

HOW DO RAINBOWS FORM?



How do rainbows form?

Did you know the light around us (white light) is made up of all the colours of the rainbow?

Red, orange, yellow, green, blue, indigo and violet

Rainbows form when sunlight is refracted and dispersed in drops of rain or mist. Sunlight slows down as it moves from the air into a raindrop (as water is denser than air). The light reflects off the inside of the water droplet and is split up into its component colours because of their different wavelengths.

You'll need

Sunny day
Spray water bottle or hosepipe



Instructions

If you have a spray bottle or hosepipe that can make a fine mist of water, you can make a rainbow on a sunny day.

Stand with your back to the sun and spray the hosepipe into the air. You might have to move it around to find the best angle for a rainbow.



What is Refraction?

Refraction occurs when light bends as it passes through a transparent material, such as glass, prisms, or raindrops.

