

CHAPTER 1 REVIEW

Name: _____

1. What is science?
2. How does science begin and end?
3. What is technology?
4. How are science and technology related?
5. Give an example of a situation where science and technology are interdependent.

6. What are the three main branches of natural science?

7. Chemistry:
Physics:
Geology:
Astronomy:
Biology:

8. What is the age of the universe?
9. How large is the observable universe?
10. All matter is made of building blocks called?

11. What causes a change in motion?

12. What kind of energy does a moving object have? _____

13. What are the 4 Big Ideas in Physical Science?

14. What are your favorite topics to learn about in science?

15. What is the scientific method?
16. What is the goal of the scientific method?
17. What are the 5 steps to the scientific method?
18. What is an observation?
19. What is a hypothesis?
20. What is a controlled experiment?
21. What is the difference between a manipulative and responding variable?
22. What is a scientific theory AND give an example.
23. What is a scientific law AND give an example.
24. Which is NEVER proven, a law or theory?
25. Why do we use scientific notation?
26. Write 0.00025 in scientific notation.
27. Write 540,000,000,000 in scientific notation.
28. Write in scientific notation: $(7.6 \times 10^{-4}) \times (1.5 \times 10^7) =$
29. Calculate how far light travels in 8.64×10^4 seconds. Light travels at a speed of 3.0×10^8 m/s. Show your work

30. What are the SI units for:

Mass:	Length:	Temperature:
Time:	Volume:	Density:

31. What do the following prefixes mean?

giga:	mega:	kilo:
centi:	milli:	nano:

32. What is a conversion factor?

33. What is precision?

34. What is accuracy?

35. What are the 3 scales used to measure temperature?

36. Convert 30C to Kelvin

37. What temperature does water freeze in C? _____ What temperature does water boil in C? _____

38. The steepness of a line on a graph is called?

39. Draw a line graph showing a direct proportion and a line graph showing an indirect proportion.

40. What type of graph compares the parts to the whole?

41. What type of graph is visually easy to use and compare sets of values and measurements?

42. Name 4 ways scientists can communicate data.

43. Write a paragraph (yes at least 5 sentences) describing how advances in technology have affected your life. (The first sentence in your paragraph should state the main idea. Give supporting details/reasons)

What is a conversion factor?

What is precision?

What is accuracy?

What are the three scales used to measure temperature?

Convert 30 C to Kelvin.

What temperature does water freeze and boil in Celsius?

The steepness of a line on a graph is called_____.

Draw a line graph showing a direct proportion and a line graph showing an indirect proportion.

What type of graph compares the parts to the whole?

What type of graph is visually easy to use and compare sets of values or measurements.

Name 4 ways scientists can communicate data.

Use the data table at the top of page 24 to create a line graph. Describe the relationship between modem speed and download time.

Use the data in the table below to create a line graph. Plot the distance on the vertical axis and the driving time on the horizontal axis. Calculate the slope of the line. If speed is the ratio of the distance to time, what is the average driving speed of the entire trip?

Write a paragraph describing how advances in technology have affected your life. (The first sentence in your paragraph should state the main idea. Give supporting details/reasons)