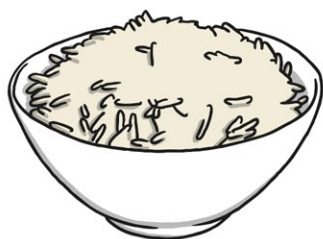


Floating Rice Bottle

Science Experiment

You will need:



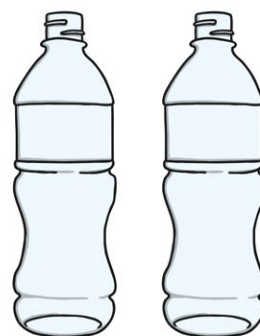
2 empty and dry plastic bottles

Rice

2 chopsticks

Funnel

Pencil



The Activity

1. Using the funnel, fill the bottles with rice, leaving about 3cm space at the top. Put one bottle to the side.
2. With the second bottle, you need to pack as much rice in as possible so tap the bottle against your work surface and make space for more rice.
3. Top up the bottle and repeat the tapping of the bottle until you are sure you couldn't possibly fit any more rice in.
4. Push the rice down with a pencil to pack the rice in further.
5. When you have finished, ensure that both bottles look like they have the same amount of rice in them.
6. Show the children the bottles and ask them if they can pick up the bottles using just the chopsticks.
7. Give the children the bottle with the lightly packed rice and keep the tightly packed bottle yourself. (The chopstick will be harder to push into the more tightly-packed bottle.)
8. At the same time, push the chopsticks into the bottles. You will be able to pick your bottle up from the table using just the chopstick, whereas the child will find that the chopstick slides in and out of the bottle.
9. It will look like your bottle of rice is magic and can float!

Note: Why does this happen? You will be able to lift the second, more tightly-packed bottle due to friction and density.

We hope you find the information on our website and resources useful. The activities set out in this resource are potentially hazardous. The activities are not suitable for all children and adult supervision may be required for some of the activities. It is your responsibility to assess whether the children in your care are able to safely carry out the activities and whether the children require adult supervision. You are responsible for carrying out proper risk assessments on the activities and for ensuring that activities can be carried out safely. We are not responsible for the health and safety of your group or environment so, insofar as it is possible under the law, we cannot accept liability for any loss suffered by anyone undertaking the activity or activities referred to or described in this resource. It is also your responsibility to ensure that those participating in the activity are fit enough to do so and that you or the organisation you are organising for has the relevant insurance to carry out the physical activity. If you are unsure in any way, we recommend that you take guidance from a suitably qualified professional.