

**KS4 The Earth and beyond**  
**Classroom-based activity**

## You are here

The Solar System is an enormous and complicated place so ensure you aim for an achievable degree of accuracy, rather than a fully detailed and exact scale model, when carrying out this activity

Challenge your pupils to create a model of the Solar System in the form of a mobile. The Sun, which will be the largest body in the model, should be at the middle of the mobile with the various planets, from Mercury to Pluto, arranged in sequence from the centre. Include the principle moons of any planet that has them and don't forget to include the asteroid belt, which lies between Mars and Jupiter. Additional items may include the occasional comet or meteor.

Before construction begins divide the pupils into small groups and give each group the task of investigating a key element of the solar system. Key questions for the groups to consider might include:

- What is the planet/asteroid/comet, etc made of?
- How does its surface differ from other bodies in the Solar System?
- Do these differences have an effect on the body's appearance?
- How big is it in relation to the other bodies in the Solar System?
- If it is a planet, does it have any moons and should these be included in the model?
- Could any form of life have evolved on these worlds?

Use balloons of various sizes covered in papier mâché to create the various elements of the Solar System, making certain that the differences in the sizes of the planets is reflected to some degree in the differing sizes of the papier mâché balloons. Once all the elements have been constructed use wire coat hangers to attach them to the "Sun" in the following sequence (from the centre outwards): Mercury; Venus; Earth; Mars; the Asteroid Belt; Jupiter; Saturn; Uranus; Pluto. The location of comets and meteors should be decided by your pupils.