

Learning Progression

Energy > context: *FOSS Physics of Sound* Grade 3

Prerequisite knowledge:

Sound has characteristic *properties*.

Energy is needed to get things done.

Identify vibrating sources that *generate* sound *energy*.

4-5PS3D
Inv. 1, Part 3

Success Criteria:

I can...*explain* that sound energy comes from a vibrating source.

Formative Assessment:

Written response

FOSS Physics of Sound
Student Sheet #4 “The Tuning Fork” and #5 “The Long Gong”

Graphically show how *energy* can be *transferred* (moved).

4-5PS3B
Inv. 2, Parts 1, 2, & 3

Success Criteria:

I can...draw a diagram that shows a sound source with sound energy moving away from the source.

Formative Assessment:

Labeled diagram

Given examples and non-examples of sound energy transfer, draw and label a diagram of one example of sound energy transfer from the source into the air.

Construct and *annotate* an *energy diagram* that describes how sound energy can be *transferred* from one place to another (received).

4-5PS3B
Inv. 3

Success Criteria:

I can...draw and *describe* how sound energy is received by a sound receiver—the ear.

Formative Assessment:

Written response

How does the ear receive sound?

Labeled sound energy transfer diagram; e.g.:

Source vibration →
Air (or other medium) →
Receiver

Demonstrate how sound *energy* affects everyday activities.

2-3 PS3A
Inv. 1, Parts 1 & 2

Success Criteria:

I can...act out how sound energy is used to *communicate*.

Formative Assessment:

Demonstration

Small groups (partners) plan and execute a demonstration of sound energy making something happen: e.g., the fire alarm causing everyone to leave the building.

Sound is a form of energy.

2-3 PS3A

Later big ideas that build on this big idea include:

In grades 4-5 students learn that heat, light, sound, and electrical energy are *generated* and can be *transferred* from place to place.



Northwest Educational
Service District 189

Together We Can

Math & Science Collaborative Inquiry Project