

Name \_\_\_\_\_ Date \_\_\_\_\_ Bell \_\_\_\_\_

## Unit 3: Lesson 2- What Objects are Part of the Solar System?

### Vocabulary

1. Solar System (page 122)-

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2. Planet (page 122)-

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3. Comet (page 131)-

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4. Dwarf Planet (page 130)-

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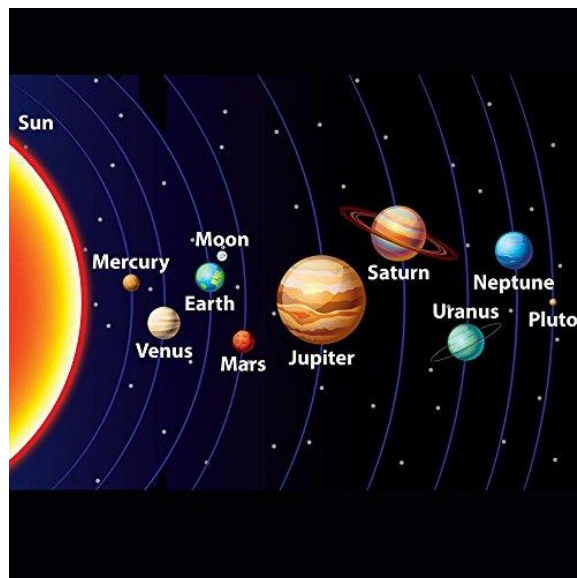
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5. Asteroid (Page 130)-

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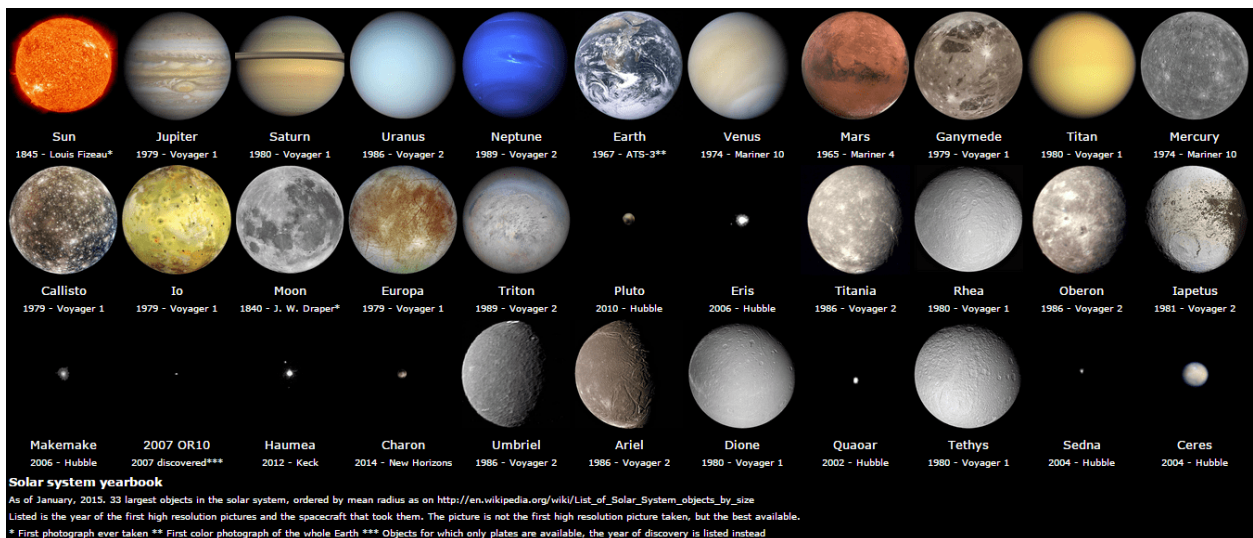
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# The Solar System Pages 122-123

1. What is a solar system?  
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2. How is the Sun different from the Planets?  
\_\_\_\_\_
3. What is a planet?  
\_\_\_\_\_
4. What is the orbital pattern of the planets? \_\_\_\_\_
5. What is the order of the eight planets in our solar system?  
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6. What is Earth's position in the solar system? \_\_\_\_\_
7. How far away is Earth from the Sun?  
\_\_\_\_\_
8. What are some ways in which Earth and other planets in the solar system move through space?  
\_\_\_\_\_
9. What are Moons?  
\_\_\_\_\_
10. How does a moon's motion compare to a planets motion?  
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11. How are the sun, the planets, and their moons all connected in our solar system?  
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## The Inner Planets Pages 124-125

12. How are planets classified?

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13. What are the four inner planets? \_\_\_\_\_

14. Why are they considered the inner planets? \_\_\_\_\_

15. What are some characteristics that the inner planets have in common?

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16. What are some characteristics about Mercury?

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17. What are some characteristics about Venus?

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18. What are some characteristics about Earth?

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19. How are the inner planets similar to Earth?

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20. How is Earth different from the other inner planets?

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21. What are some characteristics about Mars?

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22. How is the surface of Mars different from other planets?

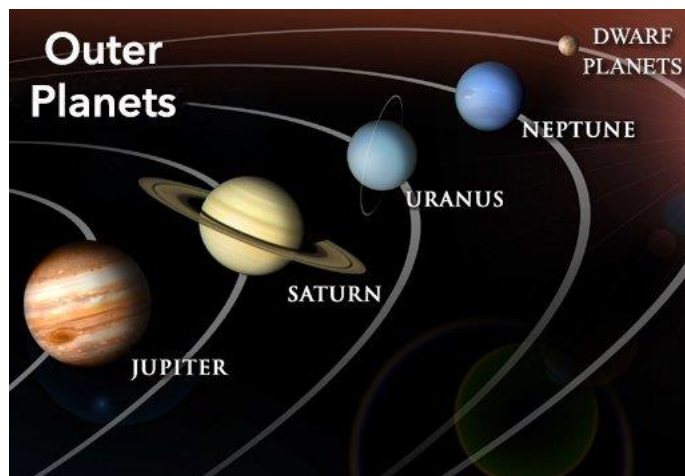
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## The Outer Planets Pages 126-127

23. What are the four outer planets? \_\_\_\_\_
24. Why are they considered the outer planets? \_\_\_\_\_
25. What is another name for the outer planets? \_\_\_\_\_
26. What are some characteristics that the outer planets have in common?  
\_\_\_\_\_  
\_\_\_\_\_
27. What are some characteristics about Jupiter?  
\_\_\_\_\_  
\_\_\_\_\_
28. What are some characteristics about Saturn?  
\_\_\_\_\_  
\_\_\_\_\_
29. What are some characteristics about Uranus?  
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\_\_\_\_\_
30. How is Uranus different from the other outer planets?  
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\_\_\_\_\_
31. What are some characteristics about Neptune?  
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\_\_\_\_\_
32. What are the main ways that the outer planets are different from the inner planets?  
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\_\_\_\_\_
33. What effect do you think being so much farther from the sun would have on the outer planets?  
\_\_\_\_\_  
\_\_\_\_\_
34. Why would a spacecraft not be able to land on any of the outer planets?  
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## Compare Inner and Outer Planets Pages 128-129

Planet	Period of Revolution (in Earth days and years)	Period of Rotation (in Earth hours and days)	Temperature (°C) (inner planets: surface range; outer planets: top of the clouds)	Number of Moons	Density (g/cm <sup>3</sup> )	Diameter
<b>INNER PLANETS</b>						
Mercury	88 days	59 days	-173 to 427	0	5.43	4,878 km (3,031 mi)
Venus	225 days	243 days	462	0	5.24	12,104 km (7,521 mi)
Earth	365 days	1 day	-88 to 58	1	5.52	12,756 km (7,926 mi)
Mars	687 days	about 1 day	-87 to -5	2	3.94	6,794 km (4,222 mi)
<b>OUTER PLANETS</b>						
Jupiter	12 years	about 10 hours	-148	63	1.33	142,984 km (88,846 mi)
Saturn	29 years	about 10 hours	-178	61	0.70	120,536 km (74,898 mi)
Uranus	84 years	about 17 hours	-216	27	1.30	51,118 km (31,763 mi)
Neptune	165 years	about 16 hours	-214	13	1.76	49,528 km (30,775 mi)

35. How does the length of a day on Venus compare to the length of a day on Jupiter?
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36. How is the length of a year on a planet affected by its distance from the sun?
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37. What patterns do you see by studying the data in the table?
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38. Which planet is most like Earth? Why do you think so?
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39. Why do you suppose that Saturn is less dense than water?
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40. Why do you think that the inner planets have much greater densities than the outer planets?
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41. How does the period of revolution around the sun change from the inner planets to the outer planets?
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42. What pattern do you see between the size of an outer planet and the number of moons it has?
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## The Flying Objects Pages 130-131

43. What are some of Jupiter's moons and what are some characteristics of each moon?

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44. What are dwarf planets?

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45. What was once a planet and is now considered a dwarf planet? \_\_\_\_\_

46. Where are most dwarf planets found? \_\_\_\_\_

47. What characteristics would most dwarf planets have in common?

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48. What are asteroids?

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49. What are two places that asteroid belts can be found in our solar system?

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50. What is the difference between a meteoroid, meteor, and a meteorite?

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51. How are asteroids and meteoroids related?

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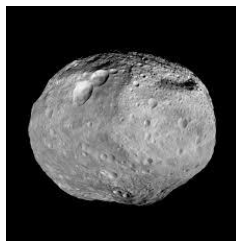
52. What are comets?

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53. How are dwarf planets, comets, and asteroids alike? How are they different?

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## Space Watch Pages 132-133

54. Why do you think it is important to know about comets, asteroids, and meteoroids?

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55. How do scientists observe and study these objects?

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56. What do scientists think caused all the dinosaurs to die?

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57. What evidence do scientists have to conclude that space objects have impacted Earth?

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58. Where in the solar system are impacts likely to occur?

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59. What is the Barringer Meteor Crater?

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