep raw and cooked food separate
- Never was raw meat
- Keep raw meat and shellfish on the bottom shelf of the fridge



QR CODE: Methods of Heat transfer video/website

WHAT DO YOU THINK?

Why is Food hygiene and safety important in Food Technology?

Why are staple foods versatile? How can a recipe be modified?

What is sensory testing used for? Which sense are used?

What are the different methods of heat transfer? Can you identify which ones you have used in food technology?

Year 7 Coastal environments

These are the key processes you need for your lessons.



Erosion	Erosion is the process of natural features being gradually worn down by water, wind, ice, or rocks.
Transportation	When eroded material is carried by the river.
Deposition	When material the river is carrying is dropped because it loses energy.

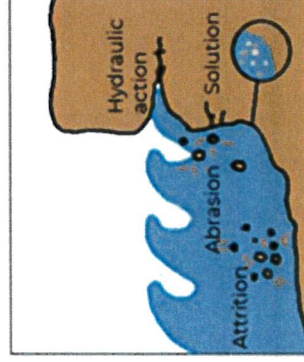
What are the different types of erosion?

Abrasion -

Eroded material is hurled or scrapes against the cliff, breaking off rock.

Attrition -

Eroded materials in the sea hit into each other, breaking down into smaller pieces.



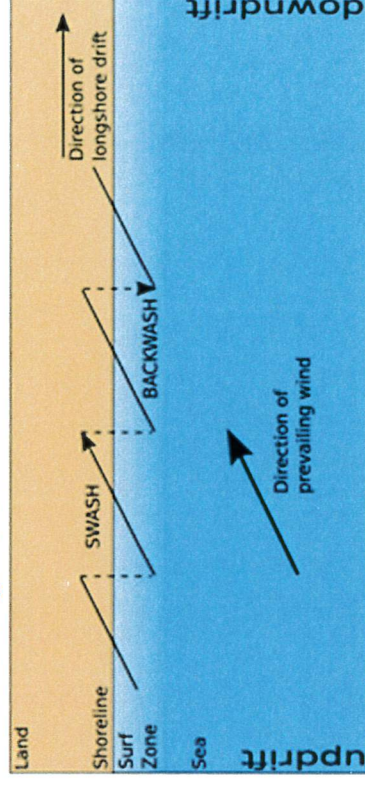
Hydraulic action -

Waves compress pockets of air in cracks in a cliff, causing the crack to widen, breaking off rock.

Solution -

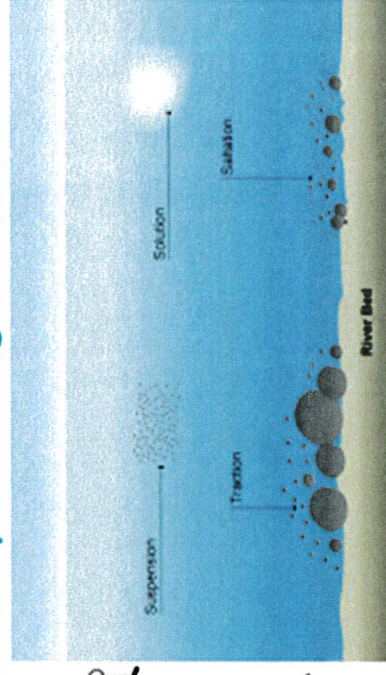
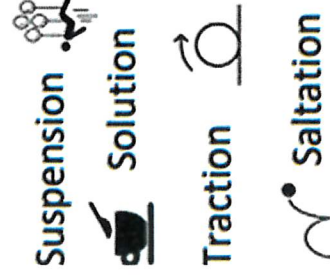
Cliffs dissolve in seawater

What is longshore drift?



- 1.The prevailing wind blows the waves onto the shore at an angle.
- 2.The swash carries sediment onto the beach at an angle.
- 3.It is then pulled back to sea with the backwash at a right angle to the shore due
- 4.Gradually, sediment is moved along the coastline in the direction of the prevailing wind

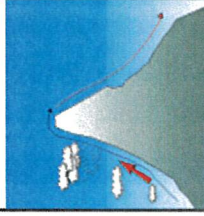
How is sediment transported along the coastline?



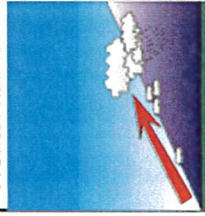
Weather and climate

Weather	Weather refers to the day-to-day changes in the atmosphere
Climate	Climate is the average atmospheric conditions found in a given area.
Extreme weather	is any weather that is unusual or unexpected. This can be <i>severe</i> or <i>unseasonal</i> weather. In the UK, warnings are issued if extreme weather is expected
Precipitation	Moisture that falls from the air to the ground. Includes rain, snow, hail, sleet, drizzle, fog and mist.

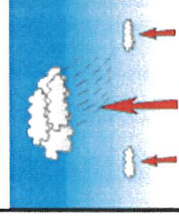
Relief Rainfall



Frontal Rainfall



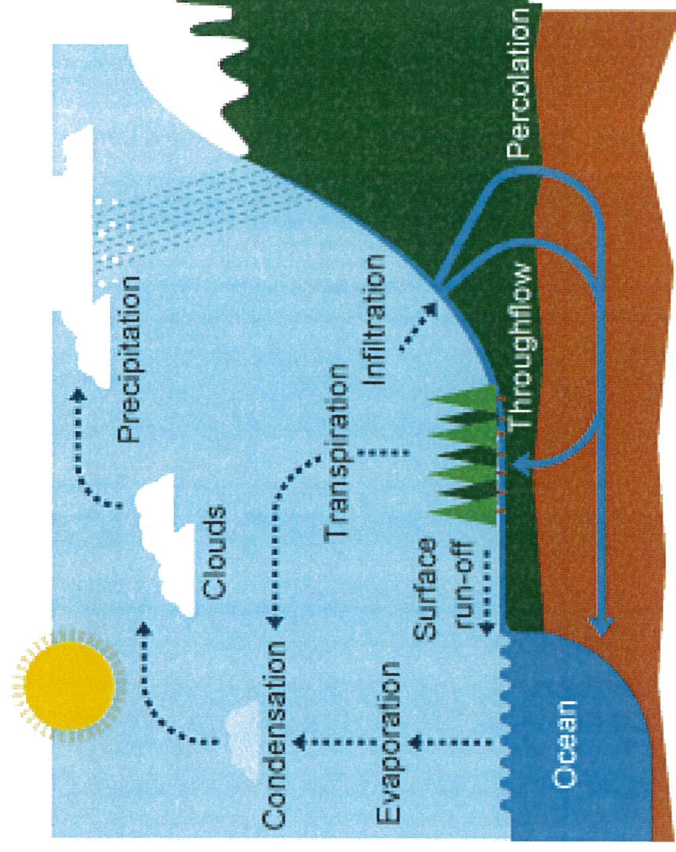
Convective Rainfall



When wind meets a hill or mountain, it must rise over it. As the warm air rises, it cools, condenses to form clouds. The clouds become saturated (full of water) and rain occurs. In the UK the prevailing wind comes from the south west (over the Atlantic Ocean). There are many mountains on the west coast of the UK (Wales). As the moist

Where a warm air mass meets a cold air mass, the warm air mass rises over the cold air mass. As the warm air rises, it cools, condenses to form clouds. The clouds become saturated (full of water) and rain occurs. Front rainfall is the most common type of rainfall in the UK.

The sun heats the ground, which then warms the air above it. As the warm air rises, it cools, condenses to form clouds. The clouds become saturated (full of water) and rain occurs. In the UK we get convective rainfall in the summer.

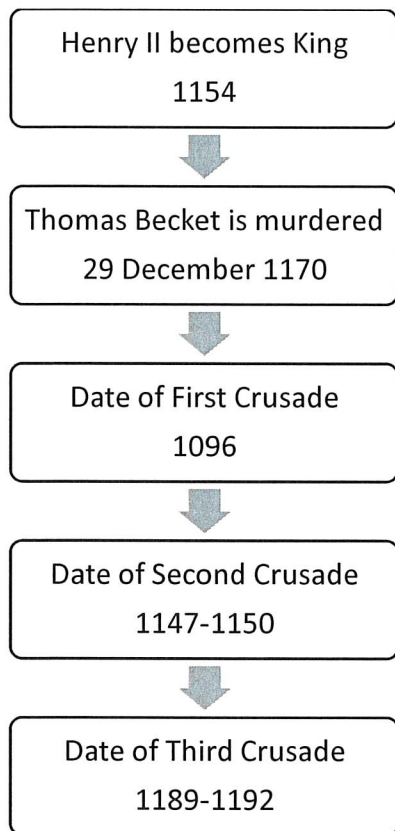


1. Energy from the Sun heats the surface of the Earth. Water is *evaporated* from oceans, rivers, lakes, etc. The warm, moist air rises because it is *less dense*.
2. *Condensation* occurs when water vapour is turned back into water droplets as it cools down. Clouds are formed.
3. *Precipitation* occurs as water droplets get bigger and heavier they begin to fall as rain, snow and sleet, etc.
4. When the precipitation reaches the surface, some falls directly into the sea, but other water falls on land.



How did Religion cause tension in the Middle Ages?

Timeline



Key Terms:

Episcopal - means the governing order of Bishops/clergy in the Church hierarchical structure.

Doom Paintings –

State -

Crusades – A series of religious wars between Christians and Muslims started to secure control of holy sites they both consider sacred

Papal Bulle – an official document signed by the Pope.

Jihad – a holy war waged by Muslims against those who reject the Muslims' teachings – it means a struggle.

State -

Divine Right of Monarchs – Excommunication - Officially

exclude someone from the Church. Outremer - The

Crusader states- Four Catholic realms in the Middle East that lasted from 1098-1291. Pilgrimage – a journey of

religious meaning. Excommunication - Officially exclude someone from the Church.

The Story: In Medieval times the Church was very influential. It held the power to enable people to go to Heaven. Peasants had to pay a tithe of 10% to the Church. The Church used Doom Paintings to show the horrors of Hell and keep people in it's control. The Church ran hospitals and provided charity in times of need. It crowned the King as it was believed that Monarchs had 'Divine Right' at this time.

There were tensions however, between Crown and State and this was shown most visably in the case of Thomas Beckett's murder and the relationship between Becket and King Henry II.

Jerusalem was the centre of the 'Holy Land' it was an important place of Pilgrimage for Christians, Muslims and Jews. In 1071 the Seljuk Turks took over Jerusalem and began treating Christians badly. This led to Pope Urban II imploring European Christians to go on Crusades (Holy Wars) to rescue the Christians in the Holy Land. The Pope promised people that if they went on Crusade their sins would be forgiven and they would go to Heaven.

The Key Individuals

Henry II (1154-1189)

Thomas Becket (1118-1170)

Pope Urban II (1035-1099)

King Richard I (Lionheart) (1189-1199)

Saladin (died 1193)





HT3

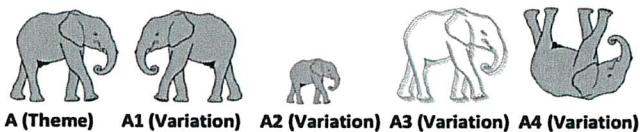
$$\begin{aligned} 65\% &= 50\% + 10\% + 5\% \\ &= 40 + 8 + 4 \\ &= 52 \end{aligned}$$

Theme and Variation

Theme and Variation - Key Words

Theme - the main, and recognisable, **melody** of a piece of music or song, it is easily remembered.

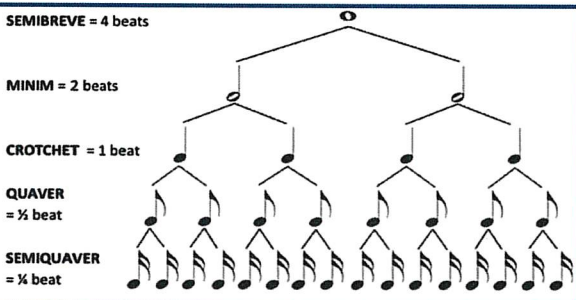
Variation - altering or changing the **theme** of a piece of music, while keeping some of the main elements such as notes or structure.



Inversion and Retrograde

Inversion - changing the intervals (gaps) between the notes so they are upside down
Retrograde - playing the main theme backwards

Retrograde inversion - playing the inverted theme backwards



Augmentation and Diminution - Note Values and Duration

Augmentation - the process of **doubling** the **duration** of the note values in a theme.

Diminution - the process of **halving** the **duration** of the note values in a theme.

Variation Techniques

- **Pitch** - changing how high or low the theme is - play the same notes at different pitches: in **octaves**.
- **Tempo** - change the speed: faster or slower
- **Dynamics** - change the volume: play it louder or softer
- **Texture** - change the amount of parts: play it **solo**; add an **accompaniment** or **chords**; add a **counter melody** (an extra **melody** played at the same time)
- **Timbre/Sonority** - change the sound; play it on a different instrument
- **Articulation** - change how it is played: **staccato** or **legato**
- **Pedal** - a very long held note in the **bass line** under the main **theme**
- **Drone** - a long or repeated set of notes using the **tonic** (note 1) and **dominant** (note 5) notes together
- **Melodic Decoration** - adding extra notes to the theme to decorate it
- **Ostinato** - adding a repeated musical pattern to the **theme**
- **Canon** - different performers performing the **theme** but starting at different times
- **Ground Bass** - a repeated musical pattern in the bass part

Support

How to create a successful theme and variation piece?



How many ideas from this video could you use in your theme and variation composition?



KEYWORDS

Smash- Hit with power and speed downward into the opponent's court.

Backhand- Hit with the back of the hand leading.

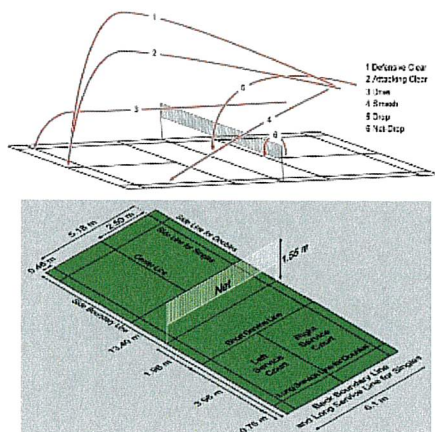
Overhead Clear- Defensive shot allowing time to recover by moving their opponent and increasing the amount of time the shuttle is in the air.

Baseline- Back boundary line at each end of the court, parallel to the net.

Service Line- The first horizontal line on each side of the court, closest to the net.

Drop Shot- Hit the shuttle downwards aiming for it to just go over the net.

Accuracy- The ability to control movement in a given direction or at a given intensity.



Unit Overview

Grip and ready position: To be able to demonstrate & use the correct grip and ready position.

forehand clear: The forehand clear shot enables players to move their opponent to the back of the court. This will create space in the mid and front court to exploit and provide time for the player to return to their base position.

forehand drive: The forehand drive is an attacking shot that is usually played from the sides of the court when the shuttlecock has fallen too low for it to be returned with a smash.

Forehand Drop shot: To be able to outwit opponents using simple drop shot. Teaching points; deception, low over net & use of angles.

Forehand Smash: To understand the importance of movement and preparation for an effective smash. Teaching points: Shuttle in front of head, Snap wrist, Aim towards ground

Basic Serve: The badminton serve is the shot selected to begin the point. The serve must be hit from behind the service line and travel diagonally from one side of the court into the opposite service box.

SUPPORT

Four types of service



Overhead Clear Tutorial



Single Rules

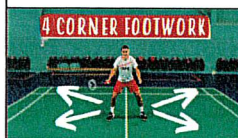


Doubles Rules



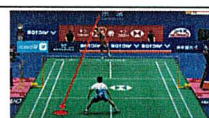
WHAT DO YOU THINK?

What is the best and most accurate way to perform a forehand shot in badminton?

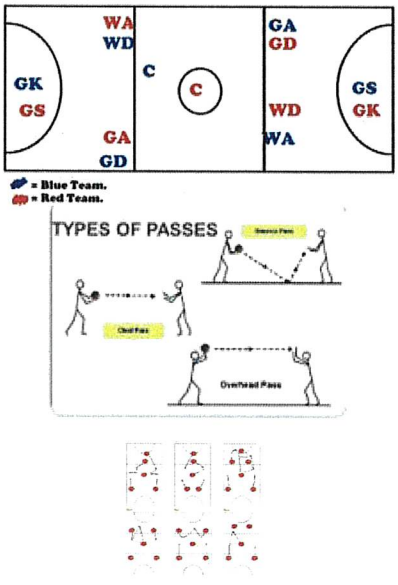


How does footwork benefit a performer in Badminton?

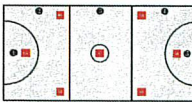
How can I use different tactics to develop my badminton game?



PE Knowledge Organiser- HT3 Netball

KEYWORDS		Unit Overview		
Accuracy- the ability to perform movements with skill and precision. Co-ordination- the ability to use two or more body parts together Agility- the ability to change direction at speed Man to man marking- each player is assigned a player to defend and track all their movements. Rebound- a player attempts to score a goal by shooting but the ball hits the goalposts and bounces back into play. Centre pass- The first centre pass within the centre circle of the court is decided between the two captains by the toss of a coin. The centre passes then alternate between the teams, regardless of which team has scored. Every time there is a goal, the ball returns to the centre where the centre position passes the ball.				
		Rule	Explanation	Consequence
		Obstruction	Standing closer than 3ft	Penalty pass, stand by opponent's side
		Contact	Contacting opponent	Penalty pass, stand by opponent's side
		Footwork	Re-grounding landing foot when in possession	Free pass
		Replaying the ball	Bouncing ball or picking up 'lost' ball	Free pass
		Holding	Holding the ball for more than 3 seconds	Free pass
		Offside	A player entering an area they aren't permitted to	Free pass from off-side infringement
		Over-a-third	Ball passing over two transverse lines	Free pass from second line
		Breaking	Moving into centre third at centre pass before whistle	Free pass from place of infringement

SUPPORT							
Four types of service		Overhead Clear Tutorial		Single Rules		Doubles Rules	

WHAT DO YOU THINK?
How would I be able to lose my defender when trying to move into space?
Think about the 7 different positions in netball and who they would be marking.

How do I know what pass best suits my situation?

KEYWORDS		Unit Overview
Dynamics- How the dancer moves. For example fast/slow, strong/light.		
Relationships- The interaction with other dancers through contact or gestures.		Expressive skills Projection. Focus. Spatial awareness. Facial expression Phrasing Musicality Sensitivity to other dancers Communication of choreographic intent Physical skills Posture Alignment Balance Coordination Control Flexibility Mobility Strength Stamina Technical skills Action Space Dynamics Relationships Timing Rhythmic content Moving in a stylistically accurate way
Projection- A confident presentation of one's body and energy to vividly communicate movement and meaning to an audience.		
Elevation- The bodies propulsion into the air away from the floor, such as a leap, hop or jump.		
Unison- when two or more dancers perform exactly the same movements at exactly the same time.		
Canon-choreographic form in which individuals perform the same movement/phrase beginning at different times.		
Mirroring- imitating qualities of movements in a dance.		

SUPPORT- types of dances					
SALSA dance		STREET dance- diversity		BALLET- swan lake	

WHAT DO YOU THINK?
How can a performer make their movements look more aesthetic?
Can you name the five key concepts that make up a dance performance?
What components of fitness are beneficial for a dancer?

CHAPTER 4:

DESERT TO GARDEN

Knowledge organiser

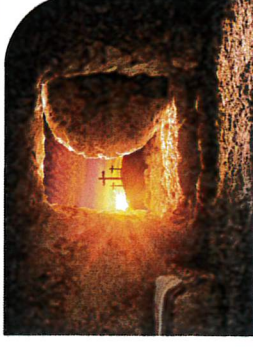
Key vocabulary	
Paschal Mystery	The belief that Jesus' death and resurrection bring salvation to every human being.
sacrament	Visible signs of God's grace that make real what they symbolise; also the name given to the ceremonies that contain these signs.
Passover	A Jewish festival that celebrates God saving the Jewish people from slavery in Egypt.
Eucharist	The sacrament in which Catholics receive the body and blood of Christ; also called Holy Communion, the Lord's Supper, the Breaking of the Bread and Mass.
Sacrifice of the Mass	The belief that Jesus' sacrifice is really made present to Catholics during the Eucharist.
transubstantiation	The process by which the bread and wine actually become the body and blood of Jesus at the moment of consecration.
Holy Communion	Another name for the Sacrament of Eucharist.
Lord's Supper	Another name for the Sacrament of Eucharist.
Blessed Sacrament	A term that refers to the body and blood of Jesus in the Eucharist.

OPTIONS	
Ethical	The world food crisis presents Catholics with an ethical and religious duty to help those most affected. The Eucharist commits Catholics to serve the poor, and Bishop Theotonius Gomes reminds Catholics that providing basic needs is a way to treat others with respect and dignity.
Artistic expression	The Sacrament of the Eucharist and the Last Supper are two common themes in Catholic art. Different artists focus on different aspects of the sacrament. For example, <i>Life of Jesus</i> Mafa: The Last Supper shows Jesus and the apostles as African men in an everyday environment. <i>Last Supper</i> by Pascal Dagnan-Bouveret is a more traditional painting of the Last Supper.
Lived Religion	One way in which Catholics show their devotion to the Real Presence of Jesus is by holding Eucharistic processions . In these, the Blessed Sacrament is carried in a procession around a holy site. These processions vary between countries as they are influenced by local customs and traditions.

The Paschal Mystery

For the Catholic Church, the term 'Paschal Mystery' means three things:

- The **actual events** of Jesus' arrest, trial, death on the cross and resurrection from the dead.
- The **significance of those events**: Catholics believe that Jesus' death on the cross frees human beings from sin, and that his resurrection opens the way to a new life with God.
- The idea that Jesus' death and resurrection are **made present in the life of the Church today**. They can be experienced by Catholics most directly in the celebration of the Mass and in the seven sacraments.



The seven sacraments

- **Sacraments are visible signs of God's grace**. These religious ceremonies make God's invisible, saving power visible and present to those who receive it.
- Catholics must receive the three **Sacraments of Initiation** to become a full member of the Church: Baptism, Confirmation and Eucharist.
- The **Sacraments of Healing** are Reconciliation and the Anointing of the Sick.
- The **Sacraments at the Service of Communion** are Holy Orders and Matrimony.
- Catholics believe the sacraments **nourish and strengthen their faith**.



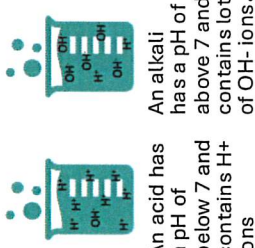
The Sacrament of the Eucharist...

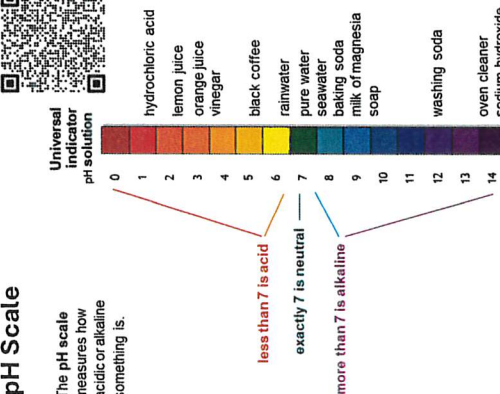
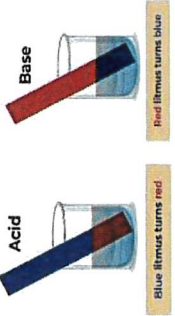
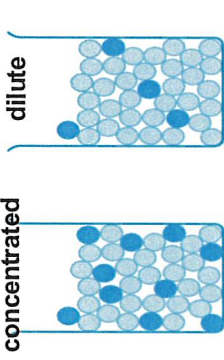
- Catholics believe the Eucharist is the most important sacrament. It is '**the source and summit of Christian life**' (CCC 1324).
- The word Eucharist means 'thanksgiving'.
- The sacrament is known by **many names** including the Lord's Supper, Holy Communion, the Breaking of the Bread, and Mass. Each name gives a different insight into the significance of the sacrament.
- **The Liturgy of the Eucharist** is the high point of the Mass. It is when the bread and wine become the body and blood of Jesus, and these are offered to the congregation.



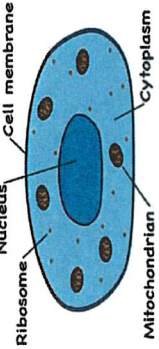
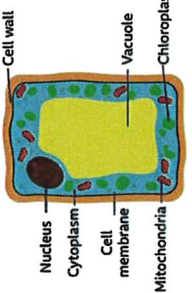
...and its significance

- The Eucharist is **significant** as it can bring a person closer to God, strengthen faith, and provide forgiveness and protection from sin. It unites Catholics together as the Church, and commits Catholics to serve the poor.
- The **Last Supper** was a meal that Jesus shared with his disciples to celebrate the Jewish Passover. During this meal, Jesus **instituted the Sacrament of the Eucharist**.
- Catholics believe that when they celebrate the Eucharist today, the events of the Last Supper and the sacrifice Jesus made become **really present** for them in the Mass.
- Jesus' sacrifice is **foreshadowed** in the first Passover meal described in the Old Testament.
- **Jesus is present** in the Mass in four ways: in the assembly of the faithful, in the reading of the scripture, in the person of the priest, and in the Blessed Sacrament.
- Most Christians around the world agree that Jesus is present in the Eucharist, but they may have **different views** on how this happens. For example, most Anglicans believe that Jesus is really *spiritually* present.
- Some Christians (such as Baptists) do not believe in the Real Presence of Jesus, and instead believe that the Eucharist is about commemorating the Last Supper.

KEYWORDS		UNIT OVERVIEW	
ACID – A solution with a pH below 7 ALKALI – A solution with a pH above 7. It is a soluble base BASE – A substance that neutralises an acid UNIVERSAL INDICATOR – An indicator that changes colour to show the pH of a solution	INDICATOR – A substance that changes colour to show whether a solution is an acid or an alkali NEUTRAL – A substance that is neither acid or alkali. It has a pH of 7 NEUTRALISATION – The process where an acid cancels out a base or a base cancels out an acid DILUTE – A solution with a small number of soluble particles per unit volume	Acids and Alkalis  An acid has a pH of below 7 and contains H⁺ ions An alkali has a pH of above 7 and contains lots of OH⁻ ions. Some acids and alkalis are corrosive.	Science Year 7 – Acids and Alkalis Knowledge Understanding Equipped In this unit you will learn: - Acids and Alkalis - Indicators and pH - Neutralisation - Acid Strength - Making salts Link to Kerboodle
			

SUPPORT			
pH Scale The pH scale measures how acidic or alkaline something is.  less than 7 is acid exactly 7 is neutral more than 7 is alkaline	Indicators  Red and Blue Litmus Paper In acid – blue paper turns red In alkali – red paper turns blue Universal Indicator A type of indicator that tells you how acidic or alkaline a solution is. It turns a different colour at each pH. 	Concentrated v Dilute Acids and alkalis can be:  Lots of acid/alkali particles in a small amount of water A small number of acid/alkali particles in a lot of water.	Neutralisation and Making Salts acid + base = salt + water neutralization Different acids produce different types of salt: - hydrochloric acid produces metal chlorides - sulfuric acid produces metal sulfates - nitric acid produces metal nitrates e.g. sodium hydroxide + hydrochloric acid → sodium chloride + water copper oxide + sulfuric acid → copper sulfate + water

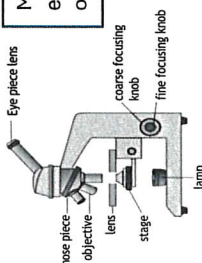
WHAT DO YOU THINK?			
What pH would sulfuric acid have?	What is a strong acid?	Can you name any other indicators apart from the ones shown here?	What would be the products of the neutralisation reaction between zinc oxide and nitric acid?
			What is the best way to neutralise a bee sting?

KEYWORDS		UNIT OVERVIEW	
CELL – The smallest functional unit of an organism, the building block of life	MICROSCOPE – An optical instrument used to magnify objects to see their detail more clearly	Plant and Animal Cells  	Science Year 7 – Cells Knowledge Understanding Equipped In this unit you will learn: - Observing cells- Microscopes and Microscope Calculations - Plant and animal cells - Specialised Cells - Movement of substances - Unicellular organisms
RESPIRATION – A chemical reaction that convert glucose and oxygen into carbon dioxide and water releasing energy	UNICELLULAR ORGANISM – An organism consisting of only one cell which has no fixed shape		
DIFFUSION – The movement of particles from an area of high concentration to an area of low concentration	ORGANELLE – A structure found inside a cell that performs a particular role.		
MAGNIFICATION - The ability of a microscope to produce an image of an object at a scale larger (or even smaller) than its actual size.	SPECIALISED CELL – A cell whose shape and structure enables it to perform a particular function		

SUPPORT

How to use a microscope

Magnification =
eyepiece lens x
objective lens





Move the stage to its lowest position.

Place the slide/object on the stage.

Choose the objective lens with the lowest magnification.

Look through the eyepiece and turn the coarse-focus knob slowly until you see the object.

Turn the fine focus knob until it comes into focus.

Repeat steps 1–5 using a higher magnification lens.

Specialised cells

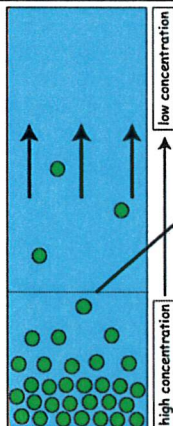
Specialised cells have special features that allow them to do a specific job or function.



Cell type	Function	Diagram
root hair cell	absorb water and nutrients from soil	
leaf cell (palisade cell)	carry out photosynthesis	
red blood cell	transport oxygen around the body	
nerve cell (neuron)	carry electrical impulses around the body	
sperm cell	carry male genetic material	

Diffusion





● solute

Movement in and out of cells

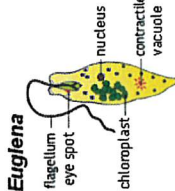
Particles move in and out of cells by **diffusion**.

During diffusion, particles spread out from where they are in **high concentration** to where they are in **low concentration**.

Unicellular organisms

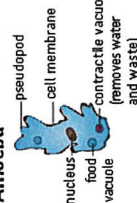


- microscopic organism found in fresh water
- contain chloroplasts and make their own food by photosynthesis
- eye spot that detects light
- flagellum allows the *Euglena* to move towards the light to make more food

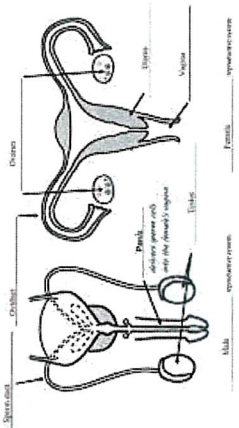


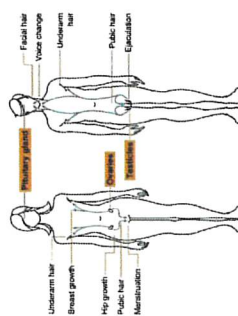
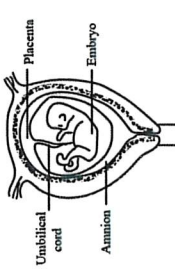
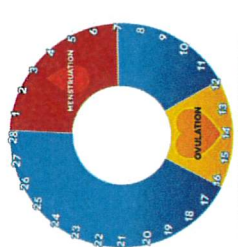
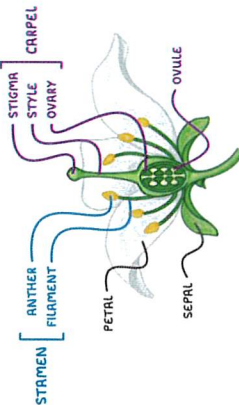
Amoeba

- nucleus controls growth and reproduction
- move by moving part of their body and the rest follows slowly in the same direction
- eat bacteria, algae, and plant cells by engulfing them
- reproduce by splitting in half (binary fission)

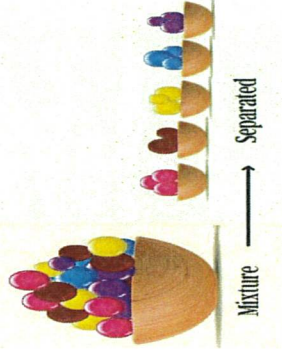


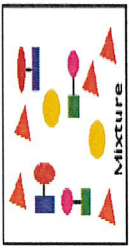
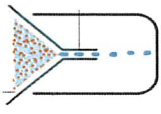
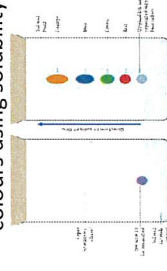
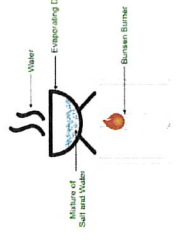
WHAT DO YOU THINK?			
How do you prepare a microscope slide of a plant cell?	How are the specialised cells above adapted for their function?	Can you give some examples of where diffusion happens in animals and plants?	What are the functions of all of the animal and plant cell organelles?
		What is Binary Fission?	

KEYWORDS		Male & Female Reproductive Organs		UNIT OVERVIEW	
ADOLESCENCE – The period of time when a child changes into an adult	OVULATION – The release of an egg from the ovary	 		Science Year 7 – Reproduction Knowledge Understanding Equipped In this unit you will learn: - physical and emotional changes of reproductive organs. - Fertilises - Development of a baby. - Plant reproduction - Pollination & germination. - different methods of plants seed dispersal 	
FERTILISATION – When the nucleus of a sperm joins with a nucleus of an egg	PLACENTA – Organ where substances pass from mothers' blood to foetus blood. Acts as a barrier and can stop some harmful substances passing				
GAMETES – Reproductive (sex) cells. Male is sperm. Female is egg.	PUBERTY – The physical changes that take place during adolescence				
MENSTRUAL CYCLE – Monthly cycle where the uterus builds up and then breaks down if egg is not fertilised	SEED DISPERSAL – movement of seeds away from the parent plant				

SUPPORT			
Changes During Puberty  HOW HORMONES CHANGE THE BODY Must know changes in boys and girls during puberty 	Development of Foetus  Must know umbilical cord, placenta and fluid sac 	Menstrual Cycle  Must know Day 1 period, day 14 ovulation 	Germination and Seed Dispersal  Know difference between cross pollination and self pollination and the importance of germination 

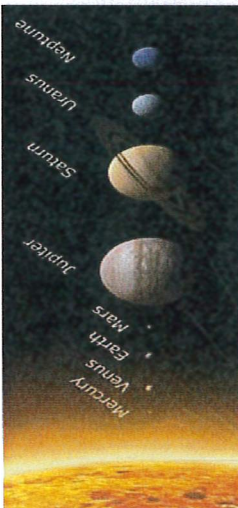
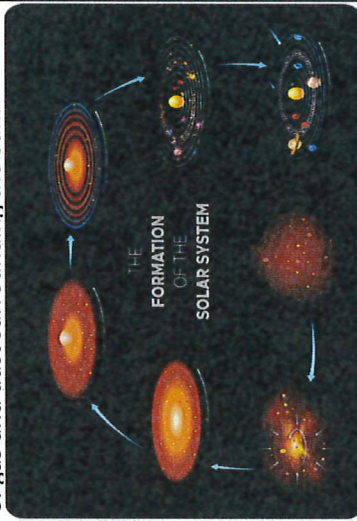
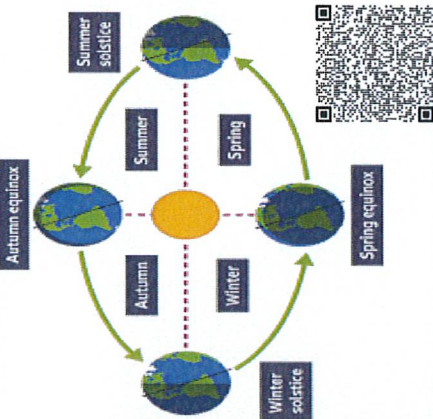
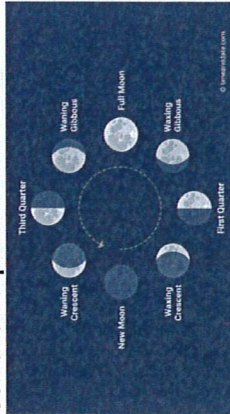
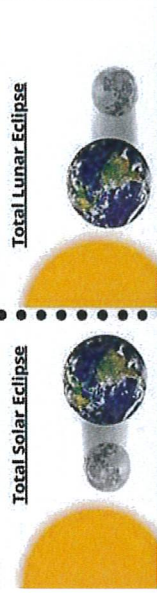
WHAT DO YOU THINK?			
What are the changes to girls during puberty?	What are the changes to boys during puberty?	What is the role of the Umbilical cord?	Describe the stages of the menstrual cycle.
		What are the advantages of plants cross pollinating?	

KEYWORDS		Separation techniques		UNIT OVERVIEW	
CHROMATOGRAPHY – Technique to separate mixtures of liquids that are soluble in the same solvent	MIXTURE – A substance where the components are not all chemically bonded			Science Year 7 – Separation techniques Knowledge Understanding Equipped In this unit you will learn: • Pure and impure • Mixtures Vs Compounds • Solute Vs Solvent • Separation techniques • Chromatography Link to Kerboodle 	
COMPOUND – A molecule of different types of atoms chemically bonded together	PURE SUBSTANCE - A substance is pure if it has no other substance mixed with it (e.g O ₂ or CO ₂)				
EVAPORATION – Process of a liquid turning to a gas	SOLVENT – The liquid in which a solid or gas dissolves				
FILTRATION – Separating an insoluble solid from a liquid	SOLUTE - The solid or gas that dissolves in a liquid				

SUPPORT					
Pure & Impure substances  Must know how melting point is affected by purity 	Mixtures and compounds  Must know the difference between mixtures and compounds 	Separation techniques Filtration - Know how to separate soluble and insoluble substances  Chromatography - Know how to separate colours using solubility  	Separation techniques Evaporation - Know how we evaporate safely  Distillation - Know when distillation is appropriate  		

WHAT DO YOU THINK?			
How can you easily identify a pure substance?	What is the difference between a solvent and a solute?	How would you separate a mixture of salt and sand?	Why in chromatography must the base line be drawn in pencil?
			How would you separate salt from water?

KEYWORDS		The Night Sky		UNIT OVERVIEW
ASTEROID – Lumps of rock orbiting the Sun left over from when the Solar System formed	HEMISPHERE – Half of the Earth either from the North Pole to equator or South Pole to equator		There are lots of thing that we can see in the sky. There are satellites (both natural, the moon or artificial, the ISS). We can see our sun which is one of the many stars in our own galaxy, the Milky Way. We can also see the planets of our own Solar System, comets and meteors. 	Science Year 7 - Space Knowledge Understanding Equipped In this unit you will learn: The Night Sky Solar System The Earth The Moon Link to Kerboodle
AXIS – Imaginary line the Earth spins on	SATELLITE – An object that circles a planet, can be natural (moon) or artificial (ISS)			
ELLIPSE – A squashed circle or an oval shape	SOLAR SYSTEM – The Sun and the planets and other bodies that orbit around it			
GALAXY – A number of stars in a galaxy and the solar systems that surround them	TOTAL SOLAR ECLIPSE – An eclipse where the Sun is covered by the Moon			

SUPPORT			
Solar System. Our Solar System consists of 8 planets, four inner terrestrial planets made of rock, and four outer gas giants. 	How the Solar System formed. Scientists think that gravity pulled dust, rock and gas together to form our Sun and the planets formed from a disc of gas and dust surrounding the Sun. 	Seasons Seasons on earth are caused by the tilt of the Earth as it orbits the Sun. 	Phases of the Moon and Eclipses The moon has phases throughout its orbit around Earth. 
There is an asteroid belt between Mars and Jupiter. Pluto is now dwarf planet and beyond Pluto is the Kuiper Belt (like asteroid belt but contains icy objects). 	Solar eclipse happen when the moon comes between the Sun and the Earth. Lunar eclipses happen when the Earth comes between the Sun and the Moon 		

WHAT DO YOU THINK?			
Can you explain why the seasons in the southern hemisphere occur in different months to the northern hemisphere?	Can you describe how rocky and gaseous planets formed in the Solar System?	Do you know what a light year is?	Can you modal, with a beachball, tennis ball and torch, showing the differences in a lunar eclipse and a full moon?
Can you state which objects in the sky can be seen with the naked eye and which need a telescope to be seen?		Can you recite all the phases of the moon starting with a full moon?	

Spanish Year 7 Term 2 – Family, people and places!



Key vocabulary	To Do: Key verb HACER [to do]: Hago – I do Haces – you do Hace – he/she/it does	la actividad – the activity los deberes – homework el deporte – sport el dibujo – drawing Key vocabulary: - Cúal – which - Cuánto – how much /how many - Cuándo – when - Para – for	la actividad – the activity los deberes – homework el deporte – sport el dibujo – drawing Key vocabulary: - Cúal – which - Cuánto – how much /how many - Cuándo – when - Para – for	la actividad – the activity los deberes – homework el deporte – sport el dibujo – drawing Key vocabulary: - Cúal – which - Cuánto – how much /how many - Cuándo – when - Para – for	la actividad – the activity los deberes – homework el deporte – sport el dibujo – drawing Key vocabulary: - Cúal – which - Cuánto – how much /how many - Cuándo – when - Para – for	la actividad – the activity los deberes – homework el deporte – sport el dibujo – drawing Key vocabulary: - Cúal – which - Cuánto – how much /how many - Cuándo – when - Para – for	la actividad – the activity los deberes – homework el deporte – sport el dibujo – drawing Key vocabulary: - 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KEYWORDS

Threading a needle-Preparing your needle for sewing.

Eye of the needle-The hole which you thread your thread through.

Sewing-The process of stitching 2 pieces of fabric together by hand.

Running stitch/ Blanket stitch-2 different stitches used for hand sewing

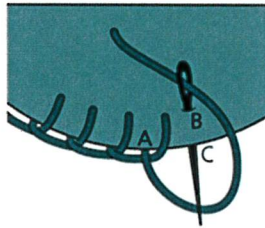
Sewing on the spot-The techniques used to stop your work from unravelling.

Client brief-A list of instructions from the client to the designer.

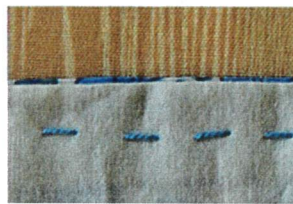
Target audience-The group of people you want to buy your product.

Year 7 Knowledge Organiser-Textiles.

Blanket stitch



Running stitch



Unit Overview

Design and create a hand puppet using felt, adding additional features such as hair, clothes etc.

You will use the running stitch or blanket stitch to hand sew your work.

The puppet must be aimed at a particular target audience.



WHAT DO YOU THINK?

Why is it important to interpret a client brief properly?

Why would a designer NOT target a product to "anyone/everyone."

Why might you use a blanket stitch over a blanket stitch?

What are the steps to stop our work from unravelling?

SUPPORT

Our Textile World-Find out why we study Textiles and what careers it could lead to.



SCAN ME

How to do the blanket stitch



SCAN ME

How to do the running stitch



SCAN ME