



Make a Pocket Solar System

About this activity: Using a strip of paper, construct a quick scale model of the distances between the orbits of the planets, the Asteroid Belt, and Pluto as part of the Kuiper Belt.

Topics covered:

- Scaled distances of orbits in the Solar System
- Types of objects in the Solar System
- Usefulness of models

Materials needed:

- Markers/Pen
- Paper Tape

Follow these instructions one by one:

1. Take a full arm span of paper roll and trim the ends with scissors to make a rectangle
2. Mark one end 'Sun' and the other end 'Pluto in the Kuiper Belt'

The length of paper now represents the distance from the Sun to Pluto. We are going to show where the other planets would be (approximately) in a scale model of the Solar System.

3. Fold the two ends of the paper together and in the middle mark 'Uranus' with a marker or pen. We are indicating that Uranus is roughly halfway between the Sun and Pluto.
4. Fold the Pluto end up to Uranus and mark the fold as 'Neptune'

Now go to the opposite end with the Sun

5. Fold the Sun end up to Uranus and mark the fold as 'Saturn'
6. Fold the Sun end up to Saturn and mark the fold as 'Jupiter'

Now for a change in folding technique, we will be folding into thirds (1/3):

7. Fold the distance from the Sun to Jupiter into thirds and mark the 1/3 fold closest to the Sun as 'Mars'
8. Fold the distance from the Sun to Mars into thirds and mark the 2/3 distance fold from the Sun as 'Earth'
9. Fold the distance from the Sun to Earth into thirds and mark 'Mercury' at the 1/3 fold and 'Venus' at the 2/3 fold.

There you have it – A Pocket Solar System! Fold it up and put in the plastic pocket of your Planner!

Activity: Look for pictures of these planets online, search the **key word SOLAR SYSTEM** and click onto **Images**. Now draw their colour and size. Size doesn't have to be to scale but clearly indicate which ones are large and which are small. Which have rings and which don't?