

Two suns

SCRIPT:

In the movie “Star Wars,” we saw an Earth-like planet that had two suns – a double star. It looked incredible...but the truth is even more mind-boggling: Most stars in the sky are double stars! Here on Earth, with just one sun, we’re a little below average. It took us a while to figure it out because most stars look like a single point of light. But when we developed better telescopes, we began to see that most stars in the sky are not one star – but two – so close together they look like one.

In fact, on a clear night, you can see the very first star that we discovered was really two stars. All you have to do is find the Big Dipper. At the bend in the handle is a star called Mizar (“MY-zar”). It looks like one, but astronomers found out it was two about 400 years ago. And now we know that each of the two is also a double star.

Today, we’ve discovered that most stars in the sky are double stars.

Hollywood, it turns out, can be quite scientific.

So what if the Earth did have two suns? It’s probably a good thing we don’t. Who knows how it might have affected life on Earth? But based on the law of averages, we were more likely to have two suns than one.

Relevant NSES Standards

NSES Content Standard A: Understanding about scientific inquiry.

(Grades K-4) Using instruments (telescopes) to provide more information than we can obtain with our senses.

(Grades 5-8) Abilities necessary to do scientific inquiry; Using scientific investigations to describe objects.

(Grades 9-12) Using concepts to guide scientific inquiry.

NSES Content Standard B: Physical science.

(Grades K-4) Measuring properties of objects by using tools (telescopes).

NSES Content Standard D: Earth and space science.

(Grades K-4) Objects in the sky. Stars.

(Grades 9-12) Evolution and formation of the universe.

NSES Content Standard E: Understanding about science and technology.

(Grades K-4) Tools help scientists make better observations.

(Grades 5-8) Better technology can lead to new discoveries.

(Grades 9-12) Science often advances with introduction of new technology.

NSES Content Standard G: History and nature of science.

(Grades K-4) Science has been practiced for a long time.

(Grades 5-12) Science can change as new evidence becomes available.

Credits: Dr. M. Sean O’Brien, Hubble Space Telescope; Dr. Robert Mathieu,
U. of Wisconsin/Madison

Copyright 2004