

Light and Colour

Turn white light red

Materials:

- ◆ a clear glass jar or bowl filled with water
- ◆ a torch
- ◆ milk



What to do:

- ◆ Darken the room and shine the torch beam through the jar/bowl of water. The light on the other side of the jar should appear white.
- ◆ Slowly pour a thin stream of milk into the water until the light turns a dark orange, the colour of the sun setting on the horizon.

Explanation:

As the sun sets, the gas molecules, dust particles and pollutants in the atmosphere on the horizon scatter the light particles so it appears a different colour. The milk has the same effect on the light from the torch.

At Pentecost, the children might like to walk beneath the red light to create the illusion of fire on their heads.

A milky rainbow

This relates to Pentecost only in a general way – the rainbow is sometimes used as a symbol of the Holy Spirit – but I like it so much I couldn't resist including it! Ed.

Materials:

- ◆ milk
- ◆ water
- ◆ a saucer or shallow dish
- ◆ several different colours of food colouring
- ◆ liquid dishwashing detergent



Method:

- ◆ Cover the bottom of the saucer or dish with milk.
- ◆ Add 4 to 8 drops of the different coloured food colouring, in different areas of the milk.
- ◆ Add 1 drop of detergent to the milk.
- ◆ The food colouring should begin to mix and swirl around.

Explanation:

The fatty oily molecules in the milk don't combine with the watery food colouring. Once the detergent is added the oily molecules break up and the food colouring can spread and move around.

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