

A Tissue Timeline



Links with the Dinosaur Dreaming site:

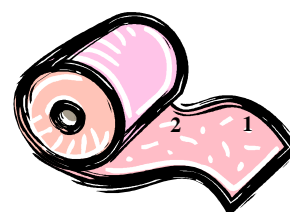
The dinosaurs lived in the **Mesozoic** Era which extended from 251 million years ago (mya) to 65 mya. The **Mesozoic Era** is divided into three periods the Triassic (251 to 205 mya), the **Jurassic** (205 to 141 mya) and **Cretaceous** (141 to 65 mya). The Cretaceous period is the time the dinosaurs lived in the area now known as the Bass Coast of Victoria. The rocks at the Dinosaur Dreaming site have been dated at around 120 million years old.

Links with the curriculum

This activity encourages students to think about the enormous extent of geological time and visualize the events that occurred during different eras in the history of the Earth. The activity links with the Thinking, Science and Maths domains of VELs.

Equipment needed:

- One roll of toilet paper per group
- Sticky labels or small pieces of coloured paper and glue
- Felt tip pens
- One empty cardboard roll per group



Procedure:

1. Provide each group with a roll of toilet paper that has a minimum of 120 sheets
2. Explain that **each sheet represents 1 million years**
3. Gradually unroll the toilet roll and number each sheet from 1 to 120 at the lower edge with a felt tip pen. As the sheets are unrolled and numbered start rolling up the numbered sheets back onto the spare roll so the 120 ends up at the start of the roll.
4. Write the following events on the sticky labels or coloured paper pieces and paste them on the time line to correspond to the timing of each event.

Event	Geological time
Dinosaurs lived at Inverloch	120 million years ago
The Himalayas began to form	70 million years ago
Most dinosaurs on earth became extinct	65 million years ago
Early primates appeared	60 million years ago
Australia separated from Antarctica	50 million years ago
Ice caps started to appear on Antarctica	10 million years ago
First human-like creatures appeared in Africa	3.5 million years ago
Homo Erectus	1.8 million years ago
First homo sapiens appeared	100,000 year ago
Evidence of humans living in Australia	65,000 years ago
Recorded human history began	10,000 years ago

5. Paste the labels/coloured paper on the relevant section of the toilet roll as you unroll the toilet paper starting at the 120 million year sheet. You will need a clear section of floor along which to unravel the paper.

6. How many more toilet paper sheets would you have needed to include the following events?

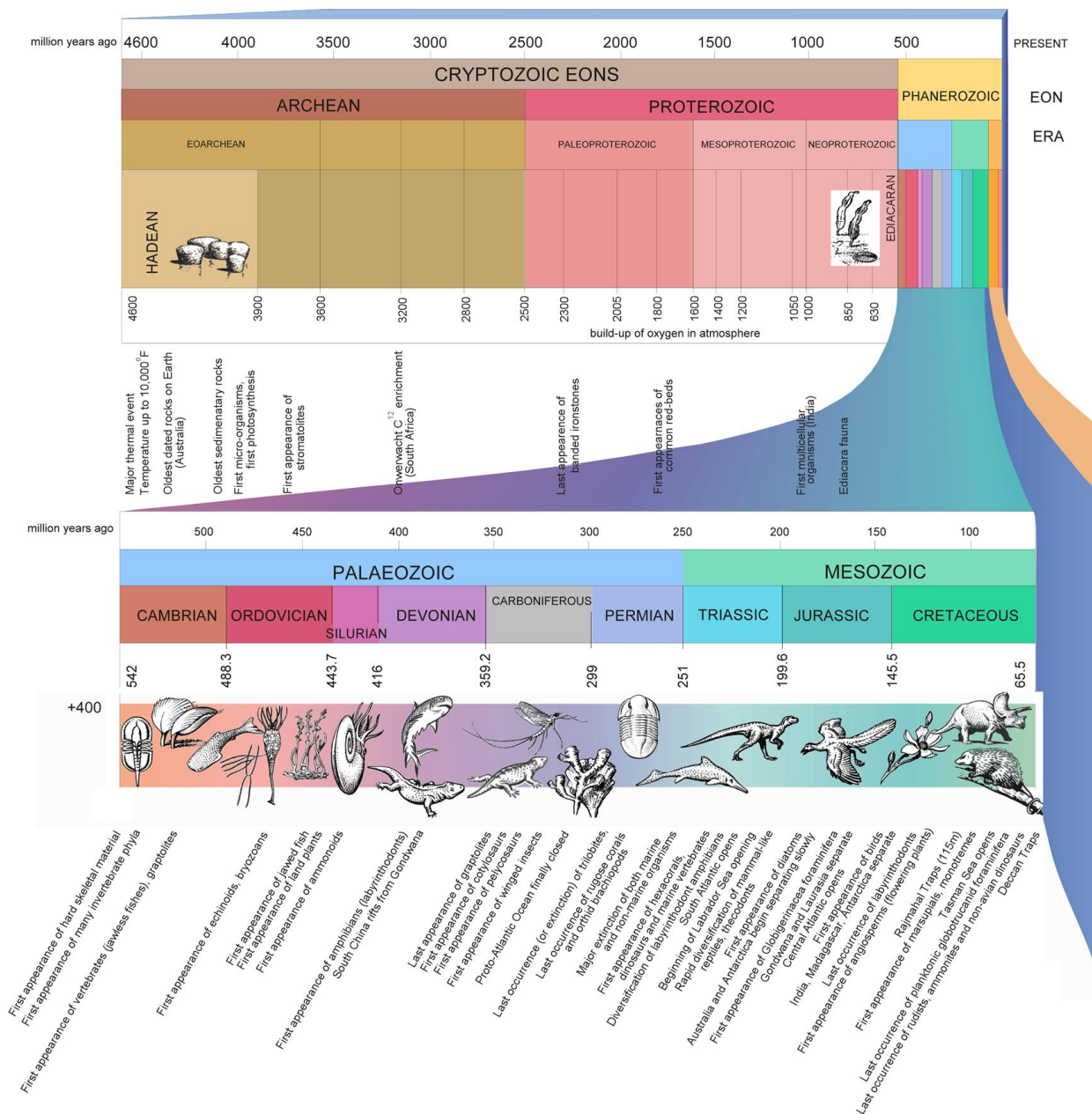
- Age of dinosaurs began = 220 million years ago
- First land plants appeared on earth = 0.5 billion years ago



- First fossil record (stromatolite) = 2.7 billion years ago
- First life appeared in the oceans = 3.5 billion years ago
- Earth was formed along with other planets = 5 billion years ago

Students could stand along an imaginary line, which is an extension of the toilet roll timeline, to indicate the position of the events listed above.

A detailed timeline for use as a teacher's resource:



Courtesy of Patricia Vickers-Rich, Monash Science Centre, Monash University. from "The Rise of Animals" published by Johns Hopkins University Press, 2007 - authors Fedonkin, Gehling, Grey, Narbonne, and Vickers-Rich.