

# Flashlight Solar System



MESS  
METER: 1



NO ADULT  
SUPERVISION  
REQUIRED



PREP TIME: 5 MINUTES  
EXPERIMENT DURATION: 2 TO 15 MINUTES

## Supplies Needed

- Pencil
- Flashlights, 1 per constellation
- Black paper
- Scissors
- Thick needle
- Tape

## Science Question: What does the night sky look like?

Constellations are groups of stars that make shapes or images, such as Orion and the Big Dipper. With light pollution and lots of neighbors it is hard to see the stars and constellations. Grab a flashlight, some paper and a dark room, and you can create a small part of the night sky on your ceiling.

## The Experiment

With a pencil, trace the front of the flashlight (where the light comes out) onto the black paper. Cut the tracings out to create large circles.

Poke holes into each black circle with the needle in the shapes of common constellations. Tape the constellation circles to the flashlight.

## The Outcome

Turn out the lights in the room and close the curtains or blinds. When you turn the flashlight on you should see the constellation patterns.

## Why It Worked

The light shines through the holes in the black paper, causing it to look like stars in the night sky.

## Did You Know?

According to the International Astronomical Union, there are officially eighty-eight constellations.

Our solar system is called that because our sun is named "Sol." Other star systems have different names.

