

Create our solar system



Using a scale of 1,000,000,000:1 you can draw the planets in our solar system. We've provided the measurements and instructions for you. You will end up with a colourful solar system which you can put on the wall.



What you need:

- ☒ Compass
- ☒ Pencil
- ☒ Ruler
- ☒ A3 piece of white paper (or 2 x A4)
- ☒ Coloured pencils, crayons or chalk
- ☒ A3 piece of dark coloured paper (or 2 x A4 stuck together with sticky tape)



Planets	Equatorial radius (km)	Equatorial radius (cm)
Mercury	2,439	0.24
Venus	6,052	0.61
Earth	6,378	0.64
Mars	3,394	0.34
Jupiter	71,400	7.24
Saturn	60,000	6.00
Uranus	25,600	2.56
Neptune	24,300	2.43

Source: <http://www.freemars.org/jeff/planets/planets5.htm>

PART 1 - Drawing your planets

Follow the measurements in cm from the table above. It doesn't matter what order you draw the planets as you'll be cutting them out but it's best to start with the largest planet, Jupiter.

- ☒ Get an adult to help if you've never used a compass before. Make sure your pencil and compass points are level and touching. Using a ruler, set the compass so that it's 7.24 cm wide. This is the radius of the circle you're about to draw.
- ☒ Draw a dot on the white piece of paper, leaving room to draw a circle around it. Place the point of your compass on the dot and slowly turn the compass to draw a circle. You should be left with a nice big circle.
- ☒ Now it's time to colour your planet. Watch the Jupiter movie so you know what it looks like.
- ☒ Carefully cut around the edge of your planet and make sure to write the name on the reverse side.

Repeat these steps for each of the planets above. Watching the planets movies should help you when it comes to colouring in.

PART 2 - Get sticking!

Now you've coloured and cut out your planets, it's time to glue them to your dark night sky.

- ☒ Holding the black paper horizontally (otherwise known as landscape), fold it in half to create a straight horizontal crease in the page. Open it out again. The crease is where your planets are going to sit.
- ☒ On the left side of the page, use yellow chalk or pencil and draw the edge of the sun.
- ☒ Watch the solar system movie so you learn what order the planets should be placed. Then, place your planets on the paper along the crease you created. Make sure you have plenty of space to fit them all on.
- ☒ Add a little glue to the edges of the reverse side of each planet and stick down along the fold.

As a finishing touch, label each planet and decorate the black paper with stars.