

13. Heliosphere – the bubble around the solar system created by solar wind; Interstellar wind – wind created by the stars of the universe; Bow wave – where the heliopause and the interstellar wind meet; Heliopause —Where the solar wind moves at the same speed as the interstellar wind; Bow shock— where solar wind and the magnetosphere meet.

### REVIEW: CLASSES 7–20.1

#### Across

4. Plasma
7. Mercury
9. Year
11. Asteroid
12. Venus
14. Jupiter
15. Solar System
17. Convective Zone
19. Corona
22. Spheroid
25. Solar Wind
26. Fusion
27. Farthest
28. Largest
29. Heliopause
30. Kiyyun
32. Bow Shock

#### Down

1. Voyager
2. Granule
3. Heliosphere
5. Great Red Spot
6. Revolution
7. Magnetosphere
8. Planetes
10. Rotation
13. Fourth
15. Solar Flare
16. Lesser
17. Coronal
18. NASA
20. Sixth
21. Hydrogen
23. Dwarf
24. Sunspots
25. Sol
31. Uranus

### CLASS 21 The Stars: Introduction

1. Gas (or Plasma)
2. d
3. Two stars orbiting the same center of mass. Or, two stars very close together that appear as one star in the sky.
4. True
5. Many stars (thousands or millions) bound together by the same gravitational force (or many stars closer together than normal) that orbit a galaxy.
6. False
7. c

### CLASS 22 The Stars: Distances, Colors & Temperatures, Numbers

1. True
2. b
3. Icarus. 9 billion light years.
4. False
5. Their temperatures.
6. Yellow
7. False
8. Blue stars
9. 100 billions
10. False

### CLASS 22.1 Binary Stars and Gravity: Part 1

1. binary star
2. a
3. True
4. Answers will vary but should include a situation where a push or pull is exerted in order to get work done. (Like pushing a grocery cart down the aisle at the grocery store or pulling weeds out of the garden or pulling a book off the bookshelf.)
5. Each star in a binary system has gravity, which is a force that pulls things toward it. In a binary system, Star A's gravity pulls on Star B and Star B's gravity pulls on Star A. The mutual gravitational pulling force keeps the stars "together" so that they are always near one another, orbiting a common point in space.
6. c
7. True
8. against (opposite)
9. b
10. False
11. True
12. mass
13. d

#### ACTIVITY

Answers will vary but should include at least 4 examples where the student experienced gravity pulling him or an object he was interacting with toward the center of the earth (e.g. jumping into a swimming pool, throwing a ball, dropping a plate and falling from a tree.)