

A Simple Slice of Science asks...

Why is the sky blue?



1

Why is the sky Blue?

To understand why the sky is blue we need to take a look at what light is and how it works

2

What is light?

Light is a type of energy called "Electromagnetic" (EM) radiation. When we see light we see it in straight lines called rays but light actually travels in waves.

The size of a wave of light determines its colour. Light with longer wavelengths appear as reds and oranges, shorter wavelength light appears blue or violet.

We see Sunlight as white light but it is

3

The Earth's atmosphere is made up of tiny molecules of gas such as nitrogen and oxygen as well as tiny bits of dust, smoke, sea salt and tiny droplets of water.

When sunlight travels through the atmosphere some of the light hits off the molecules and tiny particles and is scattered in all directions. Blue light gets scattered a lot more easily than light of longer wavelengths so we see the sky as blue.

So then why is the sunset red?

The light from the setting Sun has to travel a greater distance to our eyes.

