



## DIY LAVA LAMPS

### Materials you need:

- An empty water bottle - you could collect one from every child before doing this activity, so they can take a lava lamp home with them.
- 1 carton vegetable oil
- 1 packet Alka seltzer or Aspro clear tablets (aspirin)
- Water
- Food colouring of your choice
- Funnels so children can help fill bottles
- Chopsticks for stirring

### Setup for play:

- Fill the empty water bottles about 2/3 full with vegetable oil.using the funnels.
- Now carefully fill the rest with water but leave a little space at the top.
- Point out to the children that the water is sinking until it is below the vegetable oil. Oil and water just do not mix! The oil floats on the surface because the water is heavier than oil.
- Add a few drops of food colouring – the children can do this easily if using the little squirt bottles. The food colouring will only mix with the water, not the oil. Stir gently to mix using a chopstick or something similar.
- Ask the children NOT to shake the bottle at this stage as it causes lots of bubbles to form in the oil and this lessens the effect of the 'lava' in the next step.
- Break 1 aspro table into 3-4 pieces (or whatever you can) then hand out to the children to drop in one at a time and watch what happens!
- You can screw the lids on the bottles and use again – just add another piece of aspro tablet to drop in. *Obviously, you need to exercise supervision with this activity due to using the aspro tablets – do not leave unattended!*

## What are they learning with this activity?

As the children create their DIY lava lamps they are learning to:

- Use descriptive language to describe textures, materials and actions.
- Use hand/eye coordination skills and demonstrate spatial awareness
- Manipulate objects to explore motion, cause and effect
- Strengthen fine motor muscles and control
- Express themselves creatively while investigating and experimenting
- Create with different mediums and textures
- Identify, name and mix colours
- Use scientific inquiry skills to learn about and become familiar with the steps in a scientific process.
- Better understand liquid density and how it works
- Explore simple scientific concepts through play and observation
- Show increasing independence and competence
- Explore, infer, predict and problem solve

## Extending the play:

- Open a discussion about why the lava lamp bottle works in this way. When you drop in the aspro tablet piece, it sinks to the bottom and starts dissolving. As it dissolves, it forms a gas which rises to the top and takes a little of the coloured water with it. The gas bubble breaks on the surface and the coloured water sinks back to the bottom. Clever!
- You could use recycled jars or glass water jars instead of plastic containers if you wanted to try something different!

