

Have you ever seen a rainbow?

Rainbows are awesome, colorful arcs in the sky. They look real, but they are actually an optical illusion. As it rains, the air is full of water droplets. If the sun shines on these droplets, a rainbow will appear.

To see a rainbow, you have to be standing with the Sun behind you.

Light is made up of many colors. When sunlight travels from the air into a water droplet, it slows down and bends. The bending separates the colors and makes them visible.

Each color bends a little differently. This is why the colors in a rainbow always appear in the same order: red, orange, yellow, green, blue, indigo, violet.

Without rain, we wouldn't have rainbows!

Have you ever tried to find the end of a rainbow? It's impossible! A rainbow will always be the same distance away from you, no matter how fast you run toward it!

Some rainbows are actually complete circles. You have to be really high up to see the whole thing, though.