



# Solar System: Introduction and Planets

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*For by Him all things were created, both in the heavens and on earth, visible and invisible, whether thrones or dominions or rulers or authorities—all things have been created through Him and for Him*  
*Colossians 1:16*

1. How far away from the sun is Pluto?
  - a. 0.93 parsec
  - b. 3.25 light years
  - c. 255 million miles
  - d. 39.5au
  - e. 25au
  
2. Pluto is how many times farther away from the sun than Earth?  

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3. Which is a better descriptor of the path that planets take around the sun, a circular orbit or an elliptical orbit?  

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4. What makes it difficult to draw solar system diagrams that are to scale?  

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5. If you travelled at the speed of light for 1 year, how many miles would you travel? How many light years is that? How many parsecs?  

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6. Pollux is a star that isn't too far from Earth, about 33.72 light years. How long does it take the light from Pollux to reach Earth?
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7. **True or False?** Since the sun is 1 astronomical unit from Earth, it takes light 1 year to travel from the sun to Earth.
8. What is included in our Solar System?
- a. The sun
  - b. Pluto
  - c. Jupiter's moons
  - d. Comets that orbit the sun
  - e. Proxima Centauri
9. What does the term "sol" or "solar" refer to?
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10. List the 8 planets in order from closest to farthest from the sun.
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11. Which planets have a solid surface?
- a. Jupiter
  - b. Earth
  - c. Mercury
  - d. Saturn
  - e. Uranus
  - f. Mars

12. \_\_\_\_\_ is the smallest planet and \_\_\_\_\_ is the largest.

13. **True or False?** All 5 dwarf planets are smaller than Earth's moon.

## PUZZLE

Find all the words in the word search below.

Mercury   Venus   Earth   Mars  
Ceres   Jupiter   Saturn   Uranus   Neptune  
Pluto   Haumea   Makemake   Eris

H	S	G	D	L	R	S	K	G	I	C	D	K	R	Q	W	K	V
T	Q	H	C	O	D	P	D	K	N	E	F	F	G	K	D	I	T
Q	U	D	B	P	U	T	V	F	N	E	X	E	R	I	S	W	J
H	Q	X	B	P	K	L	Y	E	V	Y	Z	S	A	T	U	R	N
S	F	K	D	J	H	Z	D	O	N	S	T	J	K	L	M	Y	Y
F	U	Y	N	T	K	O	H	Z	N	U	O	D	O	G	H	L	X
Q	Y	V	Q	C	W	A	B	A	Q	F	S	Y	I	B	Z	W	I
P	B	H	U	R	A	N	U	S	U	M	K	Y	G	Z	Q	W	Z
J	I	D	N	T	Q	E	J	A	A	M	N	N	H	W	T	D	G
C	K	Y	P	G	P	R	T	G	G	I	E	O	S	G	F	G	M
E	K	X	K	Y	N	E	J	Q	D	K	M	A	X	U	D	M	X
E	L	Z	Q	K	N	O	U	N	I	U	A	A	G	V	F	E	X
A	L	C	N	U	Q	A	P	B	J	R	K	F	D	V	Q	R	Q
R	I	J	T	H	T	Y	I	J	J	Q	E	H	O	O	H	C	Z
T	B	P	F	P	L	U	T	O	D	V	M	E	U	I	H	U	X
H	E	I	Z	A	T	D	E	R	P	L	A	K	X	P	Y	R	J
N	M	A	R	S	Z	X	R	R	U	T	K	A	P	Z	M	Y	H
G	X	S	A	J	P	E	V	Z	Z	C	E	R	E	S	R	H	W



## REVIEW: CLASSES 7–20.1

Finish the crossword puzzle below using the words provided.

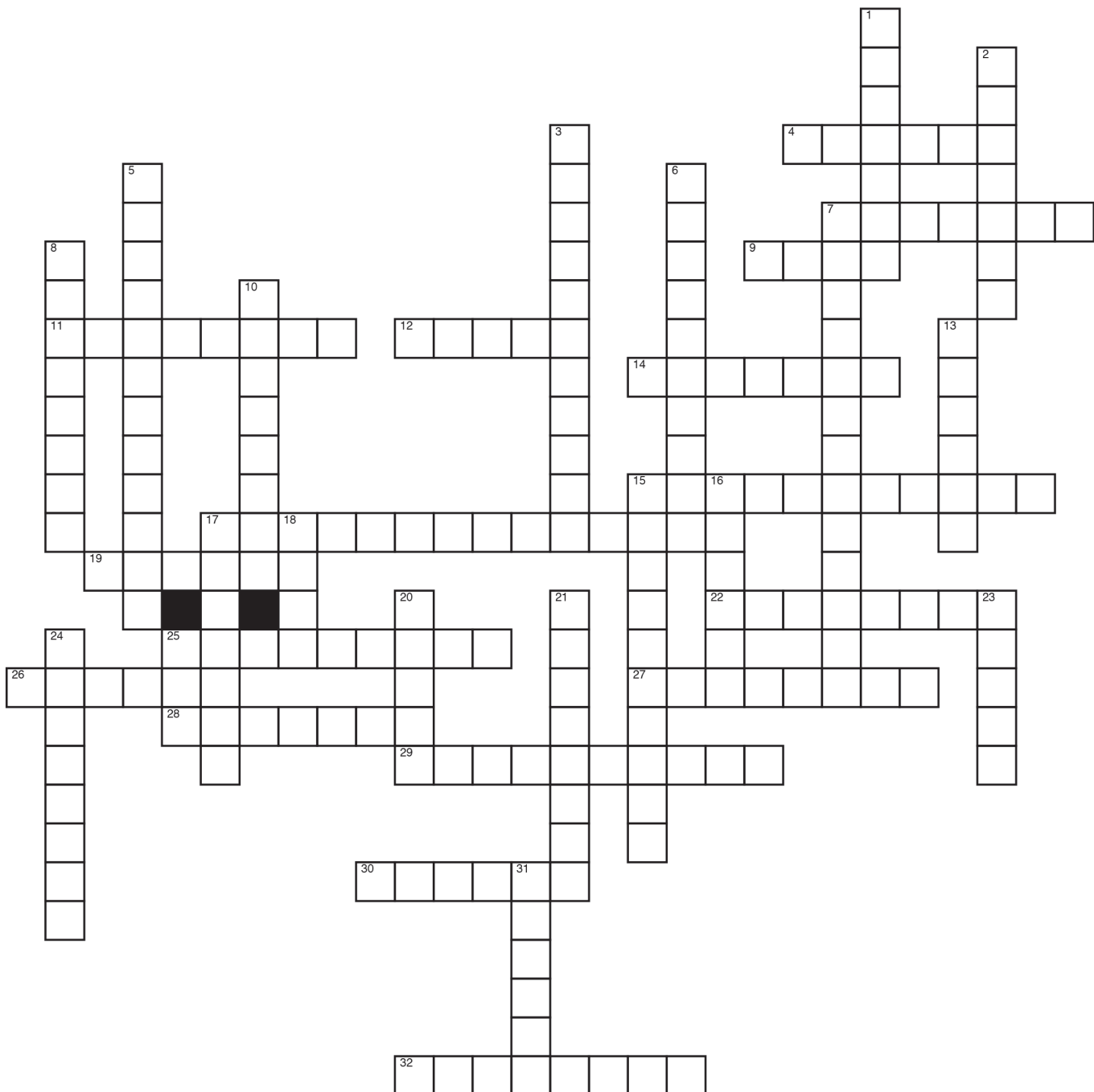
Asteroid  
Bow Shock  
Convective Zone  
Corona  
Coronal  
Dwarf  
Farthest  
Fourth

Fusion  
Granule  
Great Red Spot  
Heliopause  
Heliosphere  
Hydrogen  
Jupiter  
Kiyun

Largest  
Lesser  
Magnetosphere  
Mercury  
NASA  
Planetes  
Plasma  
Revolution

Rotation  
Sixth  
Sol  
Solar Flare  
Solar System  
Solar Wind  
Spheroid  
Sunspots

Uranus  
Venus  
Voyager  
Year



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## ACROSS

4. The state of matter that makes up the sun.
7. The planet closest to the sun.
9. It takes the earth one \_\_\_\_\_ to go around the sun.
11. The \_\_\_\_\_ Belt is between the orbits of Mars and Jupiter.
12. The brightest planet as seen from Earth.
14. The outer planet closest to the asteroid belt.
15. The \_\_\_\_\_ is the collection of planets, moons, asteroids, and other objects that orbit the sun.
17. Area of the sun where hot plasma rises and cool plasma falls.
19. The \_\_\_\_\_ is the outer part of the sun's atmosphere.
22. Earth's shape is an oblate \_\_\_\_\_.
25. The sun's constant, powerful outpouring of charged particles.
26. A \_\_\_\_\_ reaction converts hydrogen into helium and produces heat and light, fueling the sun.
27. Neptune is the \_\_\_\_\_ planet from the sun.
28. Jupiter is the \_\_\_\_\_ planet.
29. The area where the heliosphere ends.
30. The name that likely refers to Saturn in the Bible.
32. The interface of the solar wind and Earth's magnetic field.

## DOWN

1. The space probe that reached Uranus and Neptune is \_\_\_\_\_.
2. The "smaller" cells on the sun's surface within which hot plasma rises and cool plasma falls.
3. The protective area of the of the universe within which our sun's solar wind is present.
5. A huge storm on Jupiter.
6. The movement of a planet around the sun.
7. Earth's field that protects us from solar wind.
8. The word from which we derive the name of the 8 orbiting spheres.
10. The motion of a planet spinning on its axis.
13. The \_\_\_\_\_ planet from the sun is Mars.
15. A large discharge of the sun's plasma.
16. Genesis describes the moon as the \_\_\_\_\_ light.
17. Enormous solar flares are called \_\_\_\_\_ Mass Ejections.
18. The United States space exploration group.
20. Saturn is the \_\_\_\_\_ planet from the sun.
21. The sun is mostly \_\_\_\_\_ plasma.
23. Pluto is a \_\_\_\_\_ planet.
24. Localized "cool" spots on the sun.
25. The Latin word for "sun."
31. The bowling ball with rings.