



What's that sound?



6 weeks

Rationale/ Intent:

Bang, crash, wallop. Pupils will investigate how the world of sound is created. How do we hear? How is sound created? How does it travel from its source to our ears and those of the animals around us? Pupils will learn about the use of energy transfer for the travelling of sound whilst spotting the patterns between pitch, volume and the strength of vibrations.

This project will enable children to develop key knowledge and skills that will build on from year 4 in Science and Art:

In Science, the key knowledge and skills will include:

- How sound is created
- How humans hear through particle energy transfer
- Use investigative skills to develop fair testing
- Find patterns between the pitch of a sound and features of the object that produced it
- Find patterns between the volume of a sound and the strength of the vibrations that produced it

In art, the key knowledge and skills will include:

- Explore images and recreate texture through deliberate selection of materials wallpaper, string, polystyrene
- Use a wider variety of stitches to 'draw' with and develop pattern and texture.
- Start to place more emphasis on observation and design of textural art.

The school's ASCENT values of nurture and trust will be built upon and coupled with the British Values of tolerance and collaboration through the investigative skills of science as pupils work together to generate scientific outcomes.

Hook: After watching the inspirational "Stomp", the children will be challenged to learn how sounds are made using energy transfer and how the human ear works to aid hearing. This learning will enable pupils to develop their skills in science and art through investigations and observational drawings.

Outcome: Children to create their own science and art exposé and share knowledge with parents.

English

Link texts:

Linked texts and extracts are used as 'What a good one looks like' to teach from and are used to enable children in the writing process, using **Talk for Writing**, to successfully achieve the main writing outcomes for the project.

Main writing outcomes

Poetry:

Create a fearful atmospheric poems using onomatopoeia based upon their knowledge of sound.

Non- narrative-report:

Write a scientific report on how sound travels using technical vocabulary.

Write an explanation detailing how we hear.

Writing skills to cover

Tense

Poetic styles

Developing mood and atmosphere

Note taking

Planning

Editing

Coherence

Paragraphing

Punctuation and Grammar

Direct speech

Tense

Fronted adverbials

Expanded noun phrases

Verbs –

Past perfect continuous:

"had" + past participle + "-ing"

Weekly free writes; are used to develop individual targets, re-visit previous learning and offer a range of opportunities and genres to apply previously taught skills.

Focus Subject 1: Science

Focus points taken from National curriculum and distilled into skills progression

Using selection of instruments, investigate how sounds are made. Recognise that the volume of the sound is directly related to the vibrations that produced it.

Sound objectives

identify how sounds are made, associating some of them with something vibrating

Investigate how high and low notes are made and introduce to term pitch. Establish patterns and create statements: The longer the string the lower the note, the shorter, tighter and thinner the string the higher the pitch.

Sound objectives

find patterns between the pitch of a sound and features of the object that produced it

find patterns between the volume of a sound and the strength of the vibrations that produced it

Create and carry out a fair test to prove that sound travels and that sounds get fainter as the distance from the sound source increases. Record results in a table and analyse – is the statement true?

Working scientifically:

setting up simple practical enquiries, comparative

Focus Subject 3:

Art-

Focus points taken from National curriculum and distilled into skills progression

- To create sketch books to record their observations and use them to review and revisit ideas.

Art objectives

to create sketch books to record their observations and use them to review and revisit ideas

- Explore images and recreate texture through deliberate selection of materials wallpaper, string, polystyrene
- Use a wider variety of stitches to 'draw' with and develop pattern and texture.
- Start to place more emphasis on observation and design of textural art.

Art objectives

to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]

- Learn about great artists in history, who showed knowledge of both artistic and scientific disciplines.

Art objectives

about great artists, architects and designers in history

<p>and fair tests</p> <p>How we hear: that sound sources require a medium and sound travels in waves.</p> <p>Sound objectives</p> <p>recognise that vibrations from sounds travel through a medium to the ear</p>	
Visits and visitors-	
<p>Cultural capital; Art</p> <p>Listen to movie soundtracks and analyse the emotions and effects they create using a graphical organiser.</p>	
<p>Home Learning:</p> <p>Design and create a new musical instrument and be able to explain how the pitch and volume can be changed.</p>	