

Write your notes  
about what you are  
reading in this space.

## Science Shorts -8

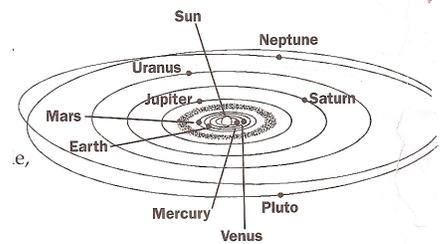
### What is Our Solar System?

You live in your home. You live in your community. And you live on Earth. But did you know you also live in our solar system? Our solar system is the sun and everything that circles it.

The largest objects that orbit, or circle, the sun are called planets. Including Earth, there are now eight planets in our solar system. You might have heard of some of the other planets in our solar system, such as Mars, Venus or Saturn.

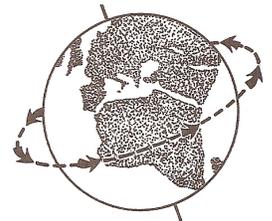
I'll bet you learned in earlier grades that there were nine planets. Have you heard about poor Pluto? In 2006 the International Astronomical Society met together to define a planet. By the time they got finished, Pluto was too small to be a planet. It is now called a Dwarf Planet.

The planets orbit the sun because of gravity. Gravity is the force that pulls objects toward each other. When you drop a pencil, gravity is what pulls it toward Earth. In the same way, gravity from the sun pulls planets toward it. The planets don't fall into the sun because they are moving very fast and are far enough away from the sun. But they aren't fast enough to get away from the sun. So the planets continue circling the sun.



It takes Earth about 365 days to go around the sun. If this number sounds familiar, it's because this is the same number of days that are in a year. A year is the time that it takes Earth to make one complete circle around the sun. This complete circle is called a revolution. The Earth revolves around the sun.

As Earth circle the sun, it also spins, or rotates, just like a toy top. It takes about 24 hours for the Earth to rotate once. This number might sound familiar, too. That's because it's the same number of hours in a day. A day is the time it takes Earth to rotate once. And every day is another day you live in our solar system!



**A.**

Draw a line to connect each word to its definition.

- |                 |  |
|-----------------|--|
| 1. solar system | large object that circles the sun          |
| 2. planet       | force that pulls objects to each other     |
| 3. orbit        | to spin like a top                         |
| 4. gravity      | sun and everything that circles it         |
| 5. year         | time it takes Earth to circle the sun once |
| 6. rotate       | time it takes Earth to spin around once    |
| 7. day          | to circle the sun or other object          |

**B.**

Write the missing word or words in each sentence.

- The solar system includes the planets that orbit \_\_\_\_\_.  
(the sun, the moon, Earth)
- There are \_\_\_\_\_ planets in the solar system.  
(eight, nine, ten)
- Every time Earth spins around once, one \_\_\_\_\_ goes by.  
(year, month, day)
- Every time Earth orbits the sun, one \_\_\_\_\_ goes by.  
(year, month, day)

**C.**

Write one or more sentences to answer the questions below.

- About how many times does Earth rotate in one year? \_\_\_\_\_  
\_\_\_\_\_
- Do you think Pluto should be a planet or a Dwarf planet? Explain your thinking.  
\_\_\_\_\_  
\_\_\_\_\_