

# DID YOU HEAR THAT? GET READY TO OPEN YOUR EARS AS WE LEARN ABOUT SOUND!

From music on the radio to footsteps on the ground, sounds are everywhere! Sounds are made when something vibrates, or shakes back and forth, and sends out waves of energy. How strong or weak a vibration is will affect how loud the sound is. How fast or slow the sound waves are will affect how high or low the sound is. We can't see these waves of energy, but we can sense them with our ears. Some things make sounds on purpose, like the sounds animals make to communicate with each other and the musical instruments people play to create songs. Other things, like rain or a slamming door, unintentionally make sounds as different objects touch each other. No matter what creates the sound, different sounds help us understand and interact with the world around us!

# DAY 5:

# CATCH A SOUND WAVE

Hearing is one of five senses that helps us know what is happening in our environment. When vibrations are made, we sense these waves of energy with our ears. We can sense how loud the sound it, how far away the source of the sound is and from which direction the sound is coming. Our ears send these signals to our brain which helps us figure out what is making the sound. Let's play a game that uses our ears to listen for sound waves!

### Before you start, you should have:

- A clear space to move around in
- Five to ten items that make different sounds (tinfoil, a plastic bag, a box of pasta, a toy that makes noise, baggies filled with different items like coins, beans or beads, etc.)
- One or more partners to play with
- Optional: a blindfold





#### **Get started:**

- 1. Set the boundaries for the area you are playing in.
- 2. Collect the items and move each one at a time so everyone knows what they sound like.
- 3. Choose one player to be "it." This player will sit the middle of the playing area and close their eyes. Optional: a blindfold may be used.
- 4. The other player(s) will spread the items in a circle around the player who is "it" and then stand at the edge of the playing area.
- 5. Taking turns, the other player(s) will try to quietly move and pick up one of the items and return to the edge of the playing area without being caught. If they do, they get to keep the item.
- 6. When the player in the middle hears one of the items being moved, they point in the direction they hear the noise and say, "Sound Wave!" If they are pointing at another player touching an item, that person must freeze. If they aren't pointing at an item being touched, they lose one of their three chances.
- 7. The player in the middle must guess which item was picked up. If they are correct, they get to keep the item. If they are incorrect, the other player gets to keep it.
- 8. The game ends when all of the items belong to a player or the player in the middle has called "Sound Wave" three times when not pointing at another player touching an item.
- 9. The player with the most items wins!
- 10. Switch who is "it" and play as many times as you like.

# Keep exploring!

Play hide and go seek with sounds! Each player hiding will make a noise, like shaking a water wattle or crumpling a piece of paper. The seeking player will use their sense of hearing to find the other players.

# What did you discover?

Upload a photo or video and tag the Sam Noble Museum on Instagram or Facebook. You can also use the hashtags #samnoblehome and #summerexplorers to share!

# Sam Noble Home



# More information on sound:

https://www.scienceworld.ca/resource/sound/



https://www.bbc.co.uk/bitesize/ topics/zw982hv/articles/z8mmb82

