

POP! TEACHER RESOURCE



Lesson Plan



Light and Prisms

Lesson Plan for *What Makes a Rainbow?*

Grade 1

Objective

To help students practice identifying the similarities and differences between two diagrams about light.

Things Needed

- *What Makes a Rainbow?* book
- *Why Is the Sky Blue?* book or “Wavelengths” infographic (attached)

Before the Activity

Read *What Makes a Rainbow?* out loud to students. Bring out the “Wavelengths” infographic (attached) or open the *Why Is the Sky Blue?* book to page 13.

Activity

To start, open the *What Makes a Rainbow?* book to the diagram on page 17. Review how prisms work by asking the following questions:

- What type of light is sunlight? (Answer: white light)
- What do prisms do? (Answer: They separate white light into different colors.)
- How do prisms work? (Answer: Light enters a glass prism. The light bends. Each wavelength of light bends at a different angle. Then the light exits the prism. Each wavelength appears in a different line.)
- What can people see coming out of a prism? (Answer: bands of separate colors)
- In what order do the colors appear? (Answer: red, orange, yellow, green, blue, indigo, violet)



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Then, have students look at the “Wavelengths” diagram. Ask students the following questions:

- How is this diagram on wavelengths similar to the diagram about how a prism works? (Possible Answer: The colors appears in the same order in each diagram.)
- How are the two diagrams different? What information does each diagram give us? (Possible Answer: One diagram shows how a prism separates white sunlight into the different colors, while the other diagram shows how the different colors have different wavelengths.)
- What information did we already know about wavelengths from the *What Makes a Rainbow?* book? (Possible Answers: The different wavelengths bend at different angles; each color is a different wavelength; etc.)
- What new information did we learn about wavelengths from the “Wavelengths” diagram? (Possible Answers: Red has the longest wavelength; violet has the shortest wavelength; the order that colors appear in has to do with their wavelengths; etc.)

Evaluation

Could students answer the questions about light and prisms? Could students identify the similarities and differences between two diagrams on light?

Standards

This lesson plan may be used to address the National Science Education Standards’ Content Standard B, grades K–4, and the Common Core State Standards’ reading standards for informational texts, grade 1 (RI 1.9).



Wavelengths

