

Name: _____ Room _____

Exploring a Scientific Problem with your Scientific Question

Scientific Inquiry is based on asking scientific questions.

YOU NEED TO USE "EFFECT or AFFECT" in YOUR SCIENTIFIC QUESTION

Affect: (verb) To have an influence on or bring about a change in something, as in "Fertilizer affects plant growth. Written as a question this would be "How does fertilizer affect plant growth?"

Effect: (noun) The result or consequence of an action or influence, as in "The effect of fertilizer on plant growth. Written as a question this would be "What is the effect of fertilizer on plant growth?"

There is a tendency to confuse these two terms. Many students frequently misuse them in their science reports, especially in the titles of science fair projects. Using the words properly demonstrates scientific literacy.

"Affect" is a verb and "effect" is a noun. For example an investigation of how fertilizers affect plant growth would reveal the effect of MiracleGro® on bean plant height. Notice in this sentence that the word "affect" describes how fertilizer might bring about an influence or have an action on plant growth. "Effect" in this sentence describes the result or consequence of the fertilizer. It might help to think of the effect as the end result. Both begin with "e:" effect, end. Think of affect as the action. Both begin with "a:" affect, action.

Affect (verb)		Effect (noun)
How does fertilizer affect plant growth?	<p>Here are a few examples of scientific questions using affect and effect.</p> <p>NOTE: Your scientific question will become your Project Title.</p>	What is the effect of fertilizer on plant growth?
How does pH affect fish behavior?		What is the effect of pH on fish behavior?
How does temperature affect reaction rate?		What is the effect of temperature on reaction rates?
How do magnets affect current?		What is the effect of magnets on current?
Which variables affect the period of a pendulum?		What is the effect of variables on the period of a pendulum?

How to Turn in your Question: Type up your Scientific Question and please attach 1-3 typed paragraphs stating the Scientific Problem; describe the reasoning behind the selection of your project, and the development of your question and STAPLE it to this page. This will go in your binder under Section 6.

Parent Signature: _____ Date _____

Student Signature: _____ Date _____

The key to a successful science fair project is asking the right question BEFORE you create your Hypothesis and begin your experiment.

Mrs. Bairstow's Signature: _____ Question approved on _____