

Video transcript for 'Day and night'

Seymour: Hello, Seymour Science here! As we all know, sometimes it's day... and sometimes it's night... but why do we have day & night? My guest today is here to tell us! Ladies and Gentlemen... Rosie!

Rosie: Thanks Seymour! Many of us live in villages, towns or cities... but these are all part of one big place that we call... Planet Earth! Earth is lit up by the Sun —

Seymour: which is a star!

Rosie: That's right. There are billions of other stars similar to the Sun, most are even bigger... they're just much further away, so look really small. Our planet spins on an invisible line — called 'an axis'. Half of the Earth is always facing the Sun, meaning it is lit up. The other half is in darkness until the planet turns around. That's why we have day and night!

Seymour: The Sun keeps us warm too, right?

Rosie: That's right! The Sun is a HUGE ball of gas, MUCH bigger than Earth, and

the gas is exploding all the time, so it gets very hot and very bright.

Seymour: But what about the moon?

Rosie: The moon can look bright too— but that's because sunlight bounces off it, helping us see at night!

Seymour: Now for the really clever stuff!

Rosie: The Earth takes one day to completely spin around...and it takes about a month for the moon to go all the way around the Earth in a circle,

Seymour: we call this an orbit!

Rosie: and then it take a whole year for both of them to go all the way around the Sun. So this is how we measure days, and months and years.

Seymour: Like I said... clever!

Mum: I hope you two aren't making a mess up there!

Seymour: Ooh, got to go!