

1. Name the layers of Earth:

Compositional	Mechanical

2. What is the name given to the impactor in the 'Giant-impact Hypothesis'?

3. Of this hypothesis, when did the impact occur?

- a. 2.5 Billion years ago
- b. 542 Million years ago
- c. 4.48 Billion years ago
- d. 6.7 Billion years ago
- e. 31.7 years ago

4. We now recognize Wegeners hypothesis as the Plate Tectonic Theory. Why 'plate'?

- a. They are round and look like dinner plates
- b. They are four of them worldwide and reminded early researchers of baseball plates
- c. They are thin and brittle, deforming around the edges where they interact
- d. No real reason why things are name this way; geologist are bad at naming things

5. What is the difference between Flux Melting and Decompression Melting?

6. What is Orogeny?

- a. A form of divergence at plate boundary
- b. When an opiolite sequence is thrust onto the continent
- c. When several 'exotic terrances' accrete to the edge of a continental craton
- d. The process of mountain building via continental collision

7. Describe the Supercontinent Cycle (also known as the Wilson Cycle) and name at least two of the known Supercontinents and their respective age.

8. What is the main factor that controls climate?

- a. Carbon dioxide content in the atmosphere
- b. Orbital forcing and differences in solar radiation
- c. Al Gore and the leftist government
- d. Climate is too complex to understand and we currently have no idea of the major controls

9. What are the three primary planetary and orbital fluctuations called the 'Milinkovic Cycles'?

1) _____ - the elliptical orbit of Earth oscillates in ellipticity, sometimes more elliptical than at other times.

2) _____ - the planet Earth is tilted on its axis, and this tilt changes through time from ~22-24.5°.

3) _____ - the tilted axis causes a 'wobble' of Earth on its elliptical orbit.

10. What is the respective **periodicity** of each of these cycles?

1) _____ years - the elliptical orbit of Earth oscillates in ellipticity, sometimes more elliptical than at other times.

2) _____ years - the planet Earth is tilted on its axis, and this tilt changes through time from ~22-24.5°.

3) _____ years - the tilted axis causes a 'wobble' of Earth on its elliptical orbit.

11. Name one extinct Megafauna beast from the Pleistocene time period: _____

12. Name two pieces of geologic evidence for the Snowball Earth Hypothesis:

1) _____

2) _____

13. Approximately when (either in millions of years OR the name of the time period) did 'Snowball Earth' occur?

14. What is the glacial feature composed of glacial till and can be found at the end of a glacier?