



Fossil Basics



Puppet Planet Educational Packet #1
Episode 1: *Thandi Finds a Fossil*





Fossil Basics:

Learning about life of the past



Using fossils to engage your learners



Fossils



What are they?

Ge·ol·o·gy

from Greek *ge*, *gaia* [Earth] + *logia* [to study]



Geology is the study of the history of the Earth and its life especially as recorded in rocks.

Palaeontology is a branch of geology that deals with the study of ancient life.



What is Palaeontology?



- ❖ **Palaeontology** is the study of the history of life on Earth as known from fossils and other evidence.
 - ❖ Fossils are the remains and traces of ancient life preserved in the rock record.
- ❖ Fossilization is the slow processes that takes millions years.
 - ❖ The oldest fossils so far discovered are **3.7 billion years**.

WHAT IS A FOSSIL?



rocks
minerals



artefacts



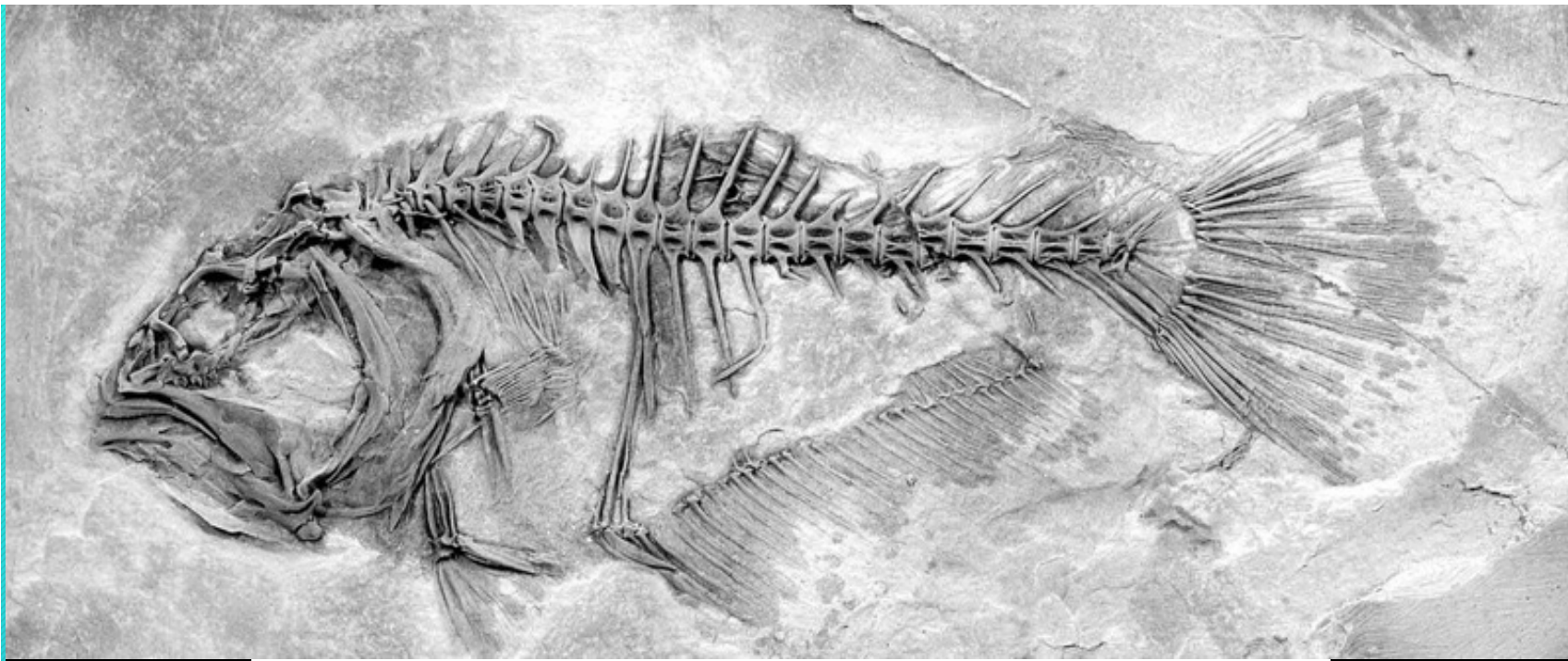
Fossils = remains
of ancient life

FOSSILS = the remains of plants and animals that are over 10,000 years old

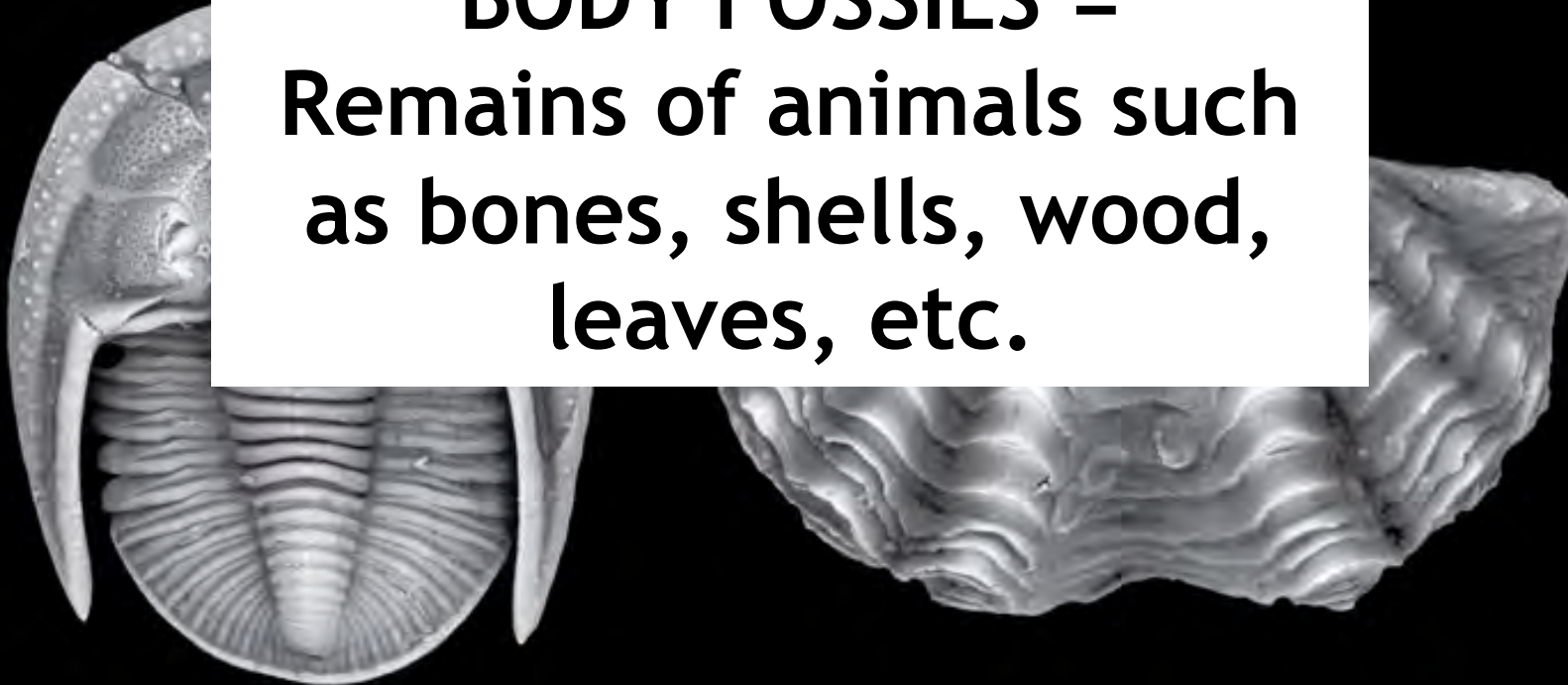


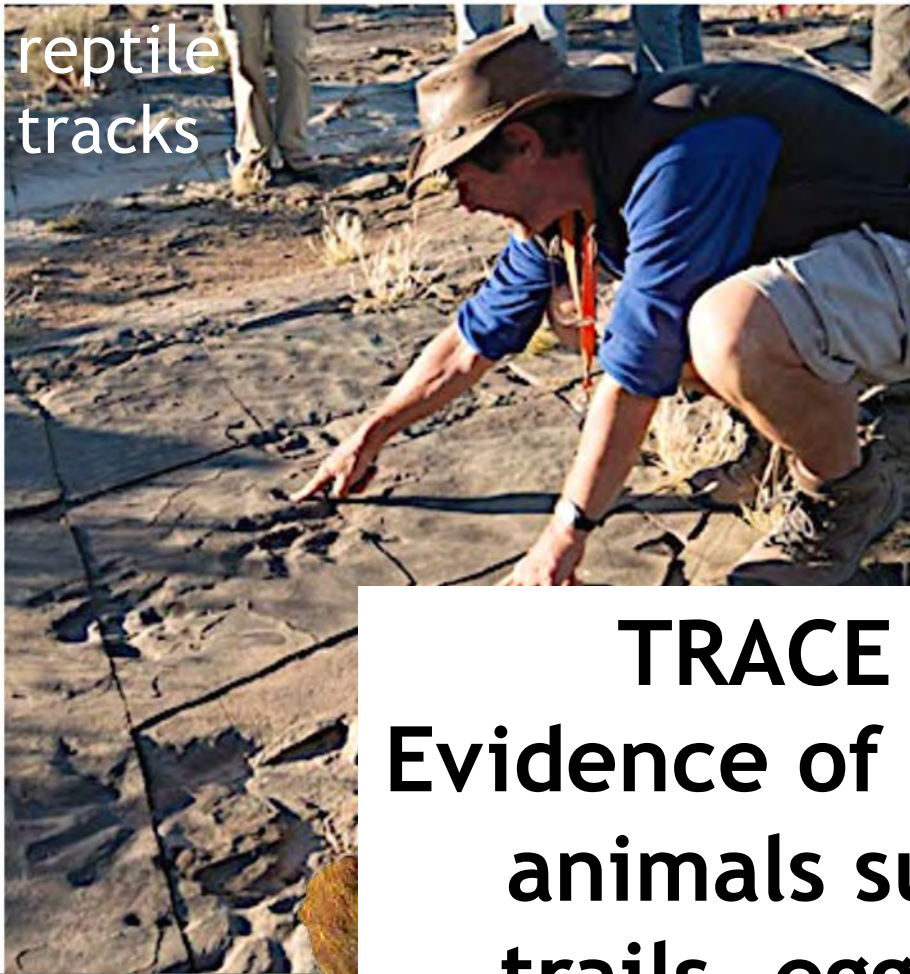
- Two main types:
1. **Body fossils**
 2. **Trace fossils**

💡 Watch out for **pseudofossils** or “false fossils.”



BODY FOSSILS =
Remains of animals such
as bones, shells, wood,
leaves, etc.





reptile tracks



dinosaur tracks

**TRACE FOSSILS =
Evidence of the behavior of
animals such as tracks
trails, eggs, dung, etc.**



worm burrows



dinosaur eggs



HOW DO FOSSILS FORM?



1. A dinosaur with hard “parts” (skeleton) dies
2. It dies in or near water like an ocean or river
3. The flesh rots away and the skeleton is buried by sediments
4. Over millions of years the skeleton slowly turns to stone
5. One day a lucky palaeontologist discovers it and digs it up!



Palaeontologists are geologists who study fossils and the history of life on Earth



Is an artefact a fossil?



No!

ARTEFACTS = are objects that have been made by people.



- If an object is an artefact, it has a maker.
- Fossils are the remains of ancient plants and animals (trace & body fossils).



Which ones are not fossils?





Which one is a palaeontologist and which one is an archaeologist?

