BBC Bring the Noise

18 mins

1. Warm up Activity

'Built to Scale'

Objective and Musical Focus
Exploring sounds; Identifying sounds; Pitch; Dynamics

Instruments?
Yes; everyday objects can be substituted.

In music, a scale is a series of notes ordered in accending or descending pitch - the bars on a xylophone are in a scale, for example. However, when comparing objects to each other, their scale can be measured in many ways...

You can play this activity with children working individually, in small groups or as a whole class.

In order to play, you will need a collection of different objects and/or percussion instruments, for example an empty bottle, a piece of paper, a plastic box, a metal spoon, a hand drum, a triangle etc. Aim to have objects/instruments of different sizes and made of different materials in your collection.

Place all the objects or instruments in a pile together. Ask a child to pick one and have a discussion with the rest of the class: what is the object or instrument made of? How heavy is it? How could you make a sound with it? What would that sound be like (long, short, loud, quiet)?

Explain to the children that they have 1 minute (or more time if you think it is needed) to order the objects in a certain way, for example, from smallest to biggest; lightest to heaviest; quietest to loudest. If you are playing as a whole class, it may be preferable to pick 5 or 6 children at a time to have a go at ordering the objects.

Once the time is up check to see if the children have ordered things correctly. See if there are any comparisons to make from the different scales, for example, are the biggest objects the loudest? What materials make the quietest sounds?

Finally, see if the children can come up with their own scale criteria.

T!P

This activity could be linked to other maths and measuring activities in your lesson plans.

12 mins

2. Song: *Gravity*

Have a listen to the song *Gravity*.

Have a class discussion about the music:

- How would you describe the music?
- What instruments can you hear?
- What is the song about?
- What do you think of when you listen to this music?
- How does the music make you feel?

Teach your class the opening of the song:

When the apples fall from the tree
It's gravity
When the ground holds on to me
It's gravity
When the apples fall from the tree
It's gravity
When the ground holds on to me
It's gravity

Explain to your class what gravity means, and that it is the force that pulls us and other things down to Earth. In this song the composer uses music to illustrate that 'pulling down' idea. When singing the word 'gra-vi-ty', each syllable has a different pitch.

Can you describe what is happening to the pitch as the singer sings that word? The pitch starts high and moves down three notes. Try showing the changes of pitch with your body/hand as you sing.

3. Main Activity

Good Vibrations

30 mins

For more classroom games around pitch, try 'High Low' and 'Swampee' in the Teacher Techniques section of the website.

All sound is made from vibrations. For example, we all have stretchy bits of skin inside our throats called vocal cords, and in order to speak, these vocal cords vibrate.

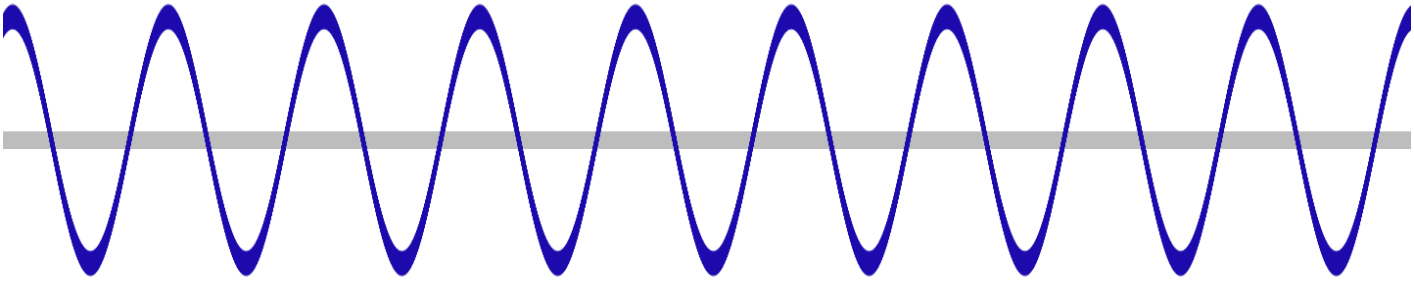
Try singing a long 'laaaaaaa' sound and while doing so gently place 2 fingers on your throat, just under the Adam's apple. You should be able to feel it vibrating!

In order for something to make a sound, there must be a vibration. Try saying the word 'vibration' while vibrating your whole body!

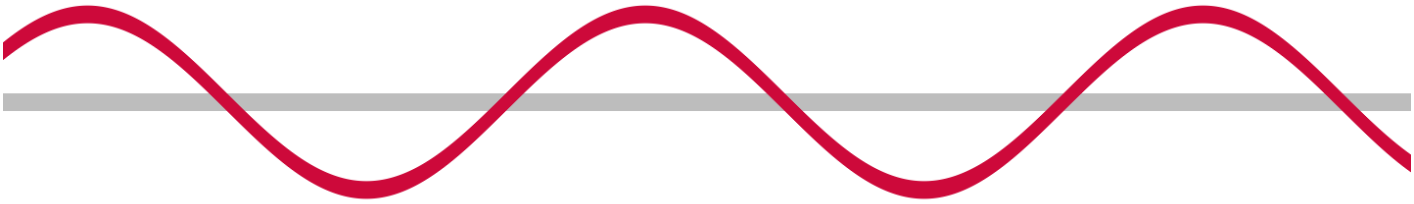
Ask the children what does 'pitch' mean in music. The pitch of a sound is how high or low the sound is. A high sound (like the squeak of a mouse) has a high pitch, and a low sound (like the roar of a lion) has a low pitch. Can you list some other high and low pitch sounds?

High pitched sounds vibrate quickly, whereas lower pitched sounds vibrate slowly. Try saying the word 'vibration' in a high pitched voice while vibrating your body quickly, then try saying the word again but this time in a low pitched voice and vibrating your body slowly.

Sound and pitch can also be shown in waves. Sounds that are high pitch look like this:



Sounds that are low pitch look like this:



Can you describe the difference between the high pitch wave and the low pitch wave?

Using the objects or instruments from the warm up activity, ask the children to experiment with the sounds and work together to fill in a table like the one below. Try drawing the pitch waves for each object and order them from highest to lowest pitch.

Object	High Pitch	Low Pitch	Wave	Order
E.g. Spoon				
Drum				
Triangle				

Now, choose three objects or instruments from your list - one that makes a high pitched sound, one that makes a low pitched sound, and one that is somewhere in the middle. Try playing the objects one after the other over 3 steady beats, from high pitch to low pitch (high - middle - low).

Finally, play these along to *Gravity*. Whenever the singer sings the word 'gravity' you are going to play your 3 objects or instruments one after the other like this:

Gra-	vi-	-ty
High sound	middle sound	low sound

4. Troubleshooting

It is important for all the above activities that you have a variety of instruments/objects that are different in shape, size, weight and made of different materials.

All of these properties will contribute to the unique timbre of each object and therefore make a more interesting experiment.

When choosing your final 3 sounds (one high pitched, one low pitched and one in the middle), make sure that it is possible to play them one after another over 3 steady beats.

You don't want to use 3 different instruments that take a short while for the child to prepare to play. Alternatively, have 3 different children playing one instrument and therefore one beat each:

Gra-	vi-	-ty
High sound Child 1	middle sound Child 2	low sound Child 3

Curriculum Links

Science
Maths

Key words

Composer: somebody who creates music.
Pitch: whether a sound is low or high.
Timbre: the unique sound quality of an instrument.