



# Orchard Lea Nursery AND PRE-SCHOOL



## Let's go mad about science

Lots of children are keen scientists and show great curiosity in making things happen. Science provides children with lots of opportunities to develop and practice many skills and makes them think critically, work as a team and get involved in reasoning and problem solving.

Here are a few lovely simple science experiments you can do at home by using lots of items you may already have lying around the house.

### Skittles experiment



This activity involves simple chemistry and shows what happens with dissolving solids. This is a great way to explore colour and science all in one. First place skittles around the edge of a plate or bowl, ensuring they are not touching and create whatever pattern you would like with the different colours. When you have evenly spaced them out around the plate, gradually pour a little bit of warm water into the centre of the plate, ensuring the water spreads evenly around the plate. Now it is time to sit and watch as the skittles begin to react and dissolve in the water creating great patterns as their colours spread across the plate.

### Bubble snakes



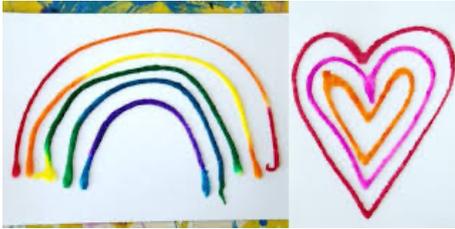
This is a fun activity for those who love bubbles and creates great shapes. All you need is a plastic bottle, an odd sock and a shallow container filled with bubble solution or a bubble mixture used with washing up liquid. First cut off the bottom end of the plastic bottle, then get your sock and place and pull up the sock all the way up the bottle. Simply dip the sock covered end of the bottle into the mixture and blow gently at the top end of the bottle. Watch as you begin to make your very own bubble snakes. You can experiment more and add food colouring to your mixture so you can create different coloured bubble snakes.

### Erupting Volcano



This is a great simple activity to explore cause and effect. You will need a plastic cup or bottle, baking soda, food colouring or paint and white vinegar. First place your cup or bottle inside a tray or on a plate. Then pour the baking soda and a few drops of colouring into the bottle. Gradually pour vinegar in and watch as the volcano begins to erupt. This is a great way for children to explore making things happen. You can also mix up the colours to make it more fun and interesting. This can be done as a separate activity or can be added to a small world tray/ village set up for your children to use their imagination in pretend play.

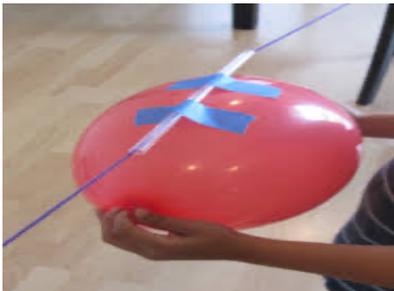
### Salt painting



This is a fun way to combine art and science. Children can create different patterns and watch their picture change. First draw your pattern with a pencil onto a piece of paper. Then gradually using pva glue, spread it on your entire pattern. Gently sprinkle salt onto the paper, covering the whole pattern. Shake off the extra salt. Using a small selection of cups or bowls you can mix up different colours using

food colour or water paints. When your picture is ready, gently use a spoon or pipette, dip it into the different colours in turn and begin to pour it over sections of your picture. Using different colours, you will see the colours spread and your picture and pattern will be created. You can make a range of patterns or you can even write your name and watch it change as you add colour. This activity allows you to explore a chemical reaction when the salt absorbs and soaks up the water and colouring.

### **Balloon rocket**



This is a great activity for those children who show an interest in aeroplanes, rockets and making things happen.

First get a long piece of string, secure one end to a wall or pole using tape, leaving the other end loose. Blow up the balloon and hold the end to avoid the air escaping. Tape a straw to the balloon. Gently thread the string through the straw and when you are ready let go of the balloon and watch it as it zooms along the string like a rocket.



### **Slime**

Lots of children show a great interest and are fascinated by slime. There are lots of different slime recipes you can make, creating different consistencies and textures. Below is one of the simple slime recipes that is easy to make, and your children will enjoy squeezing, squishing and rolling and using it in different ways. For this recipe you will need: PVA glue, contact lens solution and shaving foam. First, pour the pva glue into a pot or mixing bowl and gradually add some shaving foam and a few drops of

contact lens solution. Keep mixing the ingredients until it forms together and creates a wanted texture to be able to squeeze, squish and throw onto a surface without it sticking.

You can add colouring into your mixture to create different coloured slime. Slime provides lots of simple fun and entertainment.

We hope you have fun exploring these science experiments. We look forward to seeing pictures and videos of you experimenting with different media and materials and exploring the world around you.

**Have fun and stay safe**