

Home Learning Challenge-Super Science Experiments

For this Home Learning challenge, we would like to encourage you and your little one to become real Scientists and have a go at some different Science experiments! All experiments have been taken from British Science Week publications and are aimed at children in the Early Years. Happy experimenting!

Wavy Wax Painting-Turning Wax into Paint!

This is a fun activity that will keep children entertained for hours. For this activity, you will need:

- Wax crayons in different colours
- Plastic food bags and a rolling pin or pestle
- Heavy paper - sugar or cartridge paper
- Greaseproof paper
- Hairdryer
- Glue sticks and paint brushes



Make a collection of broken wax crayons. Ask your the children to separate them into colours. Using the wax crayons pieces, ask your child to draw shapes on a sheet of A3 paper - sugar paper or cartridge paper is best. Use a different colour for each shape. Crush the wax crayon pieces - put each colour into a separate plastic bag and bash with a rolling pin of a pestle until you have a bag or coloured wax 'crumbs' (this is a job best done by the adult). Empty the wax crumbs into bowls. The children should then sprinkle the crumbs on their drawings, filling in the shapes with the right colour. Melt the wax. Either leave the drawings in a warm, sunny spot or on a warm radiator and wait for the wax to melt and soften, or place a piece of greaseproof paper over each drawing, and gently heat the drawings with a hairdryer until the wax melts. (Adults will need to do this.) When the wax melts slightly, the children can use glue spreaders and brushes to make marks in the wax. As the wax starts to solidify they can warm their paper again and watch what happens. Think and talk about Where could we leave our pictures to melt the wax? How does the wax change when it gets warm? What does it do on the paper? What happens if the colours run into each other?

Edible Architecture!

This is a fun way and tasty way to encourage your child to think about different shapes and how we can manipulate and combine them to create familiar models. You will need:

- Different shaped biscuits and/ or crackers, wafers
- Dark chocolate
- Bowl, water and saucepan
- Baking paper
- Cooker/microwave



Make the edible cement by melting some small pieces of chocolate in a 'bain-marie' (a bowl on top of a pan of boiling water) or microwave. (An adult should do this.) Use the melted chocolate like glue. When the chocolate goes hard, it will stick the biscuits together. Make some edible biscuit buildings with multiple floors or even a roof! With chocolate stick biscuits you can build thin shapes. Pile up wafers like wooden blocks. Build a strong floor by sticking together two layers of rich tea biscuits. Construct strong posts by filling a biscuit hole with 'choco' cement and sticking in a round wafer. Thin crackers make good, strong roofs. When you get bored, pretend to be a giant and eat your biscuit buildings. Think and talk about :What did you build? What shapes of biscuits/ crackers/wafers are good for the roof? Floors? Why did you use this biscuit for this part of your building?

Magic Milk!

Drawing on the magic of soap, dancing milk can demonstrate to children how different substances can react to each other. Plus, the wonder of the movement in the tray will have all the children entranced! For this activity you will need:

- A shallow dish or tray (foil trays are fine)
- Food colouring
- Milk
- Toothpicks
- Soap

You'll need a shallow dish, such as an empty pie dish or baking tray. Submerge the bottom by pouring room temperature milk into it. Add a few blobs of food colouring (the children can do this part)

and then hand each child a toothpick dipped in dish soap - and watch the colours dance!

