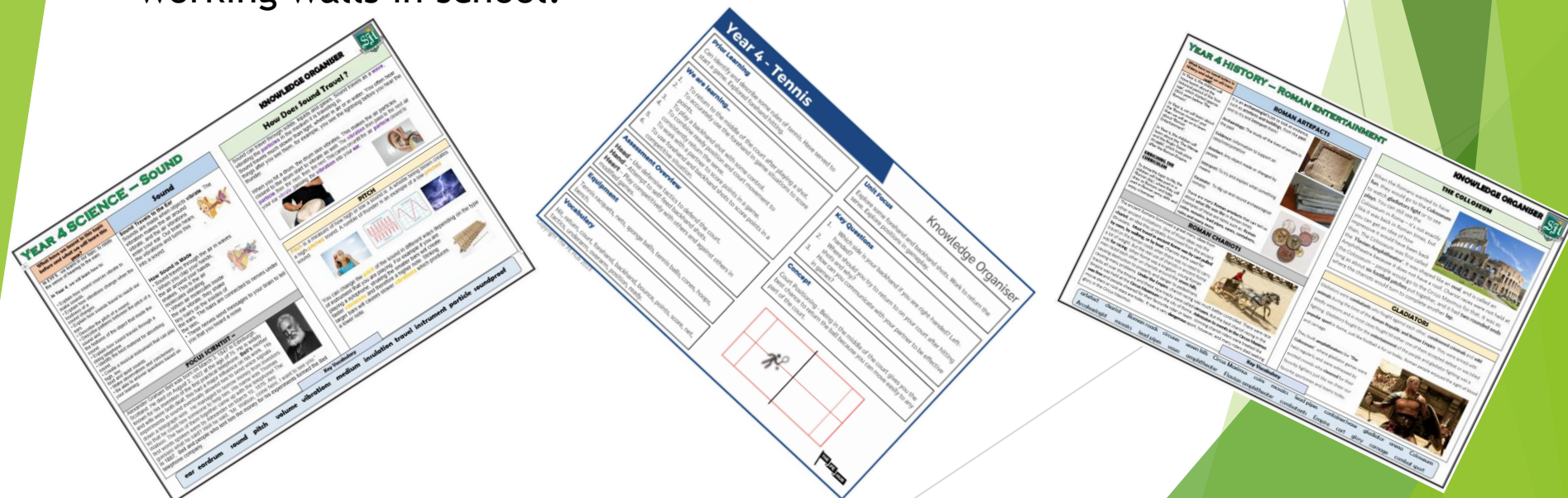


Year Knowledge Organisers



At South Hill, we have created 'Knowledge Organisers' to help pupils and parents to know what the children will be learning in each of our Foundation subjects. These contain essential vocabulary and facts for each topic.

Please see 'Knowledge Organisers' attached for Year 5 for the autumn term, which will also be in pupil's books and on working walls in school.



YEAR 5 SCIENCE – PROPERTIES AND CHANGES OF MATERIALS KNOWLEDGE ORGANISER



What have we learnt in this topic before, what we will learn this year and what will we learn next?

Everyday Materials (Objects and materials)

- To distinguish between an object and the material from which it is made
- To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- Describe the simple physical properties of a variety of everyday materials
- Compare and group together a variety of everyday materials on the basis of their simple physical properties
- Our Focus Scientist was **Charles Macintosh – Waterproof fabrics**

In Year 2, we learnt in our topic

Uses of everyday materials (Materials for different uses)

- To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching
- Our Focus Scientist was **John McAdam-building roads**

In Year 5, we will develop this further and learn about

- To compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- To know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- To use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- To give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- To demonstrate that dissolving, mixing and changes of state are reversible changes
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.
- Our Focus Scientist is **Ruth Benerito – wash and wear cotton fabrics**

CLASSIFYING MATERIALS

Different materials are used for particular jobs based on the properties they have.

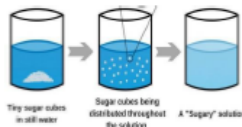
Conductor – A conductor is a material that allows heat or electricity to easily pass through it. Most metals are thermal conductors (conduct heat) and electrical conductors.

Insulator – An insulator is a material that does not allow heat or electricity to easily travel through it. Woods and plastics are both thermal and electrical insulators.

Soluble – Materials that dissolve when introduced to water.

Insoluble – Materials that do not dissolve when introduced to water.

Transparent – A material that allows light to pass through it.



FOCUS SCIENTIST – RUTH BENERITO – WASH AND WEAR COTTON FABRICS



Ruth Benerito was an American chemist. She is best known for developing wrinkle-free cotton fabric. Benerito also invented a fat mixture that could provide nutrients through the veins of patients who could not eat. In 1986, Benerito retired from the USDA. She received 55 patents while working there. A patent is an official document that gives an inventor control over who may use their invention. In 2008, Benerito was inducted into the National Inventors Hall of Fame. She died on October 5, 2013, in Metairie, Louisiana.

Key Vocabulary

melt freeze evaporate transparent insulator cooling condensation evaporation solids liquids gases conductor reversible process

CHANGES OF STATE

Dissolving

Some substances dissolve when you mix them with water. When a substance dissolves, it might look like it has disappeared, but in fact it has just mixed with the water to make a transparent (see-through) liquid called a solution.

Substances that dissolve in water are called soluble substances. When you mix sugar with water, the sugar dissolves to make a transparent solution. Salt is soluble in water too.

Mixtures

A mixture is the result of combining two or more substances, in which they do not change their physical state and no chemical reaction takes place. These mixtures are reversible as the substances included in the mixture can be separated without great levels of difficulty.

Creating a mixture of two or more objects may involve sand and water (suspension) or pasta and paperclips (mixture).

Changes of State

A reversible change of state refers to any form of process that can be undone.

For example, when ice melts to water it goes from being a solid to a liquid. If you were to continue heating the liquid, it would once again change state to a gas.

The original ice cube could be restored once the water was collected by the process of evaporation and frozen again.

Therefore the state of a substance is interchangeable between a solid, liquid or gas.

FORMATION OF NEW MATERIALS

When substances create a new material through chemical change, it is irreversible. A change is called irreversible if it cannot be changed back to its original state.

Heating

Heating can cause an irreversible change. For example, you heat a raw egg to cook it. The cooked egg cannot be changed back to a raw egg again.

Mixing

Mixing substances can cause an irreversible change. For example, when vinegar (an acid) and bicarbonate of soda are mixed, the mixture changes and lots of bubbles of carbon dioxide are made. These bubbles and the liquid mixture left behind, cannot be turned back into vinegar and bicarbonate of soda again.

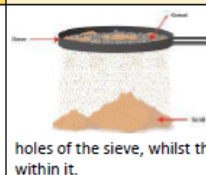
Burning

Burning is an example of an irreversible change.

When you burn wood, you get ash and smoke. You cannot change the ash and smoke back to wood again.

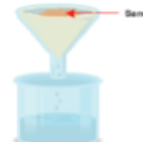


SEPARATING MIXTURES



SIEVING – a mixture of different sized solid particles can be separated with a sieve. The particles small enough fall through the holes of the sieve, whilst the largest particles remain within it.

FILTERING – an insoluble solid can be separated from a liquid when passed through a filter. The liquid passes through and the solid particles are trapped on the filter.



EVAPORATING – if a solution is boiled (heated) the water will evaporate into gas and the solid will be left behind.

YEAR 5 SCIENCE – EARTH AND SPACE

KNOWLEDGE ORGANISER



What have we learnt in this topic before and what we will learn this year?

In EYFS and Year 1 we learnt about Seasonal Changes.

In year 5 we will learn:

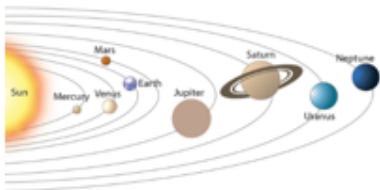
Earth and Space

(solar system and movement)

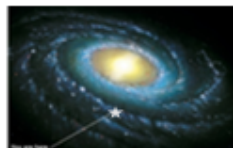
- describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- describe the movement of the Moon relative to the Earth
- describe the Sun, Earth and Moon as approximately spherical bodies
- use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

THE SOLAR SYSTEM

The Sun is a star at the centre of our Solar System. Orbiting the Sun are eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. (My Very Easy Method Just Speeds Up Naming Planets)



Rocky planets: Four closest planets to the sun are mostly made of rock and metal.
Gas giants: The four farthest planets.



The Solar System consists of the Sun and all astronomical bodies that orbit it. This includes the eight planets, numerous dwarf planets, asteroids, comets and other satellites. There are billions of systems of stars and planets. Together these form galaxies. Our galaxy, which contains at least 100 billion stars, is a spiral-shaped galaxy called the Milky Way.

FOCUS SCIENTIST – PTOLEMY AND COPERNICUS

Claudius Ptolemy – The Geocentric model (100 – 186AD)

Ptolemy's theory placed the Earth at the centre of the universe. It was believed that the Moon was orbiting on a sphere closest to the Earth, followed by Mercury, then Venus and then the Sun. Beyond the Sun were a further three spheres on which Mars, then Jupiter and then Saturn orbited the Earth. Finally, the outermost sphere was where all the stars were located.

Nicholas Copernicus – The Heliocentric model (1473-1543)

This placed the sun at the centre of the universe and the planets orbiting around the sun. The moon is the only celestial object that revolves around the earth.

THE SUN

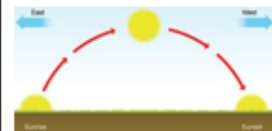
Our Sun is a star. It is no different from the other stars we see in the night sky, but it is a lot closer. A star is a massive ball of extremely hot, luminous gas (plasma) that is held together by its own gravity.

It is not safe to look directly at the Sun, even when wearing dark glasses.

Planets nearer to the Sun take less time to go around it than those further away.

One year on Mercury is 88 Earth days. One year on Neptune is 165 Earth years.

The sun rises in the East and sets in the West. It is at its strongest at midday.

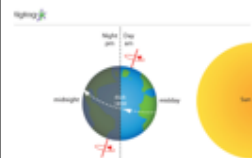


THE EARTH

The Earth is the fourth planet from the sun. It is a rocky planet.

It takes the Earth 365 days (1 year) to orbit the Sun.

The Earth rotates on its axis, taking 24 hours (one day) to make one complete rotation. The half of the Earth that faces the Sun experiences daytime, while the half that faces away from the Sun experiences night.



THE MOON

A moon is a celestial body that orbits a planet (Earth has one moon; Jupiter has four large moons and numerous smaller ones).

The changing shapes that the Moon appears to take are called phases. A complete cycle of phases is known as a lunar month. The Moon takes approximately 29.5 days to make a complete orbit of the Earth. As the Moon orbits, light from the Sun is reflected by the Moon's surface.

When the Sun, Earth and Moon are in approximate alignment, we see a full moon. This is because the side of the Moon reflecting sunlight is facing us.

As the Moon rotates and orbits the Earth, its entire surface gets an equal amount of sunlight and darkness. There is a far side of the Moon that we never see from Earth. The Moon travels in its orbit with the same side always pointing towards the Earth.

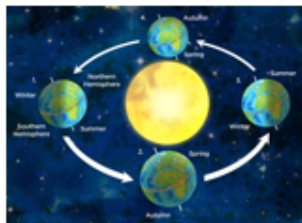


SEASONS

The seasons are caused by the tilt of the Earth on its axis. This causes the North and South Poles to be angled towards or away from the Sun at different times of the year.

Close to the equator, the tilt is not very noticeable, so the weather doesn't change very much and there is little difference between the seasons.

When a hemisphere is tilted away from the Sun, the sunlight there is less intense and it is winter. When a hemisphere is tilted towards the Sun, the sunlight there is more intense and it is summer.



Key Vocabulary

Asteroid
Ptolemy

Comet
Copernicus

Dwarf Planet
Geocentric

Galaxy
Heliocentric

Light Year
Revolves

Satellite
Phases

Star
Rotates

Universe
Axis

Solar System
Celestial body

Plasma
Orbit



COMPUTING SYSTEMS AND NETWORKS KNOWLEDGE ORGANISER

Overview



Systems

- You should also know that Information technology (I.T.) includes computers and things that work with computers.
- You should also know that computers have Input, Process and Output (IPO) components.
- Computer systems are built using a number of parts.
- Computer systems can communicate with other devices.
- There are many, many different kinds of computer systems all around the world, ranging from small-scale to large scale.

Systems

- Systems are a set of things working together as parts of a whole.
- Computer systems are made up of inputs (something that sends a message to the device), processes (the way the device acts on the message) and outputs (something that is sent out by the device). Below are some examples.

Washing Machine:

- Input: Dials and buttons.
Process: The computer inside follows a program.
Output: The clothes are washed and the display shows the remaining time.



DVD Player:

- Input: The disc is inserted and play is pressed on the remote.
Process: The system reads the information on the disc
Output: The screen displays the movie/ show.



Smart Locker:

- Input: The customer scans in a barcode.
Process: The code is recognised by the system.
Output: The correct locker is opened.



Transferring Information

Protocols and Packets

- Protocols are an agreed way of doing something. When we communicate, we use an agreed set of protocols (greeting, speaking, listening, etc.).
- In computing, agreed protocols are the way that computers communicate with one another.
- The digital information they send is called a 'packet.'



IP Addresses

- Computers and their users are not always in the same place as one another.
- With billions of computers around the world, computers need to send the information to the correct place.

- To do this, computers use special addresses called IP addresses. They may look like this:

From: 216. 58. 1. 214

To: 216. 64. 1. 20

My IP Address
63.255.173.183



Working Together

- Collaborating is another word for working together on something, to reach a shared goal.
- The internet can be used to help people collaborate online, even when they are a long distance apart!
- ‘Chat’ functions can be used keep each other updated with new information.
- Shared ‘cloud’ spaces and online drives can allow one or more person to have access to/ edit documents.
- When building upon someone else’s work, you need to be aware of copyright and intellectual property rules.



Important Vocabulary

System

Input

Process

Output

Protocol

IP Address

Packet

Reuse

Explore

Collaboration



COMPUTING: CREATING MEDIA KNOWLEDGE ORGANISER



Overview

Vector Drawing



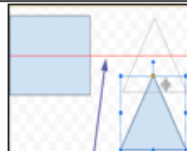
- Vector drawings are computer graphic images that are made using 2-D shapes.
- The drawings are connected by lines and curves to form polygons and other shapes, forming a complete picture.
- There are lots of different apps and programs that can help us to complete vector drawings, including Google Drawings and Adobe Illustrator.
- Many techniques, e.g. zooming, rotating, resizing & duplicating, can help to create accurate images.

More Complex Vector Drawings

Google Drawings has been used in these examples, but lots of other vector drawing software uses the same tools and functions.



When dealing with small and intricate objects, it is important to use the zoom tool. Zooming in allows you to work with more precision. Zooming out allows a wider view.



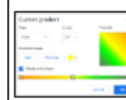
The **Alignment guides** pop up as you move objects around, and help you to align and size objects.



The line tools can be used to help you change the colour and weight (thickness) of the line, and to make dotted lines.

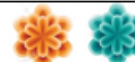


Coloured lines can be drawn, and colours can be used to fill shapes.



Gradient colours can be used to colour the same object in different colours.

Remember to that vector drawing is all about layering. By gradually adding layers of basic shapes, you build up something far more complex.



Creating Simple Vector Drawings

Vector drawings use lines and shapes to create bigger and more detailed images.



Circles

Plan your drawing by thinking about what shapes it is made up of. Each shape is called an **object**.



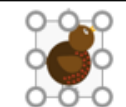
The tail is furthest away so is drawn first.

When vector drawing, the shapes **overlap**, so start with the objects that are the **furthest away**.



Copy and paste has been used to make the red spots the same size.

You can save a lot of time and effort doing the same thing over and over by **duplicating** shapes. This is done most easily by copying the object that you want to duplicate (hold ctrl + c) and pasting (hold ctrl + v) a new one.



You can **enlarge/reduce** an object by clicking on it and dragging the handles to the desired size.

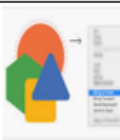


You can **rotate** an object by dragging the circular handle at the top.

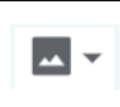
Advanced Tips



Grouping: 1. Select all images. 2. Right-click 3. Choose 'group.' All of the objects can now be moved and changed at the same time.



Advanced Layering: Right-click on objects and use the 'send to back' and 'bring to front' tools (in 'order') to ensure that your layering is in the correct order.



Backgrounds: You can create backgrounds by uploading images (using this icon). Remember to 'send to back' after it has been inserted.

Selecting Multiple Objects

This allows you to perform tasks with the whole drawing, rather than individual objects:

-Click, drag and drop a box around all of the objects in an image. This allows you to select all of the objects.

-When you perform an action (e.g. copy and paste) it will now apply to all.

Important Vocabulary

Vector

Object

Handles

Rotate

Enlarge/ Reduce

Layering

Gradient

Zoom

Alignment

Grouping

YEAR 5 HISTORY — THE VIKINGS

What have we learnt in this topic before and what we will learn this year?

In Year 4, we learnt about 'lifestyle' in both Ancient Rome and Ancient Greece including the legacies that both groups left behind.

In Year 5, we will continue looking at the theme of 'lifestyle' by learning more about what life was like for Anglo-Saxons once they had invaded Britain and consider why they wanted to invade and the changes that they made over time.

In Year 6, we will further this by looking more in depth at important events and significant leaders during World War II as well as a study on the ancient civilisation 'The Mayans'.

TIMELINE

- AD 793 - The Vikings attacked from Norway. They attacked the Monastery of Lindisfarne in Northumbria and the following year they attacked northern Britain.
- AD 866 - The Vikings capture the city of York.
- AD 878 - They had settled permanently in England.
- AD 871 - Alfred the Great becomes King of Wessex. King Alfred agrees to a treaty with the Vikings. Alfred keeps the west and the Vikings are given the east which is later known as 'Danelaw'.
- AD 1042 - Edward II is invited to return from Normandy to become the King of England. Edward II was better known as 'Edward the Confessor' due to his extreme religious devotion (piety).
- AD 1066 - The last Anglo-Saxon king, King Harold II, is defeated by William the Conqueror in the Battle of Hastings and Norman Britain begins.

LINDISFARNE MONASTERY

Lindisfarne, also known as Holy Island, was one of the first landing sites of the Vikings. Monasteries were places where monks lived and worshipped. Most people respected the monks and gave them money and gifts for their monasteries; however, the Vikings committed terrible violence against the monks at Lindisfarne. When the Vikings arrived, there was no battle as the monks did not have weapons or believe in fighting. The Vikings killed or enslaved the monks and stole most of the treasure and precious items sending shockwaves throughout Europe.



Key Vocabulary

Viking	Norway	Alfred the Great	Danelaw	Edward II	King Harold II	Anglo-Saxons	Battle of Hastings	beliefs
monastery	monk	killed	Longhouse	11 th century	peace	treasure	precious	brutal
		enslaved					skills of their fathers	

KNOWLEDGE ORGANISER



LIFE BEFORE THE VIKINGS INVADED

Anglo-Saxon children were seen as adults by the age of ten. They had to work as hard as any adult and would be punished as adults if they broke the law. Girls worked in the home e.g. housekeeping, weaving cloth and cooking meals and boys learned the skills of their fathers e.g. tree cutting, ploughing a field and using a spear in battle.

Only a few girls and boys learned to read and write and the only schools were run by the Christian church in monasteries. The sons of Kings or wealthy families might be taught at home by a private teacher.



LIFE AFTER THE VIKINGS INVADED

The Vikings brought with them their way of life and beliefs. Also known as 'The Norse people', they worshipped many gods and loved to tell stories of magic and monsters around the fire.

Many Vikings worked as farmers which was a tough life. They grew crops (oats, barley and wheat) to make flour, porridge and ale. They planted vegetables and kept animals like cows, sheep, pigs and chickens. Other Vikings were craft workers such as jewellers, woodworkers, leatherworkers, potters and blacksmiths. They made crockery, clothes and weapons. People took these goods to the market to sell and Viking traders travelled the seas to trade their goods for money or for silver, silk, spices and furs to bring back home.

Many Viking families lived together in a longhouse built from wood or stone with a thatched or turf roof. Everyone, including animals, shared one room so they were often crowded and smelly.



THE DANE LAW

The Danelaw is the name for an area of Northern and Eastern England that was under the control of the Danish Viking empire. In these areas, the laws of the Danes held sway and dominated those of the Anglo-Saxons. There were 5 boroughs (and 15 towns) in Danelaw including Leicester, Nottingham, Derby, Stamford and Lincoln, which by the ninth century were under control of the Vikings. The establishment of Danelaw brought with it an important period of peace as this divided the British Isles up into territories belonging to the ruling societies. This, however, did not last long as the Danes and English were again fighting, into the 10th Century. The English eventually gained the upper hand, and the regaining of York from the Danes in 954 was essentially the end of the Danelaw.



What is life like in the Alps?



World map



Mont Blanc is the highest mountain in the Alps.



Popular activities in the Alps include skiing, hiking and sightseeing



Climate

Most of the Alps have a mountain climate. It is much colder than the surrounding climate due to the height of the mountains. Lower regions of the Alps have a temperate climate.

YEAR 5 ART – ALL ABOUT EYES

KNOWLEDGE ORGANISER



What have we learnt before in Art and what we will learn next?	FOCUS ARTIST
In Year 4, we developed our sketching and drawing skills to show facial expressions and to create movement in our drawings. In Year 5, we will study the work of artist 'Jose Lopez Vergara'. We will use ICT to manipulate and edit images of our own eyes and learn how to sketch eyes to show highlights, shadows and texture. In Year 6, we will develop our mark making skills to draw our own creatures based on 'The Spiderwick Chronicles'.	Jose Lopez Vergara, better known to contemporary art fans as Redosking, was born in Mexico City in 1994 and raised in Madrid, Spain and now lives in . In 2003 Vergara had an accident that permanently impaired the movement of his right arm. José spent his teenage years painting murals with spray paint and creating hyper realistic drawings with colored pencils. He has gained recognition for his hyper-realistic pencil drawings of human eyes. His work showcases an extraordinary level of detail capturing the unique colors, textures, and reflections of the eye with remarkable precision. 

USING ICT TO MANIPULATE IMAGES



Many artists use ICT to 'manipulate' and edit images. Programmes such as Microsoft word can be used to change the appearance, and therefore mood, of photos. Features that can be changed include:

- Adding artistic effects
- Contrast/ Brightness
- Colour

CREATING TEXTURE BY DRAWING
Texture refers to how something feels, including its appearance and consistency. Glass, wood, rock and sand all have different textures. To create the illusion of texture in a Dragon's eye: • Scales: Draw overlapping, curved lines to mimic scales, angling the lines slightly to follow the shape of the eye. • Contrast: Ensure the eyeball is a smooth, round shape contrasting with the textured scales. • Eye: Use darker colors for the scales near the edges of the eye and lighter colors towards the center of the eye to create depth. 

HIGHLIGHTS AND SHADOWS
 In art, highlights are the lightest areas on an object where light directly hits and reflects. This can be achieved in pencil drawings by using a rubber to rub away the pencil to leave a section of white. Shadows are the darker areas where light is blocked or does not directly reach and can be achieved by using different grades of pencils. H stands for hard F stands for fine B stands for blackness.

Key Vocabulary

Jose Vergara	human eyes	realistic	tone	light	dark	highlights	shadows	grades of pencil	H	F	B
texture	appearance	consistency		scales	edge	center	manipulate	edit	effect	contrast	

YEAR 5 DT – CLAY DRAGON’S EYE

KNOWLEDGE ORGANISER



What have we learnt before in Art and what we will learn next?

In Year 2, we learnt to begin to use clay using skills such as coiling, rolling and cutting to create our own clay flowers.

In Year 4, we will further develop our skills by creating ‘Dragon eyes’ focusing on using our hands and simple clay tools to create texture, intricate shapes and by learning to join clay pieces together using ‘slipping and scoring’.

In Secondary school, we will extend this by developing our 3D art skills using clay and other mediums.

DRAGON’S EYE

A dragon is a magical, legendary creature that appears in the folklore of many cultures worldwide. Dragons often have wings, horns and are often capable of breathing fire. They often have features taken from reptiles, mammals or birds.

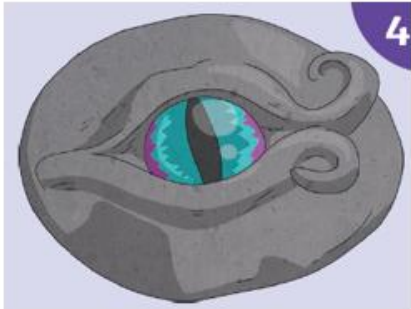
A dragon’s eye has a large iris and a vertical pupil, like a cat. The white of a dragon’s eye is often not white, but yellow, gold, green, orange, red, or silver. A dragon’s eye is protected by a leathery outer eyelid and three smooth inner eyelids. The eye is often surrounded by scales and rough skin with circular or triangular shapes.



CREATING INTRICATE SHAPES USING CLAY

We can use our hands and clay tools to shape and manipulate clay to construct intricate shapes.

For Dragon eyes, we can create eye lids by rolling long strips and placing these around the eye (using a cabochon). These can be joined onto the clay, and then sculpted, smoothed and shaped further once in place. We can also use tools to carve shapes into the clay.



Key Vocabulary

Dragon	eye	iris	pupil	scale	eyelid	score	crosshatch	slip	<u>stick</u>	smooth	texture	join
Clay tools	shape		manipulate	roll	curved	round	straight		cabochon	sculpt	triangular	

SLIPPING AND SCORING

- You can join two pieces of clay together using ‘slipping and scoring’.
- Firstly, score your join using hatch marks.
 - Next, make ‘slip’. Slip is made by adding clay to water and mixing to make a thick consistency.
 - Use a paint brush, add slip to the cross hatch. Then, add the piece of clay you are joining on top and smooth to create one piece of clay.



CREATING TEXTURE

To create texture using clay and to make our model 3D, we can use a range of shaping techniques, using our hands and simple clay shaping tools.



For a dragon, this enables us to create curved, round, or straight shapes to add details such as eye lids, scales, rough skin, and other parts of the body. We can then place a dragon eye cabochon to replicate the eye and build around and on top of this.

YEAR 5 DT – MAKING BREAD

What have we learnt before in DT and what we will learn next?	BREAD
In Year 1, we looked at fruit salads and what makes healthy options in our diet. In Year 3, we created a tea party for a Royal celebration. We have also considered what it means to be hygienic and the importance of a clean surface. In Year 5, we will consider all of these skills and look at what it means to be safe as well as hygienic. We will plan, make and evaluate our bread and then at the end of the topic, make changes and consider presentation of a final piece. In Year 6, we will go on to look at foods from WWII and the importance of rationing.	The history of bread dates back to the Neolithic age as old as 23,000 years ago! Humans have processed and consumed grain for a long time! The processes have changed since the first breads but essentially, grains and fibrous materials are still used.  Early methods included smashing the grains with rocks to crush into a dust-like state and mixing with water to form a paste. They would leave the mixture in the sun to dry out, form a bread-like substance. Some of the earliest evidence of bread 'rising' was seen engraved on the walls of Egyptian Pyramids and temples. They found that a product inside the bread, yeast, was responsible for it rising. Today, we manufacture bread in vast numbers and have a range of different styles, tastes and textures. An American called Otto Rohwedder created a machine that would slice bread, and this was introduced to Britain in 1930.
YEAST	WARBURTONS
The yeast used in baking bread is responsible for the fermentation – producing carbon dioxide which creates the rise in the dough. When the yeast comes in to contact with warmth (water) and carbohydrates (flour) it produces carbon dioxide hence the bubble holes in bread. 	At Warburtons, family is at the heart of their business.  That's because they're a real family bakers still owned and run by the Warburton family. Five generations' worth of expertise goes into making their products and allows them to continue a tradition of baking which began back in 1876. Today, they have grown to be the largest bakery brand in the UK. They produce over 2 million products every day at their 11 bakeries, which they deliver fresh to 18,500 stores every morning!

KNOWLEDGE ORGANISER

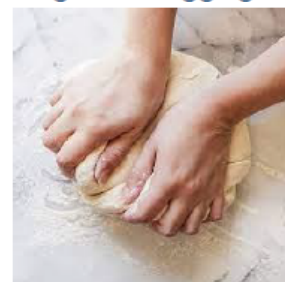


THE NEED FOR KNEADING

Kneading stretches and develops the gluten strands in the dough. The protein strands line up and this creates a gluten matrix in the bread, which traps air and lets the bread rise.

Kneading lets you have full control over the finished texture of your loaf and involves punching, stretching and dragging the dough across a floured surface.

Once you have finished kneading the dough. You allow to sit in a covered bowl to prove. Whilst the dough proves, the yeast inside will activate, causing the dough to expand to over double its original size!



HYGIENE IN THE KITCHEN

You must wash your hands before, during and of course after all aspects of food preparation. Hand washing is also essential after breaks or using the toilet.

Hair should be tied up or covered up to avoid strands of hair falling into dough. The same applies to jewellery: finding an earring inside a bread roll isn't ideal!

We must always work with clean equipment and surfaces, germs and bacteria can live on surfaces. This added to the dough and then heated could result in the bacteria growing faster and stronger!

We should take care to not put our fingers near our mouths or eyes when making the products as raw ingredients can sometimes be irritable.



Key Vocabulary

bread
roll

product
bake

grain
hygiene

wheat
centigrade

barley

yeast
ingredients

prove
evaluate

knead
taste

texture
product

rise

Year 5 – Dodgeball

Knowledge Organiser

Prior Learning

Increased confidence in a range of throwing, catching, blocking and dodging skills such as tunnel catch, duck dodge and blocking for a teammate. Developed team tactics such as a team throw and play to the return line.

Unit Focus

Handle a dodgeball with confidence. Develop more complex dodgeball skills, including accurate throwing, dodging using weave and leg lift, snatch catch, and defensive blocking for a teammate. Know more rules for dodgeball, including being able to play using varied rules in conditioned games.

We are learning...

1. to improve accuracy, aiming at different body areas
2. to use the snatch catch effectively
3. to develop smaller dodging movements like the weave and leg lift
4. to use the block-and-catch tactic
5. to use counter-attacking tactics in dodgeball
6. the hand up rule and using it in a game

Key Questions

1. When would you use a pick-up and throw in dodgeball
2. When would you use a lower-body weave? Upper body? Leg lift?
3. What happens if your teammate catches a ball you blocked?

Equipment

Foam dodgeballs, bibs, cones, hoops, benches, mats.

Vocabulary

Defence, snatch catch, counterattack, weave, conditioned game.

Rules

Lines

- Stay within the court boundaries.
- If you collect a ball off-court, return through your team's backline.
- Players must return from behind the back line when they have gone to collect a
- Players may leave the court to collect balls (hand must be raised)

Assessment Overview

Head – Apply a range of rules, including rule variations in conditioned games

Hand – Attempt a counterattack as part of a team

Heart – Attempt a counterattack as part of a team



Prior Learning

Consistently performed basic tag rugby skills. Implemented rules and developed tactics in competitive situations. Increased speed and endurance during gameplay.

Unit Focus

Combine basic tag rugby skills such as catching and quickly passing in one movement. Select and implement appropriate skills in a game situation. Begin to play effectively when attacking and defending. Increase the power of passes so the ball can be moved quickly over a greater distance.

We are learning...

1. to use defensive positions to mark and tag an attacker.
2. to pass a ball accurately and consistently while on the move.
3. to defend as part of a team to deny space to the attacking team.
4. to use a pop pass over short distances to create an explosive run.
5. to move the ball quickly using the 'magic diamond' formation.
6. to use the 3 step and pass rule with some confidence.

Key Questions

1. What techniques are we looking for during games?
2. What does it mean to take the metres not the time?
3. When would you use the magic diamond?

Equipment

Rugby balls, tags, cones, hoops.

Vocabulary

Contest, possession, pressure, support, pop pass, turn over, lose pass, W grip, offence, formation.

Rules

- Possession is changed if a pass is forward, and a free pass is awarded from where the offence occurred.
- If the ball is dropped forward, the opposition has a free pass from where the offence took place.

Assessment Overview

Head - Recognise principles of defence.
Hand - Combine skills such as running and passing.
Heart - As a team, maintain possession.



Prior Learning

Worked to develop a solo secret agent phrase and explore relationship variations through trio dance, such as action and reaction. Practised and performed a variety of different formations.

Unit Focus

Perform different genres of dance with confidence, displaying key stylistic features of both Bollywood and Line Dance styles. Perform with strength, stamina and emotion, offering detailed feedback for others to improve their work.

We are learning...

1. how to dance in the style of Bollywood.
2. how to create a Bollywood dance duet.
3. how to present and appreciate a Bollywood dance.
4. how to dance in the Line Dancing style.
5. how to create a group Line Dance.
6. How to present and appreciate a Line Dance.

Key Questions

1. What are the stylistic features of Bollywood?
2. Can you identify some of the differences between Bollywood dancing and today's Line Dancing?
3. Why is it important to transition between each wall?

Equipment

Music player, music, cones, hoops, throw down spots, laptop, internet access.

Vocabulary

Bollywood, Mudra, Lotus Flower, Flag, Deer, Bhangra, Line Dance, switch, heel switch, heel hooks, rodeo kick, step touch, grapevine, slide.

Concepts

A stylistic feature in dance is something that makes a particular style of dance look and feel different from others, a kind of signature or flavour that helps us recognise the style. E.g. In ballet, stylistic features include pointed toes, graceful arms and upright posture, or in Bollywood, there are expressive hand gestures, facial expressions, and rhythmical footwork.

Assessment Overview

Head - Confidently participate in dances from different parts of the world.

Hand – Can refine movements and add stylistic features to different genres of dance

Heart – Can perform confidently with an awareness of aesthetics.



Prior Learning

Introduced to some defensive skills. Can dribble in different directions using different parts of their feet. Passed for distance. Evaluated skills to aid improvement.

Unit Focus

Play effectively in a variety of positions and formations. Relate a greater number of attacking and defensive tactics. Become more skilful when performing movements at speed.

We are learning...

1. to turn with the ball.
2. to travel quickly and effectively when running with the ball.
3. to combine running with the ball and sending it into space.
4. to maintain position when attacking to create space.
5. to perform a stepover to beat a defender.
6. to control a bouncing ball, keeping it close to the body.

Key Questions

1. Why is regaining possession quickly crucial in a game?
2. What does possession mean?
3. Why is it essential to be goalside of your player when marking?

Equipment

Footballs, range of balls, cones, goals, bibs, stopwatch.

Vocabulary

Distance, perform, consistent, speed, fair play, regain, possession, goal side, interchange, position, maintain.

Rules

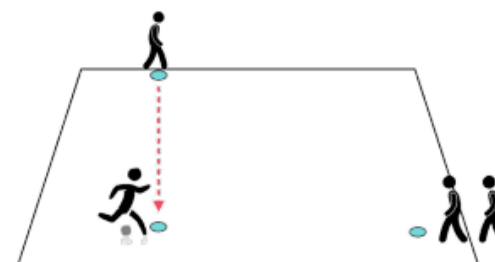
- No slide tackling.
- No touching the ball with your hands (unless you are the goalkeeper).
- To start and restart the game after a goal is scored player passes the ball to a teammate from the centre.

Assessment Overview

Head - Select an appropriate conclusion to a run with the ball.

Hand - Receive the ball and turn.

Heart - Use individual skills to keep possession.





Jigsaw Knowledge and skills progression: Being Me in My World Ages 3-11

Jigsaw PSHE is a progressive scheme of learning where knowledge and skills build year on year across the programme. The table below shows how the **Being Me in My World** Puzzle (unit of work) develops in this year group, including some of the key vocabulary. Schools may adapt content to fit their policy, so please check with your child's school for specific details.

Ages 9-10	Puzzle overview: Being Me in My World	
	In this Puzzle, children look ahead to the year, setting personal goals and reflecting on what they value about their school community. They explore leadership, motivation and how to approach challenges positively. Across the six Pieces, children learn about rights and responsibilities as citizens and develop empathy for people whose lives are different from their own. They consider fairness, privilege and disadvantage, and how choices affect themselves and others. Children examine how rewards and consequences influence behaviour and work together to create and follow their Learning Charter, focusing on cooperation and having a voice. By the end of the Puzzle, children understand how democracy and shared expectations support a positive school community, with the whole-school Learning Charter as the shared outcome.	
	Knowledge	Social and emotional skills
	- I can face new challenges positively and know how to set personal goals - I know how to use my Jigsaw Journal - I understand my rights and responsibilities as a citizen of my country - I understand my rights and responsibilities as a citizen of my country and as a member of my school - I can make choices about my own behaviour because I understand how rewards and consequences feel - I understand how an individual's behaviour can impact on a group - I understand how democracy and having a voice benefits the school community and know how to participate in this	- I know what I value most about my school and can identify my hopes for this school year - I can empathise with people in this country whose lives are different to my own - I understand that my actions affect me and others - I can contribute to the group and understand how we can function best as a whole - I understand why our school community benefits from a Learning Charter and can help others to follow it
	Vocabulary	
	appreciation, asylum, challenge, choices, citizen, collaboration, cooperation, conflict, consequences, courtesy, deprive, denied, education, empathise, goals, hopes, leadership, learning charter, manners, migrant, motivation, opportunities, participation, persecution, poverty, prejudice, privilege, refugee, responsibilities, rewards, rights, self-respect, vision, wealth	

Jigsaw PSHE is a progressive scheme of learning where knowledge and skills build year on year across the programme. The table below shows how the **Celebrating Difference** Puzzle (unit of work) develops in this year group, including some of the key vocabulary. Schools may adapt content to fit their policy, so please check with your child's school for specific details.

Ages 9-10	Puzzle overview: Celebrating Difference	
	In this Puzzle, children explore cultural similarities and differences, reflect on their own identities, and consider how assumptions and stereotypes can lead to conflict. They develop an understanding of racism, discrimination and different forms of bullying, including rumours, name-calling and cyberbullying. Across the six Pieces, children practise problem-solving, managing feelings and supporting others who experience bullying. They explore how wealth and happiness are not the same and compare lives across the world, developing empathy and respect for different communities.	
	Knowledge	Social and emotional skills
	- I understand that cultural differences sometimes cause conflict - I understand what racism is - I understand how rumour-spreading and name-calling can be bullying behaviours - I can explain the difference between direct and indirect types of bullying - I can compare my life with people in the developing world - I can understand a different culture from my own	- I am aware of my own culture - I am aware of my attitude towards people from different races - I can tell you a range of strategies for managing my feelings in bullying situations and for problem-solving when I'm part of one - I know some ways to encourage children who use bullying behaviours to make other choices and know how to support children who are being bullied - I can appreciate the value of happiness regardless of material wealth - I respect my own and other people's cultures
	Vocabulary	
	appearance, assumptions, banter, bullying, colour, community, continuum, culture, cyber bullying, difference, direct, developing world, disability, discrimination, fair, happiness, homophobic, indirect, included, name-calling, race, racist, racism, respected, respect, rumour, sexist, similarity, stereotype, texting	