

An abstract painting with a dark, textured upper half in shades of black and dark brown. Below this is a horizontal band of vibrant green and yellow, suggesting a horizon or a distant landscape. The bottom half of the image is dominated by swirling, expressive brushstrokes in various shades of blue, teal, and white, creating a sense of movement and depth, possibly representing water or a celestial body.

David A. Rothery

MOONS

A Very Short Introduction

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Moons: A Very Short Introduction

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David A. Rothery

MOONS

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Chapter 1

The discovery and significance of moons

It would be meaningless to write about the discovery of our moon, the one that goes round the Earth—‘the Moon’, as I shall call it from now on because that’s its name. The Moon is almost as obvious as the Sun. Clouds permitting, we can see it in the evening sky nearly half the time. If we are awake early, there it is in the pre-dawn sky most of the rest of the time. It can often be spotted in daylight too.

Humans have been well aware of the Moon for as far back as records go, but surely before then too because the Moon must often have been a welcome source of illumination at night. Possibly the oldest Moon-related artefacts are 30,000-year-old bone plates engraved with dots or lines, thought by some to be a way of keeping track of the Moon’s phases, as it swells from new to full and then shrinks back from full to new on its 29.5-day cycle. The Moon’s appearance changes in this way because its orbit carries it round the Earth, continually changing its position in the sky relative to the Sun so that the amount of the illuminated hemisphere we can see changes too.

It would be equally meaningless to try to pin down who first realized that the Moon goes round the Earth. To most ancient peoples it must have seemed pretty obvious that *all* the heavenly bodies go round the Earth. In fact that’s wrong, and the Moon is