# GRADE THREE SCIENCE – UNIT D: HEARING AND SOUND UNIT PLAN

*Students will*:
**3–9 Describe the nature of sound, and demonstrate methods for producing and controlling sound**

| Date | SLO *Students will:* | Activity |
|---|---|---|
| Nov 12, 2012 | 1. Identify examples of vibration<br>2. Recognize that sound is the result of vibration; and demonstrate that the larger the vibration, the louder the sound. | YouTube Video<br>Soundscapes & What Makes Sound? Worksheet<br>*Introduce Performance Task |
| Nov 13, 2012 | 2. Recognize that sound is the result of vibration; and demonstrate that the larger the vibration, the louder the sound. | Magic School Bus Clip<br>Hearing Vibrations (ruler) Experiment |
| Nov 15, 2012 | 2. Recognize that sound is the result of vibration; and demonstrate that the larger the vibration, the louder the sound. | Tuning Fork Experiment |
| Nov 20, 2012 | 4. Recognize that pitch is the result of differences in the rate of vibration, and predict how a change in the rate of vibration will affect a sound. | Pitch Experiment<br>• Plastic cup<br>• Coffee can<br>• Shoe box |
| Nov 22, 2012 | 3. Recognize that there are ways of measuring the loudness of sounds and that loud sounds pose a danger to the ear.<br>10. Recognize that certain sounds have characteristics that cause them to be interpreted as pleasant or unpleasant and identify these characteristics | Vibration and Pitch notes<br>Decibel iPad app demonstration<br>Measuring Loudness of Sounds<br>Pleasant vs. Unpleasant Sounds |
| Nov 27, 2012 | 3. Recognize that there are ways of measuring the loudness of sounds and that loud sounds pose a danger to the ear.<br>8. Describe how the human ear senses vibrations.<br>9. Compare the range of hearing in humans to that in other animals; e.g., dogs and bats.<br>11. Describe the changes in hearing that result from continued exposure to loud noise and from the natural process of aging | Bill Nye Video<br>Human Ear Role play<br>Ear Notes<br>Animal cut & paste<br>Dice Roll Review Game |
| Nov 29, 2012 | 7. Identify examples that show that sound can travel through a variety of materials, including solids, liquids and air, and that sound travels in all directions.<br>12. Construct and evaluate different kinds of soundproofing and sound-amplifying devices. | Sound Travel Experiment<br>**Hand out Study Sheet |
| Dec 4, 2012 | 13. Explain the role that sound plays in communication. | *A Riot of Quiet*<br>Sign Language |
| Dec 4, 2012 | 3-9.1,2,3,4,7,8,9,10,11 | WebQuest Review<br>Hearingandsound.weebly.com |
| Dec 6, 2012 | 3-9.1,2,3,4,7,8,9,10,11,12,13 | Unit Assessment |
| Dec 11, 2012 | 3-9.2,4,5,6 | Performance Task: Let's Make Music |