HADEAN AGE

- 4.6 to 4 BILLION YEARS AGO

We've travelled back about 4.6 billion years before the present day. The Earth is very young and extremely hot. All around us is an ocean of magma — the boiling, fluid rock that we can still see today as lava. The atmosphere is dense, almost yellowish, and a continuous burst of meteorites bombards the planet. Welcome to hell! This is the first eon (or geological time) of Earth's history, and it is aptly named after Hades, the god of the underworld. Millions of years go by and the Earth starts to stabilize and cool down. It is covered by water, with the first oceans appearing. They occupy almost the entire globe. The moon can also be seen, but it is much closer to Earth than nowadays. So close, in fact, that its gravity causes enormous tides that make the entire planet appear to swell.

PARTIE COLLÉE

ARCHEAN AGE

- 4 to 2.5 BILLION YEARS AGO

Time moves on, and we're now at 4 billion years ago, when the first living organisms appear on Earth. At between 40 and 85 °C (104 and 185 °F), the planet is still scalding hot. Nevertheless, life begins to develop in the form of single-celled prokaryotes, also known as bacteria. Strange rocks emerge out of the water. They are called stromatolites, formations of chalk-laden rock created by the bacteria. Throughout all this time, lands form from large plateaus of lava and volcanoes, which join together to create the very first continents.


STROMATOLITES

PROTEROZOIC AGE

- 2.5 BILLION to 540 MILLION YEARS AGO

Earth has frozen over – scientists now call it Snowball Earth. Its surface is frozen solid like an ice desert, due to prolonged and extreme episodes of cold – episodes including the Huronian and Varanger glaciations. Curiously, though, life continues to develop and evolve. At the end of the Proterozoic Age, we find mysterious, soft-bodied orgnanisms in the shapes of tubes and leaves. This time is known as the Ediacaran Period.

PARTIE COUPÉE

CAMBRIAN PERIOD

- 540 to 490 MILLION YEARS AGO

Hundreds of millions of years go by, and aquatic life can now be found along the coastlines of continents, where ocean tidelines are shallow. This is known as the Cambrian explosion, when the evolution of life creates a huge variety of shapes and forms. Some animals have a skeleton, a digestive system, and even gills and eyes. They are known as Burgess shale-type fauna.


PRIAPULID
ONYCHOPHORA
(VELVET WORMS)
PORIFERA
(SPONGES)
TRILOBITES
ANNELIDS

ORDOVICIAN PERIOD

- 490 to 445 MILLION YEARS AGO

Aquatic life continues to develop, with marine plants beginning to move out of the oceans and inhabit the mainland as moss and fungi.

PARTIE COLLÉE

SILURIAN PERIOD

- 445 to 415 MILLION YEARS AGO

Life now exists in great abundance. Plants are surfacing from the waters, setting off in conquest of lands that are already inhabited by tiny insects. Meanwhile, in the oceans, fish have developed scales and fins.


SEA SCORPION
JAMOYTIUS (JAWLESS EEL)
SCALY FISH
CLIMATIUS

DEVONIAN PERIOD

- 415 to 360 MILLION YEARS AGO

This is another period of extreme heat, where the ocean levels have risen and swamps have emerged. Rich areas of flora have taken shape on land, where life is becoming more diverse. Here we can find mites, scorpions, and centipedes. Life in the oceans is becoming harder for smaller animals, because the first sharks appear and other predators become more abundant. Some species of fish need to change their environment just to survive. They draw near to the marshier areas of the coastlines and start adapting themselves in order to cope with the habitat there. Over time, some of them will be leaving the waters, signalling an important moment in Earth's history.