

# 6.0

## THRESHOLD 6 HUMANS AND COLLECTIVE LEARNING

**0:12–1:11** The first living organisms appeared on Earth at least 3.5 billion years ago. To us they would have seemed tiny and insignificant, yet they were extraordinarily complex compared to anything else that had ever existed. Over the next 3.5 billion years they would diversify and evolve.

### OUR ANCESTORS

About 600 million years ago, some started to combine. Over time, they formed multicellular organisms like trees, mushrooms, frogs, dinosaurs, or even the first small mammals, which probably looked a bit like mice.

When the dinosaurs were wiped out by an asteroid, mammals prospered, evolving into a great range of new species. One group lived in trees and ate fruit.

They had hands, stereoscopic vision and unusually large brains. These were our ancestors, the primates.

Our own species, *Homo sapiens*, evolved about 200,000 years ago. Now, we treat the appearance of humans as a new threshold because we would eventually create entirely new forms of complexity.

**1:11–1:53**

### HOMO SAPIENS

Today, we have become the most important force for change on the Earth's surface. We are the first species in 3.5 billion years that has had such power.

What makes us so different? For this threshold, powerful brains are one ingredient, but it's not just a matter of brains. Many other brainy species exist. They include dolphins and chimpanzees and crows.

The other critical ingredient was the development of symbolic language. This enabled humans to share their ideas with each other very efficiently. Human communities grew and interacted, creating the perfect conditions for something new, the ability to learn collectively instead of just as individuals. Ideas and knowledge accumulated generation after generation, and human technologies became more and more powerful.

**1:53–2:34**

### COLLECTIVE LEARNING

As knowledge accumulated over time, our control of resources and the environment increased and accelerated, leading humans towards two new thresholds that would have a huge impact on our planet.