

Can drumming be science?

Why is sound important?

Sound is important because it helps us communicate. What are some ways that sound helps us communicate?

- When we hear a fire alarm sound helps us communicate that there is an emergency.
- When we hear lots of people talking sound helps us know that something is going on.
- When we hear cars on the street sound helps us remember to look both ways before we cross the street.

What kinds of sounds do you hear?

We hear sound all the time. What kinds of sounds do you hear in your day? How do certain sounds make you feel? What sounds make you feel calm and peaceful? What sounds make you feel alert and ready? What do other sounds make you feel?

We hear sound but can we see it?

Try this:

- Get a bowl from the kitchen and stretch a piece of saran wrap over the bowl as tight as possible.
- Make sure it's tight.
- Next take some small cedar leaves or grains of rice and put a few on top of the saran wrap.
- Next get a partner to hold a drum as close as possible to the bowl without touching the bowl.
- Now hit the drum a few times and watch what happens to the cedar.

Why does the cedar move when we hit the drum?

• The cedar moves around because of the sound waves that are caused when the drum stick hits the drum. These sound waves travel through the air and when they reach the plastic wrap it vibrates causing the cedar to move. The sound waves are also what allows us to hear the noise of the drumstick hitting the drum.



(Example video using baking pan instead of drum)





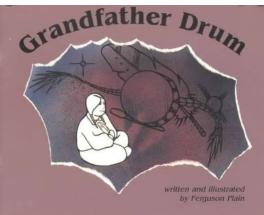
Our Elders tell us that sound is powerful!

• We talked about the different sounds we hear in our day and how certain sounds make us feel different things. Sound is a powerful tool!

- Our Elder, Captain Kenneth Ned from Sumas First Nation tells us that his ancestors played the drum when they thought someone might be coming to attack. Mr. Ned said that sometimes the sound was so loud it caused the attackers to be afraid and just turn around and go away!
- Mr. Ned is an Indigenous veteran who served as a pilot in the Canadian Armed Forces

and while he was in service, he sometimes wondered if maybe instead of using guns the soldiers should have played the drum. He wondered if maybe the powerful sound of the drum would make the attackers turn around. What do you think?

 Another Ojibwa story, Grandfather Drum, explains how Owl got the ability to turn his head all the way around, and how Nanaboozhoo the trickster, used the power of sound to make this happen!



- Mr. Ned shared about playing the drum loudly and Nanaboozhoo tricked Owl by playing the drum quietly and softly. Mr. Ned and Nanaboozhoo teach us that whether we play the drum with lots of volume or just a little bit, sound has power!
- How will you use the power of sound to help you in your day?
 - How can you use sound to help you throughout the day?
 - \circ $\;$ How can sound help in your classroom?
 - How can sound help in your community?

