

### What you will need

- Spoons
- Water
- Food colouring
- Empty glass jar with a lid
- VOOST or berocca tablet
- Cooking oil
- Funnel
- Jug

### Before you begin

- Don't forget to make sure all young people and adults involved in the activity know how to take part safely.
- Make sure you'll have enough adult helpers. You may need some parents and carers to help if you're short on helpers.



### Run the activity

1. Gather everyone in a circle. Ask if anyone knows what a lava lamp is or has seen one.
2. Explain that you'll be doing a science experiment and making your own DIY lava lamp.
3. Divide everyone into pairs or Patrols of up to four.
4. Each pair or Patrol needs an empty jar or plastic bottle, a funnel, access to cooking oil, food colouring and water, and a VOOST or Berocca tablet.
5. Everyone should fill a clean and empty jar with water, about one third of the way full. They may want to use a funnel and have someone hold the jar or bottle in place.
6. Once the water's in the jar, add a few drops of food colouring and stir with a spoon.

7. Next, add cooking oil until it's almost at the top of the jar. Again, they may want to use a funnel and hold the jar or bottle in place.
8. Allow the water and oil to settle. Talk about why the oil and water don't mix. Explain that the oil floats on top because the water has a higher density (it's heavier) than the oil.
9. Now drop a tablet into the jar.
10. Ask everyone to write down or describe what's happening. Choose a few people to answer.
11. See if anyone can notice the bubbles rising to the top. Ask the Group why they think the bubbles push through to the surface.
12. Explain that the effervescent tablets create a gas called carbon dioxide when mixed with water and that gas forms the bubbles.



## Reflection

- How did everyone find that activity?
- Was it easy to make the lava lamps – or did you find it challenging?
- Did you have to persevere and try, try and try again?

You could choose three pairs to tell everyone what happened.

You may have had to keep trying and persevere. Sometimes science experiments don't work, especially if it's your first time doing them.

How do you think they compare to real lava lamps if anyone's seen one?  
Is there anything you'd change if you did this experiment again?