

Exploring Sounds

Environmental Sounds

Ideas and activities for exploring environmental sounds for all classes

Strand : Listening and responding

Strand unit: Exploring sounds

Exploring sounds involves listening to and creating sounds from a wide variety of sources using

- **the environment**
- the voice
- the body
- instruments

This document will suggest some activities which can be used to explore environmental sounds across all classes. Suggestions for linkage and integration will also be made where appropriate.

The language used in the objectives for exploring sound asks children to

- Identify/recognise
- Imitate / Explore / Experiment
- Describe sounds using: language, movement symbols (pictures, drawings, notation)
- Investigate sound makers
- Investigate musical concepts (loud, long, quiet etc)

Exploring sound is a prerequisite for Composing. In the composing strand, children are asked to select sounds from variety of sources for a range of musical purposes. Children who have experienced lots of activities in exploring sound will find it much easier to use a variety of sounds in their compositions.



Infant classes

Objective Listen to, identify and imitate familiar sounds in the immediate environment from varying sources

rain falling, car horns blowing, dogs barking, babies crying, silence

Activity - Close your eyes

Children close their eyes and listen for sounds in

- the classroom
- the playground
- the street
- the distance

They are asked to identify and describe the sounds they hear. They can be asked whether the sounds are indoor or outdoor. The children can also imitate these sounds. This activity can be repeated at different times during the year with an increased emphasis on descriptive language and vocabulary. Exemplar 7 - Teacher Guidelines.



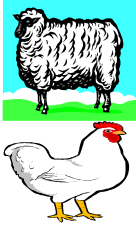

Activity – Listen carefully

Teacher taps two objects e.g. cup and book with a beater such as a pen or a spoon. The children are instructed to close their eyes, and while the teacher makes one of the sounds again, the children try to identify it. Exemplar 6 - Teacher Guidelines

Objective Describe sounds and classify them into sound families

machines, weather, animals, people

Activity - Classify the soundmakers

machine	human	animal	natural
			

A grid such as the one above could be drawn on the black board / whiteboard or put in a worksheet to classify the sound sources. Sounds can also be sourced from the internet – see sound quiz below.

First and second

Objective Listen to, identify and describe sounds in the environment with increasing awareness

ambulance, alarm clock, thunder, silence

Activity Try the **Close your eyes** activity outlined for infants

Activity - Design a sound trail and map

Children could design and record in words and pictures or with electronic media a sound trail around the classroom, the school, the local park etc. They could create a sound map or create a sound trail board game with a numbered path and pictures representing sounds. A dice and counters are used to play and if you land on a particular picture you make that sound.

Activity Songs or poems with sounds

Look out for songs with 'opportunities' for inserting environmental sounds, for example:

- I hear Thunder
- Chuala mé and ghaoth Colm Mac Lochlainn

These activities could be extended to become a composing activity.

Objective Recognise and classify sounds using differing criteria

different types of mechanical sounds

lawnmower, pneumatic drill

different types of barking

howling, yapping, barking, growling

Activity – Sound Quiz

Teacher plays sound effect snippets from a CD or from the internet and children identify and classify the sounds.

Sound effects (sound FX) can be downloaded free from the internet at sites such as

<http://www.a1freesoundeffects.com/>

<http://www.pacdv.com/sounds/index.html>

<http://www.stonewashed.net/sfx.html>

<http://www.partnersinrhyme.com/pir/PIRsfx.shtml>

<http://soundfx.com/>

Objective Recognise and demonstrate pitch differences

high, low and in-between sounds

Activity - Sound grid

A grid like the one below could be filled for sounds the children have heard during the close your eyes activity or for one of the pre-recorded sound effects

Sounds	high	low	in-between
Truck		✓	
Doorbell	✓		

Third and fourth

Objective Listen to and describe a widening variety of sound from an increasing range of sources

a ticking watch on its own and one taped to a door (a hollow door acts as a resonating chamber and the sound is heightened)

a rubber band stretched across a cardboard box

marbles dropped onto a hard or soft surface

a bottle that is full of water, half filled or empty

Activity Sound grid

The sound grid can be extended to include other criteria

Sounds	long	short	high	low	loud	quiet
Truck	✓			✓	✓	
Doorbell		✓	✓		✓	

Activity – Make some sound

Classrooms are an Aladdin's cave when it comes to sound. Children can investigate and explore the sounds that they can create. For example

- Paper or cardboard – flapping, tearing, flicking, folding, flicking
- Crayons and pencils – shaking, tapping
- Nature table contents – crumple or shake leaves, shake stones and shells, rattle seeds, rub or break twigs
- Maths equipment – twang rulers and rubber bands, shake or bang cubes or blocks, shake or flip counters, shake or drop marbles
- Blinds or radiators – run ruler along to make a sound
- Water bottles – shake or slosh the water about (lids on of course)

Children can also investigate all the specific sounds that they can make with classroom items.

- twanging
- clicking
- snapping
- scraping
- blowing
- snapping
- rattling
- tapping
- shaking
- crunching
- crashing

There are many possibilities here for integrating with oral language and vocabulary development.

Activity – Hunt the Thimble – making only environmental sounds

A child is chosen to be the hunter. They are asked to close their eyes while an object is hidden somewhere in the room. The hunter has to try to find the object. They are given clues by the rest of the class who make sounds only with things on their desks e.g. crayon boxes, pencil cases. If the hunter is close to the object, the sounds are loud and if they are far away from the object, the sound are quiet. If the hunter locates the object, they choose someone else and the game continues.

Objective Classify and describe sounds within a narrow range

bird sounds

seagull, pigeon, jackdaw, starling

car alarms house alarms

Activity- Sound Quiz

Use CDs or the internet to source sound effects within a narrow range.

Birdwatch Ireland have CD of bird sounds and nature sounds which may be useful



http://shop.birdwatchireland.ie/birdwatchireland/index.php?cPath=42_45

RTE's radio show- Mooney Goes Wild have recorded the dawn chorus

<http://www.rte.ie/radio/dawnchorus/>

The sites listed above in activities for first and second will also provide a wide variety of sounds for free download.

Objective Recognise and demonstrate pitch differences

high, low and in-between sounds, higher than, lower than, same, different, repeated

notes on a keyboard instrument

door bell, school bells, telephone rings

Activity – Show how high

Use recorded sounds from CD's or the internet or sounds on a keyboard in the classroom for an activity in which the children are asked to listen carefully to the sound, recognise the sound and then make decisions based on some criteria such as

- high or low sounds
- same or different

They might indicate their preference by moving to one side or other of the room.

They might show high or low by putting their hands up or down.

Fifth and sixth

Objective Listen to sounds in the environment with an increased understanding of how sounds are produced and organised

sound waves

echoes

resonance

vibrating air, string, metal

noise pollution

Activity – Investigating sound

There are many activities for investigating sound on the Discover primary Science website

http://www.primaryscience.ie/site/media/pdfs/col/DPS_Activity_Book_inside_08_09.pdf

There are very close links and possibilities for integration with science in this objective.

Vibrations

- **Vocal** Hold your fingers against your throat while you speak. You will feel the sound as the air is pushed from your lungs over your vocal chords. The air rushing over the vocal chords makes them vibrate and generates the sounds of your voice.

Seeing Vibrations

- Put a few grains of rice on top of a drum or an upturned bucket and tap gently. The vibrations on the drum skin or bucket will make the rice dance and jump.
- Get a bowl of water and tap a tuning fork and hold it against the surface of the water. The vibrations of the fork will make the water shake.

Sound Waves

- The vibrations passing from air molecule to air molecule are what we call sound waves. In for sound to be heard it's sound waves need to be caught by our ears.
- Tap a tambourine a few times – using the same amount of force each time. Ask the children to listen in a different way each time – for example
 - Facing the sound source
 - Facing away from the sound source
 - With ears covered
 - With ears cupped with hands
- Which way was best to hear the sound? – Which was least effective

Echoes

- When sound waves hit a barrier, they can bounce back and we hear the sound again. This reflected sound is called an echo. Children could investigate if there are echoes to be heard in different locations in the school.

Resonance

- Most musical instruments have something to amplify the sounds they make. In stringed instruments, strings are usually stretched across a hollow box usually made from wood. The vibrations of the strings make the wood and the air inside the box vibrate at the same rate as the strings. This is called resonance. It makes the sound louder and richer than it would be with the strings alone. Children could explore making sounds with rubber bands and then stretching them over a variety of boxes to make different sounds.

http://www.stomponline.com/pdf/study_guide.pdf has some lesson ideas for exploring how sound is made.

Fifth and sixth class may have the ICT skills to download soundfiles and create Sound CD's for use at other class levels.

Linkage

Exploring sounds – instruments, body percussion, vocal sounds,

Composing – Improvising and creating - using environmental sounds in compositions

Performing – Song singing – using imitated or created environmental sounds to accompany a song

Performing – Literacy – creating sequences of environmental sounds with a rhythm pattern

Integration

English – oral language – developing competence in using oral language.

Science – Energy and Forces – Sound

Gaeilge – Na fuaimeanna a aithint trí gaeilge

Spiral Nature of the Curriculum

The Irish Primary school curriculum is spiral in nature. By revisiting knowledge and ideas already acquired as the starting point for new learning, it allows for the coherent expansion of knowledge and the gradual refinement of concepts. Objectives and activities explored at a previous class level can be explored again in a more complex way at the next level.

