



Color Lesson Plan: Grade 8

Grade Level: **Eighth Grade** | Duration: **Two days, 30–40 minutes per lesson**

Objective

In this lesson, eighth graders use BrainPOP resources to model and explain how objects reflect and absorb light..

Students will:

- 1. Build Background Knowledge:**
 - Watch the BrainPOP Color movie.
- 2. Think and Do:**
 - Vocabulary: Define vocabulary and use in a sentence.
 - Simulation: Model color perception with different colored filters.
 - Graphic Organizer: Explain why objects appear certain colors.
- 3. Assess:**
 - Take the Color quiz.

Preparation

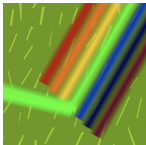
- Preview the BrainPOP movie [Color](#) to plan for any adaptations.
- Create and schedule Day 1 assignment: [Color Movie](#) and [Vocabulary](#).
- Create and schedule Day 2 assignment: [Color Movie](#), [Simulation](#), [Graphic Organizer](#), and [Quiz](#).

Before the Lesson

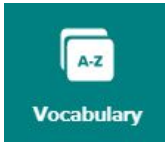


Background knowledge helps students make sense of new ideas and experiences. To activate prior knowledge, ask these questions:

- *What is light? Is there light we cannot see?*
- *What happens when light hits an object, like a mirror? What about when light hits a window? Or your shoes?*

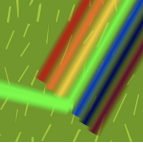
DAY 1: Build Background (10 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
<div style="text-align: center;">  </div> <p>1. Watch the Color movie.</p> <p>Click pause at noted time codes to discuss key ideas:</p> <p>Timecode 0:58: How is amplitude of a wave related to the energy in a wave?</p> <p>Timecode 1:25: What electromagnetic waves can we see? What are some examples of electromagnetic waves we can't see?</p> <p>Timecode 2:18: What gives an object its color?</p>	<ul style="list-style-type: none"> • Print the movie transcript and highlight evidence that answers each of the discussion questions. • Two students act out the transcript, one as Tim and the other as Moby. 	<ul style="list-style-type: none"> • Set a specific viewing purpose for individual students or small groups based on lesson objectives and student readiness. For example, have students focus on the parts of light waves, the types of electromagnetic waves, or the relationship between light and color. • Pause at two key points and prompt students to summarize. • Support recall by having students draw one or two key ideas from the movie. 	<ul style="list-style-type: none"> • Pause for new vocabulary. Use the word in a sentence. Prompt students to say the word and repeat the sentence. Invite them to draw a picture of the word. • Create a word wall with vocabulary and the drawing. • Pause at key points and ask the discussion questions in the student's home language or English.


DAY 1: Think & Do (20 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
<div style="text-align: center;">  <p>Vocabulary</p> </div> <p>2. Students open their Vocabulary assignment. Or, if not using Assignment Builder, model how to open Vocabulary.</p> <p>Students click Flip All or each term individually. To hear a term read aloud, click the speaker icon.</p> <div style="text-align: center;">  </div> <p>Students type a definition and sentence for each term.</p> <p>When they finish, students click the Submit To Teacher button and/or print out.</p>	<ul style="list-style-type: none"> • Print Vocabulary. <div style="text-align: center;">  </div> <ul style="list-style-type: none"> • Students write a definition and sentence for each term. 	<ul style="list-style-type: none"> • Assign appropriately challenging words to individual students. • Assign a few of the six terms to individual students to define and use in a sentence. • As a challenge, students can add two additional terms, writing a definition and sentence for each. 	<ul style="list-style-type: none"> • Say the term(s) in students' home language. Then say the words in English. Have the student repeat in English. • Use the term in a sentence. Prompt students to say the word and repeat the sentence. • Click the speaker icon to hear the term read aloud.

DAY 2: Build Background (5 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
 <p>3. Watch the Color movie again.</p> <p>Prompt students to find a fact or something new that they didn't notice the first time.</p>		<ul style="list-style-type: none"> Students return to their drawings of key concepts from the first viewing and add new details. As a challenge, invite students to identify more than one new fact. 	

DAY 2: Think & Do (30 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
 <p>4. Students open their Simulation assignment. Or, if not using Assignment Builder, model how to open the Simulation.</p> <p>Students answer questions to explore color perception by adding a filter and adjusting the filter color.</p> <p>When they finish, students click the Submit To Teacher button.</p>	<ul style="list-style-type: none"> Begin the simulation and take screenshots for each question. Print out the screenshots and the simulation questions. 	<ul style="list-style-type: none"> Model your thinking for students as you begin exploring the simulation tools. Assign specific simulation questions to individual students. Challenge students to answer all three questions. Support recall by prompting students to revisit the drawings they made after watching the movie. 	<ul style="list-style-type: none"> Read aloud the simulation questions in students' home language. Before students answer each question, have them use their home language or English to discuss what they plan to write.



5. Students open their Graphic Organizer assignment. Or, if not using Assignment Builder, model how to open the [Graphic Organizer](#).

Students use what they learned from the simulation to explain why four different objects appear as certain colors.

When they finish, students click the **Submit To Teacher** button and/or print out.

- **Print** the Graphic Organizer.



- Students **write** in responses for why each object appears a certain color.

- Students speak their response and **brainstorm** what they will write for each object.
- **Model** how to complete the Graphic Organizer by filling in one of the “Because” boxes. Demonstrate how to return to the movie to find evidence.
- Assign **one or two objects** to individual students.
- Support recall by prompting students to **revisit the drawings** they made after watching the movie.

- Say the name of each object and its color in students’ **home language** or English. Have them repeat it in English.
- Before students write, have them use their home language or English to **discuss what they plan to write**.

DAY 2: Assess (5 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
<div data-bbox="494 966 612 1101" data-label="Image"></div> <p>6. Students open their Quiz assignment. Or, if not using Assignment Builder, model how to open the quiz.</p> <p>If you assigned the quiz, you will see students’ results in your Dashboard. If not assigned, students click the Submit to Teacher button.</p>	<ul style="list-style-type: none"> • Print the quiz for students to complete. 	<ul style="list-style-type: none"> • Read aloud the questions and answers. • Reduce the number of questions and/or possible answers (using the Quiz Mixer). • Support recall by revisiting movie drawings. 	<ul style="list-style-type: none"> • Read aloud the quiz in students’ home language. • Highlight the key vocabulary in a printable version of the quiz. • Support recall by having students review drawings they made during the movie.

