# THE INNER PLANETS

#### **Similar Characteristics**

Listed below are descriptions of the inner planets. In the blank at the left write the code for the one or more planets that match the description. The first one is done for you.

Mercury = M Venus = V Earth= E Mars = R

MVER 1. rocky planet

- \_\_\_\_\_**2**. clouds of sulfuric acid
- **3**. similar in size and mass; twins
- \_\_\_\_\_4. has the largest volcano in the solar system, Olympus Mons
- **\_\_\_\_5**. rifts on the surface or under water
- \_\_\_\_\_6. closest to the sun
  - **7**. smallest inner planet
  - **8**. south pole covered with frozen carbon dioxide
- **\_\_\_\_\_9**. Its atmospheric pressure is 91 times Earth's.
- **\_\_\_\_10**. farthest inner planet from the sun
- **11**. moves in an elliptical orbit, but is close to a perfect circle
- **12**. situated between Venus and Mars
- **13**. red planet due to iron oxide (rust)
- **14**. Its surface looks like Earth's moon.
- **15**. has a greenhouse effect
- **16**. Water exists in all three states.

| GAS                   | VENUS  | EARTH      | MARS  |
|-----------------------|--------|------------|-------|
| $\mathbf{CO}_2$       | 95%    | 0.03%      | 95%   |
| $\mathbf{N}_2$        | 3.5%   | 78.1%      | 2.7%  |
| <b>O</b> <sub>2</sub> | 0.002% | 20.9%      | 0.15% |
| $H_2O$                | 0.01%  | 0.05 to 4% | 0.03% |

## **17**. appears to have no life

#### 18. EXPLORE!

The percentage of carbon dioxide in the atmosphere of Venus and Mars is the same. Is the TOTAL amount of carbon dioxide also the same? Explain.

## The Outer Planets AKA the Gaseous Giants

In each of the following statements, a key word or phrase has been scrambled. Unscramble the word and write it on the correct line in the puzzle.

- 1. Yagnedem is the largest satellite in the solar system.
- 2. Hatenem is a gas that absorbs red and yellow light from the sun.
- 3. If stunar were placed in water, it would float.
- 4. Uranus and Neptune are both colored lebu-ergne.
- 5. Oi is the most volcanically active object in the solar system.
- Nausur is a planet whose axis lies on its side in space. 6.
- 7. Jupiter has tevesny-enni moons.
- 8. A series of **gnirs** circle Saturn.
- 9. The **Yogarve** space probe provided scientists with information on gaseous giant planets.
- 10. Scientists no longer consider Tolup a planet, but rather a planetesimal.
- 11. The **Trage der post** is a huge storm of swirling gas on Jupiter.

