

Neighborhood Solar System



Collect:

- Sidewalk chalk
- Long tape measure
- Adult safety partner

Start with the sun and venture outward.

1. Head outside with your adult safety partner, some sidewalk chalk, and a long measuring tape. Use the sidewalk chalk to either write the word *sun* or draw a picture of the sun on the sidewalk in front of your house or apartment building.
2. Using the tape measure as your guide, walk out 19 feet and either write the word *Mercury* or draw a picture of this planet, which is closest to the sun.
3. Measure out another 16 feet from Mercury and draw or write *Venus*.
4. Measure out 13 feet from Venus and write or draw *Earth*, our home planet.
5. Add on another 26 feet and you will be at the red planet. Draw or write *Mars* at this point. Mars is the last planet in what we call the inner solar system.

Hop over the Asteroid Belt and head for the outer solar system!

6. Using the tape measure as your guide, walk out 180 feet past Mars to the location of the largest planet in our solar system. Draw or write the word *Jupiter* in chalk. At this point in our model, you should be nearly one city block away from where you drew the sun.
7. Measure out another 213 feet and draw or write *Saturn*. This planet is known for its rings.
8. Add another 472 feet past Saturn and write *Uranus*. This unusual planet orbits on its side.
9. Measure 534 feet, a little over 2 city blocks, out from Uranus and you land at *Neptune*. Use the chalk to write the name or draw a picture of this planet. Neptune is the last planet in our solar system. You should be nearly 5.5 blocks away from where you drew the sun!

Want to take it further?

Our solar system doesn't end after Neptune! Dwarf planets like Pluto, Eris, and Makemake reside in the The Kuiper Belt on the outer edge of our solar system. Measure out 459 more feet from Neptune and write Kuiper Belt or draw some dwarf planets.

Let's science



/marylandsciencecenter



/mdsciencecenter



/mdsciencecenter

What's the science?

Models can help us comprehend large-scale spatial relationships. The scale model you made in this activity shows just how far away the planets would be if the entire solar system were shrunk down to your neighborhood. However, in real life, the planets are usually scattered around the sun along their orbits and very rarely align.

Our solar system is made up of eight planets and many other objects that orbit the sun such as dwarf planets, moons, comets, asteroids, space dust and gases. All of these things are influenced by the gravity of the sun.