Physical Science
MP 1 - B

MATCHING - 1
Directions: Place the correct letter on the line that matches the definition to the word

_____ 1. Empirical evidence

A. representation of something in the natural world

_____ 2. Science

B. well supported explanation of the natural world

_____ 3. Testable

C. information gathered by observation or experimentation that can be used in calculating and reasoning

_____ 4. Evidence

D. hypothetical landmass that existed when all continents were joined

_____ 5. Law

E. the force of attraction by which terrestrial bodies tend to fall toward the center of Earth

_____ 6. Model

F. evidence gathered from observation

_____ 7. Pangea

G. the trial of the quality of something; proof

_____ 8. Gravity

H. that which tends to prove or disprove something; ground for belief

_____ 9. Theory

I. systematic study of natural events and conditions

_____ 10. Data

J. describes basic principle of nature that always occurs under certain conditions

FILL IN - 1
Directions: Use each of the terms below just once to complete the passage.

hypothesis	theory	science
graph	table	data
law	experiment	model
empirical evidence		

1. A good scientific _____ can repeated by someone else and the same results is found.

2. A(n) _____ can be a visual or a mathematical representation of an object or process.

3. Science uses _____ to support its explanation.

4. Data can be arranged in visual displays called _____ to make identifying trends easier.

5. A scientific _____ has a lot of support and is more than just a "hunch." A(n)

6. A(n) _____ determines what will be tested in a scientific experiment.

7. The study of _____ involves the study of the natural world

8. After data are collected, they are often arranged in a(n)
   _____.

9. Unlike in society, a scientific _____ is simply a description of what we see.

10. All of the _____ gathered in an investigation must be recorded.

MULTIPLE CHOICE
Directions: Circle the letter that best completes the question.

1. What would cause a theory or model to change?

    A. new evidence   C. new experiment

    B. new explanation   D. they never change

2. What types of web pages would have the most reliable scientific information?

    A. the government   C. a university webpage

    B. NASA   D. all of the above

3. An experiment tests the _____.

    A. conclusion   C. data

    B. hypothesis   D. observation

4. How many variables are tested during an experiment?

    A. 1   C. 3

    B. 2   D. 4

5. How many layer does Earth have?

    A. 1   C. 3

    B. 2   D. 4

6. What are some characteristics shared by people working in the field of science?

    A. they are curious   C. they are problem solvers

    B. they are creative   D. all of the above

7. Who identified and coined the word "cell"?

    A. Robert Hooke   C. Antoine Lavoisier

    B. Marie Curie   D. Luis Alvarez

8. Data can be arranged in visual displays called _____ to make identifying trends easier.

    A. model   C. graph

    B. table   D. equation

9. The horizontal axis, x-axis, displays the _____.

        A. dependent variable   B. independent variable

10. How many types of graphs did we learn about?

        A. 1   C. 4
        B. 3   D. 5

11. They used the "bluegills" to test the water because the fish -

         _____.

        A. they cough   C. vomit

        B. they swim in circles   D. they die

SHORT ANSWERS
Directions: Answer all short answer questions using complete sentences. Spelling and grammar count.

    1. What is empirical evidence?

_____

_____

_____

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    2. Name two ways scientists show creativity.

_____

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    3. What was the landmass called before the separation? Name the seven continents.

_____

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4. What two types of scientific knowledge can be expressed as mathematical equations?

_____

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_____

5. What are the steps to the scientific method?

_____

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ESSAYS
Directions: Using complete sentences answer the essay completely using at least 5-7 sentences Spelling and grammar count.

1. Do you think the contributions of old scientists are still valuable, even though some were made hundreds of years ago? Explain

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