

OUR SPACE

DIGITAL ADVENTURES IN SPACE

Liquids in Space

Two different fluids can be said to be immiscible if they do not mix to form a uniformly blended solution. For example, water and oil are immiscible. On Earth, one fluid would gather at the top of a container and another at the bottom. In this demonstration we can see what happens without gravity. The two different liquids do not separate because there is no gravitational force to bring one to the bottom of the container. However, they can be separated by rotating the container so that it feels a centrifugal force. The heavier liquid is then pushed to the furthest point from the rotation, which brings the lighter liquid closer to the centre.