Daryl Singleton

Project FOCUS
Best Lessons
SECOND GRADE

Title of Lesson: Reflecting Light with Mirrors
Theme: Physical Science
Unit Number: Click here to enter text. **Unit Title: Energy/Pushes and Pulls**
Performance Standard(s) Covered (S2P2**):**
S2P2. Students will identify sources of energy and how the energy is used.

a. Identify sources of light energy, heat energy, and energy of motion.

b. Describe how light, heat, and motion energy are used.

Enduring Standards (objectives of activity):

Habits of Mind

- [X] **Asks questions**
- ☐ **Uses numbers to quantify**
- [X] **Works in a group**

- ☐ **Uses tools to measure and view**
- [X] **Looks at how parts of things are needed**
- [X] **Describes and compares using physical attributes**
- [X] **Observes using senses**
- [X] **Draws and describes observations**

Content (key terms and topics covered):
Light Energy, Light Wave, Light Source, How Light Travels, Reflection, Shadows

Learning Activity (description in steps)
Abstract (limit 100 characters): Students will work together in small groups and reflect light off of each other's mirror to "light up" a specific object in the classroom.
Details: Begin activity by giving instructions. Students will work together, in groups of 3 or 4, one group at a time, and reflect light off of their mirrors to light up an object or place in the room. I found that 2 members per group is too easy and passes by quickly, and 4 is really challenging. 3 is a pretty good balance of difficulty and time to complete. The challenging part is making the light reflect off of every mirror to reach the object. Make sure that you are the one handling the flashlight, so that it can be as steady as possible for the students. Have the room is dark enough for the light to be seen clearly. Do a quick run though by yourself to make sure the students understand. Begin activity. Have fun reflecting light!

Materials Needed (type and quantity): 1 Bright Flashlight (laser pointer) & at least 3 Small Mirrors

Notes and Tips (general changes, alternative methods, cautions): Be patient with the children; it may take a while for each group to get the hang of handling the mirrors. Make sure to explain the importance of handling the mirrors with care, so they do not break. Also, start of by making sure that students have a general idea of how light travels, which is a straight path. I contrasted the way light and

sound travels. Explain that light cannot turn corners, but sound can. Explain reflection and how shadows are created. Ask for examples and be sure to give some of your own. That information can be the opener/lesson. Lastly, the students will more than likely need help, so allow students that are not participating to give advice or chime in as needed. Reminding them by asking questions about prior information may aid them.

Sources/References:

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