ISE GRADE 3 SCIENCE CURRICULUM STANDARDS / LEARNING OUTCOMES

Curriculum Standards/Learning Outcomes	Teaching Strategies	Resources
Topic Three: Physics of Sound **Dropping In** • Objects can be identified by the sounds they make when dropped. • Sounds have identifiable characteristics. • Sounds can convey information. • Sound is caused by vibrations. • A sound source is an object that is vibrating. • A sound receiver detects sounds vibrating. **Good Vibrations** • Sound originates from vibrating sources. • Pitch is how high or low a sound is. • Differences in pitch are caused by differences in the rate at which objects vibrate. • Several variables affect pitch, including size (length) and tension of the source material.	• Observe sounds made by objects when dropped. • Communicate with others using a code. • Compare sounds to develop discrimination. • Observe that sound originates from a vibrating source. • Compare high, low, and medium pitched sounds. • Record observations on sound. • Relate the pitch of a sound to the physical properties of the sound source.	• Full Option System Science (FOSS) Teacher's Guide. • Library Books (see list) • Videos (see list) • Internet

ISE GRADE 3 SCIENCE CURRICULUM STANDARDS / LEARNING OUTCOMES

Curriculum Standards/Learning Outcomes	Teaching Strategies	Resources
How Sound Travels • Sound travels through solids, water, and air. • Sound vibrations need a medium to travel. • Sound that is directed travels better through air. • Our outer ears are designed to receive, focus, and amplify sounds.	• Observe that sound travels through solids, water, and air. • Compare how sound travels through different mediums. • Record observations on sound.	
Sound Challenges • Several variables affect pitch, including size (length), tension, and thickness of the source material. • Sound can be directed through air, water, or solids to the sound receivers. • The medium that sound passes through affects it volume and the distance at which it can be heard. .	• Observe that the outer ear is designed to receive sounds. • Compare different ways of amplifying sounds and making them travel longer distances. • Record observations of how sound travels.	