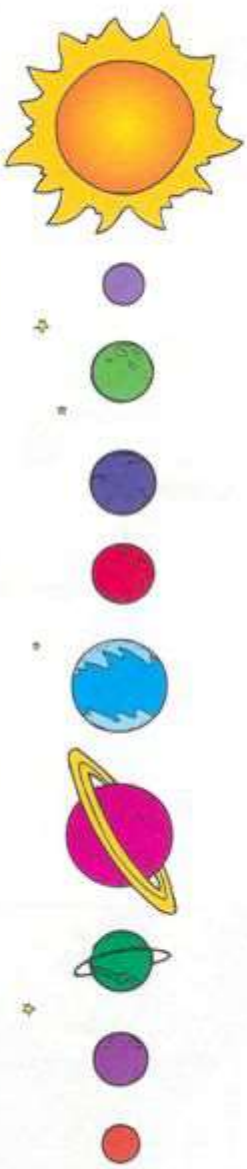


14. foglalkozás 04.17.

The Complete Book of Science

Facts about the solar system	Making posters
Mystery pictures	



Fascinating Facts About the Solar System

A solar system is more than a sun and its planets — it's anything and everything that revolves around a star!

Our solar system gets its name from the Sun. *Solar* means "of the Sun."

Our solar system is made up of our local star, the Sun, plus the nine major planets that orbit it and their moons.

It also includes asteroids, comets, and the gas and dust particles in the space between them!

The outermost region of the solar system is thought to be an area occupied by what is known as an **Oort Cloud**. Stretching far off into space, the Oort Cloud is a collection of orbiting ice particles that extends our solar system 4 light-years, or 23.6 trillion miles, into space!

All the planets in our solar system move around the Sun in the same direction. The solar system itself rotates around the Milky Way!

The Solar System

6



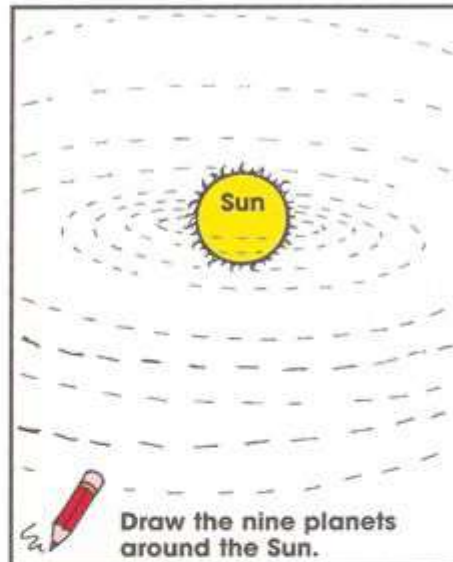
The Solar System

Our **solar system** is made up of the Sun and all the objects that orbit, or go around, the Sun.

The Sun is the only star in our solar system. It gives heat and light to the nine planets in the solar system. The planets and their moons all orbit the Sun.

The time it takes for each planet to orbit the Sun is called a **year**. A year on Earth is 365 days. Planets closer to the Sun have shorter years. Their orbit is shorter. Planets farther from the Sun take longer to orbit, so their years are longer. A year on Pluto is 248 of our years!

Asteroids, comets, and meteors are also part of our solar system.



Draw the nine planets around the Sun.

Underline:

The solar system is: the Sun without the nine planets.
the Sun and all the objects that orbit it.

Check:



- ☐ is the center of our solar system.
- ☐ is the only star in our solar system.
- ☐ is a planet in our solar system.
- ☐ gives heat and light to our solar system.

Write:

A _____ is the time it takes for a planet to orbit the Sun.
month year

Match:

Planets closer to the Sun . . . have a longer year.
Planets farther from the Sun . . . have a shorter year.

What's in Our Solar System?

An **astronomer**, or scientist who studies the universe, might make this list if you asked her what is in our solar system.



- one **star**, or hot glowing ball of gases, called the Sun
- all the planets' moons
- small chunks of rock or ice called **meteoroids**
- lots of empty space



- nine worlds called **planets** that travel around the Sun
- chunks of rock and metal called **asteroids**
- frozen balls of dirty ice called **comets**

Now write a definition for each of these words.

1. astronomer _____

2. star _____

3. planets _____

4. asteroids _____

5. meteoroids _____

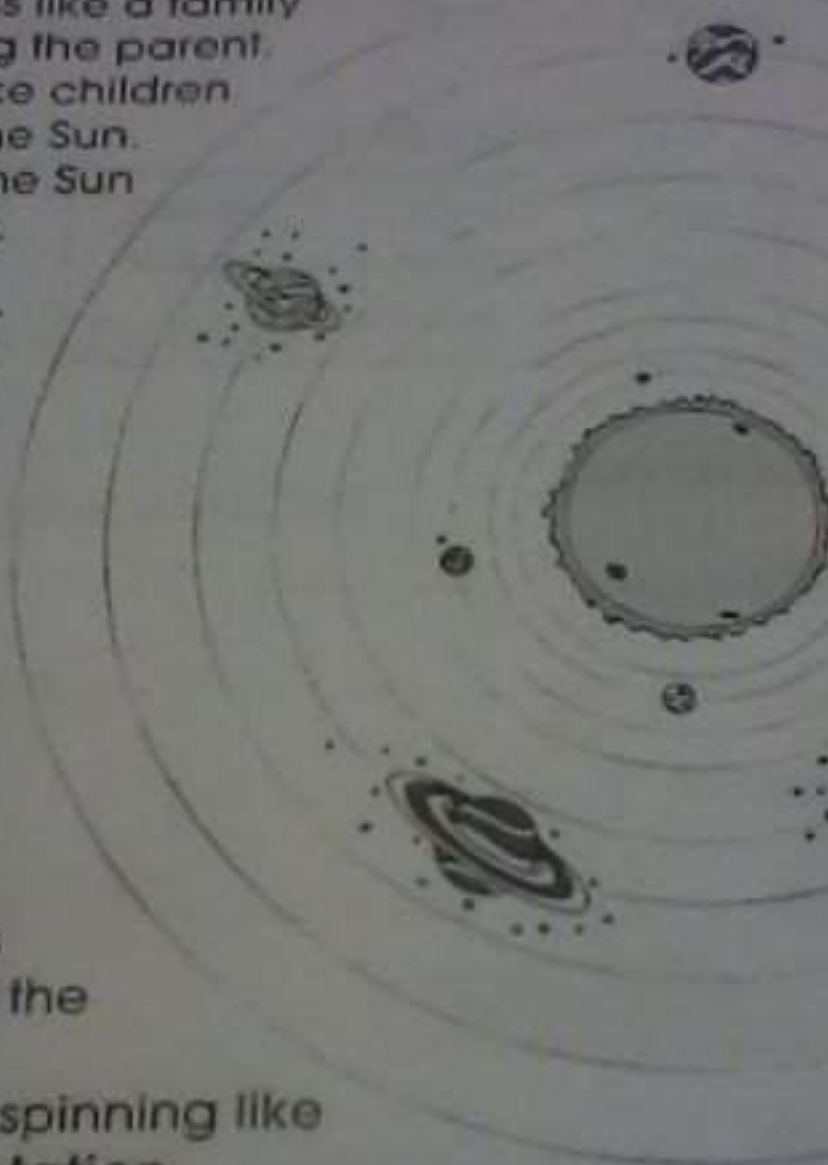
6. comets _____

Your Solar Family

Our solar system is like a family with the Sun being the parent. The planets are like children orbiting around the Sun. The planets and the Sun make up a family.

Planets **revolve**, or move, around the Sun. When a planet starts at one place, goes all the way around the Sun, and ends up back at the same place, we call that one **revolution**.

While each planet is revolving or orbiting the Sun, it is also doing something else. It is spinning like a top. We call this **rotation**.



Your "Solar" Family

1. Use a piece of white paper, a pencil, crayons, and a glass.
2. Let's compare your family to the Sun's family!