

Astrocamp 2020

Pocket Solar System

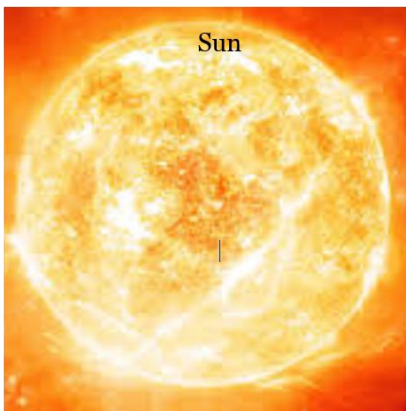
Materials:

- Register tape
- Planet pictures cut out

Instruction:

1. Cut a length of register tape 2 yards long.
2. Place the picture of the Sun at one end and write Kuiper Belt on the other end.
3. Fold the tape in half and crease.
4. Glue Uranus on the crease or write it as a label.
5. Fold the Sun to Uranus and crease. This is the location of Saturn.
6. Fold the Kuiper Belt to Uranus and crease. This is where Neptune is located.
7. Fold the Sun to Saturn and crease. This is the location of Jupiter.
8. The four terrestrial planets are very close to the Sun. Place next to one another in this order: Mercury, Venus, Earth and Mars. It is impossible to keep the model accurate at this point, as they are smaller and closer than it is possible to physically show.

Planet Pictures



Planet Distances Activity*

Materials:

Bookmark
Planet Distances Chart

Instruction:

1. Cut out the Planet Distances Bookmark and glue to cardstock.
2. Tell the students that all the planets in our solar system orbit the Sun, but they are at different distances. Display and discuss the *Planet Distances Chart*. Discuss the effect the distance from the Sun would have upon the temperatures of the planets. Discuss how the size of the planet would influence the length of a day on the planet.
3. Begin at the Sun and walk the indicated number of steps. You are now at the planet closest to the Sun, Mercury. Write down the number of steps next to Mercury off the bookmark.
4. Walk the appropriate number of steps to each of the planets and write down the steps.

Planet	Approximate distance from Sun (km)	Number of paces from the Sun
Mercury	57,910,000 km	1
Venus	108,200,000 km	2
Earth	149,600,000 km	2.5
Mars	227,940,000 km	4
Asteroid belt	414,436,363 km	7
Jupiter	778,330,000 km	13
Saturn	1,429,400,000 km	24
Uranus	2,870,990,000 km	48
Neptune	4,504,000,000 km	76



*At Heritage Village (219 20th Street NE, EGF) behind the Amundson Building there is a Planet Distances exhibit which children are free to use with the supervision of an adult.

