The Scientific Method

http://www.ck12.org/user:c2lza2l5b3VraWRZ21haWwuY29t/book/THS-Bio-A/r8/section/1.0/

1. **Science** comes from the Latin word that means _____.

2. Science is a distinctive way of gaining knowledge about the natural world that starts with asking a _____ and then tries to answer the question with _____ and _____.

3. A scientific investigation is a _____ for asking _____ and _____ possible answers.

4. List the **six steps of a scientific investigation** below (in order):

   1.

   2.

   3.

   4.

   5.

   6.

5. What does a scientific investigation usually begin with?

6. What do observations usually lead to?

7. A _____ is a possible answer to a scientific question.

8. A hypothesis must be based on _____ _____, and it must be _____.

9. Why must a hypothesis be falsifiable?

10. We will be using the "_____ ... _____" method when writing a hypothesis.

11. A **prediction** is a _____ that tells what will happen under certain

    _____.

12. _____ is any type of _____ that may either agree or disagree

    with a _____, so it may either _____ or

    _____ a hypothesis.

13. An experiment generally tests how one _____ is affected by another.

14. The affected variable is called the _____ variable.

15. The variable the affects the dependent variable is called the _____

    variable.

16. Why is it important to have a **control** in an experiment?

17. **Circle and label** the **dependent** and i**ndependent variables** in the example

    below.

You want to see what kinds of mold and bacteria will grow on different food types. You take a piece

of bread and a piece of cheese and wipe them on the floor then set them in a tray where it is dark

and moist and record your observations daily.

Translations:
Knowledge: conocimiento.   Distinctive: distintivo.   Evidence: evidencia.   Hypothesis: hipótesis.
Prediction: predicción.   Agree: acordar.   Disagree: no estar de acuerdo.   Affected: afectado.
Dependent: dependiente.