

Form	BA - 1, Science, Grade 5, SY 24-25
Identifier	F-7ZWBC5_C37696

Item	BA-1_Grade 5_1
Identifier	I-SCI-F-S000026_C19294
Standards	SCI.5.5-ESS1-1

Which of the following **BEST** supports the argument that the sun appears brighter than other stars because it is closer to Earth?

- A The sun emits more light than any other star in the universe.
- B The sun's brightness is due to its larger size compared to all other stars.
- C The sun appears brighter because it is much closer to Earth than other stars.
- D The sun appears brighter because its surface temperature is higher than other stars.

Item	BA-1_Grade 5_2
Identifier	I-SCI-F-S000026_C62878
Standards	SCI.5.5-ESS1-1

If two stars emit the same amount of light but one appears much dimmer than the other from Earth, what is the most likely explanation?

- A The dimmer star is significantly farther from Earth than the brighter star.
- B The dimmer star is smaller in size compared to the brighter star.
- C The dimmer star is moving away from Earth at a faster rate than the brighter star.
- D The dimmer star has a lower surface temperature than the brighter star.

Item	BA-1_Grade 5_3
Identifier	I-SCI-F-S000026_C83077
Standards	SCI.5.5-ESS1-1

Which of the following scenarios would **BEST** demonstrate that the apparent brightness of a star depends on its distance from Earth?

- A A star with a larger size appears brighter than a smaller star at the same distance.
- B Two identical stars, one much farther from Earth, appear to have different brightness levels.
- C A star's brightness changes over time due to fluctuations in its energy output.
- D Two stars of different temperatures appear equally bright because they are the same distance from Earth.

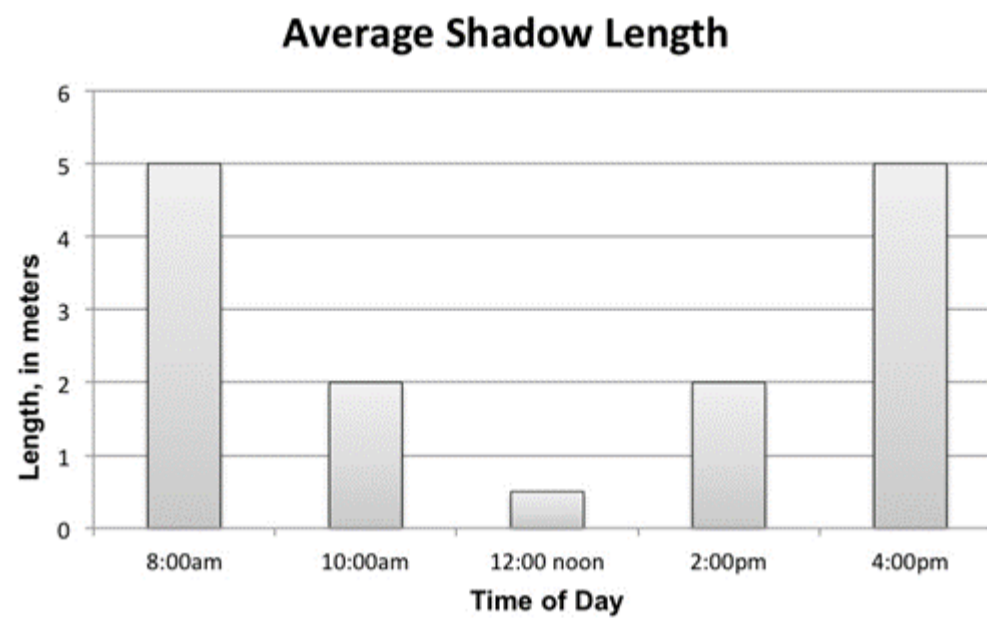
Item	BA-1_Grade 5_4
Identifier	I-SCI-F-S000026_C31600
Standards	SCI.5.5-ESS1-1

A student claims that the sun is not necessarily the brightest star in the sky, but it appears so due to its proximity to Earth. Which piece of evidence would most strongly support this claim?

- A Observations show that many stars are larger than the sun.
- B Measurements indicate that the sun is closer to Earth than any other star.
- C Data reveal that the sun has a lower surface temperature than some other stars.
- D Research indicates that the sun emits light in different wavelengths compared to other stars.

Item	BA-1_Grade 5_5
Identifier	I-SCI-F-S000026_C47218
Standards	SCI.5.5-ESS1-2

A student creates a graph showing the length of shadows at different times throughout the day. The graph shows that shadows are longest in the early morning and late afternoon.

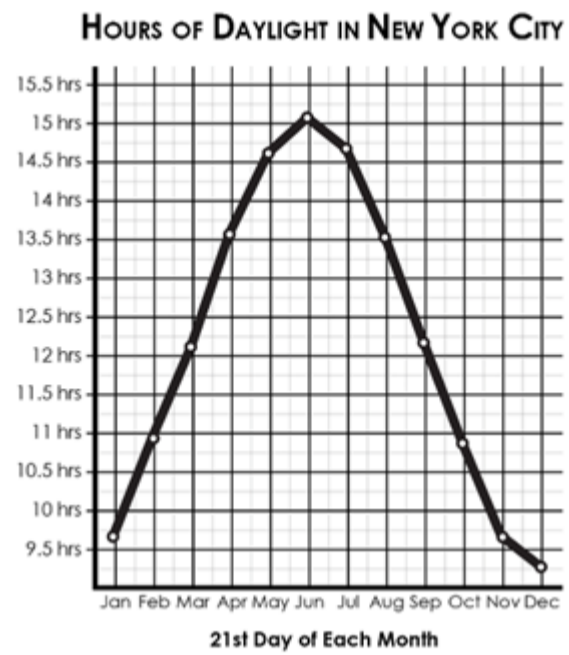


What pattern does this graph reveal about the relationship between the sun's position in the sky and shadow length?

- A Shadows are longest when the sun is highest in the sky.
- B Shadows are shortest when the sun is near the horizon.
- C Shadows are shortest when the sun is setting.
- D Shadows are longest when the sun is low in the sky.

Item	BA-1_Grade 5_6
Identifier	I-SCI-F-S000026_C44006
Standards	SCI.5.5-ESS1-2

A graph displays the amount of daylight hours over several months in a specific location. The graph shows an increase in daylight hours from January to June and a decrease from June to December.



What seasonal pattern does this graph represent?

- A The pattern of shadow length throughout the year.
- B The pattern of day and night cycles as the Earth rotates.
- C The pattern of increasing and decreasing daylight as the Earth orbits the sun.
- D The pattern of star visibility in the night sky.

Item	BA-1_Grade 5_7
Identifier	I-SCI-F-S000026_C88422
Standards	SCI.5.5-ESS1-2

A student creates a table based on observations over the course of a year listing what constellations can be seen in the night sky. The table shows that certain constellations are visible only during certain months of the year.

**CONSTELLATIONS BY SEASON IN THE NORTHERN HEMISPHERE**

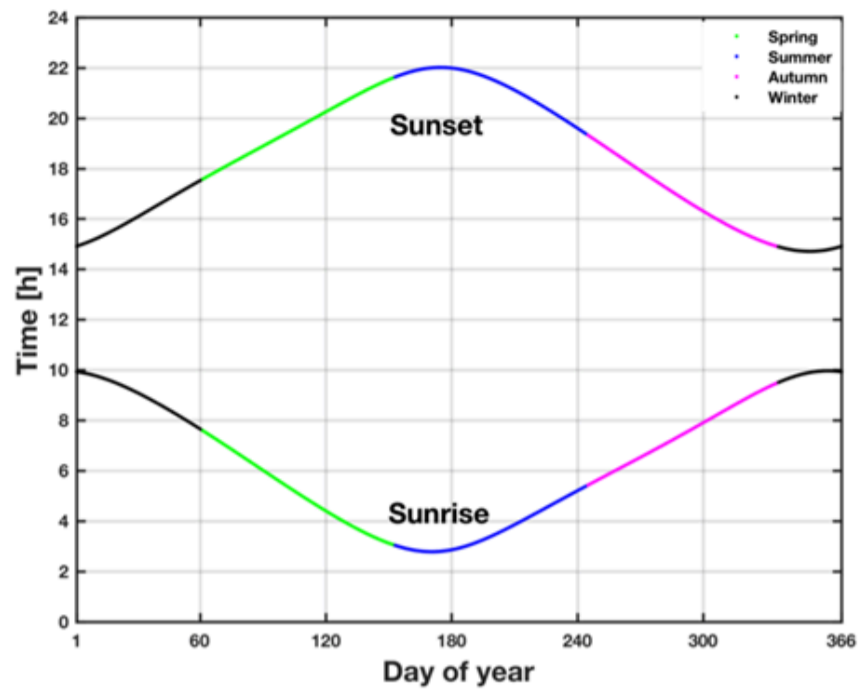
Summer	Fall	Winter	Spring
Summer Triangle	Aquarius	Auriga	Leo
Hercules	Pegasus	Canis Minor	Virgo
Scorpius	Andromeda	Gemini	Cancer
Draco	Pisces	Taurus	Hydra

What does this pattern suggest about the Earth's position relative to the stars?

- A The Earth's orbit around the sun changes the stars visible in the night sky throughout the year.
- B The Earth's rotation causes the constellation to be visible only at certain times.
- C The constellation's brightness changes, making it visible only during specific months.
- D The Earth's tilt causes some constellations to appear only in the winter months.

Item	BA-1_Grade 5_8
Identifier	I-SCI-F-S000026_C09052
Standards	SCI.5.5-ESS1-2

A teacher presents a graph showing the timing of sunrise and sunset over the course of a year in a particular location. The graph reveals that sunrise occurs earlier and sunset later during the summer months.



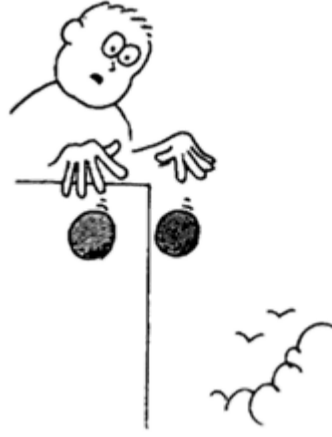
What conclusion can be drawn from this pattern?

- A The sun's distance from Earth changes throughout the year.
- B The Earth's rotation speeds up during the summer months.
- C The sun rises in different directions during different seasons.
- D The Earth's tilt causes longer days in summer and shorter days in winter.



Item	BA-1_Grade 5_9
Identifier	I-SCI-F-S000026_C96052
Standards	SCI.5.5-PS2-1

A student drops two balls from a certain height, and they fall straight to the ground.

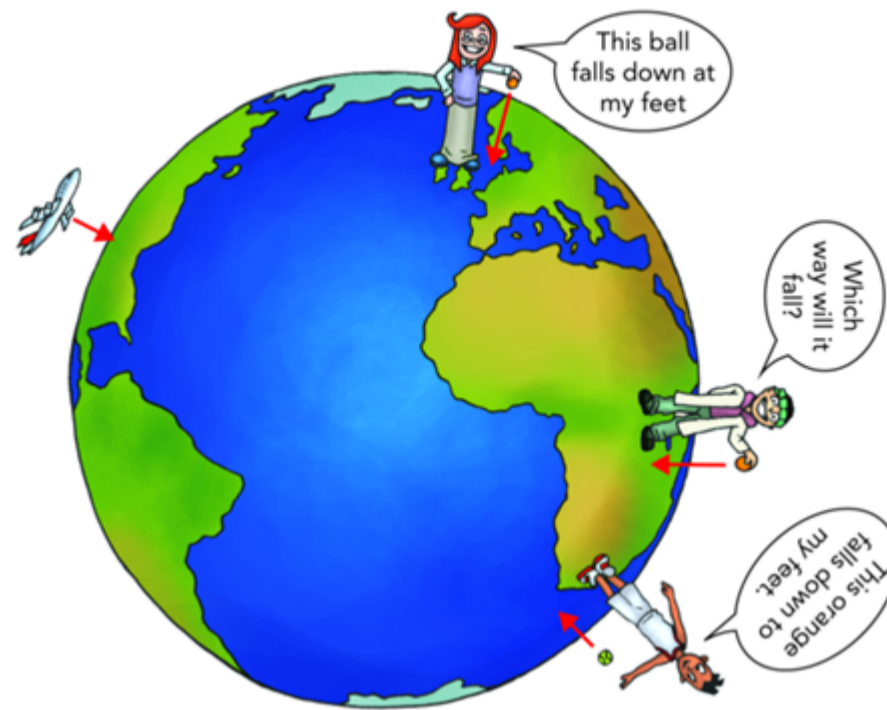


Which observation best supports the argument that Earth's gravitational force is directed downward?

- A The balls speed up as they fall.
- B The balls move in a straight line towards the center of the Earth.
- C The balls remain suspended in the air before they begin to fall.
- D The balls bounce back up after hitting the ground.

Item	BA-1_Grade 5_10
Identifier	I-SCI-F-S000026_C19247
Standards	SCI.5.5-PS2-1

A student observes that no matter where on Earth an object is dropped, it always falls to the ground.



What does this observation suggest about the direction of Earth's gravitational force?

- A Earth's gravity acts in different directions depending on the location.
- B Earth's gravity is weaker at different points on the Earth's surface.
- C Earth's gravity is directed downward everywhere on Earth.
- D Earth's gravity changes direction with the time of day.

Item	BA-1_Grade 5_11
Identifier	I-SCI-F-S000026_C25683
Standards	SCI.5.5-PS2-1

Which of the following **BEST** supports the argument that “down” is the direction pointing toward the center of Earth, as defined by Earth’s gravitational force?

- A When standing in different locations around the globe, people experience the same sense of “up” and “down.”
- B Objects at higher altitudes experience less gravitational force than objects at sea level.
- C Gravity pulls objects at the North and South Poles in the same direction.
- D Objects fall at different speeds depending on their mass, but always toward the ground.

Item	BA-1_Grade 5_12
Identifier	I-SCI-F-S000026_C39510
Standards	SCI.5.5-PS2-1

A scientist measures the direction of gravitational force at various locations on Earth. The measurements indicate that the force is always directed toward the ground at each location.



How does this support the argument that Earth's gravitational force is directed downward?

- A It shows that gravity is strongest at Earth's surface and weaker in space.
- B It demonstrates that gravitational force is consistent in magnitude across all locations.
- C It confirms that "down" is always the direction pointing toward Earth's center, regardless of location.
- D It suggests that the force of gravity can change directions based on local geography.