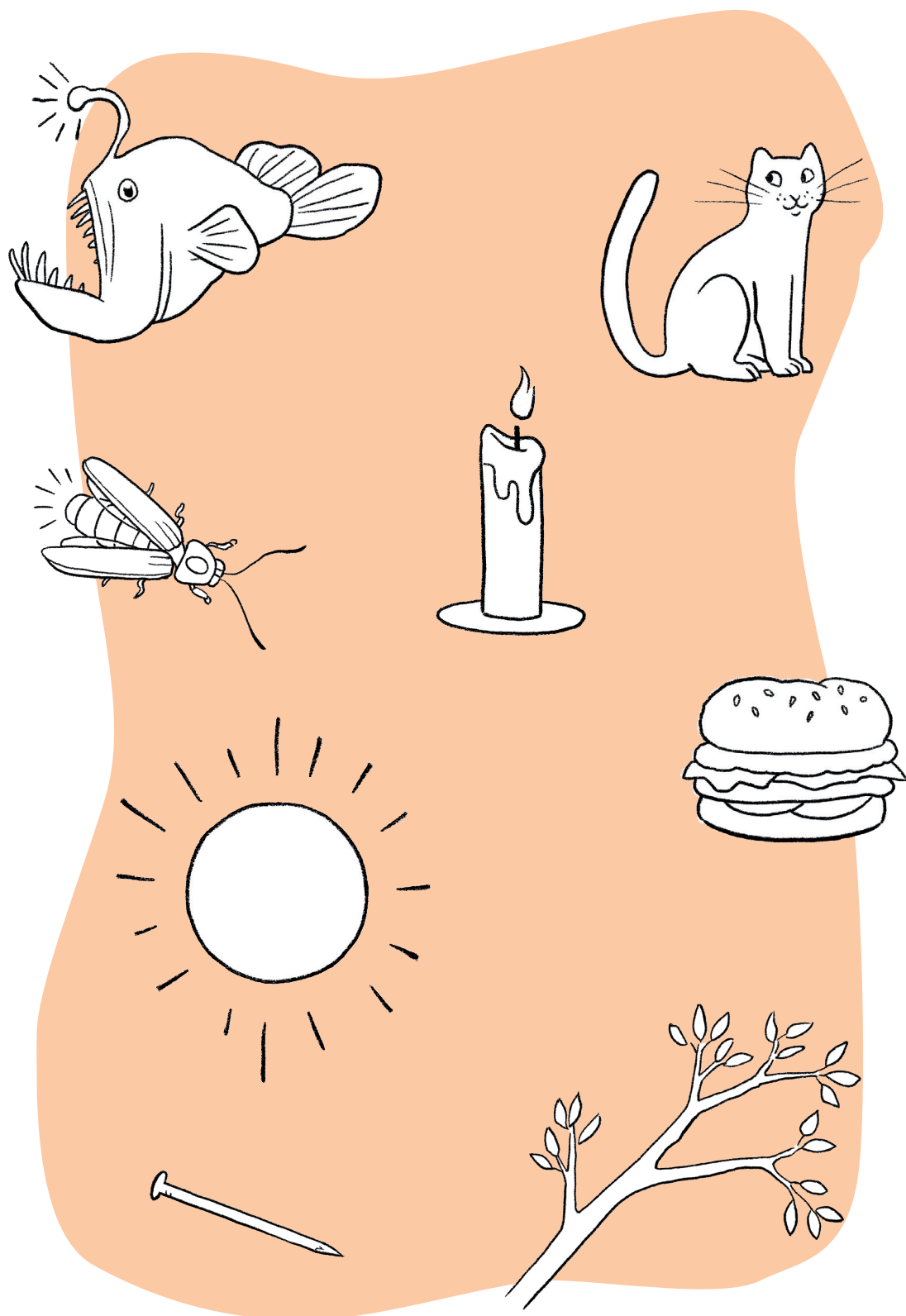
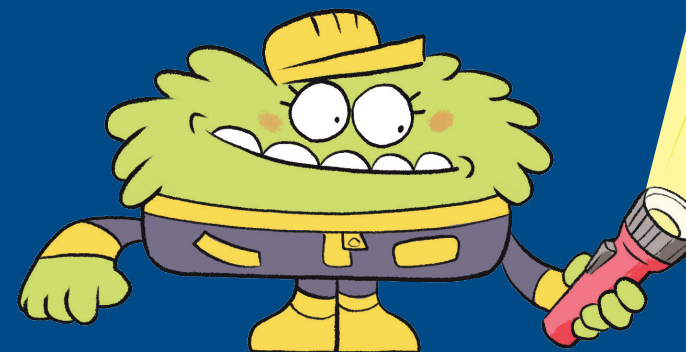


Light is a form of energy you can see. Some things give off their own light.
Color those things yellow.



Some things can
only be seen with a
light source.



Draw a light source you use in
your room at night.

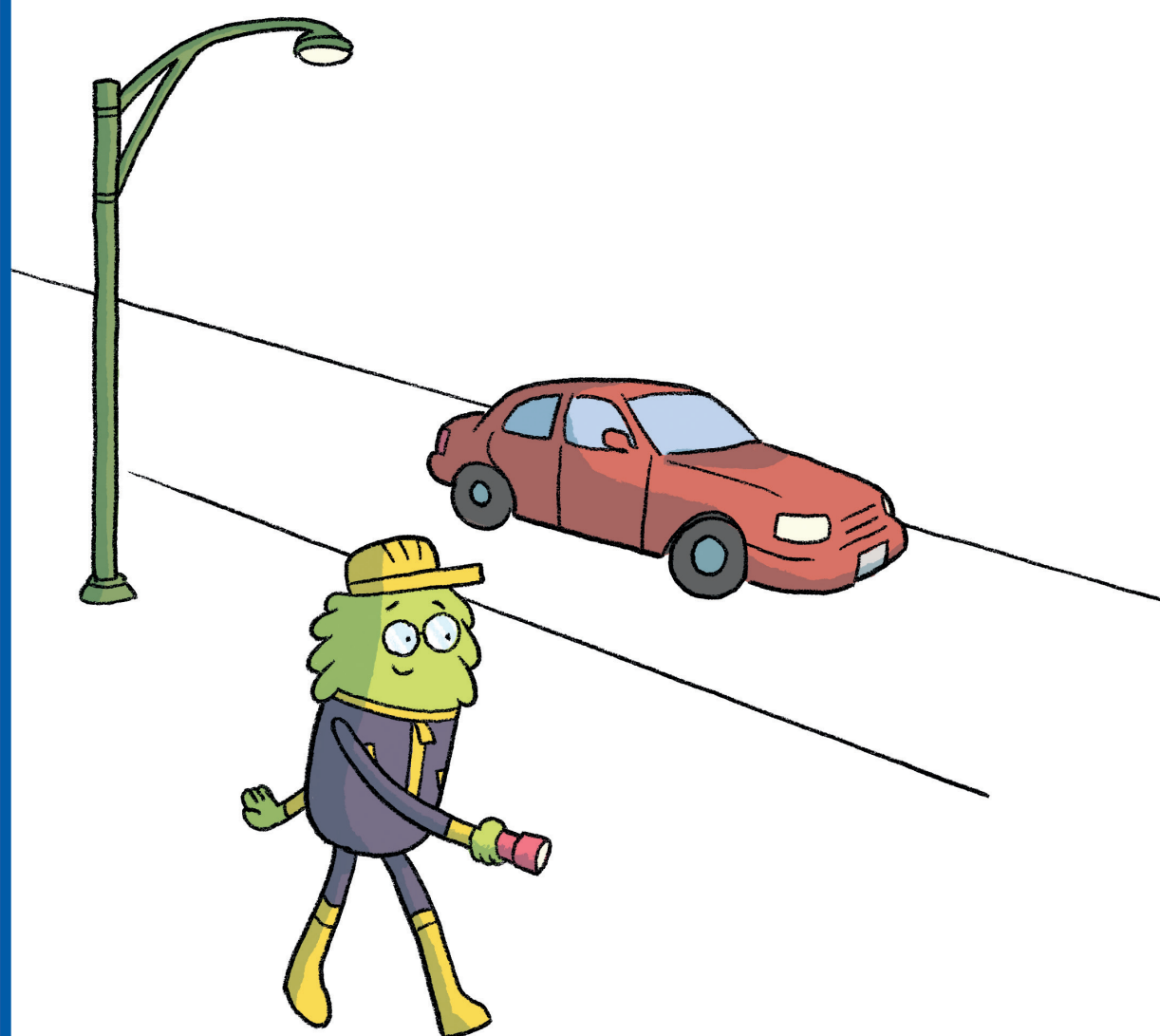
Draw how your room looks.

Draw a light source you use in
your room during the day.

Draw how your room looks.

Look around the space you are in. What light source is closest to you?

Light moves in a straight line. Draw beams of light from each of the three light sources in the picture.

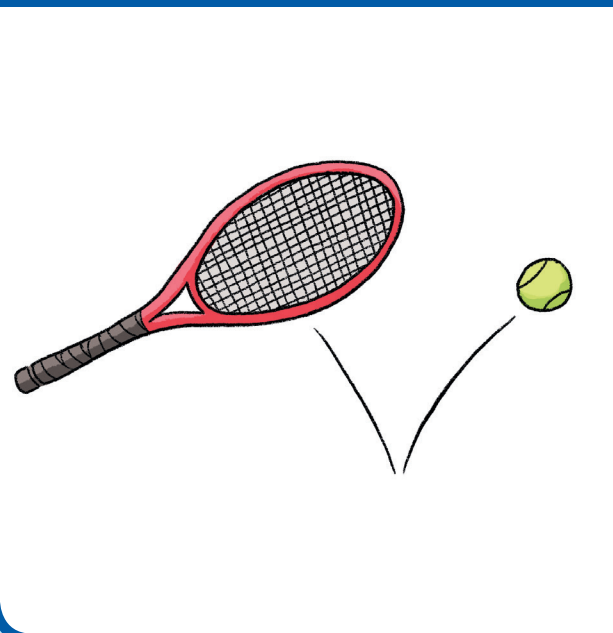


Read the story aloud. Then add details to the picture showing what you think Brian saw under the bed.

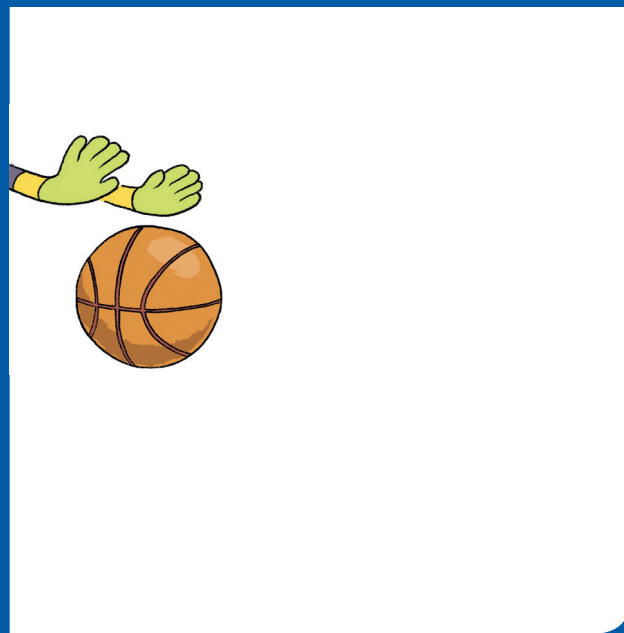
It was very late and dark at the sleepover. All of Brian's friends were sleeping. Brian heard a noise in the dark. Then he heard it again! Brian got his flashlight out of his backpack. He snuck over to the bed and slowly peeked underneath it. Then he flipped on his flashlight!



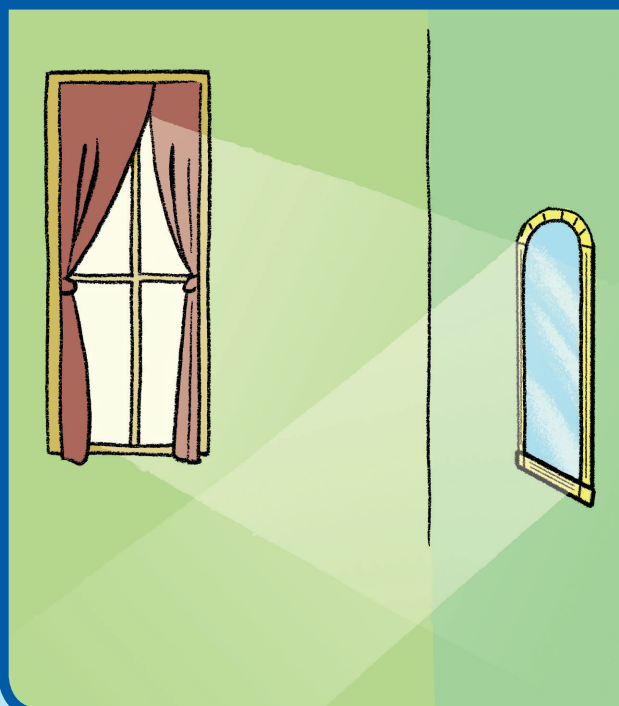
Many kinds of balls bounce.



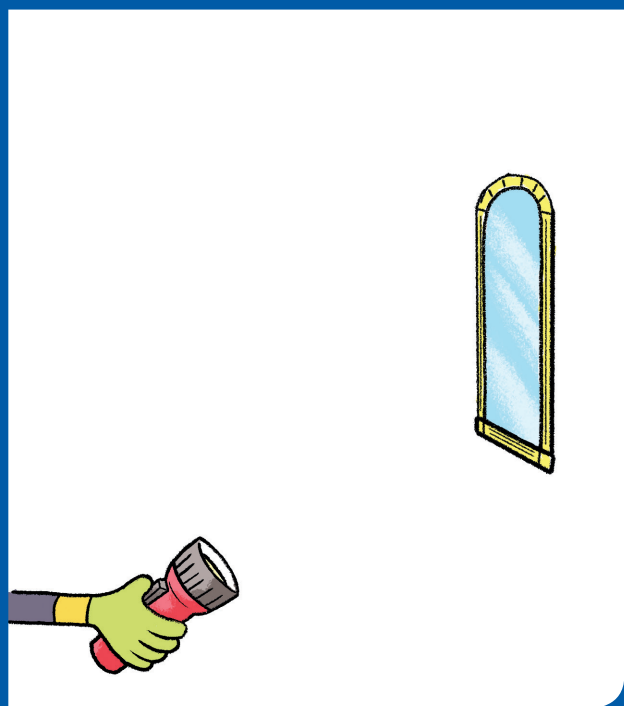
Draw how you think this ball will bounce.



When a beam of light hits a shiny surface, like a mirror, it also bounces. This is called reflection.

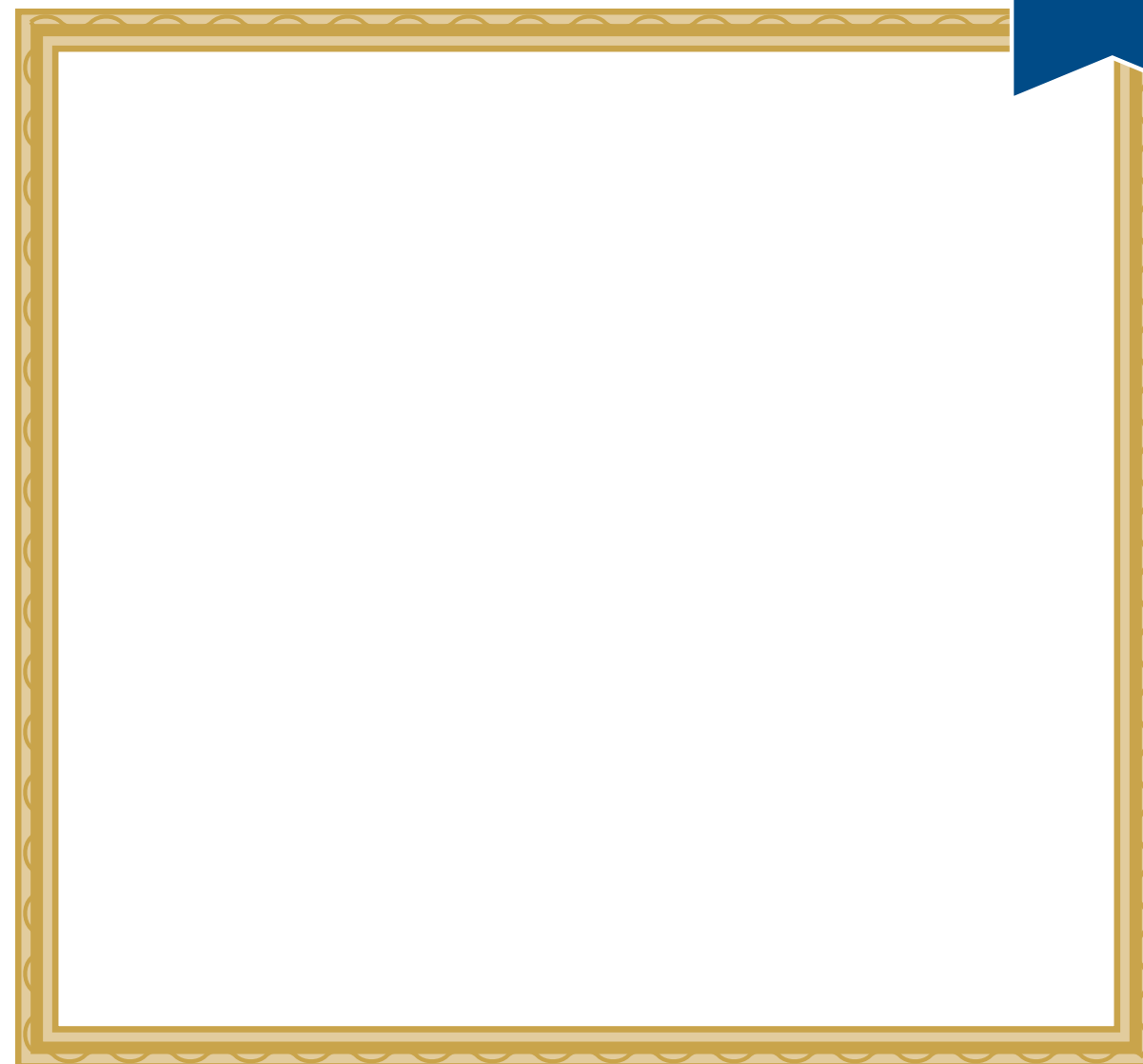


Draw how you think the light of the flashlight will reflect.

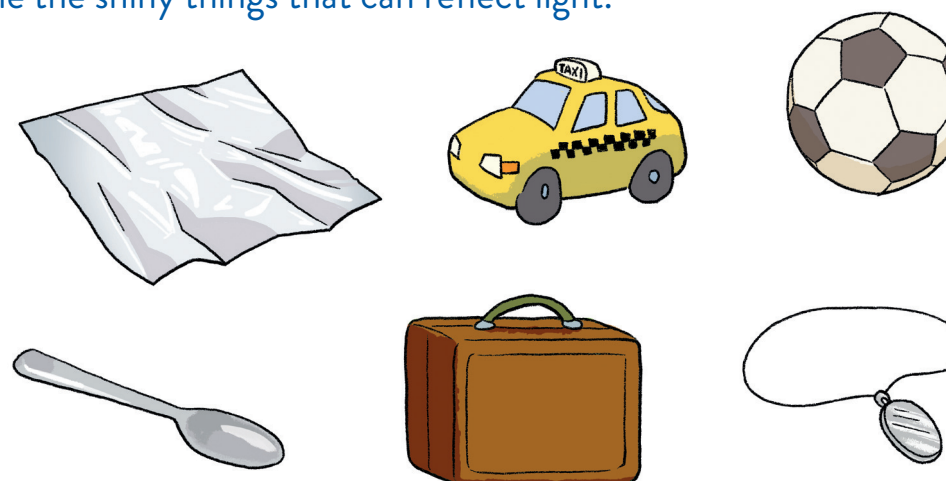


You can use a mirror to redirect a beam of light. You can also see your reflection.

Stand in front of a mirror in your home. Draw what you see.

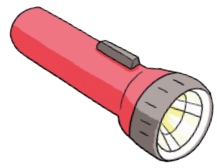


Circle the shiny things that can reflect light.

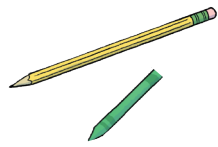


LET'S START!

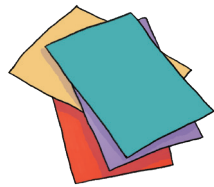
GATHER THESE TOOLS AND MATERIALS.



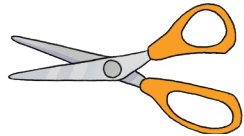
Flashlight



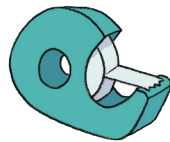
Pencil, crayon,
or marker



Construction paper



Scissors
(with an adult's help)



Tape



Aluminum
foil



Spoon



4-6 twist ties



Clothes
hanger

3-5 pieces
of string,
each 1-2
feet long



3. **Tape** the paper circle over the lens of the flashlight and turn it on. **Point** the flashlight at the wall, floor, or ceiling to project your pattern!



13

Light

LET'S TINKER!

Look at your materials and predict which ones will reflect light.

Use the flashlight to shine a beam of light onto each item. Which items reflect the light? How can you tell? Were your predictions correct?

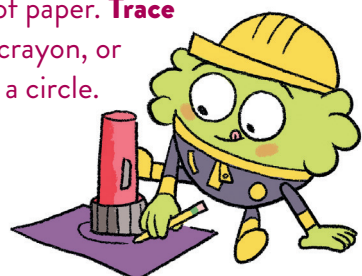
Turn all the lights off. Does anything change?

Discover other materials in your home that reflect light.

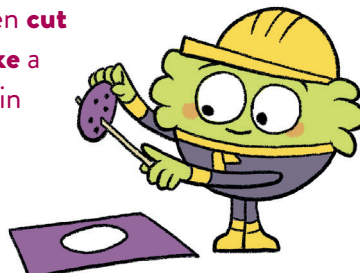


LET'S MAKE: FLASHLIGHT PICTURES!

1. **Place** your flashlight facedown first on a piece of paper. **Trace** it with a pencil, crayon, or marker to make a circle.



2. **Cut** out the paper circle. Then **cut** out or **poke** a few holes in the circle.



It's time for Amelia's party, but she doesn't have a disco ball. A disco ball reflects light around a room in fun shapes and patterns! Amelia can't have a party without something like a disco ball.

How can you help save the day with a similar decoration?



Build your own hanging party decoration that reflects light in fun shapes and patterns.



PROJECT 13: DONE!
Get your sticker!