

Name _____ Period _____ Date _____ Seat _____

Scientific Inquiry Skills Study Guide

Explain the following:	Define or give an example
1. calculated quantity	
2. constants	
3. control group (control or controls)	
4. data table	
5. dependent variable	
6. experimental control ("the control")	
7. experimental group	
8. graphical analysis	
9. hypothesis	
10. independent variable	
11. inductive reasoning	
12. inference	
13. mean	
14. observation	
15. phenomenon	
16. precision	
17. qualitative data	
18. quantitative data	
19. scientific law	
20. theory	
21. variables	
22. accuracy	

Explain the following	Use words or drawings or both. You may use examples. Yes and no are not acceptable answers.
23. Explain what the following statement means: Every experiment has a cause and effect.	
24. I can explain how an experiment is controlled so that the only the independent and dependent variables change.	
25. I can recognize that multiple trials in an investigation produce accurate results.	
26. I can interpret data tables. Draw a labeled data table with a calculated column. Indicate the IV & DV on the data table.	
27. I can express data graphically using a line graph (state the axis for the IV, the DV, include the units in parenthesis the graph, explain the trend). Draw an example labeled graph	
28. I can formulate an experimental hypothesis based on the independent and dependent variables.	
29. I can interpret the trend or trends of a graph. Show some examples	
30. I can write a valid conclusion. List the essential components of a conclusion.	
31. I can defend a conclusion recognizing whether or not it supports or rejects a hypothesis. Give an example	