Friday 11th November 2020

LO: To explain how sound travels thorugh solids, liquids and gases.

Read the text and discuss with your partner

Oct 29-12:51

Friday 12th November 2020

LO: To explain how sound travels thorugh solids, liquids and gases.

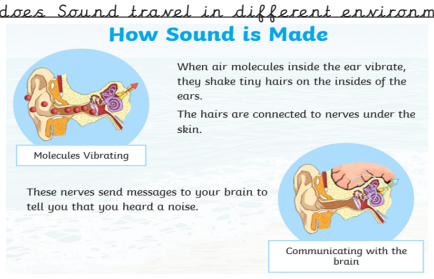
Starter

A sound is made when

The particles vibrate and

Oct 29-12:51

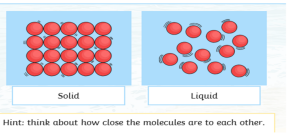
How does Sound travel in different environments?



Nov 14-15:10

Sound waves need to travel through a medium such as solids, liquids and gases. The sound waves move through each of these mediums by vibrating the molecules in the matter. The molecules in solids are packed very tightly. Liquids are not packed as tightly. And gases are very loosely packed. This enables sound to travel much faster through a solid than a gas.

Why do you think sound travels faster through solids and liquids than gases?



Hint: think about how close the molecules are to each other.

Sound travels about four times faster and farther in water than it does in air. This is why whales can communicate over huge distances in the oceans. Sound waves travel about thirteen times faster in wood than air. They also travel faster on hotter days as the molecules bump into each other more often than when it is cold.

https://uk.whales.org/whales-dolphins/how-do-dolphins-communicate/

Nov 14-15:14

Activities

Observe how sound can travel through different materials.

1. Tuning fork in water.
2. Drum and rice. (share ppt)
3. Using voices.

Observe how sound travels through solids, liquids and gases in the 3 experiments.

Oct 29-13:33

The vibrations from the tuning fork made ripples as the water _____. When we hit the drum, the grains of rice bounced. The rice bounced because the skin of the drum _____ causing the rice to vibrate too. We noticed that the rice vibrated more if we hit the drum harder. The size of the vibration is called the _____. The _____ travelled across the playground, vibrating the _____ so our friends could hear.

Sounds travel faster through _____, than _____ or _____.

amplitude	gases	liquids	vibrated
travelled	solids	molecules	soundwaves

I do

Dec 2-11:58

The vibrations from the tuning fork made ripples as the water _____. When we hit the drum, the grains of rice bounced. The rice bounced because the skin of the drum _____ causing the rice to vibrate too. We noticed that the rice vibrated more if we hit the drum harder. The size of the vibration is called the _____. The _____ travelled across the playground, vibrating the _____ so our friends could hear.

Sounds travel faster through _____, than _____ or _____.

amplitude	gases	liquids	vibrated
travelled	solids	molecules	soundwaves

we do

Dec 2-11:58

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Sounds travel faster through _____, than _____ or _____.

amplitude	gases	liquids	vibrated
travelled	solids	molecules	soundwaves

you do

Dec 2-11:58