Date __February 20, 2009________  Period __5/6____  Subject/Class/Grade _Life Science/ Grade 7
Laurie Morgan

Unit/Theme___Scientific Method_____ Standard ___ L.S.1  The student will plan and conduct investigations in which
a)  data are organized into tables showing repeated trials and means;
b)  variables are defined;
c)  metric units (SI—International System of Units) are used;
d)  models are constructed to illustrate and explain phenomena;
e)  sources of experimental error are identified;
f)  dependent variables, independent variables, and constants are identified;
g)  variables are controlled to test hypotheses, and trials are repeated;
h)  interpretations from a set of data are evaluated and defended; and
i)  an understanding of the nature of science is developed and reinforced.

Content Objective (Benchmark) - SWBAT investigate using the scientific method, identify steps to the scientific method, recognize key terms associated with scientific method, demonstrate ability to follow steps of scientific method.

Language Objective (Desired Result) - SWBAT orally discuss prior knowledge on scientific method, investigate and follow procedures working with a partner

Key (Special) Vocabulary
Hypothesis, control group, experimental group, independent variable, dependent variable, constants, scientific method

Supplementary Materials (graphs, models, visuals) (Marzano)
Cabbage juice lab- test tubes, beakers, graduated cylinder, vinegar, ammonia, baking soda solution, apron, goggles, pipettes, cabbage juice
Index cards
Overhead projector
Science fair examples
Word wall words

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Procedure:
1. Quick review (27-30)- individual practice- K-W-L chart- use words from word wall.
2. Pass out, “I have-Who Has” index cards and participate in class activity.
   - Each student with an index card stands up.
   - One person begins by reading a question.
   - The person with the answer to this question will read his/her card and then ask another question.
   - It is a cycle that continues connecting each person until you reach the first person again.
3. Show an example of a science fair project using scientific method- connects to real world problems/investigations.
4. “Around The World”
   - Students will pair up with person next to them.
   - On a piece of paper number 1-12.
   - Set up index cards at each station (12).
   - Students will start at a station and have 45 seconds to answer the question on piece of paper.
   - Rotate around room until all questions are answered.
   - Collect for classwork grade.
5. Begin Cabbage Juice Lab to investigate scientific method.
   - Have students take lab worksheet out of notebook.
   - Read over instructions.
   - Show materials.
   - Write out their hypothesis.
   - Demonstrate/model how lab will be conducted.
   - Pass out goggles and get with appointments on appt. clock.
6. Allow them time to do lab with their partner.
7. Clean up lab.
8. Answer lab questions that follow at desk individually.
9. Discuss lab results.