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| Forms of energy (sound) | 10.30.2018 |

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| Subject |  | Overview |
| |  | | --- | | Basic Science | | Prepared By | | [Instructor Name] | | Grade Level | | 2 | |  | This lesson plan covers teaching content for;   1. Things that produce sounds. 2. Musical instruments. |

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| Materials Required -Balloons  - Cans/tin  -Rubber bands  -Radio  -Drum |
| Additional Resources  * <https://www.interior-deluxe.com/light-heat-sound-energy.html> * <https://study.com/academy/lesson/sound-waves-lesson-plan-for-elementary.html> * <https://www.pinterest.com/pin/177188566565278048/> * <https://sciencing.com/science-activities-sound-secondgrade-level-6400841.html> * <https://brownbagteacher.com/sound-1st-grade-science/> |
| Additional Notes |

|  |  | Teacher Guide |  | Guided Practice |
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| **Objectives** Students will be able to:   1. Explain the meaning of energy. 2. Name some instruments that produce sounds. 3. Make local instruments that produce sounds. 4. Make different kinds of sounds with the instruments they made.  Information/Instruction  1. Introduce the word Sound energy and define it. 2. Demonstrate vibrations by blowing air through your lips and making "car sounds" or a "horse snort". 3. Tell them “Sound” is generally a term that is used to describe when something is heard by the ear. 4. Sound, however, is much more complex than it may seem. Sound first starts out as a vibration that is formed before anything is able to be heard. 5. These vibrations are created by movement, for instance, when two hands clap together. |  | **Day 1/Lesson 1- 15 Mins**   1. Open and clean a can/tin. 2. Cut off the neck of a balloon. 3. Stretch the body of the balloon tightly over one end of the can. 4. If the students are unable to do this themselves, make a class set for them. 5. Tell them to blow through the cut-off neck of a balloon. 6. They can make any sound and feel the vibrations in their lips.   **Day 3/Lesson 3- 15 mins**   1. Place a drum on the speaker of a portable radio/CD player. 2. You may need to tip the player so that the speaker faces up. 3. Put some rice on the drumhead and ask students to predict what will happen when you turn the radio on. 4. When you turn on the radio, the vibrations from the speaker will travel through the air (and the sides of the drum), to the surface of the drum, causing the drumhead to vibrate and the rice to bounce. |  | **Day 2/Lesson 2- 15 mins**   1. Using the drum made earlier from a can and balloon, beat the drumhead (stretched balloon) with a drumstick (a chopstick or the eraser end of a pencil). 2. Ask students if they see any vibrations (they won't). 3. Then ask if they can hear them (they will). 4. Explain that although it is hard to see, the drumhead is vibrating. 5. Tell the students that vibrations from the drumhead travel through the air to their ears.   **Day 4/Lesson 4- 15 mins**   1. Arrange about 6 to 10 glass cups or bottles on the table. Set aside a bowl of water. 2. Have your students tap pencils or spoons on the empty glasses, responding to the sounds produced. 3. Add varying levels of water to the glasses, noting how the sounds change depending on the amount of liquid. 4. Divide students into groups, with a couple of glasses filled with varying amounts of water. 5. Encourage them to try varying liquid levels and create musical compositions, recording their findings on a paper. 6. Tell them this activity illustrates the concept of sound as vibrations; more liquid in the glass inhibits vibration and deepens the tone, while less liquid lets the vibrations ring free. |
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| Assessment Activity  1. Assess the students’ participation in class. |  | Assessment Activity |  |  |
| Summary |  |  |  |  |