

Pocket Solar System



Make a miniature model of Earth's neighborhood!

Our Solar System is made up of the Sun and all the smaller objects that move around it, including eight planets and many dwarf planets, moons, asteroids, and comets.

Materials Needed:

Paper, ruler, scissors, tape or glue, colored pencils or markers.

Instructions:

Step 1: Cut strips of paper about 7.5 cm (3 inch) wide. Tape or glue them together to make a strip one meter (39 inches) long.

Step 2: Draw the edge of the sun on one end of the paper, and the Kuiper Belt at the other end.

Hint: Draw the edge of the sun as close to the end of the paper as you can. This will make the following steps easier.

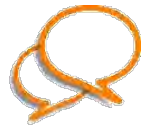
Step 3: Follow the steps on the *Folding Instructions* sheet to add planets and asteroids. Try to predict where each one goes!

Look at the *What's in the Solar System?* sheet for pictures and descriptions of each one. For younger children, you can choose to draw all the objects, or just a few.

Step 4: Try adding in moons orbiting the planets, comets and asteroids orbiting the sun, or spacecraft exploring the solar system. Be creative!

Note: This model is accurate for distance, but not for size. At this scale, the Sun would be smaller than a grain of sand, and you would need a magnifying glass to see any of the planets!

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Think and Discuss

Were you surprised by the distances between the planets? Why or why not?

How are the planets similar?

How are they different?

Which place(s) in the Solar System would you like to visit?

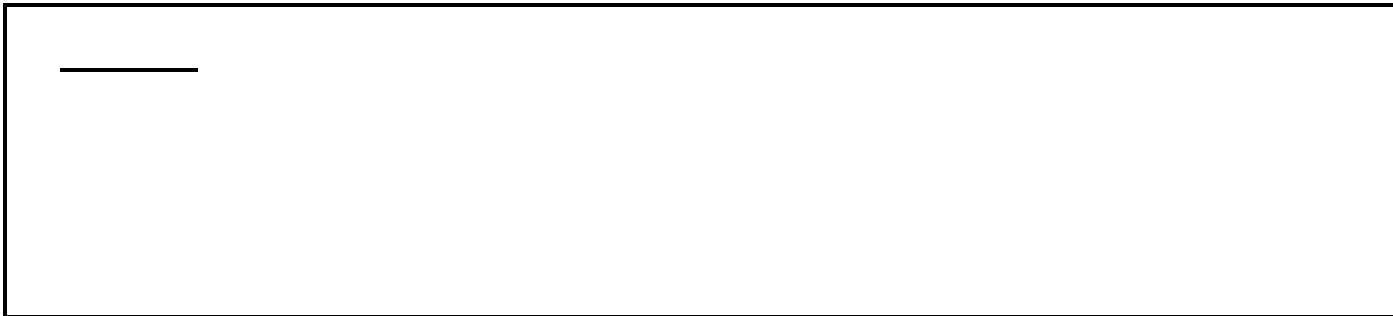
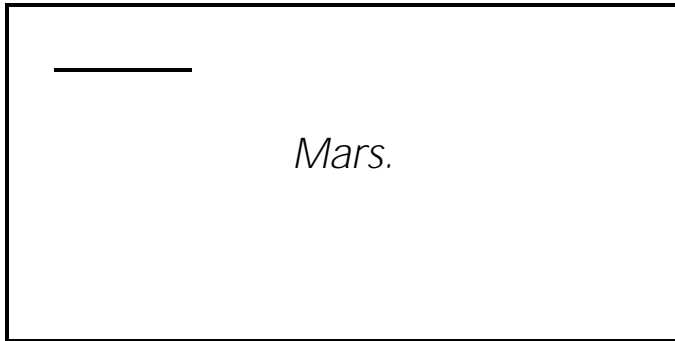
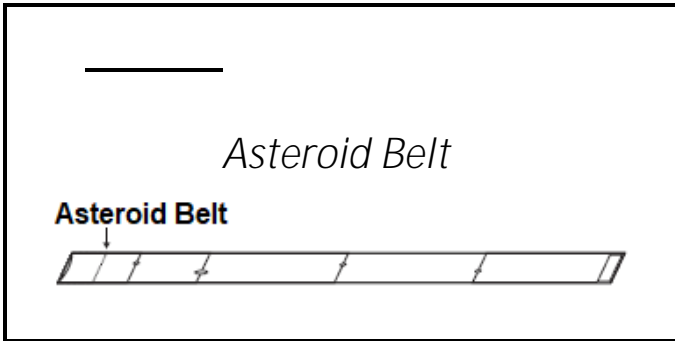
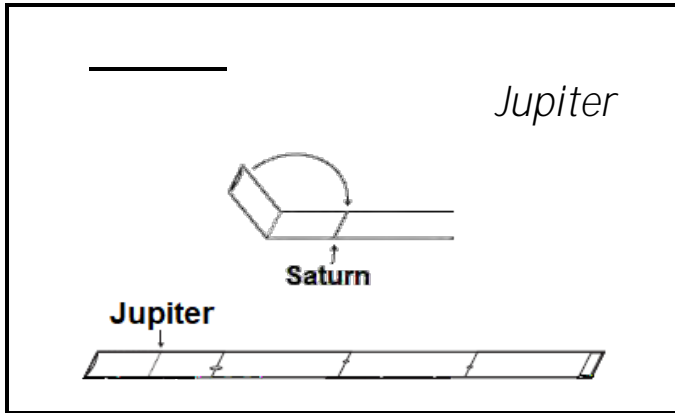
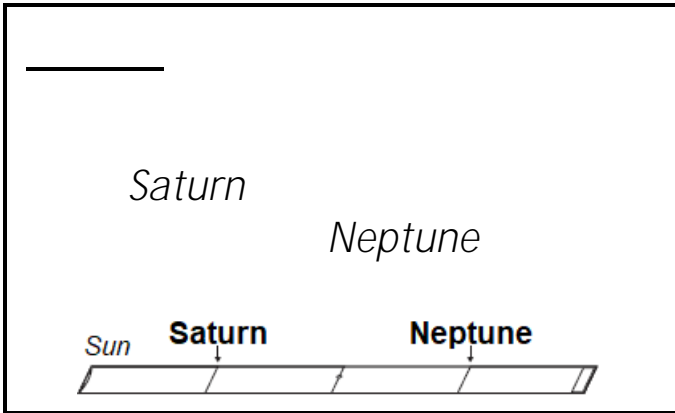
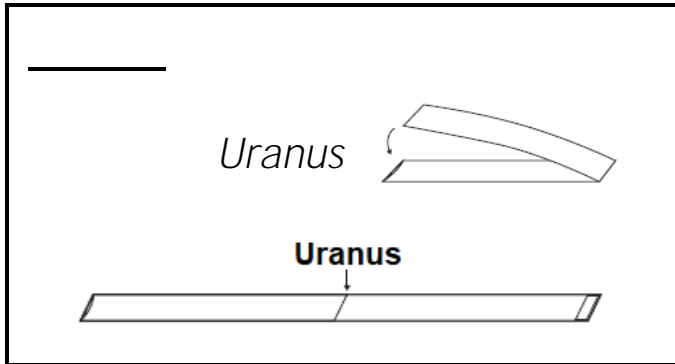
What do YOU want to know about the Solar System?

Image: NASA/JPL.

Solar System Fun Facts

The Solar System is located in an outer spiral arm of the Milky Way galaxy.

Our Solar System formed about 4.5 billion years ago.



The solar system is made up of eight planets and many other objects orbiting the sun. In addition to planets, there are dwarf planets, moons, comets, asteroids, dust, and gas, all influenced by the gravity of the Sun.

The Sun (also called Sol) is a star. There are lots of stars, but the Sun is the closest one to Earth. It is the center of our solar system, and its gravity holds the solar system together. The Sun's warmth and light makes life possible on Earth.

Mercury is the closest planet to the Sun. It is the smallest planet in the solar system: it's only a little bigger than

