WET TROPICS MANAGEMENT AUTHORITY

Evolution in Motion

← Million Years Ago

PRE-CAMBRIAN

545 — CAMBRIAN

490 — ORDOVICIAN

434 — SILURIAN

410 — DEVONIAN

354 — CARBONIFEROUS

298 — PERMIAN

251 — TRIASSIC

205 — JURASSIC

141 — CRETACEOUS

65 — PALEOCENE

54 — EOCENE

34 — OLIGOCENE

24 — MIOCENE

5 — PLIOCENE

1.6 — PLEISTOCENE

0 — HOLOCENE

PALEOZOIC

MESOZOIC

CAINOZOIC

TERTIARY

QUARTERNARY

START HERE

STROMATOLITES

ACTIVITY 1. You are standing at the dawn of life on earth, 500 million years ago. The length of your foot equals 10 million years. Step from heel to toe as if you are on a tightrope, and start walking forward through time. It will take 50 steps to reach the present.

1 **500 million years ago:** The only living things are swimming around you in the warm, shallow sea. **Swim around like a simple life form then return to your spot. Take 10 steps forward.**

TRILOBITE

ACTIVITY 2. Choose an animal from this poster and study how it evolved. Create a tail, wings, fins or ears and act out your role as you take this Time Walk...

2 **400 million years ago:** The first animals with internal skeletons evolve. **What are they?**

FORK FERNS

3 The first primitive plants move onto land. **Name an ancient plant still found in the rainforest today. Take 5 steps.**

AGE OF FERNS

DRAGONFLY

LUNG FISH

4 **350 million years ago:** The first dragonflies skim overhead on wings over 70 cm long. **Name another early invertebrate.** (Today's largest dragonfly, 'Petalura ingentissima', has a wingspan of 16cm and is found here in the Wet Tropics.) **Take 5 steps.**

AGE OF CONIFERS

5 **200 million years ago:** Early dinosaurs roam across Gondwana. **Make a noise like a dinosaur. What other animals evolved then which are still around today? Take 15 steps.**

AGE OF CYCADS

ACTIVITY 3. Create a table showing the changes which have happened to rainforests in the last 200 million, 20 million, 20,000 and 200 years. What "Age" was it? Describe what the forest was like. Name an animal you would see around that time.

MUTTABURRASAURUS

6 **150 million years ago:** The first flowering plants develop in the lush rainforest which covers Gondwana. Insects, birds and mammals help the plants to reproduce and spread all over the world. After 140 million years the dinosaurs start disappearing. **Why? Take 5 steps.**

AGE OF FLOWERING PLANTS

IDIOSPERMUM

7 **100 million years ago:** Ancestors of the platypus and echidna evolve. **Do some research on the internet and describe what else is happening in Gondwana's rainforest. Take 8 steps.**

CROCODILE

PLATYPUS ANCESTOR

ACTIVITY 4. Pretend you have a crystal ball and can see into the future. Will the rainforest change? What plants and animals may be extinct in 100 years? Develop an action plan to change the future.

GOLDEN PENDA

GOLDEN BOWERBIRD

NORTHERN BETTONG

TREE KANGAROO

ACTIVITY 5. Rather than adapting to the environment, humans adapt the environment to suit their needs. How have Rainforest Aboriginal people changed the environment? How do you alter your environment?

8 **15 million years ago:** Australian and Asian continental plates collide. **Take your last two steps.**

10 **In the last 100,000 years.** Ice ages have gripped the world every 100,000 years for the past two million years. During an ice age it's cool and dry and the rainforest shrinks. Water freezes at the poles causing sea levels to drop. The ancestors of today's Rainforest Aboriginal people migrated on land bridges from Asia to Australia. **What stage of the Ice Age cycle are we in now? What happens during periods of global warming?**

9 **2 million years ago:** Look down at your feet: early humans evolved where your big toe joins your foot on your last step. **What will happen to humans in the future?**

HUMANS

ACTIVITY 6. Evolution is an ongoing process. Design or build a rainforest animal, insect or plant. Give it a name. What has it evolved from? How has it adapted to survive? What does it eat? What eats it? What does the surrounding forest look like?

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