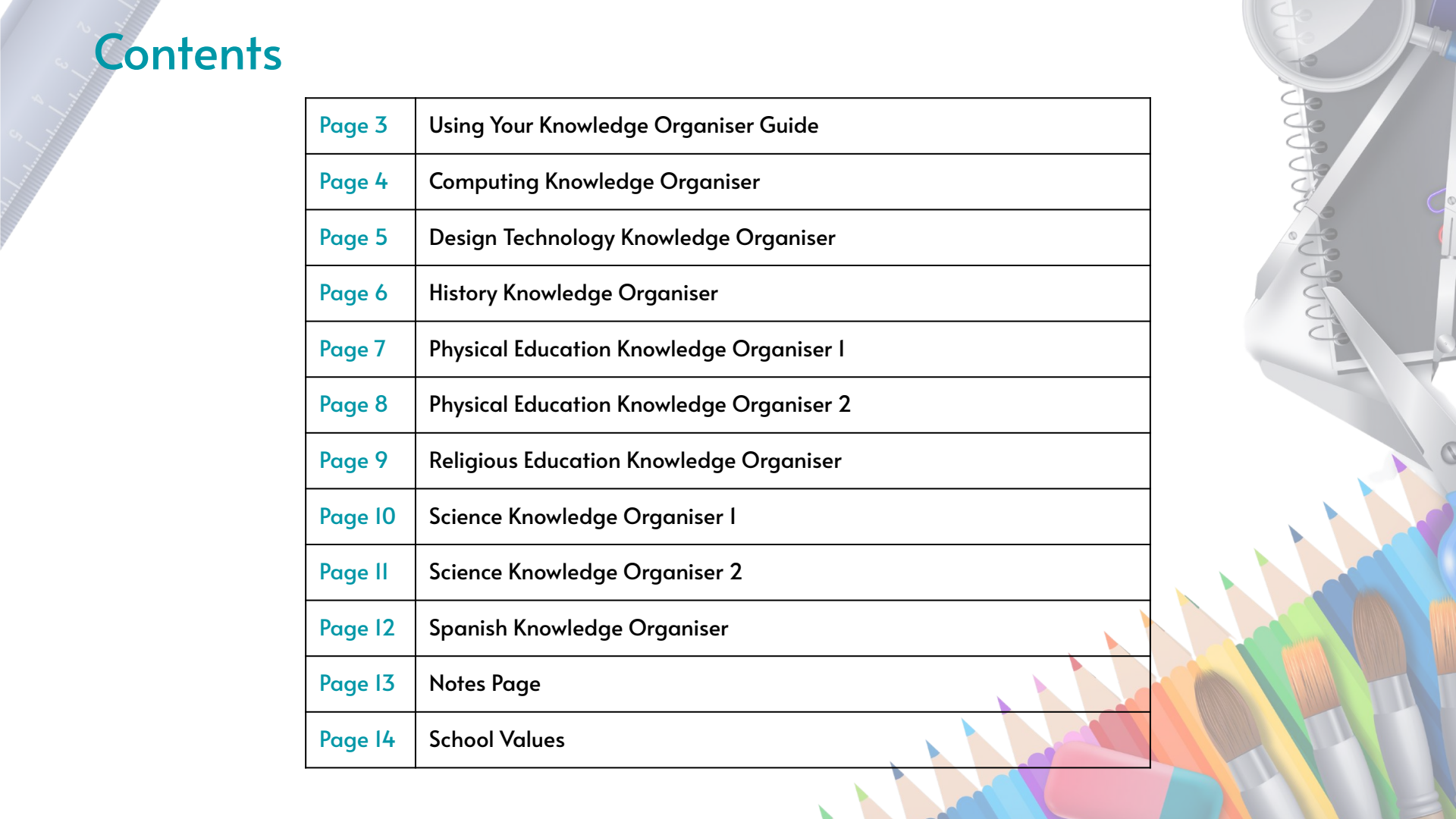
Knowledge Organiser Booklet Year 4

Autumn 2

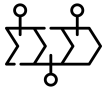
Name		Class	

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Use your knowledge organisers to help you remember more.

	Test Yourself!	Only Connect! 	Memory Cards 	Order, Order! 	Phone a Friend! 	Picture it! 
1	Look at and study the definitions of the key vocabulary on your knowledge organiser.	Create a mind map, making connections and links with things that you remember without looking back.	Make your own information cards by writing questions about key vocabulary on one side of the card.	Using a simple line, sort information from your topic into chronological, sequential or hierarchical order.	Ask a friend or family member to have the knowledge organiser or memory cards in their hands.	Read over your knowledge organiser and the key vocabulary, remembering the definition.
2	Cover or hide the information on the knowledge organiser and write down everything that you remember.	Challenge yourself by covering or hiding the knowledge organiser, using what you can recall.	On the other side of the card, write the answer to your questions. You could add pictures to your cards.	Check these with a friend or family member, using data on your knowledge organiser, add more detail.	Get them to test you by asking different questions about the information on your knowledge organiser.	Using the information you remember, draw pictures or diagrams to represent words.
3	Check your notes! Correct your mistakes and add anything that you might have missed out.	Check what you have added to your mind map by using your knowledge organiser to correct any mistakes.	Ask a friend or family member to ask you the questions you created or to ask you new questions.	Challenge yourself by adding information you recall from previous topics which are related.	Write your own sentences using the key vocabulary to replace those on the knowledge organiser.	Showing your diagrams to friends or family, ask them to guess which word you have represented.

This is your Year 4 Computing Knowledge Organiser for Autumn 2 - Audio Production

Tier 2 Vocabulary

speaker

A device that produces sound by converting signals from a computer or other audio source into sounds that we can hear.

A part of a radio, television, or computer, or of a piece of electrical equipment for playing recorded sound.

You will learn that some devices have built in speakers and some needs these as an extra.



Key Vocabulary

audio

Audio refers to sound, especially when recorded, transmitted, or reproduced.

Audio is made up of vibrations, or sound waves, that we can hear.

You will record your own voice and reflect on what makes a good audio recording.



import

A good or service bought in one country that was produced in another.

To import information into a program or computer is to copy it from another program or form of storage.

You will learn how to import additional sounds to your podcast, for example background music.



MP3

'MP3' is the abbreviation for 'MPEG Audio Layer III'.

An MP3 is a compressed digital audio file.

You will learn how to save your podcast as an MP3 so it can be listened to on a range of devices.



output device

a piece of hardware used to receive data from the computer and convert it into a human-perceptible form.

Headphones receive information from computers and are output devices.

You will identify the input devices used to record sound and output devices needed to listen to it.



podcast

A podcast is a program made available in digital format for download over the Internet.

Podcasts can cover almost every topic imaginable and is a combination of the words 'iPod' and 'broadcast'.

You will listen to a range of podcasts, identify the features and then create your own.



How this connects with previous learning

In Year 1, you will create digital paintings and explore a range of digital art.

In Year 2, you will make patterns and use those patterns to make music with both percussion instruments and digital tools.

In Year 3, you will use digital devices to create a different form of media: stop-frame animations and desktop publishing.

How this connects with future learning

Later this year, you will develop your understanding of how digital images can be changed and edited, and how they can then be saved and reused

In Year 5, you will begin to make short videos in groups, assessing the strength of the sound and visuals.

In Year 6, you will continue to develop your knowledge of digital media by using a computer to create 3-D models.

This is your Year 4 Design & Technology Knowledge Organiser for Autumn 2 - 2D Shape to 3D Product

DT Themes

textile

Types of cloth or fabric.

Our clothes are made from different textiles.

Products can be made from one textile or a range of different textiles.

We will use textiles when creating a pouch.

Tier 2

plan

The steps you take to achieve something.

A plan can help us to think through each step of a project.

We will plan the steps needed to create a pouch.

We plan before making to help us organise our thoughts.

function

The purpose or role that an object or person fulfills.

The function of a hairdryer is to dry hair quickly.

The function of a microwave is to heat up food.

The functions of a pouch are to hold, carry and protect its contents.

Key Vocabulary

pouch

A sturdy bag or sack that is used to carry things.

A pouch is often fastened with a drawstring.

We will make our pouches from one piece of fabric. .



stitch

The movement of a needle and thread through a textile.

Stitches can be used to join textiles together.

Stitches can also be used to decorate fabrics.



fastening

A thing used to close firmly.

Zips, clips, buttons and drawstrings are all types of fastenings.

When a bag is fastened, its contents won't come out.



compartment

One of separate parts of of an object that is used for keeping things in.

My bag has three compartments.

We will make a pouch with one compartment.



How this connects with previous learning

In Year 1, you learnt how to join materials without sewing.

In Year 2, you learnt how to use running stitch to join fabrics.

In Year 3, you explored the function of a product.



How this connects with future learning

In Summer 2, you will design, make and evaluate a moving creature.

In Year 5, you will plan the steps needed to make a loaf of bread.

In Year 6, you will design, make and evaluate a tablet case.

This is your Year 4 History Knowledge Organiser for Autumn 2 – The Romans

Historical Themes

empire

A group of countries that are controlled by one ruler for example the British Empire.

In Year 3 you learnt that the Egyptian Empire was an ancient empire centred on the Nile River and ruled by a Pharaoh.

The Romans migrated across Europe to expand their Empire.

The Roman Empire needed more and more soldiers to defend it. It got too expensive to keep the empire under control.

leadership

The person or people who are in control of a group.

In Year 3 you learnt that Pharaohs of Ancient Egypt were leaders. The Pharaoh was often treated as a god.

Julius Caesar was an army leader from Rome who led the invasion of Britain in 55 BCE.

As Roman soldiers started to take over Iceni (Celtic) Boudica led the Celtic tribes in a rebellion against the Romans.

Tier 2

legacy

Something that is part of your history or remains from an earlier time.

The legacy of different groups of people over time has shaped the way we live in the world today.

The Romans built brick and stone buildings with central heating, sewage systems and straight roads.

When the Romans invaded, they built a fort beside the River Thames. Londinium became the important city in Roman Britain.

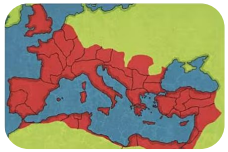
Key Vocabulary

Roman Empire

An empire is lots of areas or states all ruled by one person or state.

The Roman Empire lasted from 700 BCE to AD476 and ruled across Europe, North Africa and Asia.

The Roman Empire included Italy, all the lands around the Mediterranean large areas of Europe.

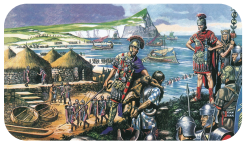


conquer

To overcome and take control of a place or people by military force.

The Roman army had been building an empire across Europe and wanted to conquer Britain.

A number of Roman emperors wanted to conquer Britain and add it to the empire.



invade

To enter a country by force with an army in order to occupy it.

In 54-55 BCE Julius Caesar tried to invade Britain but failed.

InAD43 Emperor Claudius invaded Britain again and succeeded so Britain became part of the Roman Empire.



legion

The Roman army was made up of legions. There were over 5,000 soldiers in a legion.

Only men who were 20 years old could join the Roman army and they had to stay in the army for 25 years.

Only Roman citizens could be regular soldiers as part of the legion in the Roman army.



How this connects with previous learning

You know the names and places of important continents and countries, towns and cities in Britain.

You know that an empire is controlled by one ruler.

During Year 1 you learnt about The Great Fire of London in 1666. The fire destroyed the medieval City of London inside the old Roman city wall.



How this connects with future learning

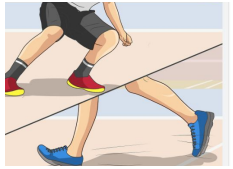
The Roman army left Britain in AD 410. Britain was again invaded by tribes from northern Europe: the Jutes, the Angles and the Saxons.

In Year 5 you will be learning about the Ancient Greeks The name 'Greeks' was given to the people of Greece by the Romans.

In Year 6 you will be learning about how Britain has changed over time and became an empire.

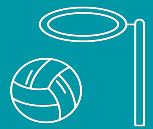
This is your Year 4 Physical Education Knowledge Organiser for Autumn 2 - Netball

Key Vocabulary

pivot	goal attack	centre	goal shooter	goal defence	foul
A technique or a move used by a player to change direction quickly while maintaining their balance	A position that is one of the two attacking positions in the team. Responsible for scoring goals and providing support.	A position that is allowed to move freely across all thirds of the court.	A position that is restricted to just the shooting circle. Responsible for shooting goals and providing support.	Responsible for defending and stopping the opposition from scoring. Allowed to move freely in the defending third of the court and the centre.	When a player breaks the rules which results in a free pass or penalty pass being awarded to the opposing team.
After catching the ball, the goal attack used a quick pivot to evade the defender.	The goal attack made a precise pass to the goal shooter, who was able to convert the opportunity into a goal.	The centre quickly moved the ball up the court with a series of accurate passes, creating several scoring opportunities.	The goal shooter positioned themself under the post, then received the ball and took a shot at the goal.	The goal defence made a fantastic interception, jumping high to reach the ball and preventing the opposition from scoring a goal.	The referee blew their whistle to signal a foul after the player made contact with the opposition while attempting to intercept the ball.
					

How this connects with previous learning

In Year 2 you learnt how to work with others to build basic attacking pay.	In Year 3 you learnt how to perform basic netball skills such as passing and catching using recognised throws.

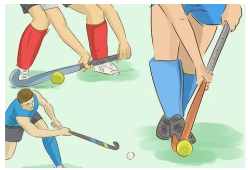
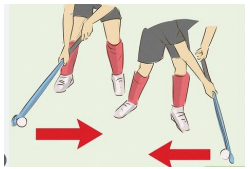


How this connects with future learning

In Year 5 you will learn how to play effectively in different positions on the court, both attacking and defending.	In Year 5 you will learn how to increase power and strength in your passes.
In Year 6 you will learn how to work as a team to improve game tactics and gameplay.	

This is your Year 4 Physical Education Knowledge Organiser for Autumn 2 - Hockey

Key Vocabulary

attack	straight dribble	slap pass	push pass	control	feint dodge
The players who are responsible for moving the ball towards the opposing team's goal and attempting to score.	A technique used by player to move the ball in a straight line while running with the ball.	A type of pass where the player uses a full backswing and slapshot technique to hit the ball hard and accurately to a teammate.	A type of pass that is performed by pushing the ball along the ground with the flat side of the stick.	The player's ability to handle and manipulate the ball with their stick. This includes dribbling, passing and shooting techniques as well as their ability to maintain possession.	A technique used by a player to deceive an opposing player and create space to move the ball up the field.
The player attacked with the ball with speed and control, creating an opportunity to score a goal.	The forward used a straight dribble to move the ball up the pitch.	The defender made a powerful slap pass from their own half of the pitch, sending the ball towards the attacking line.	The centre used a quick push pass to move the ball to a teammate in a better position avoiding the opposing defender.	The midfielder demonstrated excellent ball control, using quick stickhandling skills to maneuver around the opposition.	The forward pulled off a beautiful feint dodge, faking out the defender wu a quick change of direction.
					

How this connects with previous learning

In Year 2 you learnt how to recall and link combinations of skills, dribbling and passing

In Year 3 you learnt how to manipulate the sick and ball with safety and control.

How this connects with future learning

In Year 5 you will learn how to play effectively in different positions on the pitch.

In Year 5 you will learn how to increase power and strength of passes and move with the ball over longer distances.

In Year 6 you will learn how to choose and implement a range of strategies and tactics.

This is your Year 4 Religious Education Knowledge Organiser for Autumn 2 - Christianity in Britain

Tier 2 Vocabulary

classifying

To divide things into groups.

In Year 3 you learnt how to classify different religions in terms of beliefs about God.

In Year 5 you will learn how to classify different religions in terms of the special celebrations and festivals that members of the faith community take part in.

In this unit we will be able to classify the different stories of the bible into stories from the old and new testament.

Key Vocabulary

worship	Holy Communion	The Last Supper	bible	testaments
Christians worship as a way of communicating with God.	Holy Communion, (also called the Lord's Supper or The Eucharist) is a ritual practiced in most denominations of Christianity.	The Last Supper, also called the Lord's Supper in the New Testament, is the final meal shared by Jesus and his disciples in an upper room in Jerusalem.	The Bible is the holy book of Christianity. It was written by lots of different people over a long period of time.	The Christian Bible is described: Made up of 66 books in two 'Testaments.'
Different types of Christians worship in different ways and singing is an important part of many Church services.	Holy Communion is a re-enactment of the Last Supper, the final meal that Jesus Christ shared with his disciples before his arrest, and crucifixion.	The Last Supper was held on the evening of preparation for the Jewish Passover. It was a gathering for Christ and His twelve disciples one last time before His arrest and crucifixion by the Roman army.	The Bible is divided into two main sections. These are called the Old Testament and the New Testament.	The Old Testament talks about how the earth was created by God and was all written before Jesus arrived on earth. It is the same as the Jewish Bible,
Christians believe that singing helps them communicate with God. It enables them to express many emotions including thanks, joy and sorrow. Many churches have choirs who lead the congregation in song.	Through this celebration, Christians remember Christ's sacrifice of himself on the cross, by partaking in the Body of Christ, the bread; and the Blood of Christ, the wine. 	The Last Supper appears in the New Testament Bible writing of Matthew, Mark, Luke and John 	In lots of churches, the Bible is kept at the front of the church on a special table called the altar. 	The New Testament was written after Jesus lived on Earth and introduces us to him, his birth, life and how he died to save humans on earth from their sins 

How this connects with previous learning

In Year 2 you learnt about sacred books across different religions. You know some religious stories from the bible and how they are important.

In Year 3 you learnt about the importance of Christian prayer and what people believe.

How this connects with future learning

In Year 5 you will learn more about stories from the bible and make connections between stories of temptation and why people can find it hard to make good choices.

In Year 6 you will apply your ideas of Christian worship and belief using scriptures. You will look at the challenges of being a Christian in Britain today.

This is your Year 4 Science Knowledge Organiser Unit 1 - States of Matter

Scientific Enquiry

identifying & classifying

Identifying means knowing what something is and naming it. Classifying means grouping things together if they have something in common. We will name and classify materials, explaining why they are solids, liquids or gases.

comparative & fair testing

Comparative testing means testing objects in order to rank them. Fair tests observe or measure the impact of changing one variable when all others are kept the same. We will explore how to melt ice more quickly and changing the rate of evaporation.

researching

We will research using secondary sources to find out about the water cycle.

Working Scientifically

- Asking scientific questions
- Planning an enquiry
- Observing closely
- Taking measurements
- Gathering and recording results
- Presenting results
- Interpreting results
- Drawing conclusions
- Predicting
- Evaluating an enquiry

Subject Specific Vocabulary

solid

A solid is a material that keeps its shape and has a fixed volume. Solids like sand can be confused with liquids because they can be poured, but when poured they form a heap and they do not keep a level surface when tipped. Each individual grain demonstrates the properties of a solid.

liquid

A liquid has a fixed volume but changes in shape to fit the container. A liquid can be poured and keeps a level, horizontal surface.

gas

A gas fills all available space and has no fixed space or volume.

boiling point

Boiling is a change of state from liquid to gas that happens when a liquid is heated to a specific temperature and bubbles of the gas can be seen in the liquid. The boiling point of a material is the temperature at which a liquid will turn into a gas.
Different liquids have different boiling points. Water has a boiling point of 100 °C. Sunflower oil has a much higher boiling point of 450 °C. This is why this liquid is useful for cooking.



freezing point

Freezing is a state change from liquid to solid. The freezing point is the temperature at which a liquid will turn into a solid.
Different liquids have different freezing points. Water has a freezing point of 0 °C at which it then turns into ice.



melting point

Melting is a state change from solid to liquid. The melting point is the temperature at which a solid will turn into a liquid. Butter has a melting point of 38 °C.

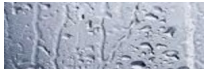
evaporation

Evaporation is the same state change as boiling (liquid to gas), but it happens slowly at lower temperatures and only at the surface of the liquid. Evaporation happens more quickly if the temperature is higher, the liquid is spread out or it is windy.



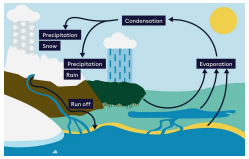
condensation

Condensation is the change back from a gas to a liquid caused by cooling.



water cycle

Water at the surface of seas or rivers evaporates into water vapour (a gas). This rises, cools and condenses back into a liquid forming clouds. When too much water has condensed, the water droplets in the cloud get too heavy and fall back down as rain, snow or sleet and run back into rivers etc. This is known as precipitation. These processes are known as the water cycle.



Things you learnt in previous topics

In Year 1, you learnt to name a variety of everyday materials and their simple physical properties. You compared and grouped together everyday materials using their properties. In Year 2, you learnt to compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass. You found out how the shapes of solid objects made from some materials can be changed.

How this connects with future learning

In Year 5, you will compare and group everyday materials. You will know some materials will dissolve in liquid to form a solution and decide how mixtures might be separated. You will give reasons for the particular uses of everyday materials. You will also demonstrate that dissolving, mixing and changes of state are reversible changes and explain that some changes result in the formation of new materials, usually irreversible.

This is your Year 4 Science Knowledge Organiser for Unit 2 - Sound

Scientific Enquiry

comparative & fair testing

Comparative testing means testing objects in order to rank them. We will test and compare materials to find the best sound insulator.
Fair tests are enquiries that observe or measure the impact of changing one variable when all others are kept the same. We will conduct pitch and volume tests.

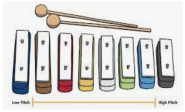
pattern seeking

We seek patterns by looking for links between variables. We will be looking for patterns in pitch and volume after conducting different tests.

Working Scientifically

- Asking scientific questions
- Planning an enquiry
- Observing closely
- Measuring (taking measurements)
- Gathering and recording results
- Presenting results
- Interpreting results
- Concluding (drawing conclusions)
- Predicting
- Evaluating an enquiry

Subject Specific Vocabulary

sound	vibration	pitch	volume	insulation
Sound is created when something (the source) vibrates and sends vibrations into our ears.	A vibration is a back and forth motion.	Pitch is the highness or lowness of a sound depending on the frequency of vibrations.	Volume is how loud or quiet a sound is. Loud sounds have a high volume. Quiet sounds have a low volume.	Sound insulation is a material that prevents sound (or heat) from being transmitted.
				
A sound produces vibrations which travel through solids, liquids and gases from the source to our ears. Sound cannot travel through a vacuum (an area empty of matter).	The vibrations from a sound cause parts of our body inside our ears to vibrate, allowing us to hear (sense) the sound.	A high sound has a high pitch. A low sound has a low pitch. The shorter the bar on a xylophone, the higher the pitch. The longer the bar, the lower the pitch. A tight drum skin gives a higher pitched sound than a loose drum skin.	The loudness (volume) of the sound depends on the strength (size) of vibrations which decreases as they travel. Sounds decrease in volume as you move away from the source.	A sound insulator is a material which blocks sound effectively like foam. 

Things you learnt in previous topics

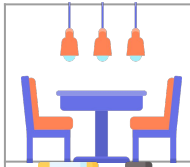
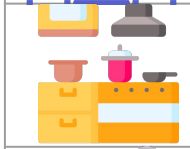
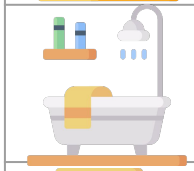
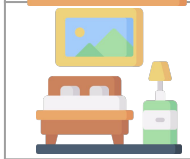
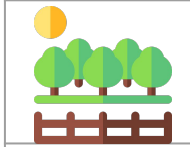
In year I, you identified, named, drew and labelled the basic parts of the human body and were able to say which part of the body is associated with each sense, including that we use our ears to hear.

How this connects with future learning

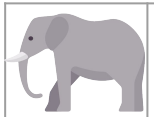
At secondary school, you will learn that waves on water are undulations which travel across water and can be reflected. You will also learn that the rate of sound waves are measured in Hertz. You will learn about: echoes, reflection and absorption of sound; the speed of sound in air, water and solids; how sound is detected; hearing in humans and animals; pressure waves; about waves transferring information for conversion to electrical signals by microphone.

Year 4 Spanish Knowledge Organiser
Mi casa

Mi casa
My house

	salón
	cocina
	baño
	*habitación*
	jardín
	garaje

Adjetivos
Adjectives

					
Grande	Pequeñ o/ a	Nuev o/a	Viej o/a	Guay	Cómod o/a

¡RECUERDA!
Add "-s" to make the plural form.
Una silla Vs. Dos sillas



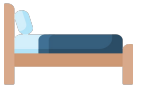


Hay - There is / There are

es - It is

Hay una habitación y un baño.	There is a bedroom and a bathroom.
Hay dos habitacion es y dos baño s.	There are two bedrooms and two bathrooms.
Hay dos sillas y una mesa.	There are two chairs and one table.
El garaje es muy pequeño.	Reading is interesting
La cocin a es muy nuev a.	The kitchen is really new.

Muebles
Furniture

	mesa
	silla
	*sofá*
	cama
	*tele*
	nevera
	puerta
	ventana

new wave federation

To help you remember and recall key information, you can make your own additional notes here.

At New Wave Federation, we demonstrate...



Collaboration

Creativity

Focus

Kindness

Responsibility