



**MORLEY  
VICTORIA**

★ Encouragement ★ Enjoyment ★ Success ★ Effort ★

# OUTDOOR SCIENCE

Whilst we are all at home, here are some great science experiments that can be done outside. Each experiment has a link attached (if necessary) for you to see a full explanation of how to carry out the enquiry. If you give any of them a try please post pictures to our twitter page – we would love to see!

- 1) Heart rate experiment – take your resting pulse rate, then do low impact (walking), medium impact (jogging) and high impact (sprinting) exercise and take your pulse after each one. Compare pulse rates and discuss why this happens.
- 2) Bug hunt – head up into the garden area and see how many different bugs you can identify. Extend this by creating classification keys for the animals you have found.
- 3) Find the best soap bubble solution – children to experiment using different ratios of washing up liquid to water and use pipe cleaners to create bubbles. When they have found the best option can they then create something to make the biggest bubble. <https://www.scholastic.com/parents/school-success/learning-toolkit-blog/get-outside-to-make-giant-dish-soap-bubbles.html>
- 4) Create a catapult to launch ping pong balls the furthest. <https://buggyandbuddy.com/science-kids-launching-ping-pong-ball-snowmen/>
- 5) Nature Bingo – can children spot a variety of things around the school site?
- 6) Parachutes – children experiment with different materials to find the best parachute for a toy. Challenge them by asking them to find a way to measure

which is the best. <https://inspirationlaboratories.com/how-to-make-a-parachute/>

- 7) Diet coke and mentos — drop a mentos into a bottle of diet coke and watch what happens.
- 8) Solar ovens - <https://desertchica.com/diy-solar-oven-smores-kids-science-experiment/>
- 9) Leaf transpiration experiment - <https://teachbesideme.com/leaf-transpiration-experiment/>
- 10) Human sundials - <https://www.scholastic.com/teachers/blog-posts/genia-connell/interactive-science-human-sundial/>
- 11) Explode plastic bags - <https://kidsactivitiesblog.com/87040/exploding-baggies-science-experiment-for-kids/>
- 12) DIY boats powered by baking soda and vinegar - <https://www.theottoolbox.com/baking-soda-vinegar-powered-boat-ste/>
- 13) Egg drop — challenge children to create a container to protect an egg from a drop. Test them out.
- 14) Making slime (this can be messy!) - <https://momypoppins.com/new-york-city-kids/crafts-recipes/simple-slime-recipes>
- 15) Make invisible ink and write secret agent notes - <https://momypoppins.com/kids/boredom-busters/how-to-make-invisible-ink>
- 16) Making a walking rainbow - <https://momypoppins.com/boredom-busters/science-experiments-at-home-make-a-walking-water-rainbow-with-kids>
- 17) Ice cream in a bag - <https://science.howstuffworks.com/innovation/edible-innovations/ice-cream3.htm>
- 18) Create the best paper airplane — look at factors such as air resistance and weight to help. There are so many youtube videos to follow.

- 19) Centrifugal force - <http://suzyhomeschooler.com/saturday-science-centrifugal-force/>.
- 20) Erupting moon rocks - <http://www.learnplayimagine.com/2014/06/erupting-moon-rocks.html>
- 21) Chromatography - <https://buggyandbuddy.com/chromatography-butterflies-separating-colors-in-markers/>
- 22) Lava lamps - [https://slsmithphotography.typepad.com/my\\_weblog/2010/06/lava-lamps-summer-fun.html](https://slsmithphotography.typepad.com/my_weblog/2010/06/lava-lamps-summer-fun.html)
- 23) Leak proof bag - <https://www.stevespanglerscience.com/lab/experiments/leak-proof-bag/>
- 24) Melting ice with salt - <https://artfulparent.com/melting-ice-science-experiment-with-salt-liquid-watercolors/>
- 25) Create a wind turbine - <https://www.sustainablelearning.com/resource/build-your-own-wind-turbine>