

AT HOME! PROJECT NO.3

Marbled Pebbles

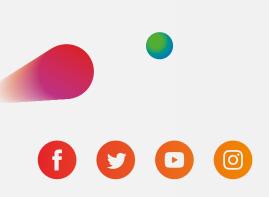
As family days out are put on hold, we've been thinking how we can make your family days in as much fun as possible.

Eureka! is the UK's only hands-on museum just for children aged 0-11. Full of exhibits to explore, helpful staff to engage with, activities to do and buttons to press. Based in West Yorkshire, we have brought smiles to the faces of over 8 million visitors since 1992. As families can't come to us, we are keen to bring a sample of the Eureka! experience to you.

Our expert staff have come up with a series of experiments that can be done at home, all designed to inspire children to get hands-on, have fun, and learn about themselves and the world ground them.

Get experimenting and send us or share your pictures and videos using #EurekaAtHome and we'll share on our social media feeds too.

WE'RE ALL IN THIS TOGETHER!







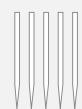
MARBLED PEBBLES

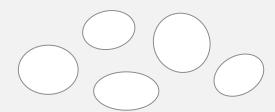


Create beautiful coloured designs on pebbles – you can leave them as presents for other people, or you can make a lovely display.

YOU WILL NEED:

- An old bowl for the water
- A selection of coloured nail varnish
- Some bluetack, or plasticine or other adhesive putty
- Toothpicks or other stirrer
- Pebbles











STEP 1:

Choose your pebble to decorate and press the putty onto one side of the pebble to make a 'handle'

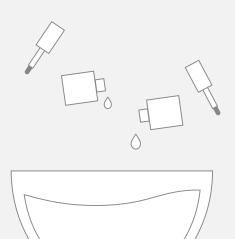






STEP 2:

Fill your bowl with water and add droplets of nail varnish onto the surface of the water. Keep the varnish in the middle of the bowl – don't use Mum's gel varnishes (they won't work!)



Top Tip: Check with Mum first if you're using her nail

varnish!

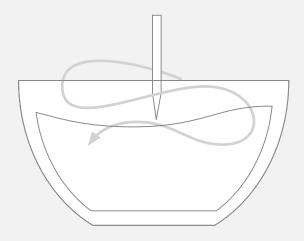
MARBLED PEBBLES





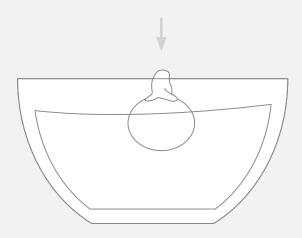
STEP 3:

Use the end of a toothpick to swirl the colours gently around to create a pattern. Be quick as the varnish will soon dry.



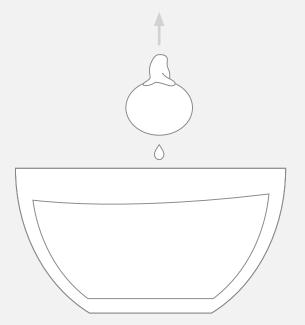
STEP 4:

Pick up your pebble by its putty handle, and dip it through the layer of nail varnish into the water.



STEP 5:

After a second or so, slowly lift the pebble from the water, and hold it above the surface for the water to drip off.



Top Tip: The varnish film should stick to the pebble leaving the water clear

MARBLED PEBBLES

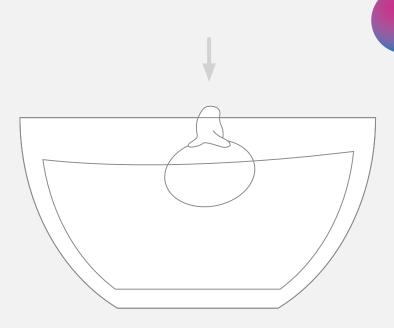


STEP 6:

Turn over the pebble and push the other end of the putty onto a surface to dry. Try again with another pebble.







What's the science?

Nail varnish is less dense than water, which is why it floats on the surface rather than dissolving. The two substances – water and varnish – are immiscible which means un-mixable. Nail varnish contains three main ingredients: a pigment which gives it the colour, film-forming molecules which means it can dry into a hard protective film, and a solvent – a liquid into which all other ingredients dissolve. The solvent evaporates quickly into the air, giving nail varnish its smell and allowing it to dry quickly.

When you see news of oil spills in the ocean the same thing is happening. When large ships carrying crude oil spill some, the oil floats on the ocean's surface. The oil sticks to the feathers of seabirds who dive through it, and turtles, whales and fish who swim up the surface.











