Half-term Home Learning Challenge

Super Science



Activities to keep your little ones busy and learning all through the half-term break!

Invisible Ink

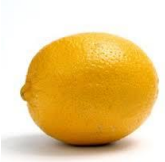


This activity will get even the most reluctant of mark makers eager to put pen to paper. Best of all, you only need one ingredient-lemon juice! You can extend the activity further by using fresh lemons and encouraging your child to cut and squeeze their own juice (which is amazing for building strength in the hands!), or bottled juice works just as well.

Pour some juice into a cup-it doesn't have to be a lot. Then your child can use either a cotton bud or a paintbrush, dipping it into the lemon juice and then painting it onto their page. Some children can make a series of marks, practising their gross motor skills by making lines and circles, while other children might want to think about practising letters or numerals. When your child is satisfied with their work, pop the sheet of paper under a hot grill for 1-2 minutes, then take it out and have a look. The lemon juice should have browned, revealing the work that they created!



This activity is so helpful for young learners for so many reasons. Firstly, in terms of physical development, it not only lets them develop both gross and fine motor skills through holding the writing tool and the shapes that they create, but also links into health and self-care as children are given opportunities to manage risk (the grill under adult supervision). It also has clear benefits for writing and reading skills, and can link to maths if they are encouraged to create 2D shapes or numerals. It also has good science links as it can be a platform to discuss reversible and irreversible changes-will this lemon juice ever be able to go back to how it was? You might want to think about doing a freezing and melting activity alongside this one to help children understand that while some things can change back to their original state, others can't. Finally, it links to Expressive Arts and Design as children can use the activity to create their own pictures. Best of all, the activity is so open-ended and has so many possibilities that your child will be busy for hours!



Gloop-Changing States



One activity guaranteed to keep children entertained for hours is gloop-a mixture of cornflour and water. Gloop is so mesmerising because it is able to display the properties of both solid and liquid. When at rest, gloop looks and behaves just like a liquid, but when you pick it up between your fingers and exert force on it, it retains its new shape and behaves like a solid until this force is released. Then it reverts back to its liquid state. Gloop is so quick and easy to make too-just mix 3 cups of cornflour with 1 ½ cups of water and a few drops of food colouring, and let the fun commence!

Dancing Raisins

A final investigation is the classic dancing raisins experiment. All you need is a handful of raisins (make sure they're separated as the magic won't work if they are stuck together!) and some clear soda (club soda, lemonade etc). Fill a cup with water and then drop the raisins in, getting your child to predict if they will sink or float. Then watch! It may take a few minutes, but soon the raisins should begin floating up and down, a bit like the lava in a lava lamp. Children will watch this for hours, amazed at what is going on. You may wish to extend this by using different kinds of soda and investigating which soda produces the best/longest results. Less confident learners may also appreciate a more simple sink or float activity, investigating household objects and seeing which float in a tank of water and which sink to the bottom.

