



POCKET SOLAR SYSTEM

Model our cosmic neighborhood.

Procedure

- Take a 3 foot strip of paper and draw a circle to represent the Sun at one end and the Kuiper Belt at the other.
- Fold the paper once and crease. Draw Uranus on the line.
- Fold the paper in half again and crease to create fourths. Draw Saturn on the line closest to the sun, and Neptune on the line closest to the Kuiper Belt.
- Fold the sun up to meet Saturn. Unfold, and draw Jupiter on the new line.
- Fold the sun up to meet Jupiter, then draw the asteroid belt on the line.
- Fold the sun to meet the asteroid belt. Unfold and draw Mars on the line.
- Fold the sun to Mars, then fold the section in half again. Unfold the paper to reveal three creases - draw Mercury, Venus, and the Earth on these lines.

Materials

- Paper (needs to be 3 feet long)
- Markers, crayons, or colored pencils



Results

You have created a 2-D scale model of the universe that shows the distance between planets and other objects in space!

Why? The solar system is made up of eight planets and many other objects orbiting the Sun. In addition to planets, there are moons, comets, asteroids, dust and gas, all influenced by the gravitational pull of the Sun. The scale model you made shows how far away the planets would be from the Sun and each other, if the entire solar system were shrunk down to 3 feet across! Your model shows the planets lined up so you can see them all at once. In real life, the planets are usually scattered around the Sun along their orbits.