

DO ~~NOT~~ TRY THIS AT HOME

The Light Collection

What you need: • a large clear, straight-sided glass
• water • milk • teaspoon • torch • darkened room

Do you want to see my homemade sunset?

Fill the glass about $\frac{2}{3}$ full of water...

... add half a teaspoon of milk...

... and stir.



In a darkened room, shine the torch down onto the top of the water whilst looking through the side of the glass. Can you see the blue colour?

Then try shining the torch through the side of the glass whilst looking through the opposite side. What colours can you see now?

Finally, shine the torch up through the bottom of the glass and peer down through the water. What a lovely sunset!

The milk particles in the water scatter the light from the torch like dust and molecules in the atmosphere scatter light from the sun. The further the light has to travel through the water, the more of the blue light has been scattered, leaving only red light for you to see. Just like at sunset.

