



# DINO'S DYNAMOS Experiment

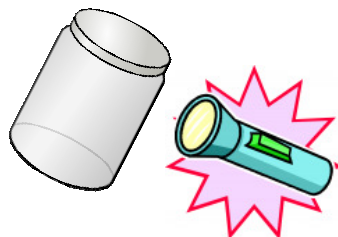
## Why is the Sky Blue?

On a nice sunny day the sky looks bright blue and in the evening a sunset can make the sky blush red, pink and orange. Carry out this experiment to find out why .



### What you need:

- A large clear glass jar or vase
- Water
- Teaspoon of powdered milk
- A torch

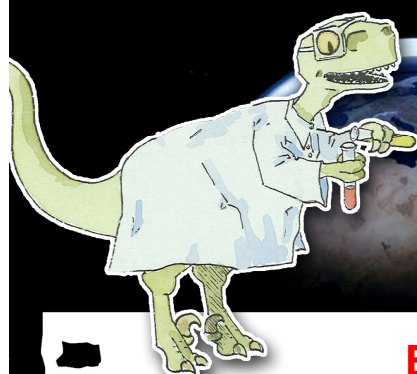


**Step 1** Fill the jar with water.

**Step 2** Add the powdered milk to the water and mix.

**Step 3** Take the jar into a dark room and shine the torch down on the water from above. It should appear blue.

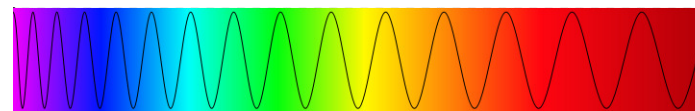
**Step 4** Place the torch beside the jar so the light is shining through it. Walk to the other end of the room and look through the water. It will now appear pink and orange.



# DINO'S DYNAMOS Experiment

## Explain the Experiment

The sun creates light that is made up of all the colours of the rainbow - red, orange, yellow, green, blue, indigo and violet. When mixed together, these look white. Light is a wave and each colour has a different wavelength. Violet, indigo and blue light have short waves while red, orange and yellow have longer waves.



When the sun's white light shines through Earth's atmosphere, it bounces off gases in our atmosphere. These gases scatter the waves of different coloured light. The blue light is scattered more because it has a shorter wave length so we see blue more than any other colour.

When the sun is on the horizon, the blue waves are scattered too much because they have a longer distance to travel. This means you see the red and orange waves which makes a pretty sunset.

