

Solar System Model

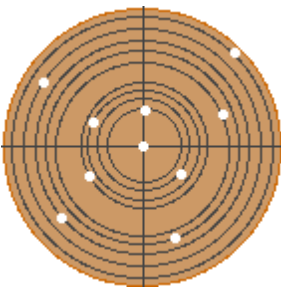


This is a model of our Solar System, picturing the Sun and the nine planets that orbit it: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, and Pluto.

Nicolaus Copernicus (1473-1543) was a Polish astronomer who developed the Copernican system, a model of the solar system in which all the planets orbit the Sun.

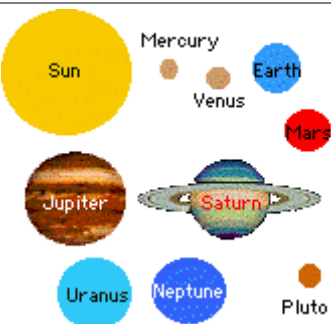
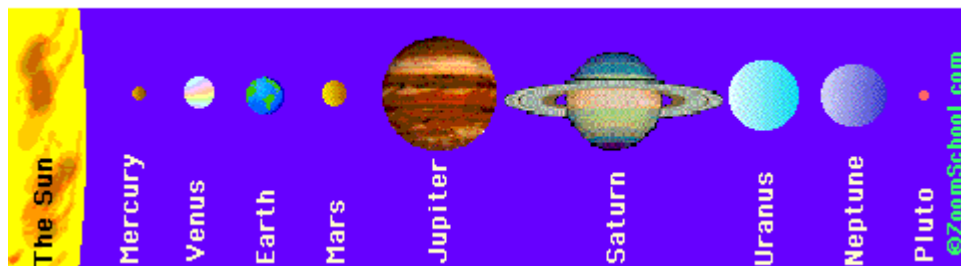
Supplies needed:

- A round piece of cardboard about 1 ft across (the cardboard from a frozen pizza works well)
- Lots of colors of oak tag (or construction paper)
- Scissors
- Tape
- String
- Pencil, crayons, or markers
- A compass (for making circles)



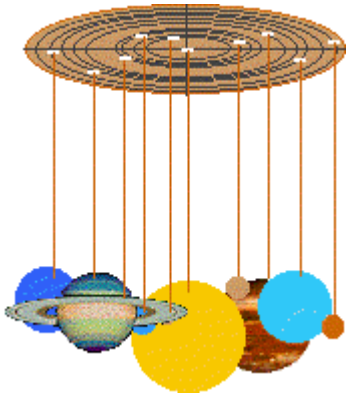
Using an awl, the sharp point of scissors, or a large nail, punch a series of holes in the cardboard. First punch a hole in the center (this is where the Sun will hang). Then punch one hole on the spots on each circle (orbit); a planet will hang from each hole. Use the diagram shown below of the order of the planets to attach the planets to their correct orbit from the sun.

The Relative Sizes of the Planets and the Sun



Cut circles from oak tag to represent the Sun and each of the planets. Since the range in size of the Sun and the planets is far too large to represent accurately, just make the Sun the biggest. Make Jupiter, Saturn, Uranus, and Neptune a bit smaller than the Sun. Make the remainder of the planets much smaller.

Write the name of each planet on its back.



Tape a length of string to each planet (and the Sun).

Lace the other end of each string through the correct hole in the large cardboard circle (Mercury goes in the inner orbit, Venus goes in the second orbit, Earth goes in the third, etc.). Tape the end of the string to the top-side of the cardboard.

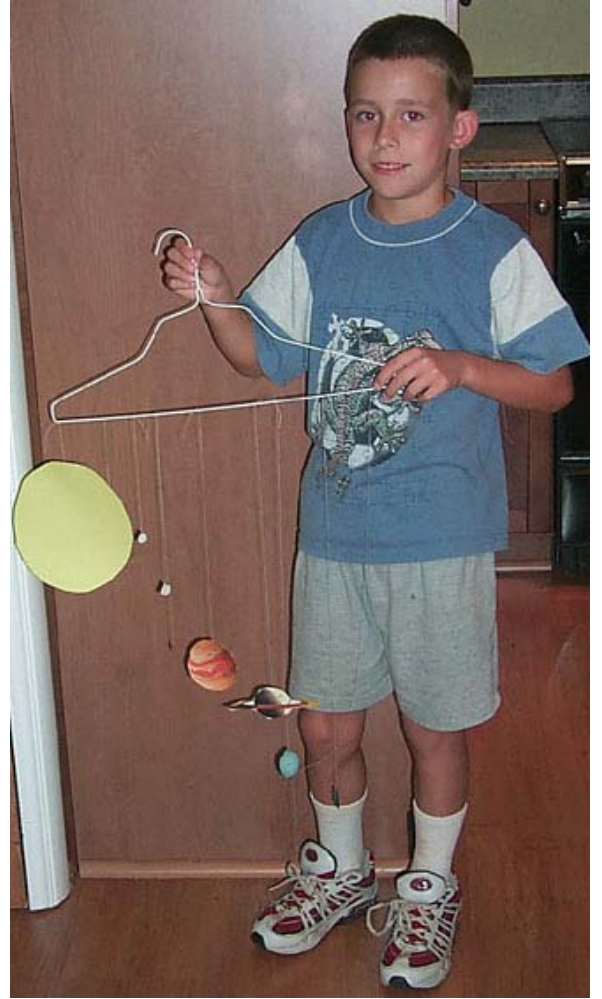
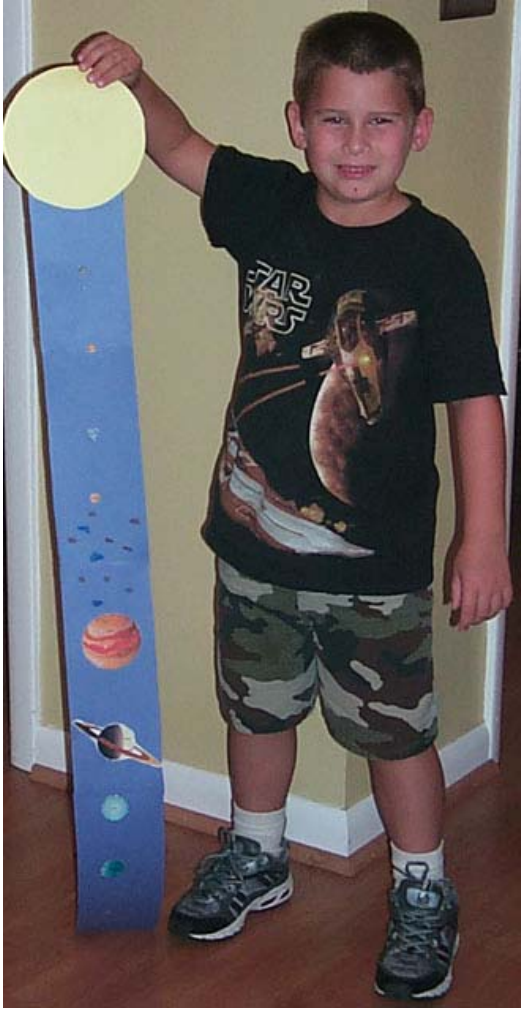
After all the planets (and the Sun) are attached, adjust the length of the strings so that the planets (and Sun) all lie in a plane.

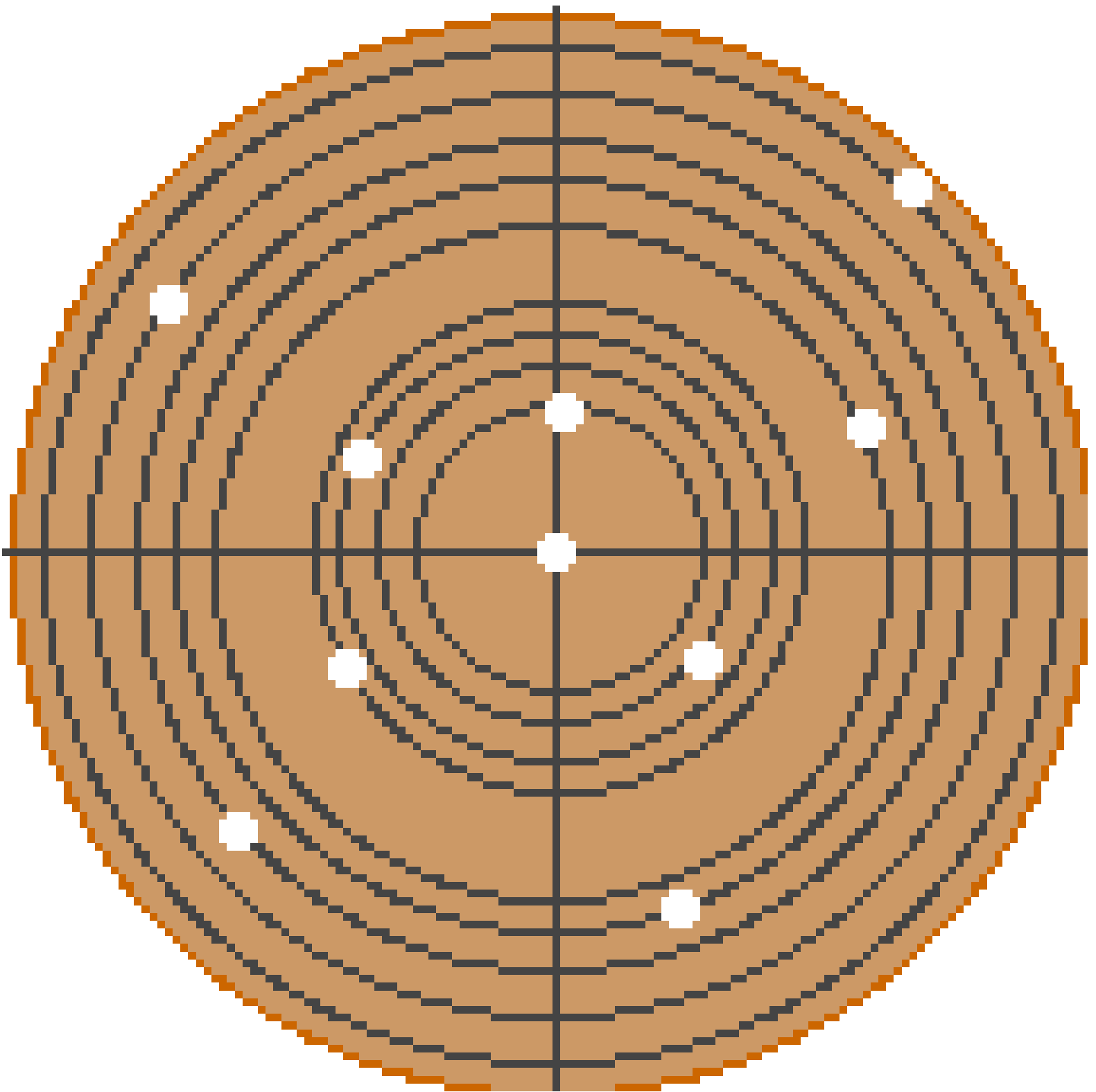


To hang your model, tie three pieces of string to the top of the cardboard - then tie these three together. Tie them to a longer string (from which you'll hang your model).

You now have a model of our solar system.

Alternate solar system projects





Print this page. Cut all of the planets out. You can use them for your poster or mobile. Cut out a large sun from yellow construction paper.

