

Activity Guide - Waves

Reflection/Absorption Popcorn

— *Light Slides: 22-23, *Examples:* [Reflection popcorn](#) [Absorption popcorn](#)

Overview

Objectives

- Demonstrate understanding of principles of reflection and absorption, applying abstract concept to tangible examples
- Use motion of the body to inspire engagement and excitement

Guiding questions

- If your clothing is reflecting green today, what does that look like? Do we see green if green is being reflected? (hint: yes! A green object is reflecting green light)
- If your clothing is absorbing green today, what does that look like? Do we see green if green is being absorbed? (hint: the clothing will not appear green.)
- If your clothing is absorbing all the light what does that look like? (hint: black!)
- If your clothing is reflecting all the light what does that look like? (hint: white!)

Materials needed

- None

Space needed

- Enough space for students to stand up

Time allotment: 2-3 minutes

Number of students: All students

Instructions

1. Starting with one color at a time, ask students to stand if they are reflecting ____ color. If they are wearing that color, they are reflecting it, so they should stand up. If they are not wearing that color, they should remain seated.
2. Repeat with single colors until you feel ready to up the complexity. Then ask for 2 colors, all the colors (white), none of the colors (black)
3. To up complexity further, ask which colors students are absorbing. For example, ask students to stand if they are absorbing green. That means any student NOT wearing green would stand up. This concept may take a little longer to sink in, so it may be worth repeating until students grasp the concept.

Note: This activity may not be appropriate if you have students with color blindness.