

# National Geographic Explore Science:

## Size of Stars

**1-ESS1-1 Use observations of the sun, moon, and stars to describe patterns that can be predicted.** [Clarification Statement: Examples of patterns could include that the sun and moon appear to rise in one part of the sky, move across the sky, and set; and stars, other than our sun, are visible at night but not during the day.] [Assessment Boundary: Assessment of star patterns is limited to stars being seen at night and not during the day.]

### Materials:

- 3 erasers
- "Stars in the Sky" Slideshow ([PPT](#) or [PDF](#))
- *Starry Sky* read-aloud book ([PPT](#) or [PDF](#))

**Topic:** Size: Patterns of Stars in the Sky

**Student Question:** Are stars different sizes?

1. Gather three identical pencil erasers or other small objects. Take the class into a long hallway. Encourage students to observe the erasers to verify that they are the same size.
2. Set one eraser/object on the —floor directly in front of the class. Invite a volunteer to place another eraser halfway down the hallway and the last eraser at the far end.
3. Ask students to observe the erasers now. Pose the question: *Why do the erasers look like they're different sizes?* Encourage students to share their ideas. Guide the class to understand that the answer is distance. The first eraser looks bigger because it's closer to them.
4. Use the "Stars in the Sky" Slideshow and have students compare the size of the stars in the photos. Help students understand that the sun and stars are just like the erasers. The further away something is, the smaller it appears. Stars that look like tiny dots of light in the night sky are really huge stars located far out in space.
5. Read *Starry Sky* focusing on the size of stars and why the sun appears to be so much larger.