



## **Content Standards for Sound**

### **Kindergarten**

#### **Physical Science**

##### Nature of Matter

2. Examine and describe objects according to the materials that make up the object (e.g., wood, plastic, metal, and cloth.)

##### Forces and Motion

4. Explore that things can be made to move in many different ways such as straight, zigzag, up and down, round and round, back and forth, or fast and slow.

#### **Scientific Inquiry**

##### Doing Scientific Inquiry

1. Ask “what if” questions.
2. Explore and pursue “what if” questions.

### **Grade One**

#### **Physical Sciences**

##### Nature of Matter

1. Classify objects according to the materials they are made of and their physical properties.

#### **Scientific Inquiry**

##### Doing Scientific Inquiry

1. Ask “what happens when” questions.
2. Explore and pursue student generated “what happens when” questions.
4. Create individual conclusions about group findings.

#### **Scientific Ways of Knowing**

##### Science and Society

1. Explain that everybody can do science, invent things, and have scientific ideas no matter where they live.

### **Grade Two**

#### **Physical Sciences**

##### Force and Motion

1. Explore how things make sound (e.g., rubber bands, tuning fork and strings)
2. Explore and describe sounds (e.g., high, low, soft and loud) produced by vibrating objects.

#### **Scientific Inquiry**

##### Doing Scientific Inquiry

1. Ask “how can I/we” questions.
2. Ask “how do you know” questions (not “why” questions) in appropriate situations and attempt to give reasonable answers when others ask questions.
3. Explore and pursue student-generated “how” questions.
5. Use evidence to develop explanations of scientific investigations (What do you think? How do you know?)

### **Scientific Ways of Knowing**

#### Science and Society

4. Demonstrate that in science it is helpful to work with a team and share findings with others.

### **Grade Five**

#### **Physical Sciences**

##### Nature of Energy

4. Describe and summarize observations of the transmission, reflection, and absorption of sound.
5. Describe that changing the rate of vibration can vary the pitch of a sound.

#### **Scientific Inquiry**

##### Doing Scientific Inquiry

1. Use evidence and observations to explain and communicate the results of investigations.

### **Grade Seven**

#### **Physical Sciences**

##### Nature of Energy

1. Identify different forms of energy (e.g., electrical, mechanical, chemical, thermal, nuclear, radiant, and acoustic)

### **Grade Eight**

#### **Physical Sciences**

##### Nature of Energy

1. Demonstrate that waves transfer energy.
2. Demonstrate that vibrations in materials may produce waves that spread away from the source in all directions (e.g., earthquake waves and sound waves.)