



Seaside's Science Spot

Try some of these science experiments, projects or activities at home this half-term. The aim of these activities is to allow you and your child/children to engage with fun, but simple activities at home that will promote their excitement and interest in this subject.

Each half-term we will update Seaside's Science Spot with a range of different activities to try at home. Most of these activities will require adult supervision, but this is an excellent opportunity for you to engage with your child's science learning beyond the classroom. We have included some information on the science behind each activity that you could also discuss.

We would love to see some photos or short videos of the science learning you have been getting involved in at home so we can share this on the school website. Please send any photos or videos to:

schooladmin@seasideprimary.co.uk – FAO Mr Nicholas

Please note, by sending photos or videos to the above address, you are giving your permission for the school to use these on the school website.

Activity 1: Bouncy Custard Balls

You will need:

- Custard powder
- White PVA glue
- Water
- Borax
- Food colouring
- Plastic teaspoon
- A tablespoon
- 2 plastic cups



Method:

1. In one plastic cup make up a borax solution by adding half a teaspoon of borax to two tablespoons of water and stir until dissolved.
2. Pour one tablespoon of PVA glue into the other plastic cup. (Add food colouring if you would like).
3. Add 2 teaspoons of custard powder to the PVA glue. Stir everything together.
4. Add one teaspoon of borax solution to the glue mixture. Stir well until the mixture becomes stiff. Knead the solution until it becomes elastic.
5. Roll the mixture into a ball and bounce it.

What if it's...?

Too brittle? Too much borax.

Too soft and does not stretch? Not enough borax.

Too dry? Add more water.

Too wet? Add more custard powder.

Activity 2: Cupid's Arrow

You will need:

- A saucer
- Milk
- Talcum powder
- Strawberry milkshake powder or other coloured powder
- Washing up liquid
- Cocktail stick
- Cardboard
- A pen
- Scissors



Method:

1. Pour enough milk on a saucer to cover the base.
2. On the cardboard draw a heart shape which is smaller than the saucer.
3. Make a hole in the middle of the heart shape and cut it out so that there is a heart shaped hole in the middle of the cardboard.
4. Gently sprinkle talcum powder on top of the milk to form a thin layer.
5. Make a small amount of solution of washing liquid with a little water.
6. Place the cardboard template over the saucer of milk so that the heart shape is in the middle.
7. Sprinkle a little milkshake powder to form a heart on the surface of the talcum powder.
8. Quickly take a cocktail stick and dip it into the washing up liquid solution.

What's the Science?

Initially the powders are held up by the surface tension of the milk.

Water molecules stick to each other to form a 'skin' on the surface which is strong enough to support the thin layer of powder.

When the washing up liquid solution is added it quickly spreads across the surface of milk in a thin layer. This detergent breaks up the closely-packed water molecules and reduces the surface tension allowing the powders to fall.

As it spreads across the surface it drives the powders in front of it so the heart shape appears to explode outwards.

Activity 3: Feeling the pressure

You will need:

- A balloon
- A narrow-mouthed jar
- String or an elastic band
- A straw
- A pin or toothpick
- A piece of card
- Some glue
- Scissors



Method:

1. Cut the balloon to give you a flat-ish piece of rubber.
2. Stretch this over the neck of a jar and fasten with strong or elastic band.
3. Glue the straw to the centre of the piece of rubber, that that it points out horizontally beyond the edge of the jar.
4. Attach the pin or toothpick to the other end of the straw.
5. Now position your card so that the pointer is just in front of it. You can then draw marks on the card to record the highs and lows of the pointer...
6. Over the next few days and weeks, you should see the pointer moving up and down and this should, in theory, correspond to the weather heading your way. When the pointer's high, look out for nice weather. When the pointer is falling, take an umbrella!

What's the Science?

In periods of atmospheric high pressure, the balloon skin will curve into the bottle slightly, as there's more pressure outside the bottle than inside. This will make the pointer point higher.
During low pressure, the balloon skin will bulge slightly outwards, with the opposite effect.