



## Bright Light Academic Standards

### Bright Light Grades 3–6

In this illuminating exploration of light and color, students make exciting discoveries as they experiment with lasers, diffraction glasses, and giant water prisms. Through real-life applications, the scientific concepts of refraction, diffraction, and reflection are illustrated with engaging educational activities related to spectrum analysis and the electromagnetic spectrum.

### Academic Standards

#### Science GLEs

##### Grade 3

(SI-E-A1) Ask questions about objects and events in the environment (e.g., plants, rocks, storms)

(PS-E-C2) Describe the reflection/absorption properties of various colored objects

(SI-E-A1) Pose questions that can be answered by using students' own observations, scientific knowledge, and testable scientific investigations

(SI-E-A2) Use observations to design and conduct simple investigations or experiments to answer testable questions

(SI-E-A2) Predict and anticipate possible outcomes

(SI-E-A3) Use the five senses to describe observations

##### Grade 4

(SI-E-A1) Ask questions about objects and events in the environment (e.g., plants, rocks, storms)

(SI-E-A1) Pose questions that can be answered by using students' own observations, scientific knowledge, and testable scientific investigations

(PS-E-C2) Diagram what happens to white light as it passes through a prism

(PS-E-C2) Describe how light bends or refracts when traveling through various materials (e.g., pencil bending in water)

(SI-E-A2) Predict and anticipate possible outcomes

(SI-E-A3) Use the five senses to describe observations

(SI-E-B4) Base explanations and logical inferences on scientific knowledge, observations, and scientific evidence