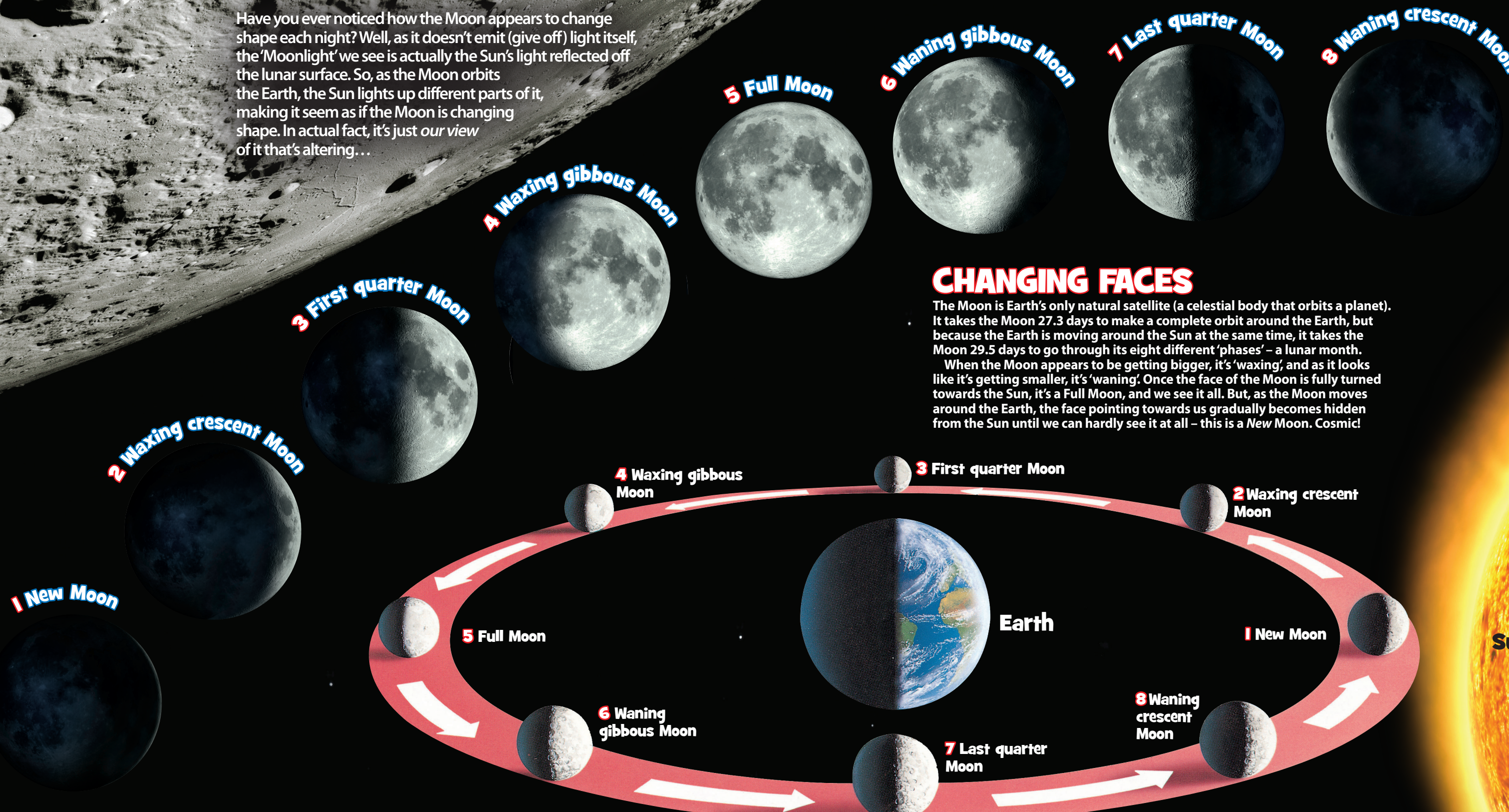


The phases of the MOON

Have you ever noticed how the Moon appears to change shape each night? Well, as it doesn't emit (give off) light itself, the 'Moonlight' we see is actually the Sun's light reflected off the lunar surface. So, as the Moon orbits the Earth, the Sun lights up different parts of it, making it seem as if the Moon is changing shape. In actual fact, it's just *our view* of it that's altering...



CHANGING FACES

The Moon is Earth's only natural satellite (a celestial body that orbits a planet). It takes the Moon 27.3 days to make a complete orbit around the Earth, but because the Earth is moving around the Sun at the same time, it takes the Moon 29.5 days to go through its eight different 'phases' – a lunar month. When the Moon appears to be getting bigger, it's 'waxing', and as it looks like it's getting smaller, it's 'waning'. Once the face of the Moon is fully turned towards the Sun, it's a Full Moon, and we see it all. But, as the Moon moves around the Earth, the face pointing towards us gradually becomes hidden from the Sun until we can hardly see it at all – this is a New Moon. Cosmic!

Top tip Keep an eye on the Moon this month and see if you can spot all eight phases.