HANDS-ON ACTIVITY

Glowing Light

We see stars because they produce light. The sun is a star, and we can see the sun because of the light it produces. The light from the sun helps us see many other objects that reflect the sun's light. What factors do you think affect a star's brightness?

Form a question Ask a question about why the sun looks brighter than other stars in the sky.

Did you know?

Light from the sun takes about 8 minutes to reach Earth.

As you work through the activity, use a table like the one below to record your observations.

Step	Observations	Why did this happen?	How is this similar to stars?
Step 1: Size			
Step 2: Distance			
Step 3: Temperature			

STEP 1 Activate one large and one small glow stick. When your teacher turns off the lights, record your observations.

STEP 2 Activate two small glow sticks. Place one close to you and one far away from you. Again, record your observations.

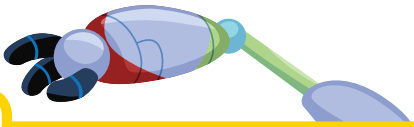
STEP 3 Fill the three cups with water: one cold, one room temperature, and one warm. Place a small glow stick in each cup of water. When your teacher turns off the lights, record your observations.

POSSIBLE MATERIALS

- ☐ 4 glow sticks (one large and three small)
- ☐ water
- ☐ cups
- ☐ thermometers

Draw conclusions Write a **claim** about your investigation using **evidence** to support it. Then, explain your **reasoning**.

Apply To compare the brightness of stars, scientists determine what stars would look like if they were all at the same distance from Earth. What properties of a star would not change if all were the same distance away?



Making Sense

Based on your investigation, what might be true about the sun that would make it appear much brighter than other stars?