

## SCIENCE QUIZ

### Earth and Space

What factor or factors cause Earth's change of seasons?

- A** Earth's rotation around the Sun
  - B** the Sun's rotation around Earth
  - C** Earth's tilted axis and revolution around the Sun
  - D** Earth's rotation and revolution around the Sun
- 1.

A space probe lands on a planet that is dark and cold. In your **Answer Document**, describe what can you infer about this planet from this evidence. Also include what could be inferred if the space probe finds evidence that liquid water may have existed on the planet. (2 points)

2.

When do spring tides occur?

- A** during spring
  - B** during a third-quarter moon
  - C** when the Moon and the Sun line up
  - D** when the Moon and the Sun pull in different directions
- 3.

Which phrase **best** describes the solar system?

- A** the Sun and the objects that orbit it
  - B** Earth, the Sun, and the Moon
  - C** Earth and the objects that orbit it
  - D** eight planets and their moons
- 4.

The diagram below shows the phases of the Moon. If the new moon is seen on a given day, approximately when will the full moon occur?



5. **A** one week later  
**B** two weeks later  
**C** three weeks later  
**D** four weeks later
- What would you use to determine if another star is similar to the Sun?
6. **A** a space telescope  
**B** an optical telescope  
**C** binoculars  
**D** a space probe

- In about 5 billion years, the Sun will grow much larger than its current size. It will become which type of star?
7. **A** a white dwarf  
**B** a protostar  
**C** a constellation  
**D** a red giant

When Galileo saw four moons revolving around Jupiter, which scientific belief was challenged?

- A** that life exists on other planets
- B** that all objects in the solar system revolved around Earth
- C** that Earth was flat
- 8. **D** that there were no other planets

Which best describes what happens to air pressure as you climb a mountain?

- A** Air pressure decreases.
- B** Air pressure increases.
- C** Air pressure remains the same.
- 9. **D** Air pressure decreases and then increases.

This table shows the time it takes for the five planets to revolve around the Sun.

Mercury	88 days
Venus	225 days
Mars	687 days
Jupiter	4,333 days
Neptune	60,190 days

Where would Earth fit into this table?

- A** between Mercury and Venus
- B** between Venus and Mars
- C** between Mars and Jupiter
- 10. **D** between Jupiter and Neptune



All of these orbit the Sun in our solar system **except**

- A** asteroids.
  - B** comets.
  - C** dwarf planets.
  - D** meteors.
- 11.

In your **Answer Document**, draw or describe a difference and a similarity between the Sun and another star. Name the beginning and end stages of a medium-sized star like the Sun. (4 points)

12.

At which angle does sunlight strike the equator on the first day of spring?

- A**  $180^\circ$
  - B**  $150^\circ$
  - C**  $120^\circ$
  - D**  $90^\circ$
- 13.