



## Facts About Light

Light is amazing. Without it, we wouldn't be able to navigate the world around us. Humans have developed to depend almost entirely on sight to explore and understand what is going on in our world. However, light isn't as simple as it might seem - in fact, there are some pretty amazing facts that might just "light up" your understanding!

### **You can't really see objects**

When you look at something in front of you, you don't technically see the object. What your eyes detect is light bouncing back off the object and hitting the retina at the back of your eye. If scientists ever develop a material that doesn't reflect a single speck of light, then that object would effectively be invisible!

### **We rely on the sun**

Even though humans have flooded the Earth with man-made light, our main source of light is still the sun. It takes the light from the sun around 8 minutes to reach us, over a distance of around 93 million miles. The light from the sun appears white to our eyes but is made up of the seven colours of the rainbow. This is why we see them when sunlight hits raindrops in the air. It is reflected into the separate colours, and forms a rainbow.

### **Light is quick, but not instant**

Light has to travel, which means it takes time to get somewhere. Light travels at 300,000 kilometres per second, which makes it the fastest thing in the universe. On Earth, things are so close that light seems to appear instantaneously, but over greater distances, it takes its time. One of the closest stars to Earth is Sirius, and light takes four years to travel to us. From more distant stars, it takes even longer. So, when you look up at a night sky and see the stars, you are actually seeing the light of stars as they were hundreds of years ago. Some of the stars may not even be there anymore, but we won't see them blink out until their last rays of light reach us. You are literally looking backwards in time!

