

# Scientific Method Review

Name: \_\_\_\_\_ Date: \_\_\_\_\_

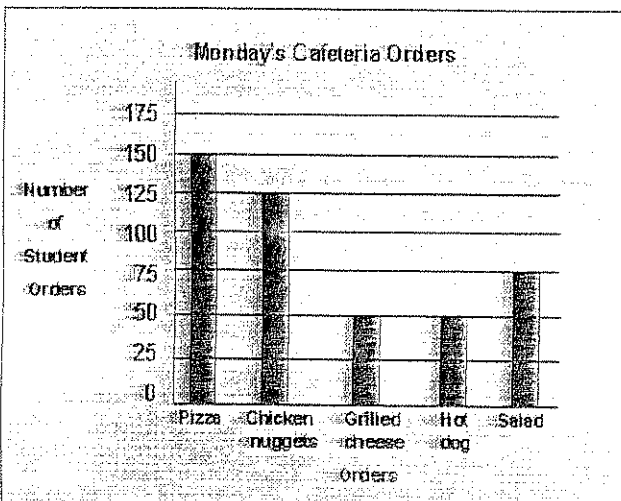
**Match It!** – Read each definition below. Write it the matching word next to the definition. Use the word bank for help.

<b>independent variable</b>	<b>constant variable</b>	<b>conclusion</b>	<b>qualitative observation</b>
<b>dependent variable</b>	<b>hypothesis</b>	<b>experiment</b>	<b>quantitative observation</b>
<b>inference</b>	<b>research</b>	<b>data</b>	

1. \_\_\_\_\_ : the part of the scientific method that you test your hypothesis
2. \_\_\_\_\_ : observations based on numbers
3. \_\_\_\_\_ : an educated guess about the results of an experiment
4. \_\_\_\_\_ : the one thing a person changes on purpose during an experiment
5. \_\_\_\_\_ : a summary of what you learned from an experiment
6. \_\_\_\_\_ : a temporary explanation to help us make sense of our observations
7. \_\_\_\_\_ : information collected throughout the experiment
8. \_\_\_\_\_ : observations based on your five senses
9. \_\_\_\_\_ : the things in the experiments that must stay the same in order to have a fair experiment
10. \_\_\_\_\_ : the factor of the experiment you're watching or measuring
11. \_\_\_\_\_ : to study or look into a subject further

**Apply It!** – Read each question and then write the correct answer on the line.

Use the bar graph below for questions 12 – 14.



12. Which order made the cafeteria the most amount of money according to the graph?

\_\_\_\_\_

13. How many students ordered a grilled cheese and a hot dog?

\_\_\_\_\_

14. Look at the table below. Which order is incorrectly matched to the number of student orders? Circle it.

Number of Orders	Order
125	Chicken nuggets
50	Hot dog
150	Pizza
60	Grilled cheese
75	Salad

Use the following experiment for questions 15 – 19.

One day, Kelly noticed that her mother's sunflower plants weren't all the same height. She created a hypothesis that if sunflower plants received more direct sunlight, then the more they would grow. She potted three new sunflower plants with the same amount of soil, same numbers of seeds, and planted them in the same pot. She also decided it would be important to give each plant 500 mL of water each day.

**Plant A**



No sunlight

**Plant B**



Partial sunlight

**Plant C**



Direct sunlight

15. What did Kelly hypothesize for her experiment?

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16. What is Kelly's independent variable?

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17. What scientific tool would Kelly use to give each plant 500 mL of water each day?

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18. List Kelly's constant variables.

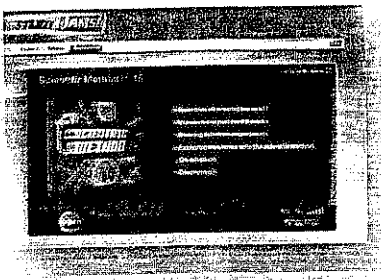
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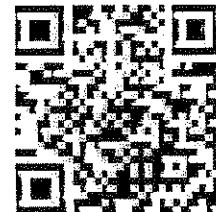
19. Kelly is measuring or watching for what to happen in her experiment?

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**Watch & Play It!** – There are many videos and games on the internet. Check them out to help you!



<http://studyjams.scholastic.com/studyjams/jams/science/scientific-inquiry/scientific-methods.htm>



<http://www.soipass.org/5s/Games/ScientificMethodPlank.html>

Scientific Method Music Video