

**Project FOCUS  
Best Lessons  
FIRST GRADE**

**Title of Lesson:** Gummy Bear Light

**Theme:** Physical Science

**Unit Number:** 4      **Unit Title:** Light and Shadows

**Performance Standard(s) Covered (enter codes):**

S1P1

S1SC3

S1SC5

S1CS1

**Enduring Standards (objectives of activity):**

**Habits of Mind**

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

**Content (key terms and topics covered):**

Essential Questions: How do we see light?

Key Terms: light, energy, sight, reflect, absorb

**Learning Activity (Description in Steps)**

**Abstract (limit 100 characters):** Purpose of this lesson is to define light and to determine how we see light.

**Details:**

Begin the lesson by asking the students to describe each of their definitions of light. Then, define "light" as an "energy" that allows us to see and that white light is made up of all of the colors of the rainbow. Discuss how the students' predictions were correct/ incorrect. Next, show an educational youtube video entitled "The Colors of Light" that demonstrates what light is. Also, the video shows how an instrument, a prism, can be used to view all of the colors of the rainbow after white light passes through it.

After introducing and defining the concept of light, ask the students how we see light. Ask the students why light is necessary for our "sight." Write responses on the board. Tell them that the colors we see are "reflected" and all of the other colors are "absorbed." Concretely define the terms by writing them on the board.

The next part of the lesson is the hands-on portion. We will use gummy bears to visualize how certain colors are "reflected" as the color we "see" and the others are "absorbed" because we don't see them. Before passing out materials, have the students record their predictions about what will

happen. Encourage participation by telling them that real scientists are incorrect all the time and need to experiment to determine the correct answer to scientific questions.

Now, pass out the gummy bears and white lights. Allow 5-10 minutes for the students to explore their predictions. The last part of the lesson consists of another youtube video entitled "Light Absorption and Reflection." This video will further reinforce the concepts of "reflection" and "absorption." After the lesson is over, the student are permitted to eat the gummy bears they used in their science experiment.

**Materials Needed (Type and Quantity):**

- Gummy Bears (1 bag should suffice but just get enough so that each student gets a gummy bear of each possible color)
- White lights (1 for each student if you have a small class or one per table if you have a larger class)
- Laptop to show the videos

**Notes and Tips (suggested changes, alternative methods, cautions):**

Make sure your laptop is compatible with the smartboard apparatus at your school. Also, in preparation for this lesson, I had to learn how to download videos to my laptop. Most schools block sites like youtube and also do not allow you to open links to sites like youtube. I used a feature called "kickyoutube" to download the youtube videos to my laptop. Find the video "The Colors of Light" and type "kick" in front of "youtube" of the url address, i.e. [www.kickyoutube.....etc](http://www.kickyoutube.....etc). After typing kick in the url, press the enter button. Next, find the download option compatible with your computer. You will then just download the video to any media player you have on your desktop.

**Sources/References:**

- 1) Rubicon Atlas ( available at :  
<http://clarke.rubiconatlas.org/c/pi/v.php/Atlas/Develop/UnitMap/View/Default?TeacherID>)
- 2) The Colors of Light video on youtube.com (<http://www.youtube.com/watch?v=2ZsJpcOliSU>)
- 3) Light and Absorption video on youtube.com  
([http://www.youtube.com/watch?v=DThUKDM\\_Wtk](http://www.youtube.com/watch?v=DThUKDM_Wtk))