

# Light Bubbles

STEM Activity



# Lines of Light

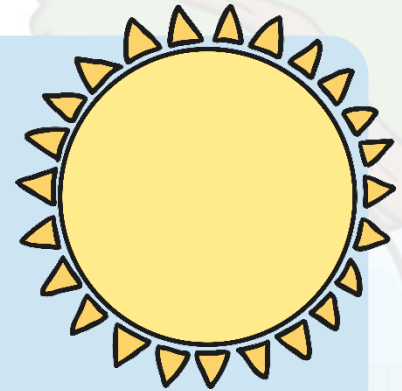
Light travels in **straight lines** and it travels **very fast**.



Whenever you see a light source (like the sun) the light from that source has travelled really fast in a straight line to get to your eyes.

Here, your brain makes sense of the light it sees and gives it colour.

The light can travel so fast because it travels in straight lines.



If you switched the classroom lights on, you would have to wait for the light to reach your eyes before you could see, as it would take longer to get there!

Sometimes you can bend light.

When you bend the light, the effects of this are really cool to see.

**Let's  
find out  
more...**

# What You Need



- Small **clear** plastic lid (e.g. from yoghurt container)
- Tape
- A torch
- Washing-up liquid
- Water
- Measuring jug
- Spoon
- Straw
- A darkened room

# What to Do

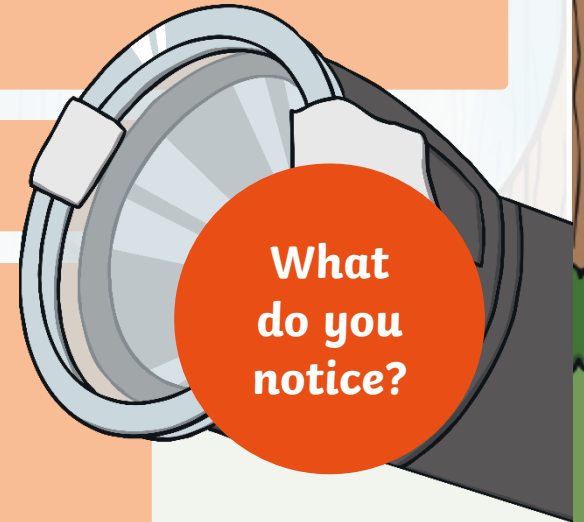
**1** Mix 2 or 3 drops of washing-up liquid in 200ml water. (You may wish to add more or less to make the best bubble mixture!)

**2** Tape the plastic lid onto the end of the torch.

**3** Put a spoonful of the bubble liquid on the lid.

**4** With a straw dipped into the bubble liquid on the lid, try to blow one big bubble that covers the whole lid.

**5** Hold the torch so that the bubble dome is just above your eyebrows.



**What  
do you  
notice?**

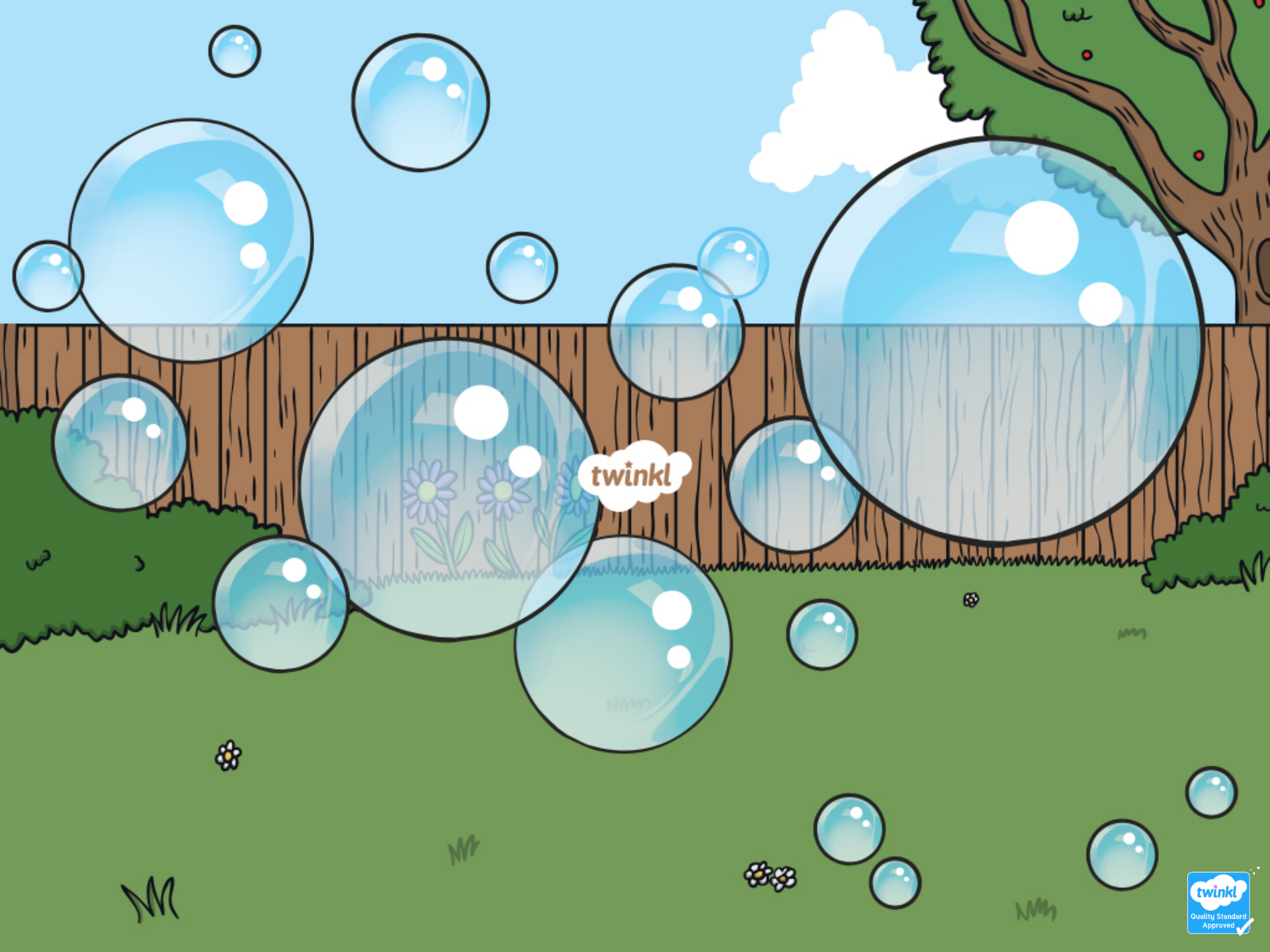
# Here's What's Happening...

The light is travelling in straight lines until it reaches the bubble on top of the clear lid.

At this point, the bubble interferes with the light and causes it to become distorted (put out of shape).

This interference causes the swirling and colours to appear.





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