

Chapter 4: Geology – The Earth Speaks

Section 4A: The Earth, A Special Place

1. What is the relationship between the design of the Earth, its moon, and the sun with the living things that inhabit the Earth?

- All are linked
- The entire _____ works _____ as a system _____ by _____.

2. Give two reasons why Earth's mass is designed for life.

- Earth's _____ is large enough to _____ that _____ an _____.
- Earth's _____ influences the _____ of the _____, which controls _____.

3. Explain how the tilt of Earth's rotational axis is designed for life on Earth.

- Spreads the _____ over a _____ area as it orbits.
- Creates _____ and moderate _____.

4. What special properties of water on Earth are designed for life?

- _____ exists mostly as a _____ on Earth.
- Water _____ many _____, making it _____ for life's _____.
- Water helps _____ in organisms.
- Water _____ and distributes _____ energy around the globe.

5. Why is Earth's magnetic field critical for life?

- _____ the planet from _____
_____.
- Without it, life could not survive, and the _____ would be
_____.

6. How does Earth's position in the solar system protect life?

- The right distance from the _____ to keep _____
mostly _____ and _____ in
_____ form.
- _____ deflect or trap dangerous
_____ and _____ that might strike Earth.
- They regulate _____.

Section 4B: Geology, the Science

7. What is uniformitarianism?

- The belief that _____ have always
worked in the _____ and at the
_____ throughout Earth's
_____.

8. Why did uniformitarianism require that the Earth be old?

- Earth's processes, such as _____ or _____
_____, are usually very _____.
- If those processes had always happened at the same pace, then it would take
_____ of years to form the features we see today.

9. What is the name of the viewpoint that the Earth is billions of years old?

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10. What two kinds of information does a geologist use when explaining how a rock formed in the past?

- Facts obtained from _____.

- _____ about Earth's conditions at the time the rock was formed.

11. How does Genesis 8:22 relate to the principle of uniformity?

- God promised _____ that as long as the Earth remains, there will be _____ and _____.

- Natural processes are _____ and _____.

12. As scientists look at rock layers, where would they expect the oldest layer to be?

- Scientists expect the _____ layers to be at the _____, with _____ layers _____ them.

- Geologists often assess the _____ of _____ based on their _____ in the _____.

Section 4C: The Earth's Structure

13. Describe a seismic wave.

- A wave of _____ that travels _____ the _____ when part of the crust _____.

14. Why can't radar from aircraft or satellites show us structures deep within the Earth?

- Radar cannot

15. Identify the main divisions of Earth's interior.

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Sketch and label the internal structure of Earth:

16. Contrast the outer and inner core.

- The _____ core is _____.

- The _____ core is _____.

17. What is the Moho?

- The Moho is the _____ that marks the _____ of _____.

Section 4D: The Earth's Natural Resources

18. What is a natural resource?

- Any _____ from our _____ that people _____.

19. Classify each of the following as biological or non-biological resources:

- Iron ore

- Fresh water

- Ocean tuna fish

- Pine trees for lumber

- Petroleum

- Soil

20. What makes a resource renewable?

- Has an _____ or can be _____ or _____ quickly.

21. Why should a Christian care about the environment?

- Christians should _____ Earth's resources to _____ and _____.

22. What are two ways to get the most out of non-renewable resources?

- _____ and _____ them.
- Develop _____ when possible.

23. What is resource management?

- The effort to _____, _____, and _____ use _____.

24. What could happen to natural resources that make them unfit for use?

- Resources can become _____ by _____ activities or by _____ like _____ or _____.