Fossil Day Instructions

- Date the igneous intrusions found in your stratigraphic map using the radiometric table on Google classroom
- Gather a packet of fossils from your teacher
- Place the fossils for your continent in their strata
- Make a list from youngest to oldest and include the fossil names and igneous rock ages on a whiteboard
    - Example: Fossil name A
      Fossil name B
      Igneous intrusion: 185 million years
      Fossil name C
      Fossil name D
      Igneous intrusion: 300 million years
    - This information tells you that fossils A and B are younger than 185 million years, C and D are between 185 million years and 300 million years
- When all groups are finished, rotate around to every continent and write down their order of fossils and igneous intrusions from youngest to oldest
- Take this information back to your station and clean off your lab bench
- Use a roll of receipt tape and meter stick to make a timeline (every ten centimeters is ten million years--start at 70 million and end with 330 million)
- Start with Africa and write the igneous intrusion dates on your timeline (ex. Africa 185 mya) and place the fossils on the timeline with the information you obtained from Africa
- Move to Antarctica and write the igneous intrusion dates on your timeline and place OR move the fossils based on the new information
- Continue this trend until all fossils are placed
- Answer post-activity questions

Post-Activity Questions

1. What evident changes do you see in living plants and animals as time progresses?

2. What patterns or trends do you see in the fossil record? Do these align with the geologic evidence we've discussed?

3. Why is it beneficial to collect fossils from around the globe rather than in one location? What must we do to determine the absolute age of a fossil?

4. How did we use relative and absolute dating techniques to determine the age of fossils?