

The Solar System—Planets, Earth's Moon, and Constellations

Scrambled Solar System

See if you can unscramble the words that tell us about different parts of the solar system we live in. There is a clue for each part of the solar system to unscramble. If you need more help, all the words you need are listed in the word bank at the end of the activity.

1. This part of the solar system is a big star that gives us light and heat.

n s u

2. This part of the solar system is the planet we live on.

r h E t a

3. This is the largest planet in our solar system.

t p J i e r u

4. This is a dwarf planet in our solar system that is very cold.

o l P t u

5. This is a planet in our solar system that has rings.

S u t r a n

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Decoding Galaxies

Let's decode information about galaxies below. Each one has a clue. There are lines to write your answer on, with one line for each letter. Under the lines are math problems for you to do to find the right letter for each line. After you do the math problem, look for the answer in the chart at the top of the page and write the letter that matches the answer on the line.

a	b	c	d	e	f	g	h	i	j	k	l	m
1	2	3	4	5	6	7	8	9	10	11	12	13

n	o	p	q	r	s	t	u	v	w	x	y	z
14	15	16	17	18	19	20	21	22	23	24	25	26

1. This is what scientists classify galaxies by.

$$\begin{array}{r} \underline{\hspace{1cm}} \\ 10+9 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 4+4 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 0+1 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 8+8 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 2+3 \end{array}$$

2. This kind of galaxy is the largest and is shaped like an egg.

$$\begin{array}{r} \underline{\hspace{1cm}} \\ 4+1 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 6+6 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 7+5 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 4+5 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 9+7 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 10+10 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 6+3 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 2+1 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 1+0 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 8+4 \end{array}$$

3. This kind of galaxy is medium-sized and looks something like a pinwheel.

$$\begin{array}{r} \underline{\hspace{1cm}} \\ 11+8 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 10+6 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 7+2 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 9+9 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 0+1 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 9+3 \end{array}$$

4. These kinds of galaxies are the smallest and can be all different shapes.

$$\begin{array}{r} \underline{\hspace{1cm}} \\ 8+1 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 12+6 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 11+7 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 1+4 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 5+2 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 10+11 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 10+2 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 1+0 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 10+8 \end{array}$$

5. This is the name of the galaxy we live in.

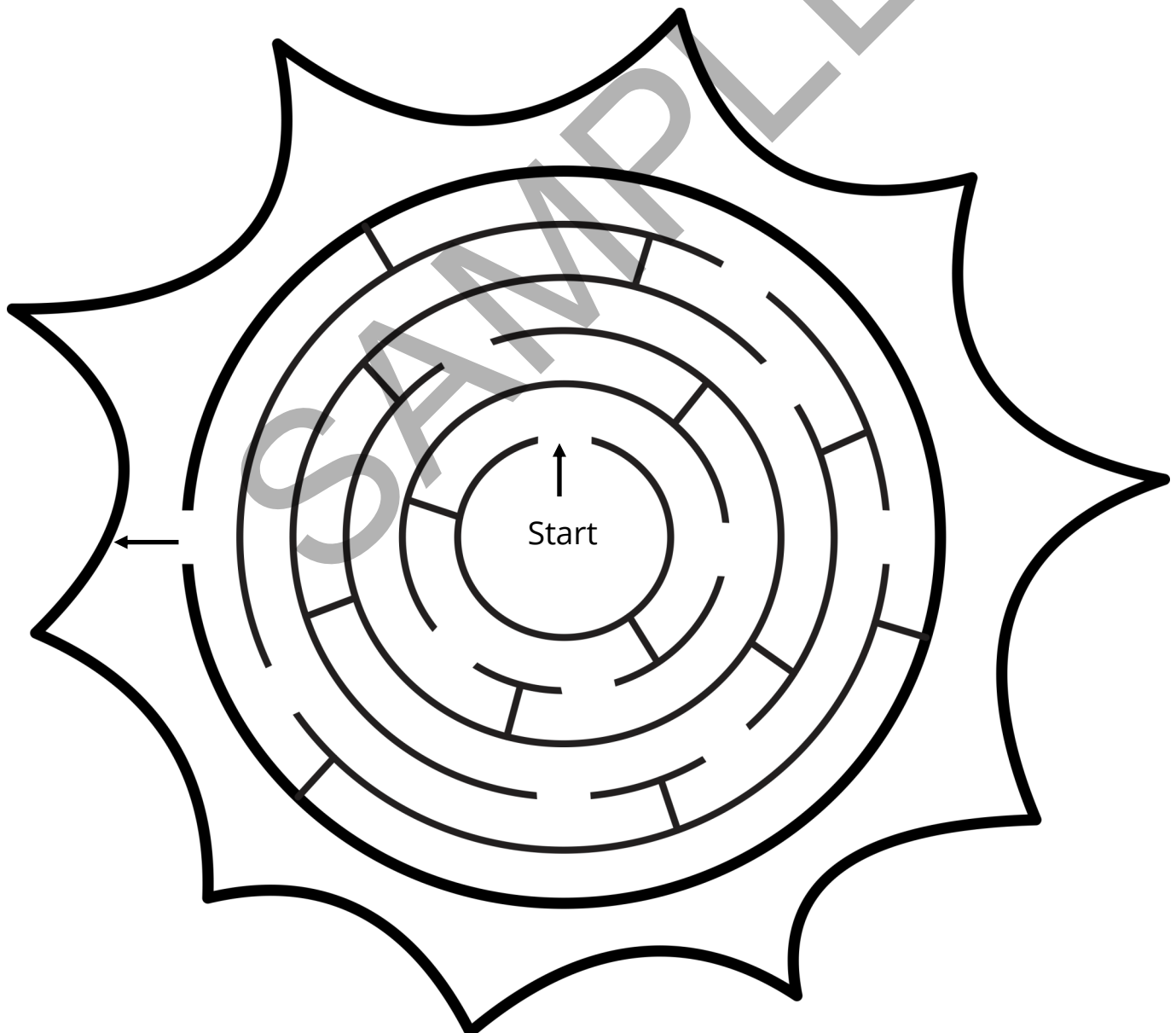
$$\begin{array}{r} \underline{\hspace{1cm}} \\ 6+7 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 9+0 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 11+1 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 5+6 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 15+10 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 13+10 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 0+1 \end{array} \quad \begin{array}{r} \underline{\hspace{1cm}} \\ 10+15 \end{array}$$

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Help the Atom Escape

The sun is a really big star. It gives light and heat to the Earth. Without the energy from the sun, life on Earth could not survive. All the energy we get from the sun has to travel a long way to get here. When you feel how hot the sun seems on a nice summer day, you can imagine how hot it must have been when it left the sun!

Imagine you are an atom in the center of the sun who wants to see what it looks like in space around the sun. Help the atom get to the outer part of the sun to take a look.



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More Planets Cut and Paste

The boxes below have information about the four planets farthest from the sun. Read the information. Cut out the boxes with the names of the planets from the next page. Paste the name of each planet in the empty box under the correct description.

Year is about 12 of our years long Largest planet in our solar system Highest temperatures may be as high as 1500 °F (800 °C) Could fit about 1,000 Earths inside this planet Has at least 63 moons	Year is about 29.5 of our years long About 9 times the size of Earth Average temperature may be about -218 °F (-139 °C) Has rings of rock, dust, and ice that orbit the planet Has at least 60 moons

Year is more than 84 of our years long Is made mostly of liquids and gases Average temperature may be about -323 °F (-197 °C) First planet discovered in modern times Has at least 27 moons	Year is about 165 of our years long About 9 times the size of Earth Winds blow thick clouds up to 900 miles (1,450 kilometers) per hour Is the eighth and farthest planet from the sun Has at least 13 moons

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More Planets Cut and Paste (continued)

Neptune

Jupiter

Saturn

Uranus

