



Talk

Talk about the oldest organisms on Earth.

The longest living organisms

Trees are the longest living organisms among animals and plants.

Pando or the Trembling Giantis is a clonal colony of aspens, considered to be a single living organism with one massive underground root system. The root system of the Pando is, at an estimated 80,000 years old, the oldest known living organism. The Pando is located in South-Central Utah, USA.



The Methuselah tree (*Pinus longaeva*) is the oldest single living organism on Earth. It dates back to the time of the pyramids. This species of coniferous tree appears in western parts of North America. The name Methuselah refers to the biblical grandfather of Noah, the oldest person ever to walk the Earth; the tree grows in the White Mountains in California.

This is the tree that will feature in the film that the students will see later in the lesson.



Dinosaurs appeared around 237 million years ago. They were the dominant terrestrial vertebrate for 135 million years. They disappeared 66 million years ago. Birds evolved from dinosaurs and are therefore regarded as their descendants.



Talk

Talk about the film

The oldest trees

The oldest living trees in the world date back to the times **when the pyramids in Egypt were being built** (around 4700 years ago). Methuselah, the oldest tree in the world, is **4600 years old**. However, dinosaurs disappeared much earlier (around **66 million years ago**) Fossils found in different parts of our planet indicate that the first trees appeared almost **400 million years ago**, and thus were here before the dinosaurs (approximately 237 million years ago), although none of these old trees have survived until today.

History recorded in a tree

Trees are constantly growing. If we look at a tree stump we can see what are called its annual growth increments, also known as growth rings. By examining these growth increments we can determine the conditions prevailing in a given area at a specific time. For example, in fertile years the tree grows more and the ring is therefore wider.