

Sample Earth Science Chapter Test Corrections

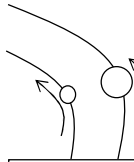
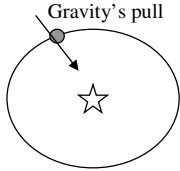
Good explanations show that you took time to research the right answer (or clearly understand the wrong answer). They are true, specific and logical. A labeled, picture is required for any physical situation.

SAMPLE 1: Galileo's model needed _____ to explain why planets move in orbits.

Wrong: C. Retrograde Motion Right: A. Law of Gravity

Two Good Explanations:

Gravity is the force that pulls objects together. This force explains why the Moon doesn't fly away from Earth, and why planets don't fly away from the Sun.



Retrograde motion is the appearance of a slow outer planet to move backwards when Earth passes it in orbit. It proves planets orbit the Sun, but doesn't tell why.

Earth speeds passed Jupiter, so Jupiter looks like it's going backwards

Two Bad Explanations:

In the notes is said, "Galileo proved the moon had craters and plains, not oceans. Also, the Sun had spots that moved in a way that proved the Sun was a spinning sphere."

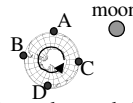
--This is bad because it has nothing to do with the question. It doesn't explain either why the right answer is right or why the wrong answer is wrong.

Law of Gravity is the right answer because it explains why the planets go around the Sun. Retrograde motion doesn't do this.

--This is a bad explanation, because it give no new information. It just repeats what we already know from the question. No research was done.

SAMPLE 2: In a 24-hour period, how many hours is it physically possible to see the moon in the sky?

Wrong: B. 6 hours Right: D. 12 hours



Good Explanation:

As the Earth spins, the moon rises and sets just like the Sun does. Currently people located at points A and C could see the Moon, but people at points B and D would need Superman's x-ray vision to look towards their feet through the Earth to see the Moon.

Three Bad Explanations:

The moon is always in the sky, but the Sun is too bright, so we only see it 12 hours. – False

The moon always rises at 6pm and sets on 6am – This is only true for a full moon.

The answer is 12 hours because we can only see the moon for 12 hrs a day. The Moon is always in the sky. We can only physically see the moon for 12 hrs because of the position of the sky.

-- This starts by repeating the information from the question. It then mentions the position in the sky but gives no reason why this ought to matter.

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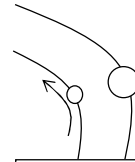
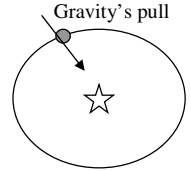
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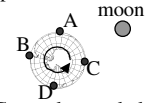
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