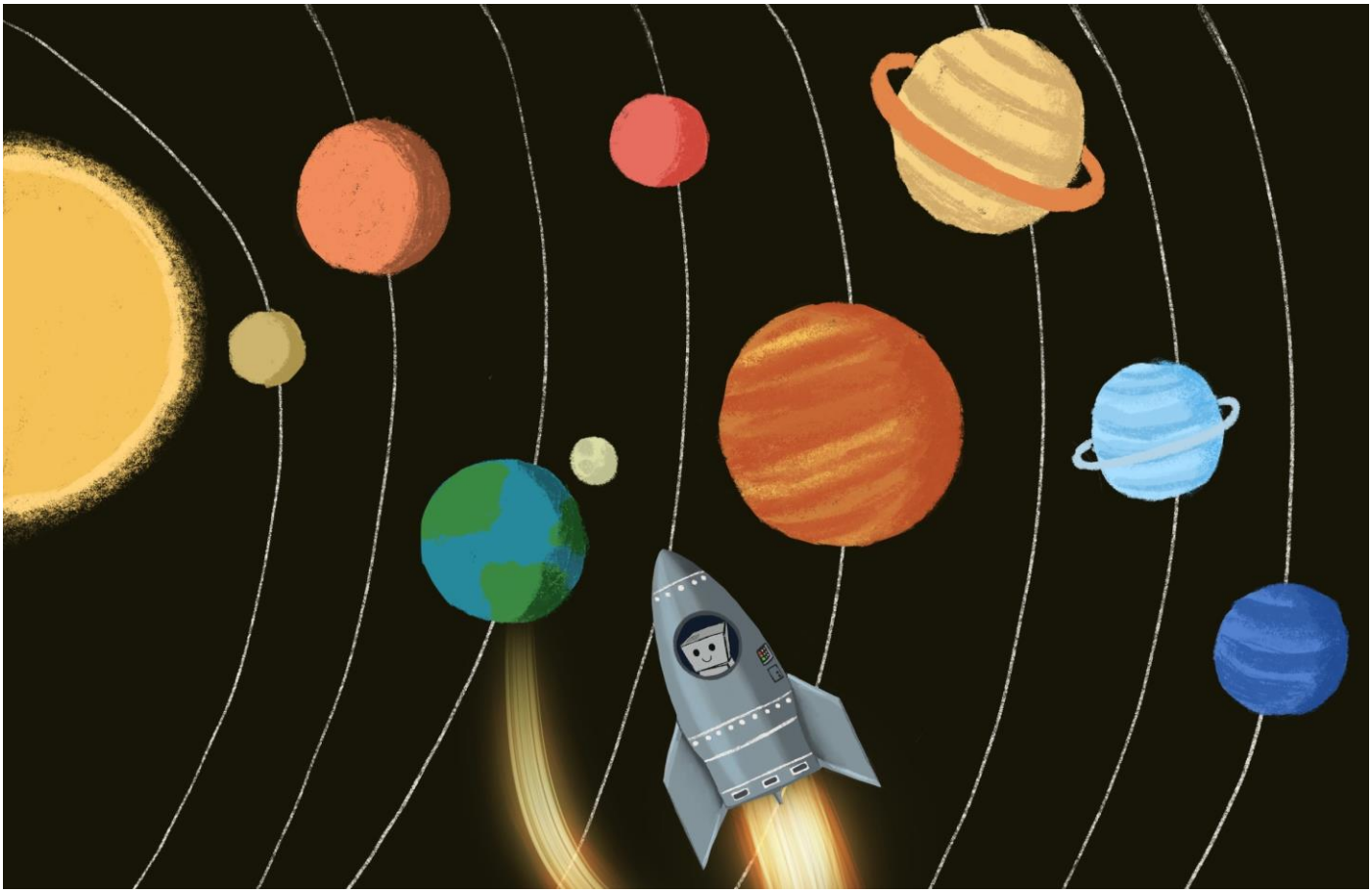
Little Robot and The Moon



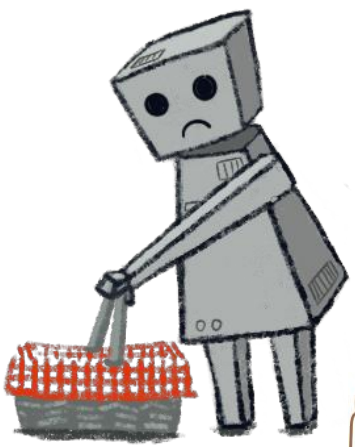
Little Robot packed a fresh batch of moon rock cakes inspired by her special friend and set off on her journey to space. She whizzed up, up, up into the night time sky in her rocket.

When she reached space Little Robot had a big surprise. Counting Earth there were eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune!

Little Robot thought perhaps there were other robots out there too, so she waved as she passed by.

The moon was much bigger than Little Robot thought it would be, so big in fact, that it didn't notice Little Robot stopping by to say hello.

And Little Robot soon realised that her cakes would be more like crumbs for the moon. Feeling sad, she dropped off the cakes and made her way home.



Make a Pocket Solar System

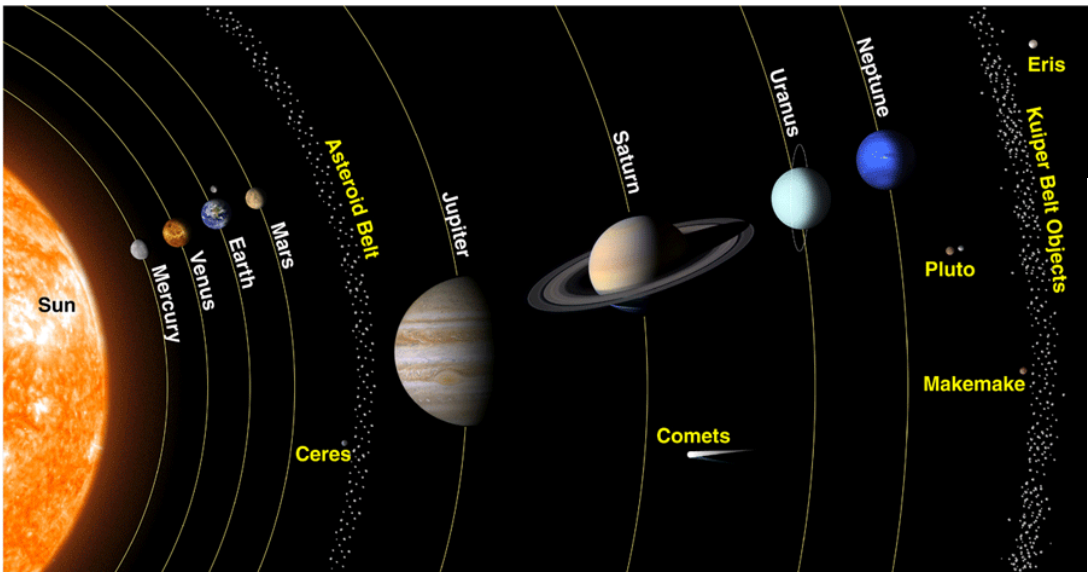


Image: www.nasa.gov

It's almost impossible to imagine the distances in the Solar System. The distance from the Earth to the Sun is about 93 million miles (150 million kilometres). An aeroplane travelling at 400 mph (644 kph) would take 20 years to fly that distance!

Now you know why space is called "SPACE"!

We usually use light-years to describe distance in space – light travels at a speed of 186,000 miles (300,000kilometres) a second. So, the sun's light takes about 8.3 minutes to reach us!

We can use scale to help us make a pocket solar system. Scale is the relationship between the real size of something and its size on a map, model or diagram.

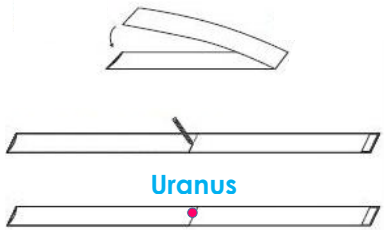
Can you make a scale model of the Solar System? What will you use? Perhaps play dough or papier mâché or a strip of paper!

Why's this maths?

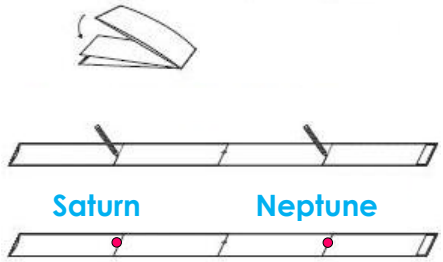
You are exploring the ideas of scale and estimation. It doesn't matter how long your piece of paper, if folded correctly it will always be to scale. Using scale can give an accurate representation of something that in real life would be gigantic

Make a Pocket Solar System

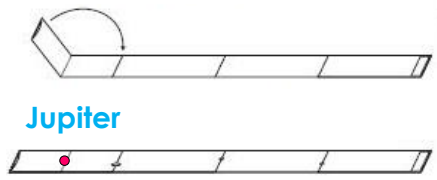
1. On a long strip of paper, draw the sun at one end and Kuiper Belt at the other.



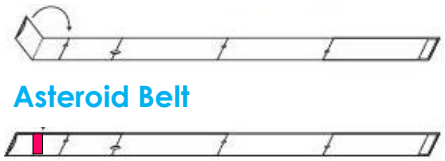
2. Fold the paper in half and draw Uranus on the crease.



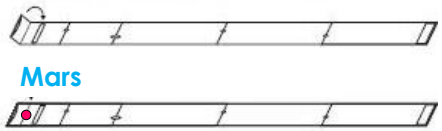
3. Refold the paper and then fold in half again to make fourths. Draw Saturn and Neptune on the creases.



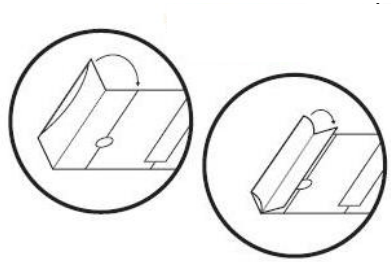
4. Fold the sun to meet Saturn, then unfold and draw Jupiter on the crease.



5. Now fold the sun to meet Jupiter, unfold and draw the Asteroid Belt on the crease.



7. Fold the sun to meet the Asteroid Belt, then unfold and draw Mars.



8. Fold the sun to Mars and then fold the section in half again.

9. Unfold and you should have three creases to draw Mercury, Venus and Earth.

Your Solar System is complete!

Activity adapted from: www.explorescience.com

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