



# Your Birthday on Another Planet

Name: \_\_\_\_\_

Class: \_\_\_\_\_ Date: \_\_\_\_\_

1. In what direction do the planets move around the Sun?  
 Answer by comparing this movement with the movement of the hands of a clock.

Counterclockwise (as seen from above the Earth's North Pole.)

2. Which of the four planets travels fastest in its orbit around the Sun?

Mercury, the planet closest to the Sun.

3. Which of the four planets travels most slowly in its orbit around the Sun?

Mars, the planet farthest from the Sun.

4. You celebrate your birthday once every Earth year.  
 How do we determine the length of a year?

It's the amount of time the Earth takes to complete one orbit around the Sun.

5. Does a "year" last the same amount of time on all the planets?

No.

6. If you lived on Mercury, would your birthday occur more or less often than on Earth?

More often. (Slightly more than four birthdays on Mercury for one birthday on Earth.)

7. What would your age be in Martian years if you lived on Mars?

Slightly more than half your age on Earth. For example, eight Earth years equal about four Martian years. For this question, students should consult the table of the period of revolution and compare the periods for the Earth and Mars.

8. At what age in Earth years could you celebrate your first birthday on Uranus? On Pluto?

At about age 84 on Uranus and 248 on Pluto. For this question, students should consult the table of the revolution periods and compare the periods for the Earth, Uranus and Pluto.