

Magical Bending Straw

Objective: To learn about refraction of light and the properties of light as it travels through different mediums.

Standards: Light, Heat, Electricity, and Magnetism (light reflectance, refraction, and absorption), Transfer of Energy (light transmission, refraction, absorption, reflection, and scattering).

Materials: drinking glass, drinking straw, and water.

Procedure:

- (1) Fill the glass halfway with water.
- (2) Place the drinking straw in the glass.
- (3) Look at the straw from the top, the bottom, and the sides.
- (4) Make note of observations.

Science Behind It: Students should notice that the straw appears bent or broken at the point where it meets the water as they observe it from the sides of the glass. The straw appears bent because rays of light travel more slowly through mediums such as glass and water than they do through air. Since the light from the straw in the water reaches observers' eyes later than the part of the straw not in the water, the straw appears broken or bent.