

What to do:

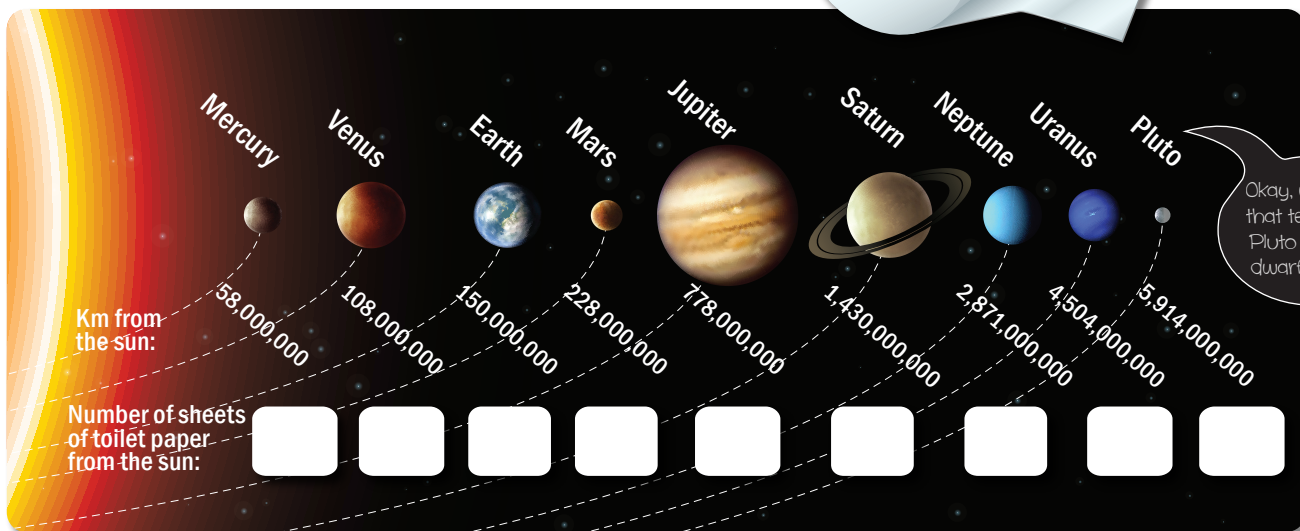
Work with some friends and start by drawing and labelling the Sun on the toilet paper. You should draw this on the seam between the first and second sheets. Next you'll need to do some calculations. Don't tear sheets off, but instead unravel the roll and count the sheets until you reach the correct spacing for the next planet. Draw and label the Planets.

How does it work?

Here's a reminder of the Planets that make up our Solar System and which orbit the Sun at the centre. The Planets are (starting with the Planet closest to the Sun and moving out):

Things you'll need:

- A roll of toilet paper with at least 150 sheets on it (a new loo roll has about 500 sheets)
- Coloured feltpens



Okay, we know that technically Pluto is now a dwarf planet!!

Now for the Maths bit:

To calculate the number of sheets of loo paper required for the correct spacing of the Planets from the Sun, the calculation you need to do is:

1 sheet of toilet paper = 50,000,000 km

$$\text{Number of sheets} = \frac{\text{real distance (km)}}{50,000,000 \text{ km}}$$

Time to Think:



- How could you use this information to make a scale model of the Planets?
- What else do you know about the Planets?
- What can you find out about the early scientists Ptolemy, Alhazen & Copernicus?
- Why is understanding our Solar System so important to us?

Did you know?

The Planets orbit the Sun in perfect circles... and the distances used in this activity represent the average distance of the Planet from the Sun in ellipses rather than perfect circles.