

Assessment is on _____

1. E Gravity

2. A Moon

3. D Comet

4. B Meteor

5. C Asteroid

A. rocky satellite that orbits a planet

B. chunk of rock or metal that enters the Earth's atmosphere

C. metallic rock that orbits the sun between Mars and Jupiter

D. ice and dust that orbits the sun

E. force that keeps planets in orbit around the sun

6. Mars and Jupiter are planets, but Pluto is a dwarf planets because Pluto has too many objects in its orbital path.

7. From Earth, we see the sun in the day sky and other stars in the night sky. Nighttime stars look like tiny points of light. Nighttime stars appear so much smaller than the sun because the sun is closer to Earth.

****BE ABLE TO READ TABLES, CHARTS, AND DIAGRAMS.****

Here are some examples, but different diagrams, charts, or questions will appear on the assessment.

8. Identify the inner and outer planets, in order, from the sun.

Inner Planets	Outer Planets
Mercury	Jupiter
Venus	Saturn
Earth	Uranus
Mars	Neptune

9. Complete the chart to compare the inner and outer planets.

Characteristic	Inner Planets	Outer Planets
General size	Small	Big
Composition (made of)	Rock	Gas
General temperature	Warmer (usually hot)	Colder (negative)
Time of rotation	Spin slowly	Spin quickly
Time of revolution	Orbit quickly	Orbit slowly
Moons	Few moons	Many moons
Rings of debris	No rings	Many rings
Distance from sun	Close	Very far

10. Label these celestial objects by size. 1 is the smallest. 8 is largest.

5 inner planets

4 dwarf planets

3 Earth's moon

1 most comets

6 outer planets

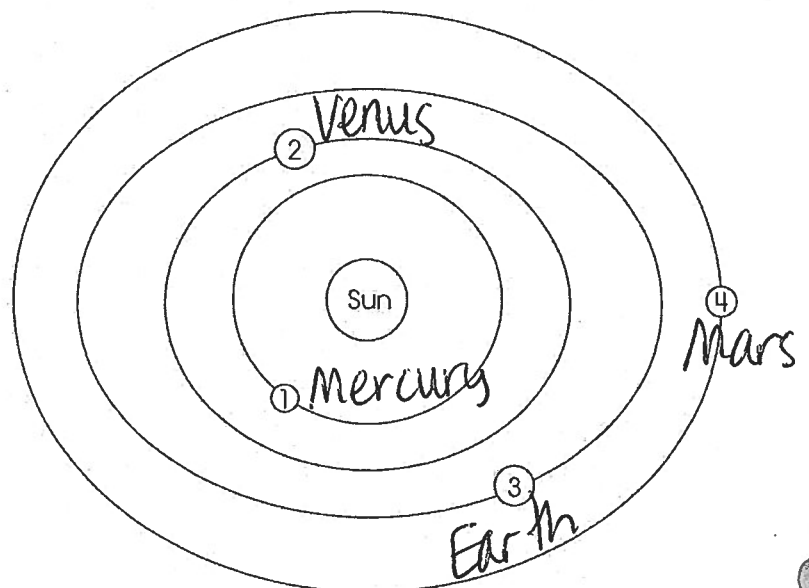
8 most stars

7 the sun

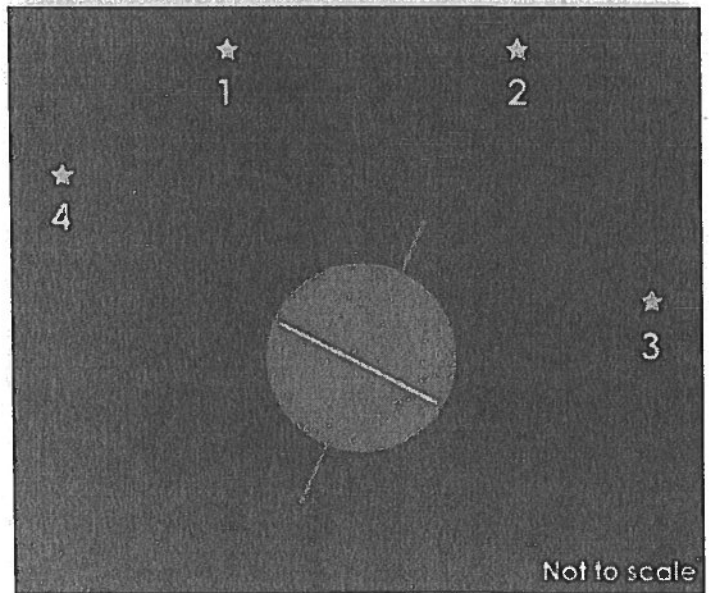
2 most asteroids

11. Label the planets in the diagram.

A Diagram of the Planet Orbits Closest to the Sun



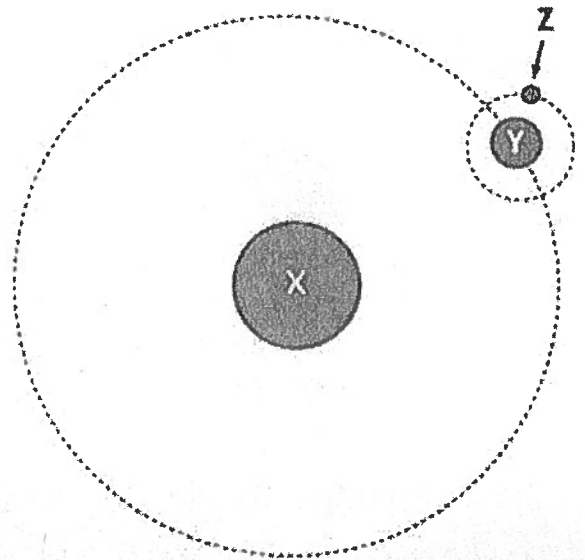
12. The picture shows the positions of four stars relative to Earth's axis and equator. When viewed from the Northern Hemisphere, star 2 appears to stay in the same place in the sky throughout the night. This star appears to stay still while other stars appear to move across the sky because Earth rotates on its axis.



13. The diagram shows three celestial objects and the orbital paths of two of the objects. Complete the table to label the objects.

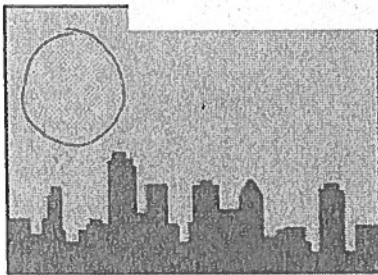
Object	Name
X	star, sun
Y	planet
Z	moon

Orbital Paths

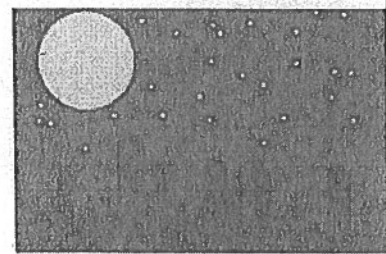


14. A student takes a picture of the sky from her window once during the day and once again at night. The sun and moon appear to be the same size in the pictures because the sun is larger,

but it is farther away than the moon.



Daytime Sky



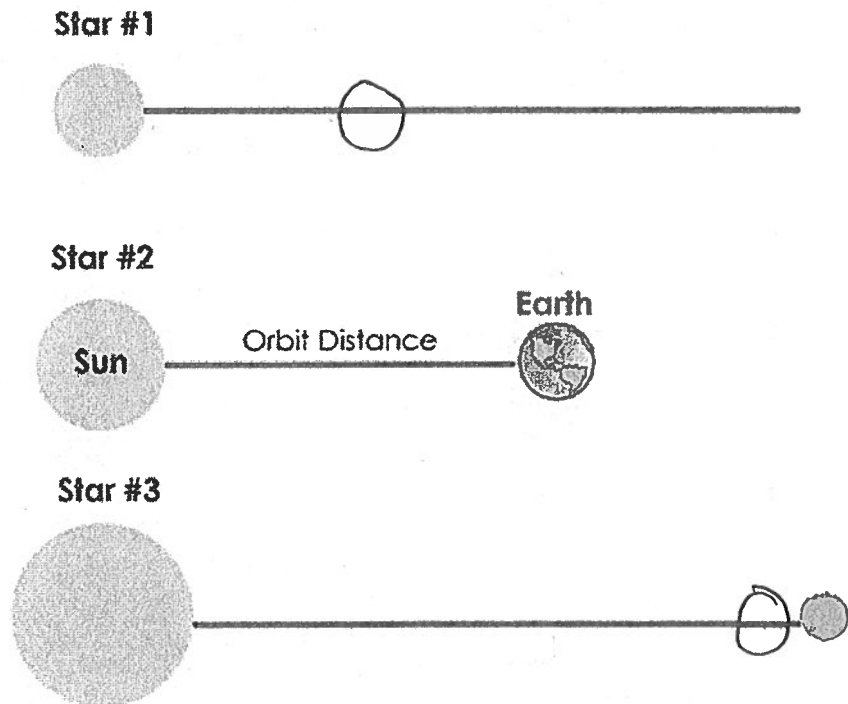
Nighttime Sky

15. Use the chart to compare and contrast the sun and other stars.

Characteristics	Sun	Other stars
When can you see it?	daytime	nighttime
Makes its own light?	Yes	Yes
In or outside our solar system?	Inside	Outside
Actual size of star	Medium-sized dwarf	Bigger and smaller
Size it appears from Earth	Largest	Smaller
Composition (made of)	Gas	Gas
Distance from Earth	Close	Far
Apparent brightness	Very bright	Bright, medium, dim
Actual color	Yellow	Blue, white, red, yellow, orange

16. One night while camping, a student observes that the moon and stars appear to move across the sky. The moon and stars appear to change position because the Earth rotates.

17. Three stars of different sizes are shown. Star #1 is smaller than our sun, and star #3 is bigger than our sun. The distance from Earth to the sun is shown. Draw an earth-sized planet on each line at a distance such that Stars 1 and 3 appear to be the same size as our sun when viewed from that planet.



18. Complete the following chart with characteristics of Earth:

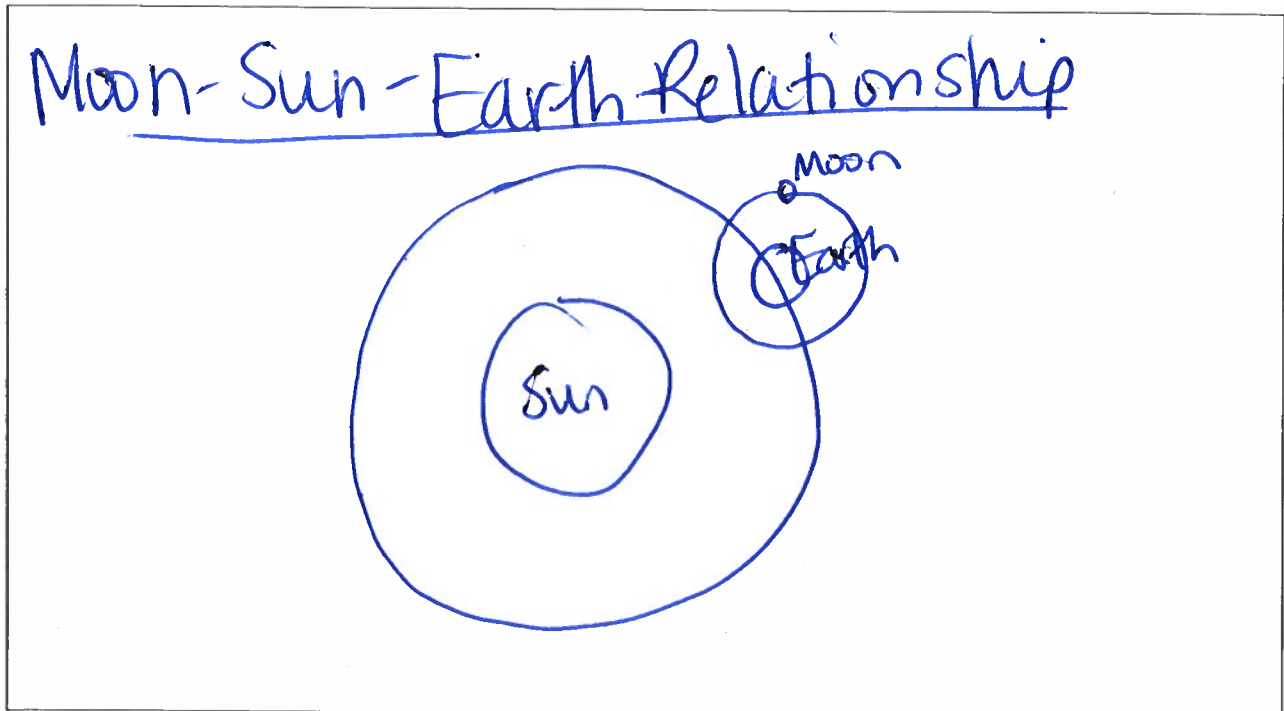
Earth's shape	Orbit Shape	Angle of axis-tilt	Length of revolution	Length of rotation
sphere	circle/oval	$23\frac{1}{2}^{\circ}$	1 year 365 $\frac{1}{4}$ days	1 day 24 hours

Match the term to its meaning:

19. **B** Rotation
20. **C** Revolution
21. **D** Spin
22. **E** Orbit
23. **A** 50
- A. percent of Earth that experiences night at the same time
- B. this causes the pattern of day and night on Earth
- C. go around the sun
- D. synonym for rotate
- E. synonym for revolve

24. During the day, the sun appears to move in the sky. At nighttime, the stars and moon change position in the sky. This phenomenon occurs because Earth rotates on its axis.

25. Diagram the moon-sun-earth relationship



Match the term to its meaning:

26. **D** Telescope

27. **C** West

28. **B** East

29. **E** Satellite

30. **A** Rover

A. NASA vehicle that explores planetary surfaces

B. The sun appears to rise in this direction

C. The sun appears to set in this direction

D. Instrument that reflects or refracts light to view space from Earth

E. Instrument that orbits Earth to take photos or view space

31. The diagram show the position of the Earth (E) now. Label where the Earth will be in 3, 6, 9, and 12 months.

