

**What do I need to know from previous units?**

I can say which part of the body matches with each **sense**.

**What will I know by the end of the unit?**

**How is sound made?**

**Sound** travels through solids, liquids and gases. It travels as a **wave**, vibrating particles in the medium it is travelling in. Sound cannot travel through a vacuum (like space) as there are no particles there.

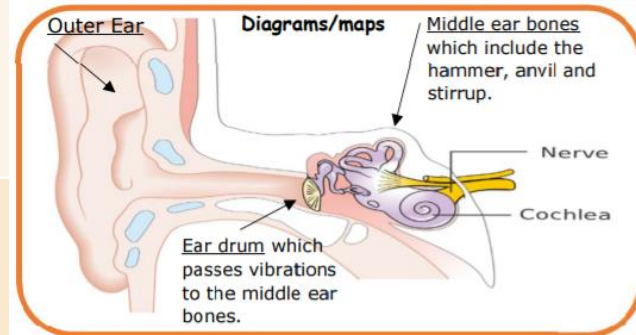
**How do sounds travel from the source to the ear?**

Those **vibrations** transfer to the next particles and so on. It continues until the air particles nearest the ear vibrates. This passes vibrations into the **ear**.

Once in the **ear**, the **vibrations** hit the **eardrum** and are passed through the **inner ear**. Here they are changed into **electrical signals** which are sent to the **brain**.

Particles		
Sound waves can travel through solids, liquids and gases, they travel fastest through solids and slowest in gases. They travel more easily through solids because the vibrating particles are closer together.		

Solid	Liquid	Gas
Particles are very close together. They can vibrate, but not move.	Particles are close together, but can move around easily.	Particles are spread out. They can move around freely and quickly



**Key Vocabulary**

**Definition**

<b>ear</b>	An <b>organ</b> used for hearing.
<b>vibration</b>	A quick <b>movement</b> back and forth.
<b>sound wave</b>	<b>Vibrations</b> travelling from a <b>sound source</b> .
<b>volume</b>	How <b>loud</b> a sound is.
<b>amplitude</b>	The <b>size of a vibration</b> . A larger amplitude = a louder sound.
<b>pitch</b>	How low or <b>high</b> a sound is.
<b>Outer, middle and inner ear</b>	The ear is made up of three different sections: the <b>outer ear</b> , the <b>middle ear</b> and the <b>inner ear</b> . These parts all work together so you can hear and process sounds.

Volume
The size of a vibration is called the amplitude. The louder the sound, the larger the amplitude will be.
The closer the source of sound is, the louder it will be. Quieter sounds have a smaller amplitude.

Pitch
Pitch is how low or how high a sound is. Faster vibrations will have a higher pitch.
The pitch of sounds can be changed in different ways. With stringed instruments, the tighter the string, the higher the pitch of the sound.

Who: Scientific Influences	
Name/Picture	Why significant
 Alexander Graham Bell 1847-1922	Alexander was a Scottish scientist and inventor. His most famous invention was the first telephone. Although Alexander Graham Bell invented the first telephone, people continue to invent new versions all the time! James West and Gerhard M. Sessler invented microphone design which is used in more than 90% of the 2 million microphones made every year.

## History Year 4 – Spring 1/Spring 2

### What do I need to know from previous topics?

Queen Elizabeth was the longest reigning monarch in history. She reigned for 70 years.

### What will I need to remember for future learning?

At the end of Queen Victoria's reign, the **British Empire** was the largest ever known in world history covering 23% of the land of the Earth.

**Dr Barnardo** was the founder of many homes for poor children and started the charity Barnardo's. In his lifetime, he helped nearly 100,000 children.

The **Industrial Revolution** was a huge period of change in Britain between 1750 and 1900. Before this, most people lived off the land. After this, many people moved to towns to work in factories.

### How does this topic impact on our lives today?

A vast quantity of **Victorian inventions** are still used today e.g. photographs, telephones, cars, bicycles and stamps.



The British Empire - 1901

## What was life like in Victorian Manchester?

Important people  
Queen Victoria  
Dr Barnardo



### Key Vocabulary

### Definition

#### Victorian Era

The period of time between 1837 and 1901 when Queen Victoria reigned over Britain.

#### Industrial Revolution

When Britain began to make money from products which it made, not products which grew.

#### The British Empire

All the countries around the world that were ruled by Queen Victoria.

#### inventions

A new thing that someone has made.

#### population

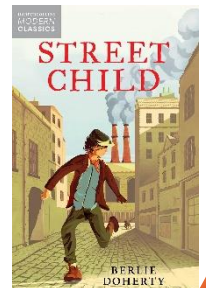
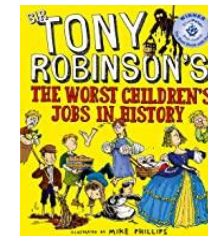
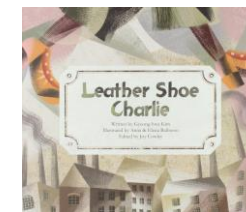
The whole number of people living in a country, city or area.

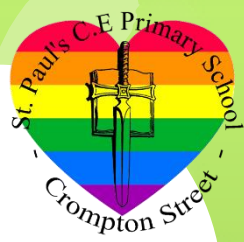
#### Child labour

Dangerous exhausting work done by children in factories, mines etc.

### Key Texts

"The Worst Children's Jobs in History" by Tony Robinson  
"Street Child" by Berlie Doherty  
"Leather Shoe Charlie" by Gyeong-hwa Kim





**What do I need to know from previous topics?**

There is only one God in Hinduism but each of the **deities** shows an aspect of Brahman.

The three most significant forms of Brahman are **Brahma** (the creator), **Vishnu** (the preserver) and **Shiva** (the destroyer).

**What will I need to remember for future learning?**

Hindus show their faith through **puja** (worship). They use items on the **puja tray** in their worship as well as the ritual of **arti** and listening to and singing **bhajans** (worship songs devoted to different deities).

The **Diwali story** shows good overcoming evil and light overcoming darkness.

**Diwali celebrations** are important to Hindu families and communities and involve food, dancing, artwork, music, prayer, gifts and fireworks.

**Key Vocabulary**

**Definition**

**Dharma**

The duties a Hindu should follow in their life.

**Aarti**

Circulating a diva lamp in front of a deity, showing respect and love to God.

**Bhajans**

A Hindu devotional song.

**Mandir**

A place where Hindus go to worship.

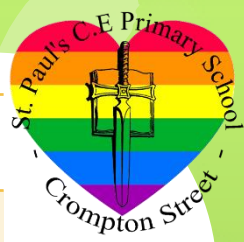
**Diwali**

The Hindu Festival of Lights.

**Puja**

Offering light, incense, flowers and food to the deities.





**What do I need to know from previous topics?**

How to conduct a sensory evaluation using smell, appearance and taste.

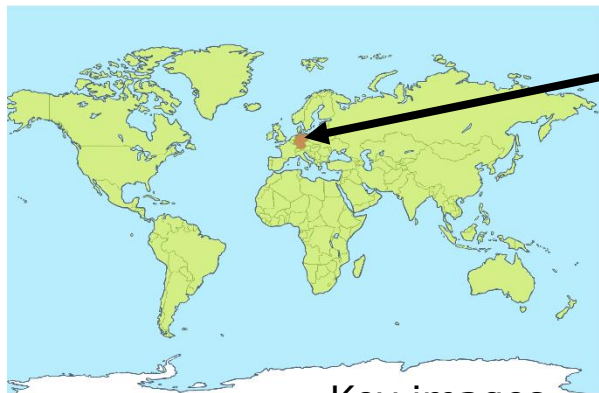
**What will I need to remember for future learning?**

A soft baked **pretzel** is a type of baked bread product made from **dough**, shaped into a twisted knot.

The traditional **pretzel** shape is a distinctive symmetrical looped form, with the ends of a long strip of dough intertwined and then twisted back into itself.

To **knead** dough, press the heels of both hands into the dough, then push the dough away from you firmly. Fold the **dough** in half and turn it around. Push the dough away from you again, then fold it in half and turn it around. Continue until it feels smooth and springy.

Key Vocabulary	Definition
<b>Pretzel</b>	A type of baked bread product made from dough shaped into a twisted knot.
<b>Knead</b>	Work flour into dough with the hands.
<b>Heel of the hand</b>	The rounded pad at the bottom of your palm.
<b>Texture</b>	Quality of food that can be felt with the fingers, tongue or teeth e.g. crunchy, chewy, sticky.
<b>Dough</b>	A thick mixture of flour and liquid.



Key images

## Art Year 4 Spring: William Morris- Wallpaper Prints (Printmaking and Digital Artwork)



### What do I need to know from previous topics?

**Printing** makes a **copy** of something. There are lots of different ways to print.

**Warm colours** are orange, yellow, and red. Blue, purple, and green tend to be **cold colours**. Warm and cold colours evoke different moods and feelings in a piece of artwork.

**Complementary** colours sit across from each other on the colour wheel. When placed next to each other, they create a strong **contrast**.

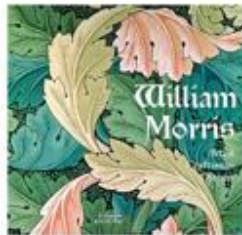
**Andy Warhol** used the process of screen printing during the **Pop Art** movement.

### What will I need to remember for future learning?

Many artists are inspired by **nature** and we can see this influence in their artwork.

**Printing plates** can be made from many different materials. They help us to create a **repeating pattern**.

### Key text



### Key artists and artwork

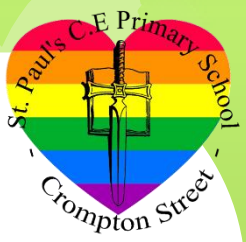
William Morris- African Marigold



William Morris- Daisy



Key Vocabulary	Definition
<b>printmaker</b>	someone who makes art by <b>printing</b> from <b>plates or blocks</b>
<b>printing plate</b>	used to <b>transfer</b> the <b>image</b> onto the surface you are printing on
<b>relief print</b>	ink is <b>rolled</b> onto a printing plate and printed onto paper or fabric
<b>influence</b>	something that <b>inspires</b> and artist to create a piece of work
<b>floral</b>	a <b>design</b> featuring a pattern with <b>flowers</b>



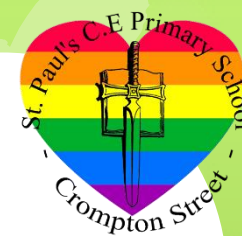
**Key Vocabulary**

English	French
English	l'anglais
maths	les maths
French	le français
science	les sciences
geography	la géographie
history	l'histoire
Spanish	l'espagnol
computing	l'informatique
religion	la religion
art	le dessin
and	et
but	mais

**What will I know by the end of the unit?**

- How to name school subjects in French
- How to retrieve information from a French spoken passage
- How to express an opinion in French

<p>les mathématiques</p>	<p>l'anglais</p>	<p>la musique</p>	<p>l'informatique</p>
<p>le français</p>	<p>l'espagnol</p>	<p>la géographie</p>	<p>le sport</p>
<p>les sciences</p>	<p>l'histoire</p>	<p>les arts plastiques</p>	



What will I know by the end of the unit?	
Situations can <b>involve danger hazard or risk</b> . Taking risks can have <b>positive</b> and <b>negative</b> consequences.	Once a <b>photo</b> is posted <b>online</b> it can be copied and sent to others. Photos can be altered digitally. A photo shared in a public forum online can be downloaded and viewed or used by anyone in the world.
Being able to <b>stand up for yourself</b> in a dare situation is very important. It shows assertiveness and strengthens our self-respect.	<b>Medicine</b> is a drug which has been designed to help the body by treating or <b>preventing an illness</b> or injury <b>but can be harmful</b> if not used properly.
Increasing numbers of young people are choosing not to <b>smoke</b> and not all people <b>drink alcohol</b> .	All <b>decisions</b> have consequences both positive and negative. We are responsible for thinking things through before we act.

Mini Minds:



Braveasaurus

Dreamasaurus

Key Dates

- 7<sup>th</sup> February-SCARF Day
- 3<sup>rd</sup> -9<sup>th</sup> February- Children's Mental Health Week
- 11<sup>th</sup> February-Safer Internet Day

Key Vocabulary	Definition
<b>Danger</b>	Something which will definitely cause harm.
<b>Hazard</b>	Something which could cause harm.
<b>Risk</b>	An action which is taken in a hazardous situation.
<b>Dare</b>	When someone asks you to do something risky which you feel uncomfortable with and might get you into trouble or cause you harm.
<b>Influence</b>	To have an effect on the behavior of others.
<b>Consequences</b>	Things that might happen because of the decision taken, or what happens next.



Individual Liberty

British Values – Individual Liberty

- We value everyone's input and opinions.
- We try to see things from other's point of view.
- We are encouraged to make choices for ourselves in a safe and supportive environment.