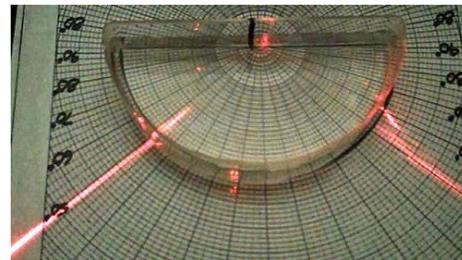


Light & Shadows – Good Reflectors

What is reflection?

Materials:

- Plasticine
- White card paper
- Flash light
- Small mirror
- Aluminum foil (smooth)
- Aluminum foil (crumpled)
- DVD
- White paper
- Black construction paper
- Coloured construction paper

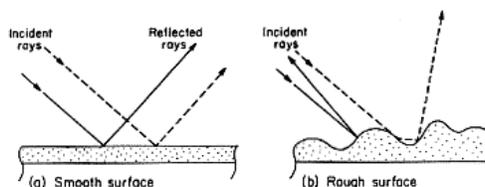


Procedure: (Remember to have your parent’s permission and have them watch and help you.)

- Create a 3 column table listing each of the seven reflecting surfaces from mirror to the construction paper in the left most column. Tables are a great way to display information that you want to compare.
- In the middle column write down whether or not you think it would be a good reflector (use Worst, Reflects Some, Good, Better, Best).
- The third column is for the Experimental Results.
- Stand the white card paper upright in the Plasticine. This will be the screen.
- Darken the room.
- Use the mirror to reflect the light from the flashlight onto the screen and note in your chart how good a reflector it is (you are looking for brightness and shape on the “screen”).
- Use each of the other materials to observe how well they reflect light and record this on your chart.
- Look at your predictions and the actual results. How do they compare?

What's Happening:

If an object does not give off its own light it reflects light in order to be seen. Some surfaces like polished metal surfaces or a mirror reflect most of the light back into your eyes. Reflection involves two rays: incoming or incident ray and outgoing or reflected ray. All reflected light obeys the relationship that the angle of incident equals the angle of reflection. Rough surfaces don’t appear to be good reflectors because the incident rays strike bumps on the surface that are at different angles causing the light to scatter in many different reflection angles.



Extension:

Use the reflectors to aim the light at various locations in the room. For more about the Science of Light see: <http://www.optics4kids.org/home/teachersparents/articles/the-reflection-of-light/>.

This activity is based on our Light & Shadows kit. The source for this lab was located by EDEL330 students Ms. S. Beattie and Ms. K. Biech in Science and Technology: Light (Addison Wesley pp 8-9). Our teaching kits (described on our website) are loaned out FREE to provide classroom teachers and parents of home schooled children an opportunity to explore Science in interesting ways. Please consider volunteering as a classroom guest speaker or offer your business as a field trip location.

Lorne Cooper, Regional Executive Director

PRAXIS, “Making Science Fun”. Contact Praxis at praxis@praxismh.ca, www.praxismh.ca, Tweet or follow us @PraxisMedHat, or friend us on Facebook. Address: c/o 200 7th Street S.W., Medicine Hat, AB, T1A 4K1 Phone: 403-527-5365, Fax: 403-527-6570.