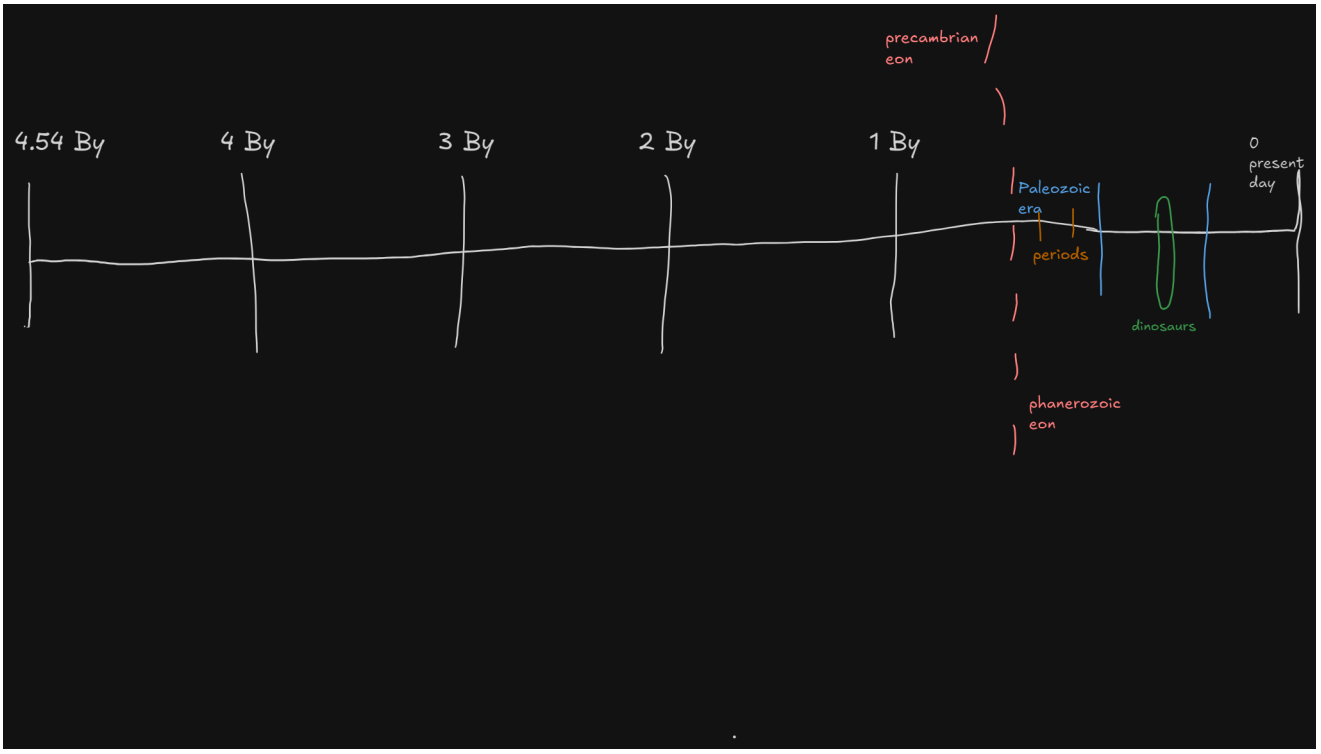
7 - The Geological Timescale

Definition

The geological time scale is a way for us to organize the Earth's history, and put events in the proper order



Tip

When drawing a timescale for the assignment, draw from oldest on bottom to newest on top, like rock layers

Superposition

Superposition is used to see how life has changed through time because fossils are found in sedimentary rocks

Principle of Fossil Secession

- Built on framework of the law of superposition
- "Fossil assemblages succeed one another through time in a regular and determinable order"
- Same fossils ≈ same age

Principle of Lateral Continuity

- A sedimentary layer does not extend indefinitely, but the surface of the Earth does

Correlation

- …
- There is no place where **all** sediments of **all** ages are stacked up together
- Example: manually stitching together photos for a panoramic photo

Hierarchy

- Temporal divisions of geologic time (early - late)
- Have corresponding set of rocks
- Eon (longest)
    - Era
        - Period
            - Epoch
                - Age
- Phanerozoic (542 my)
    - Cenozoic (66 my)
        - Quaternary (2.6 my)
            - Holocene (12,000 years)
                - Present Day