



ENERGY QUEST: LIGHT

4th Grade

DESCRIPTION

Enhance your students' understanding of the nature of light with this "enlightening" program, which introduces light as a form of energy. Students will conduct hands-on experiments into the properties of light, how it is affected by lenses, mirrors, and prisms, and explore concepts such as refraction, reflection, absorption, opaque, translucent and transparent. Program will run for 2 hours.

30 MINUTES – INTRODUCTION IN THEATER

- Introduce characteristics of light
- Demonstration of properties of light using a laser

30 MINUTES - LAB

- Explore the properties of both colored and white light, and how reflections change using various types of mirrors (concave, convex and plane)
- Investigate the creation of white light using colored light, as well as using various lens shapes to determine their appropriate use
- Test the effects everyday objects have on light

30 MINUTES - STORE AND TREE ACTIVITY

- Discuss light travelling through colored filters
- Compare the changes in their image in various mirrors
- Review reflection, refraction, absorption, transparent, translucent and opaque concepts

30 MINUTES - GALLERY TIME

- Visit and explore Collins Family My Big Backyard focusing on the greenhouse and light activities

TAKE HOME ITEMS

- Blue filter glasses with "secret" riddle card

REVISED 07.23.21

GEORGIA STANDARDS OF EXCELLENCE:
S4P1a-c