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## Modelling to Scale - Student Worksheet

A scale model is a copy that keeps the proportions but not the size of the original. What is the scale of the drawing in the right column?
Original 1:1

It is difficult to make an accurately scaled model of Earth, Sun and Moon because the Sun is very, very large in comparison to the Earth and Moon. The diameter of the Sun (the blue line across the sun) is almost 109 times bigger than the diameter of the Earth. Draw the Earth to the same scale on the right.

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## Modelling to Scale - Student Worksheet

If you drew the Earth as a circle with a diameter of 1 cm , what size would the diameter of the sun have to be? $\qquad$
Guess how many sheets of A4 paper you would need to stick together to draw the Sun at this scale?


Why can't we make this model to scale? $\qquad$

This model will however display how the moon moves round the Earth and the Earth and Moon move round the Sun.


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