



and



SCIENCE WITH E-BLOX (Grades K-3*)

Aligned with Next Generation Science Standards (NGSS)

Light and Sound

Lessons

Lesson 1
Light Sources

Lesson 2
How Light Behaves

Lesson 3
Shadows
"Light and Shadows"
Quiz

Lesson 4
Sound Is All Around Us

Lesson 5
What Makes Sound?
"Sound" Quiz

NGSS

1-PS4-2

1-PS4-3

1-PS4-3

1-PS4-1

1-PS4-1

Skills

Identify where light comes from

Identify how light moves

Identify what makes a shadow

Identify sounds in our surroundings

Identify how sounds are made

E-Blox Projects

"Light Sources" - build a closed circuit with a lamp to understand how electricity lights it up.

"Switches" - build a circuit with a switch and a lamp to see how switches work.

"Shadows" - build a circuit with a lamp and a motor (to limit the flow of electricity) to see how light dimmers work.

***Parental or teacher guidance recommended for grade K students.**

Lessons

Lesson 6

People Use Sound to Communicate

Lesson 7

People Use Light to Communicate

“Sound and Light to Communicate” Quiz

NGSS

1-PS4-4

1-PS4-4

Skills

Identify ways to communicate using sound

Identify ways to communicate using light

E-Blox Projects

“Sound Is All Around” - build a circuit with a buzzer to learn how audio alarms work.

“Ship to Ship Morse Code” - build a circuit with an LED and use flashing lights to transfer Morse code.