

Light and Mirrors

Many kids are fascinated by mirrors and this hands-on activity is a great way to illustrate how light travels while allowing them to play around with mirrors. Light is a form of energy that you can see and mirrors are able to reflect this light. Help your child understand how light and mirrors work together by playing this targeting game. All you need is a flashlight and a handheld mirror and you're ready to go!

What You Need:

- A bright flashlight
- A handheld mirror (a metal camping mirror will work)
- Sheet of black paper
- White crayon

What You Do:

1. Cut several circles from black construction paper and number them – 1, 2, 3, etc. You can make as few as three or as many as ten – it's up to you. Place these "targets" around the room.
2. Have your child practice aiming the flashlight at these targets. Help him see that the beam of light travels from the flashlight across the room. Can you tell you where the light will shine if you point it to the right? To the left?
3. Turn off the flashlight and hold up the mirror. What does your child think will happen when you turn on the light? Where will the beam of light go? He'll probably say that the light beam will shine on the mirror.
4. Turn on the flashlight and show him how the light is reflected off the mirror to another point in the room.
5. Shift first the light and then the mirror to show your child how this changes where the light shines. Changing the angle of the flashlight to the mirror changes the angle that the light reflects from the mirror.
6. Have your child use the mirror to shift the light beam from side to side and hit the targets. It isn't nearly as easy as it looks!

This simple experiment lets him see that light travels in a straight line, and challenges him to use that discovery to make predictions about how light will behave when directed toward a mirror.

