



Experimenting with Sound Waves

Developed by: Tom Turner

Date:

Objective:

It might be hard to imagine that sound waves can travel through solid objects as well as through the air. This simple but exciting sound waves science activity will demonstrate for your child how sound can and does indeed travel through solid objects!

Vocabulary Words:

Materials:

- Metal kitchen spoon- a large metal measuring spoon works great!
- At least 30 inches of kite string

Background Information:

Activity Instructions:

1. Stretch out the string and tie the handle of the spoon in the middle of the string.
2. Take one end of the string and tie around your child's pointer finger. Do the same using the other end, but tie this string around the pointer finger of your child's opposite hand.
3. Instruct your child to put his or her fingers, with the string wrapped around each, into their ears.
4. Help your child lean over so the spoon dangles and help him or her swing the spoon so it hits a nearby door or wall.
5. Hit the door or wall again, but this time with more force. What does your child hear?

Your child should hear a bell-like sound travel up the string from the spoon and into their ears. Discuss with your child how the sound waves created from the spoon hitting the door moves through the string until he or she is able to hear it!

Conclusion/wrap up:

Your child should hear a bell-like sound travel up the string from the spoon and into their ears. Discuss with your child how the sound waves created from the spoon hitting the door moves through the string until he or she is able to hear it!

Further Investigations:

Sources:

- From KidsAcadamy: <https://www.kidsacademy.mobi/storytime/sound-science-experiments>

Also look at: <https://team-cartwright.com/sound-science-activities>