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## WORKSHEET 1 THE UNIVERSE

NAME: \_\_\_\_\_ CLASS: \_\_\_\_\_ DATE: \_\_\_\_\_

### 1 Complete these words with the missing vowels *a, e, i, o, u* or *y*.

pl \_\_\_ n \_\_\_ t

c \_\_\_ m \_\_\_ t

s \_\_\_ t \_\_\_ ll \_\_\_ t \_\_\_

\_\_\_ st \_\_\_ r \_\_\_ d

g \_\_\_ l \_\_\_ x \_\_\_

z \_\_\_ d \_\_\_ c

n \_\_\_ b \_\_\_ l \_\_\_

\_\_\_ rb \_\_\_ t



### 2 Match each word to its definition.

light year    dwarf planets    asteroids    rotational axis    orbit    galaxy

1. They are smaller than planets and they orbit the Sun. \_\_\_\_\_
2. They are rocky objects which are irregular in shape. \_\_\_\_\_
3. It is the invisible line on which celestial objects spin or rotate. \_\_\_\_\_
4. It is the distance light travels in one year. \_\_\_\_\_
5. It is the curved path which a celestial object follows in its revolution around another celestial object. \_\_\_\_\_
6. It is a vast collection of stars, dust and gases, held together by gravitational attraction. \_\_\_\_\_

### 3 Put the words in order and write the correct sentences.

1. Scientists empty between spaces think there vast the galaxies are

\_\_\_\_\_

2. Planets larger are bodies much other celestial than

\_\_\_\_\_

3. Saturn's mostly rings made ice of particles are

\_\_\_\_\_

4. The life is with planet the only Earth

\_\_\_\_\_

5. The Uranus is temperature of average -200° C surface

\_\_\_\_\_

6. The planets is crust of made inner the rock of

\_\_\_\_\_

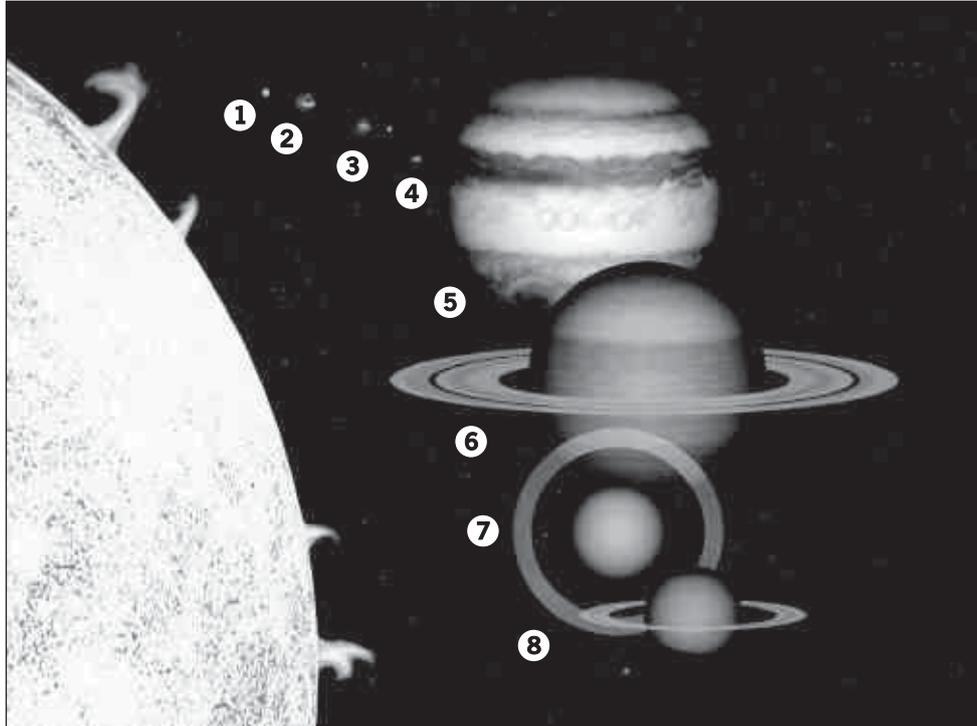
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# 1

## WORKSHEET 2 THE UNIVERSE

NAME: \_\_\_\_\_ CLASS: \_\_\_\_\_ DATE: \_\_\_\_\_

### 1 Write the names of the planets.



1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

### 2 Complete these sentences using the words in the box.

elliptical eight larger Mars outer natural Saturn one moons inner

The Solar System is made up of **1.** \_\_\_\_\_ planets and **2.** \_\_\_\_\_ star, the Sun. It also includes comets, **3.** \_\_\_\_\_ and asteroids. The Earth's **4.** \_\_\_\_\_ satellite is the Moon, but there are also many artificial ones orbiting it.

The planets all move in **5.** \_\_\_\_\_ orbits. The **6.** \_\_\_\_\_ planets, Mercury, Venus, Earth and **7.** \_\_\_\_\_ are all rocky; the **8.** \_\_\_\_\_ planets, Jupiter, **9.** \_\_\_\_\_, Uranus and Neptune are gaseous. Mars is **10.** \_\_\_\_\_ than Mercury, and Jupiter is much larger than the Earth.

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## WORKSHEET 3 THE UNIVERSE

NAME: \_\_\_\_\_ CLASS: \_\_\_\_\_ DATE: \_\_\_\_\_

### 1 Use your Student's Book to complete this chart.

Planet	Type	Distance from the Sun (AU)	Period of rotation	Period of revolution	Average surface temperature	Number of satellites
Mercury	rocky		58.65 days			0
Venus		0.72		224.6 days		
Earth			23 h 56 mins	365.25 days		1
Jupiter	gaseous				- 150° C	
Neptune		30.06			- 210° C	

### 2 Use your chart to answer these questions.

Which planet...

1. ... has the most satellites? \_\_\_\_\_
2. ... has the shortest period of rotation? \_\_\_\_\_
3. ... has the longest period of revolution? \_\_\_\_\_
4. ... is the greatest distance from the Sun? \_\_\_\_\_
5. ... is the hottest? \_\_\_\_\_
6. ... rotates faster, Venus or Neptune? \_\_\_\_\_
7. Which planets are closer to the Sun, the rocky planets or the gaseous planets? \_\_\_\_\_

### 3 Now answer these questions.

1. Which galaxy does our Solar System belong to? \_\_\_\_\_
2. Which is the nearest star to our Solar System? \_\_\_\_\_
3. Which celestial bodies are made up of ice, dust and gas, and have bright tails? \_\_\_\_\_
4. What is the distance from the Earth to the Sun? \_\_\_\_\_
5. How fast does light travel in one second? \_\_\_\_\_

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# 1

## THE UNIVERSE

NAME: \_\_\_\_\_ CLASS: \_\_\_\_\_ DATE: \_\_\_\_\_

**1 Jigsaw chart.**

**Work in pairs. Take turns to read and classify these sentences. Write each number in the correct category.**

- |   |
|---|
| <b>1.</b> They are spherical bodies which orbit the Sun.                                  |
| <b>2.</b> They are vast collections of stars, dust and gases.                             |
| <b>3.</b> They are imaginary patterns of bright stars.                                    |
| <b>4.</b> There are eight of them.  |
| <b>5.</b> They contain thousands of millions of stars.                                    |
| <b>6.</b> Ours is called the Milky Way.   |
| <b>7.</b> They are massive spherical bodies of gases.                                     |
| <b>8.</b> They all move in elliptical orbits.   |
| <b>9.</b> They emit light and heat.   |
| <b>10.</b> Officially, there are eighty-eight.  |
| <b>11.</b> They form when clouds of gases are pulled together by gravitational forces.    |
| <b>12.</b> Their position changes with the seasons because of the movements of the Earth. |

GALAXIES
2

CONSTELLATIONS

STARS

PLANETS

**2 Write a description of the four celestial objects. Use the chart and your own knowledge!**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

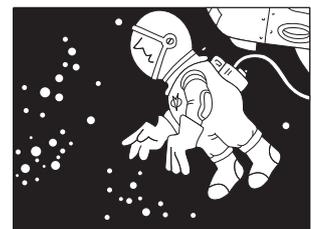
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\_\_\_\_\_



# 1

## WORKSHEET 5

### THE UNIVERSE

NAME: \_\_\_\_\_ CLASS: \_\_\_\_\_ DATE: \_\_\_\_\_



Mars



Martian moon

Do you know why the moons of Mars are called Phobos and Deimos? Mars was the Roman god of war (Ares in Greek) and his symbol is ♂, which represents a spear and a shield. For some strange reason, the moons of Mars received Greek names rather than Latin ones, Phobos meaning 'panic' and Deimos meaning 'terror', because these two feelings are always related to war.

Phobos can be used as a suffix. We can construct words that inform us about human and animal feelings of extreme fear in different situations. For example, a person who suffers from claustrophobia feels terribly afraid when enclosed in a small space. Think also about other similar words such as hydrophobia, arachnophobia or agoraphobia. There are all kinds of fears! Fortunately, as rational human beings, we can also use different strategies to overcome these fears.

**1 Choose the best title for this reading passage and write it on the line above.**

*The two moons of Mars      The gods and the moons      Two satellites*

**2 Correct the information.**

1. Mars was the Greek god of war.

\_\_\_\_\_

2. According to the text, war evokes feelings of anger and despair.

\_\_\_\_\_

3. Claustrophobia refers to the fear of going to war.

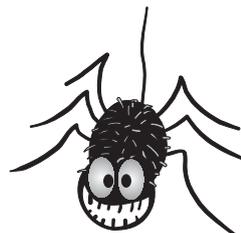
\_\_\_\_\_

4. We must learn to live with our fears.

\_\_\_\_\_

**3 Match the words to the fears they indicate.**

- |                  |                             |
|------------------|-----------------------------|
| 1. hydrophobia   | a. fear of spiders          |
| 2. ablutophobia  | b. fear of books            |
| 3. agoraphobia   | c. fear of water            |
| 4. arachnophobia | d. fear of open spaces      |
| 5. bibliophobia  | e. fear of washing yourself |



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# 1

## TEST 1

### THE UNIVERSE

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NAME: \_\_\_\_\_ CLASS: \_\_\_\_\_ DATE: \_\_\_\_\_

#### 1 Circle the correct answer.

1. The universe is all the (a) space (b) energy (c) matter, space and energy that exists.
2. A nebula is (a) a cluster of stars (b) a cloud of gas and dust (c) a vast empty space.
3. Nebulas surround (a) all the planets (b) the stars (c) the natural satellites.
4. Astronomers use (a) Astronomical Units (b) International Units (c) Universal Units.
5. Satellites orbit (a) the stars (b) the Sun (c) planets and dwarf planets.
6. Mercury and Venus have (a) one satellite each (b) no satellites (c) more than ten satellites each.
7. Asteroids can form (a) belts (b) constellations (c) systems.
8. The position of the constellations changes with (a) the seasons (b) the way we imagine them (c) the colour of the night sky.
9. The orbit of comets is (a) highly irregular (b) more or less regular (c) highly elliptical.
10. An astronomical unit (AU) is the distance from the Earth to (a) the Moon (b) the Milky Way (c) the Sun.

#### 2 Read the text and answer the questions.

##### *Theories of the Universe*

In the second century BC, the astronomer Ptolemy proposed that the Earth was the centre of the Universe, and that the Sun, Moon and planets orbited the Earth. This was known as the Geocentric theory, or the Ptolemaic System. However, in 1542, Nicolas Copernicus proposed that the Sun was at the centre of the Universe. When Galileo Galilei invented the telescope in 1610, he was able to prove the Heliocentric theory (or Copernican System): the planets and stars revolve around the Sun.

1. For how many centuries was the Geocentric theory used in astronomy?

\_\_\_\_\_

2. What did this theory suggest?

\_\_\_\_\_  
\_\_\_\_\_

3. What was Copernicus' theory?

\_\_\_\_\_  
\_\_\_\_\_

4. Who invented the telescope?

\_\_\_\_\_

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