

Fireworks in a Jar

A fun and exciting activity to create your own fireworks and learn about properties of different liquids.

You will need:

- Jar
- Bowl
- Fork
- Tablespoon
- Cooking oil
- Warm water
- Food colouring (red, yellow, blue, green)

Making the activity:

- Fill the jar three-quarters full with warm water and place the lid on.
- In a separate bowl, add three tablespoons of cooking oil and four drops of food colouring together.
- Use a fork to gently mix the cooking oil and the food colouring together.
- Don't forget to use open ended questions like: *what do you think will happen when the oil mixture is poured into the water?*
- Gently pour the oil mixture into the jar and observe what happens.

How this develops early scientific learning:

Creating your own fireworks in a jar will enable your little one to explore and observe the properties of different liquids when mixed together. The food colouring will slowly sink out of the cooking oil and into the water because it is heavier than the oil. When this happens, it will expand and begin to mix with the other colours which will then look like a tiny 'explosion of fireworks'.

You could also try using a variety of different food colourings to see what different patterns and effects you can make. Or why not try using a tray to mix the oil and the water together and look at the marbling pattern that is created. You could then make a picture of this by placing a sheet of paper on top and then slowly lifting it off.

KEY QUESTIONS -

- What do you think will happen? Why?*
- What happened to the oil?*
- Why do you think that happened?*
- What do you notice about the colours?*

Keeping Everyone Safe

Always take care when handling the glass jar



Growing Scientists



This is not the only way to make beautiful fireworks...

Why not try putting a drop of food colouring or ink on a piece of paper and using a straw to blow it in different directions. The outcome will look very similar to a firework explosion.

Expand on this idea by layering colours on top of each other leaving time for drying inbetween.

Pop a picture of your masterpiece below:

