

Greatest Discoveries with Bill Nye: Earth Science

Name: _____

#1- The Outer Core

1. The first layer was the _____, a skin of rock covering the planet.

#2- The Inner Core

2. The core that Lehman had found was the Earth's _____.

3. The core that Richard Oldem had discovered turned out to be the Earth's _____.

4. At the center of the core, the temperature can be as high as _____ °F, which is 2,000° hotter than the surface of the sun.

#3- Continental Drift

5. Pangaea comes from the Greek and means _____.

#4- The Sea-Floor is Spreading

6. When the United States entered the war, _____ was a geology professor at Princeton University.

7. In 1953 a 12,000 mile long mountain range called the _____ - _____ was discovered in the Atlantic Ocean.

8. Harry Hess had discovered that the seafloor was _____.

9. The process that recycles the crust is called _____.

#5- Plate Tectonics

10. The surface of the planet is broken into large interconnected _____, that are constantly in motion.

11. The plates are _____, they are not _____.

12. A _____ - _____ fault is where the plates move by one another.

13. Weather has so many _____ it can change quickly.

14. One lightning bolt can strike with the power of _____ million volts.

#6- Troposphere and Stratosphere

15. Troposphere means...

16. Stratosphere means...

#7- Cosmic Raditation

17. Victor Hess discovered _____.
18. It is estimated that each year more than _____ people die from cancer caused by the small natural dose of radiation.

#8- Magnetic Field Reversal

19. The Earth's magnetic field acts as a _____, protecting our planet from the Sun's dangerous radiation.
20. The Earth's magnetic field has reversed about _____ times in the last 20 million years.

#9- Periodic Ice Ages

21. Every _____ years or so the angle of the Earth's axis tilts slightly.
22. The Earth may have experienced as many as _____ ice ages over the last several million years.

#10- Global Warming

23. Over the past 100 years the surface temperature of the Earth has increased about _____ °F.
24. Keeling found that the level of CO₂ in the atmosphere was increasing at a rate of _____ billion tons per year.
25. The South Cascade Glacier has retreated by _____ miles over the last century.
26. It would take _____ the size of MT. St. Helens erupting everyday of the year to equal the amount of CO₂ emissions people produce.

#11- Geological Change

27. The mechanism of the slow process of geologic change was _____.

#12- Radiometric Dating

28. Mineral samples of uranium always contained traces of _____.
29. If we compare the entire history of the Earth to a span of 24 hours, 1 million years would go by in about _____ minutes.
30. The Earth _____ all living things.