

## **Chapter 1 The Nature of Science YSBAT**

1. Meteorology
2. Paleontology
3. SI units
4. Describe scientific notation
5. Geology
6. Oceanography
7. Hypothesis
8. Astronomy
9. Hydrosphere
10. What is the control in an experiment?
11. What is the constant in an experiment?
12. Describe Earth's crust
13. Describe Earth's mantle
14. Describe Earth's core
15. Independent variable
16. Dependent variable
17. Describe ways in which Earth's biosphere and atmosphere interact.

18. Be sure you know the basic units and what they measure. Hint: page 6 of notes.

19. Describe the scientific method

20. What is the percentage of CO<sub>2</sub> in Earth's atmosphere?

21. What percent of the Earth's water is salty?

22. What percent of the Earth's water is fresh?

23. Convert the following *into* scientific notation.

$$3,000,000,000 = \underline{\hspace{2cm}} \quad 4270 = \underline{\hspace{2cm}}$$

$$.189 = \underline{\hspace{2cm}} \quad .000934 = \underline{\hspace{2cm}}$$

24. Convert the following *from* scientific notation.

$$4 \times 10^6 = \underline{\hspace{2cm}} \quad 2.35 \times 10^2 = \underline{\hspace{2cm}}$$

$$1 \times 10^{-6} = \underline{\hspace{2cm}} \quad 3.2 \times 10^{-8} = \underline{\hspace{2cm}}$$

25. What do geochemist study?

26. Give 3 reasons that an understanding of the dynamic nature of the planet Earth is important. Hint: page 4 of notes.

27. What is the composition, in percent, of the gases that surrounds the Earth?

28. Converting kelvins (K) to Celsius (C)

$$278\text{K} = \underline{\hspace{2cm}} \text{ } ^\circ\text{C} \quad 250\text{K} = \underline{\hspace{2cm}} \text{ } ^\circ\text{C}$$

29. What is the formula for density?

30. What is the formula for Newtons (N)?

31. What is the difference between mass and weight?