

imagination hub: sensory play

How to make your own lava lamp

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Oily Cart





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let's make a lava lamp

A lava lamp lets you enjoy seeing colourful bubbles going up and down. You can make this with things you can find in your kitchen.

You will need:

- Bicarbonate of Soda/Sodium bicarbonate
- Cooking Oil
- Vinegar
- Food Colouring
- Transparent Jar
- Spoon
- A little cup
- A torch
- A room where you can get darkness

Step 1:

Put a little bicarbonate of soda into the jar (enough to cover the bottom of the jar). Carefully shake the jar to level off the soda.



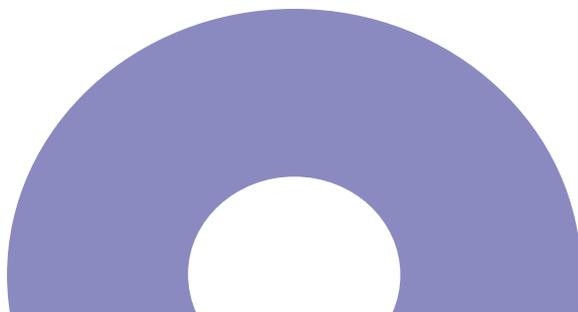
Step 3:

Pour cooking oil into the jar but to no more than 2/3 full. Do not fill the jar or it will because overflow later! Now put the jar to one side.



Step 4:

Pour a little vinegar into a small cup.



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Step 5:

Add food colouring into the small cup.



Step 6:

Stir the vinegar and food colouring mix.



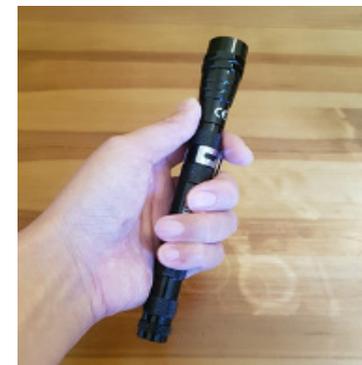
Step 7:

Carefully pour the vinegar mix into the jar with the oil and the soda.



Step 8:

Get a torch ready and turn off the lights.



Step 9:

Point your torch in to the jar.

Ta-dah! You now have a lava lamp.



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experiment challenges

Now you have your lava lamp. Lets play with the torch!

- Place your light beneath the jar. It is the best way to enjoy watching the bubbles.
- Pick up the jar and move the light around it.
- Put your jar on the table and point your torch to the jar.
Can you get the bubbles' shadows on a wall?
- What is the best way to light up the bubbles in the jar?

bubble trouble?

Sometimes bubbles are not very active for the first few minutes. Don't worry. It gets very bubbly a bit later.

The lava lamp will last about 10-15 minutes. If your bubbles die down, you can add more of the vinegar/food colouring mixture to the jar. It will get the bubbles going again. Perhaps you can mix different food colourings to the vinegar so you will have different coloured bubbles.

hack it!

Now you have made some shadows with your lava lamp, here are some ideas to try with some other shadows:

Play some nice and calm music, keep your room dark and experiment!

- Put your hand in front of the torch and see what shapes you can make.
- Move your hand closer or further away from the torch. See how your shadow changes in size.



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- Make shadows on the wall, the corner of your room or ceiling. You can make shadows on your white t-shirt too!
- Look for objects around the house and make shadows with these. Kitchen gadgets like a cheese grater, a sieve or a whisk are fun. Transparent items, like glass, make beautiful shadows as well.
- Cut a square from a plastic bag and colour it with a permanent marker. Then place it in front of your torch. This way you can make coloured shadows!
- You can use any thin paper for a shadow screen, such as printer paper, greaseproof paper, or packing paper. You can also try moving only the torch on the paper screen.
- Fill a tupperware container with water and point the torch through it. You can make shadows with water!



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