

2. a, b
3. False
4. Mercury's
5. False
6. A planet's rotation causes day and night
7. False
8. One
9. True
10. National Aeronautics and Space Administration

### CLASS 11 Venus

1. True
2. a, b, d
3. Earth
4. True
5. True
6. a, c
7. Second
8. Carbon dioxide is excellent at holding in temperature (creating the greenhouse effect). Since Venus' atmosphere is composed almost all of carbon dioxide, it causes the planet to retain heat, making it the hottest planet in the solar system.
9. False
10. False

### CLASS 12 Earth, Mars and the Asteroid Belt

1. It is the distance between Earth and the sun and equals 93,000,000 miles.
2. False
3. True
4. Oblate spheroid
5. False
6. a, b, d, e
7. Phobos and Deimos
8. USA and the former Soviet Union/USSR (Russia)
9. A space probe on the surface of Mars active since 2012
10. The Asteroid Belt
11. c
12. True
13. False

### CLASS 13 Jupiter

1. Jupiter, Saturn, Uranus and Neptune
2. True
3. Gas
4. Io, Europa, Ganymede and Calisto
5. Moon, Venus
6. a, c, d, e
7. Io
8. Hot things cool down. According to the naturalism model, Io has been there for billions of years, which means it has been cooling for billions of years; however, it is too small to still be hot enough to be volcanically active. The naturalism model cannot explain why Io has active volcanoes.
9. 1,300 Earths can fit into Jupiter and 1,300,000 Earths can fit into the sun
10. b, c
11. True
12. A hurricane-force storm and as far as we can tell, it has been there for at least 355 years (since 1665).

### CLASS 14 Saturn

1. b
2. 9.5; twice
3. True
4. True
5. b, c, and e
6. False
7. Robert Hooke
8. a, c, e
9. True
10. False
11. Pioneer 11
12. False

### CLASS 15 Uranus

1. Seventh
2. True
3. Jupiter
4. Larger
5. False
6. True
7. Methane ice
8. a, b, c, e
9. True

10. Rings
11. False
12. Because you get a better view of the sky without light passing through the atmosphere. Earth's atmosphere distorts light waves and degrades telescopic images. The higher off the ground a telescope is, the less atmosphere light must pass through, which produces a better picture.

### CLASS 16 Neptune

1. b
2. 30 times farther
3. Neptune's largest moon, and it is a little smaller than Earth's moon
4. False
5. True
6. True
7. Gravity
8. a, b, c and d
9. Neptune completes 1 rotation faster than Earth but Earth completes 1 revolution faster than Neptune.
10. A concentration of severe storms
11. NASA
12. Voyager 2
13. The area of space that receives solar wind. It's beneficial to the solar system because it helps protect from cosmic radiation.
14. True

### CLASS 16.1 Planet Names and the Dwarf Planets

1. d
2. love, beauty
3. True
4. king
5. a
6. False
7. Neptune
8. d
9. b
10. a
11. True
12. Satellite
13. Ceres, Pluto, Makemake, Haumea, Eris

14. Ceres
15. Ceres

### CLASS 17 The Moon

1. The lesser light (to rule the night)
2. It reflects sunlight.
3. A
4. 30 days
5. Because the moon orbits the earth, which takes 30 days; therefore, each day the moon moves about 1/30 the way around the earth. This makes its position change from day to day as it goes around the earth.
6. 240,000 miles
7. True
8. e
9. Saturn has the most and Venus and Mercury the fewest (none).
10. True

### CLASS 17.1 Moon Phases

1. a
2. True
3. False. (The moon phases in the Southern Hemisphere are mirror images of the moon phases in the Northern Hemisphere.)
4. d
5. new moon
6. c
7. waxing crescent
8. True
9. the first quarter and full moon phases.
10. a
11. b
12. waning gibbous, last quarter, waning crescent
13. By which side of the moon is lit up.
14. True. (Note: In the Southern Hemisphere, the left side of the moon is lit up when the moon is in the waxing phase.)

#### ACTIVITY

Answers will vary, but each day of moon observation should include the following elements: