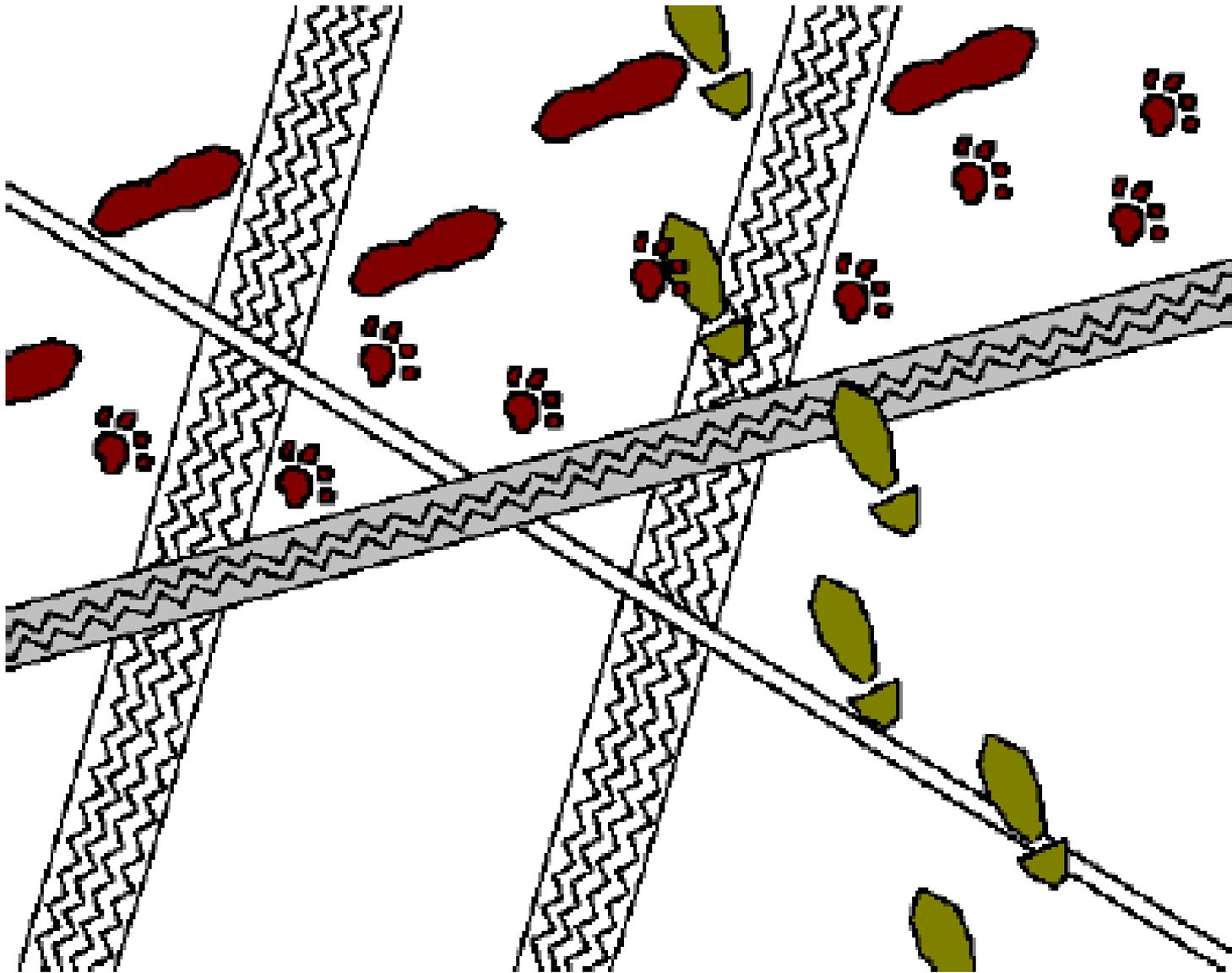




Earth's Past History

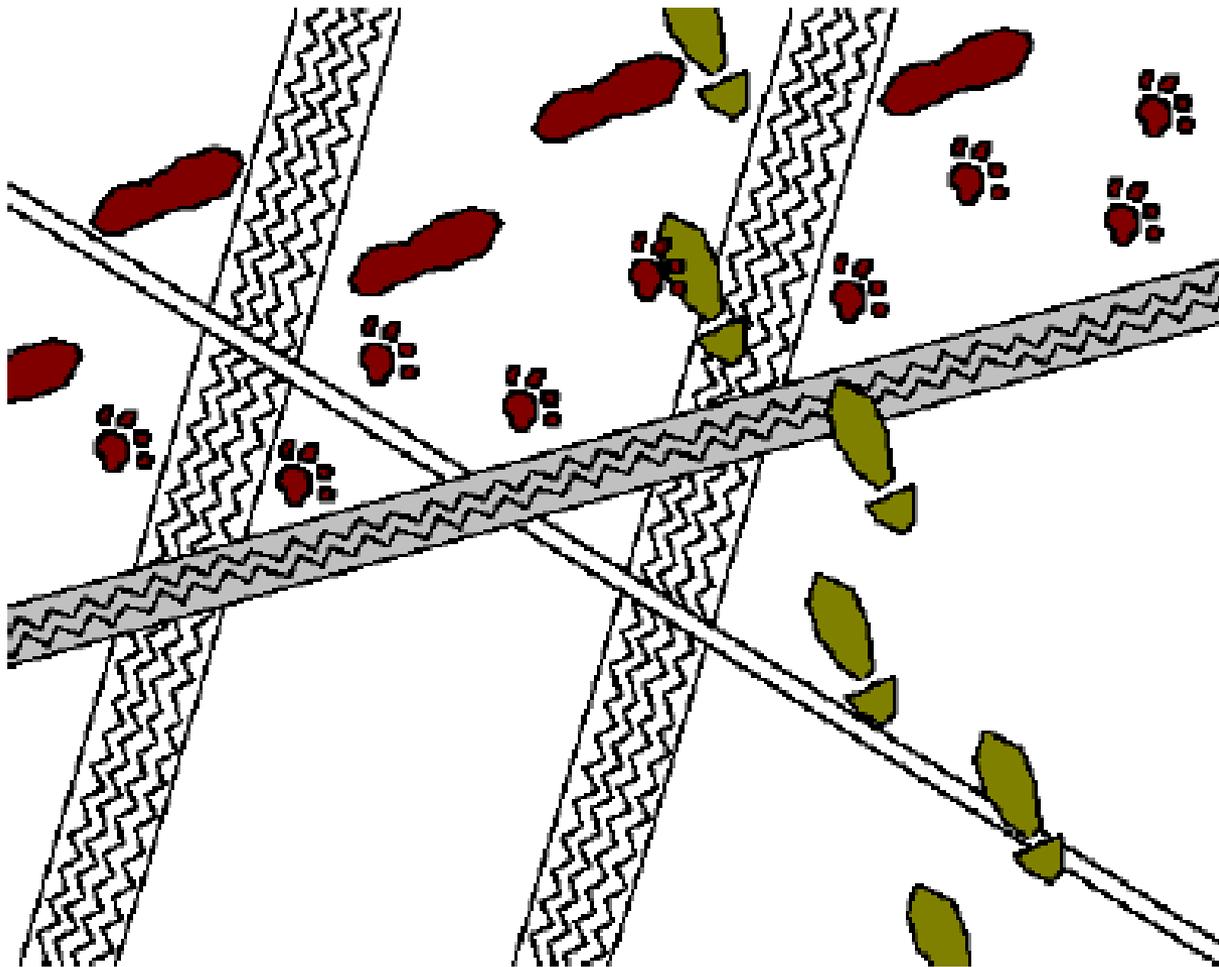
A Review of Fossils
and the Law of Superposition

Who Dunit?



(used with permission from Steve Dutch, Univ. of Wisconsin, Green Bay)

Who Dunit?



(used with permission from Steve Dutch, Univ. of Wisconsin, Green Bay)

Clues:

The Butler walks to work

The Handyman rides a bike

The Cook rides a motorcycle

The Maid drives a car

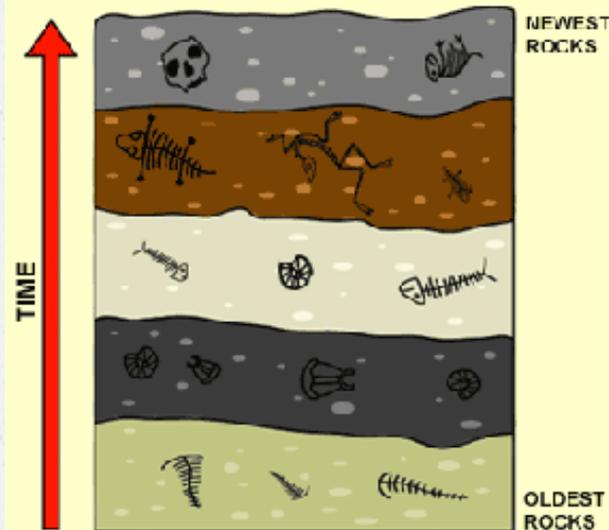
The Nephew has a seeing-eye dog

Questions

- o Who would have been in the spot last?
- o How do you know?
- o Who would have been first?
- o The law of superposition works just like these tracks.

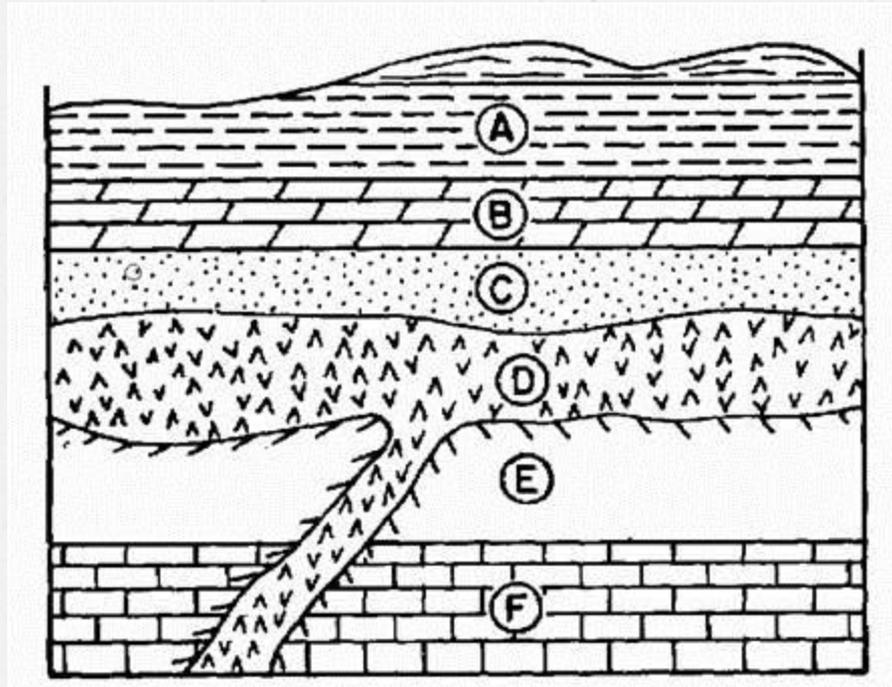
Law of Superposition

- o The Law of Superposition states that layers of rock and soil that are on top are younger than the layers underneath them

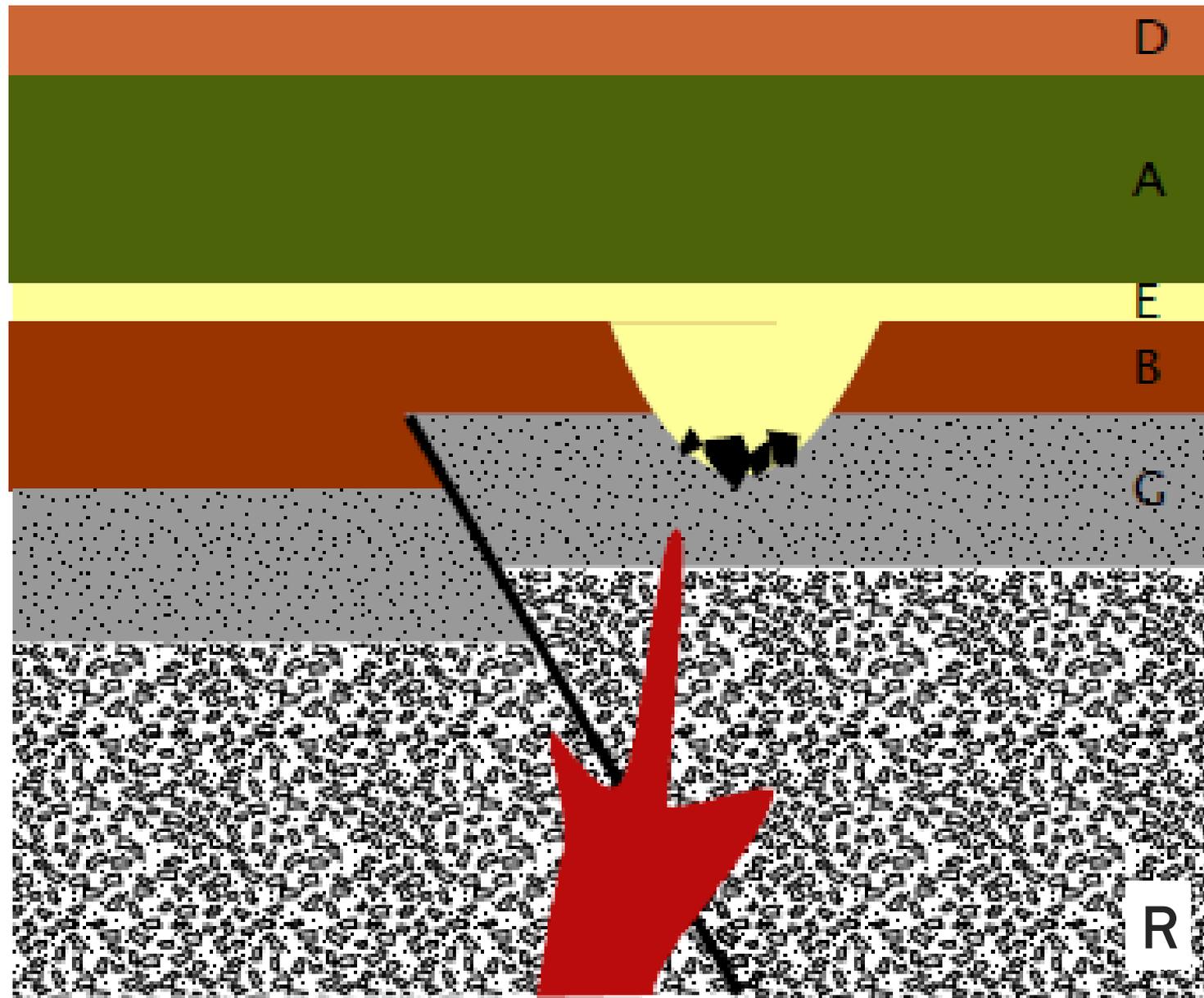


Right Side

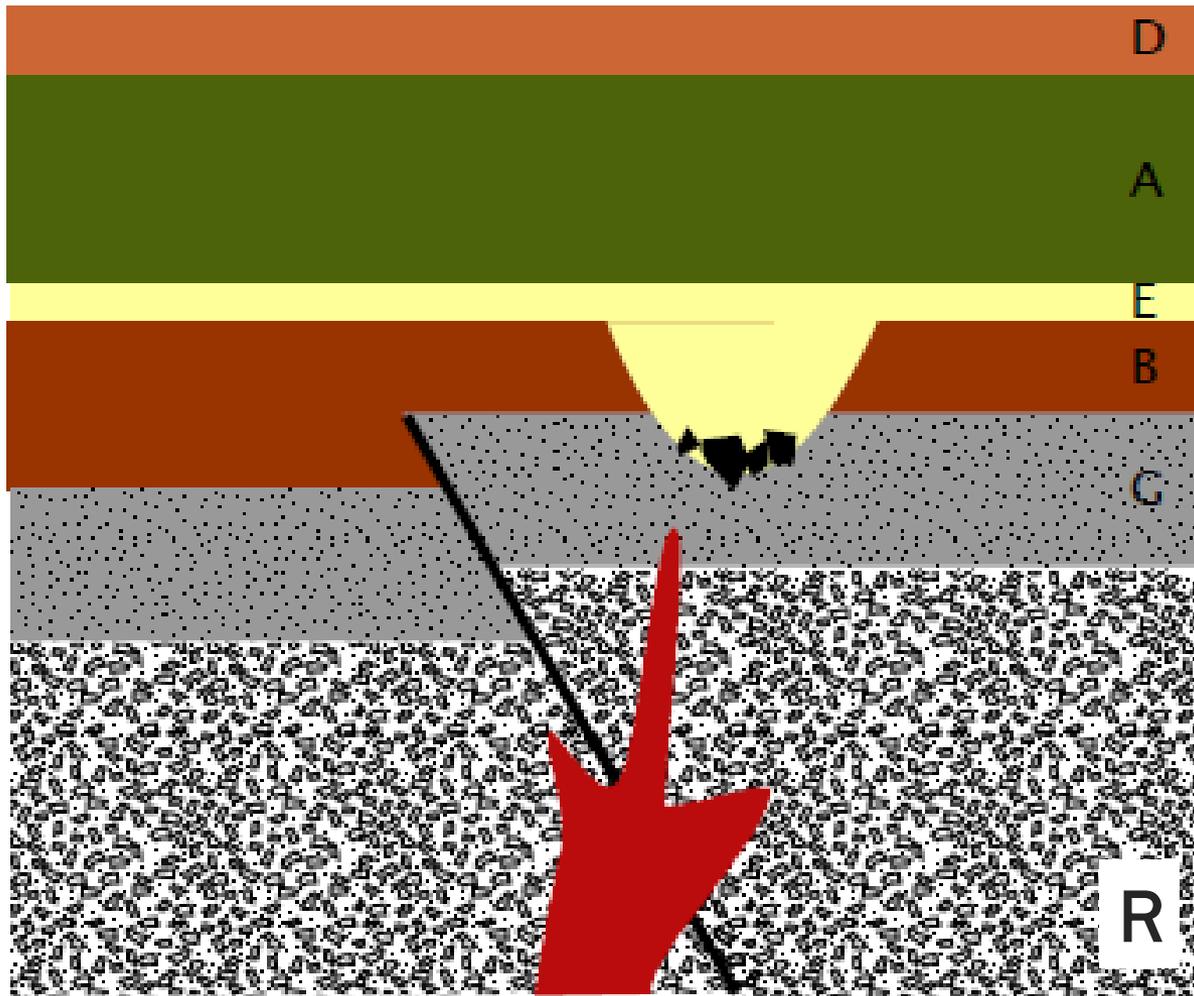
- o Label the oldest layer
- o Label the youngest layer
- o List the order of all layers from oldest to youngest



Principle of Superposition



Principle of Superposition

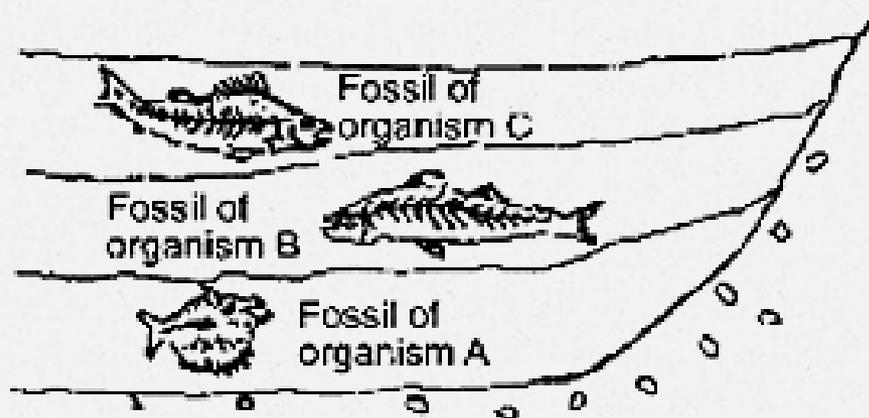


- 3 earthquake
- 9 deposit D
- 5 deposit B
- 2 deposit C
- 4 intrusive lava
- 1 rocky deposit R
- 6 river cuts through
- 7 deposit E
- 8 deposit A

- Were the yellow and green layers moved by the fault?
- Did the magma intrude before or after the fault moved?
- What was the first thing that happened?
- Is there more than one interpretation?

Sedimentary Rock

- Sedimentary rock is made of sediment and is typically found in layers (like a sandwich)
- Because this type of rock is formed by adding layer after layer on top of the older layers, this rock is where we find fossils!



See the distinct layers?

This is sedimentary rock and would probably have many fossils in them.



The oldest layer is ...

The youngest layer is ...

Fossils Tell a Story

- o Scientists can learn about what types of organisms lived long ago
- o Scientists can also tell a story about Earth's past environments by studying the fossils found in each layer
 - o What was the environment in that area like?
 - o When did organisms appear?
 - o When did organisms disappear?

STEMScopes Video

- o What type of rock are fossils found in?
- o How do fossils show changes to Earth over time?
- o Which layer is the oldest layer?
- o Which layer in the youngest layer?

Writing in Science

- Write a history of the past environments found at this site
- Oldest to youngest
- Be sure to include your reasoning

