



PRINTABLE INSTRUCTIONS

Step 1: Prepare your equipment

- Take two long strips of paper. You can use loo paper or till roll, or you can create long strips by sticking strips of A4 or A3 paper together.
- On each piece of paper, write Sun very close to the top and Dwarf Planets very close to the bottom.

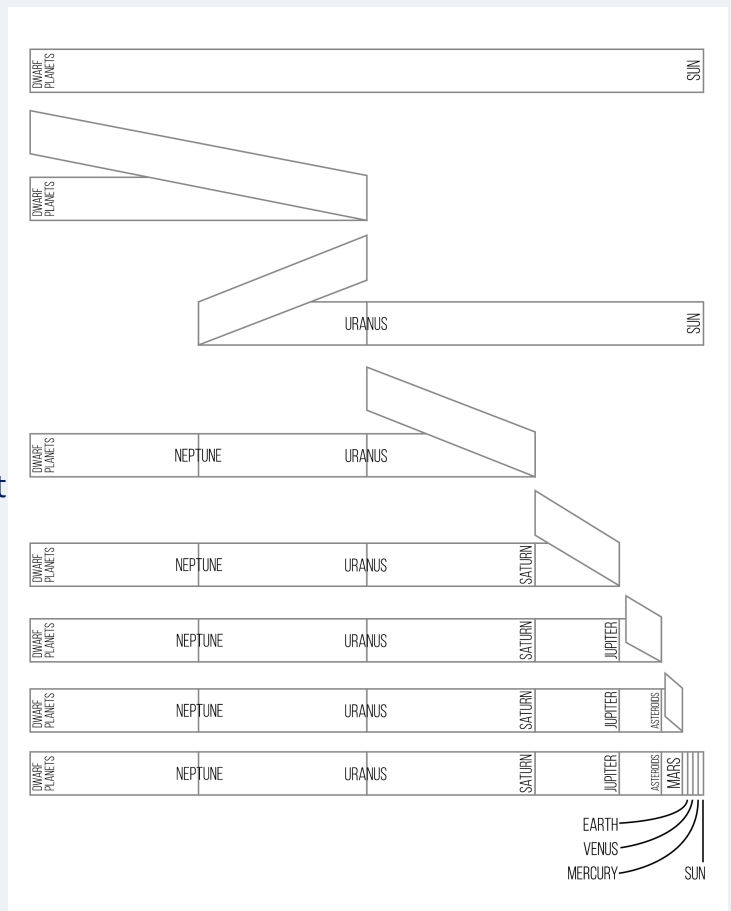
Step 2: Estimate the distance between each planet and the Sun.

- Think about where you think each planet falls between the middle of the Solar System (where the Sun is) and the edge of the Solar System (where most of the dwarf planets are).
- On one of the strips of paper, mark where you think each planet would be and label each mark, so you know which is which.

Step 3: Discover the true answer

Take your second strip of paper and follow these instructions:

1. Fold the paper in half and write Uranus on the crease.
2. Re-fold the half and then fold this in half again, write Saturn on the crease $\frac{1}{4}$ down the page, and write Neptune on the crease $\frac{3}{4}$ down the page.
3. Fold the paper from the Sun, up to where Saturn lies, and write Jupiter at this crease which should be $\frac{1}{8}$ down the page.
4. Next fold from the Sun, up to Jupiter, and write Asteroid Belt at this crease, $\frac{1}{16}$ down the page.
5. Fold from the Sun, up to the asteroid belt, and write Mars at this crease, $\frac{1}{32}$ down the page.
6. Write the remaining planets (Mercury, Venus, Earth) evenly in the space between the Sun and Mars, in that order with Mercury closest to the Sun.



How does the true scale compare with your estimate? Was your guess close?