Common Core Academy Marnie Moody

June, 2012 Nancy Krivick

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**Introduction to the Scientific Process** (2 Day Lesson)

**Lesson 1: The Steps of the Scientific Method**

**Enduring Understanding:** There are many ways to “do” Science.

**Essential Questions:**

What is the Scientific Process?

Why do Scientists use a Scientific Process?

How do you apply the Scientific Process in your own life?

**Content Objective**

SWBAT Demonstrate the Scientific Process by creating a flow chart.

SWBAT Apply the Scientific Process to obtain knowledge based on Observable Evidence and/or experimentation by completing a lab.

**Language Objective**

SWBAT Design a Scientific Method Flow Chart based on real life scenarios by using Scientific Vocabulary.

SWBAT Read, Discuss, and Design an experiment to solve a real life problem.

**Fast 5:** **Anticipation Guide** (Revisit at the end of the lesson)

5 Ques. T/F

**Hook:** **Movie Clip “Monty Python Scientific Method”**

**Class Notes:**

**Power Point Notes and Fill in Note Sheet on the Steps of the Scientific Method.**

Review the steps of the Scientific Method and show examples of different flow charts of the scientific method.

**Look for similarities, what do they have in common? (Examples: Arrows, number of steps, the order of the steps, graphics, color, is it easy to read?)**

**Students will work in groups to create a flow chart** **poster** showing the steps of the scientific method. (ILO: 6b, Reading Standard: 7, Writing Standard: 4)

(This activity shows that there is more than one way to use the Scientific Method, and that it is a process.)

**See Assignment and Rubric**

**Revisit Fast 5: Anticipation Guide and Review**

Formative Assessment: **Bill Bakes a Cake** (Students will both identify and problem solve using the steps of the scientific method.) (Reading Standard: 6)

or **RAFT: Mad Scientist Review**

**Lesson 2**: **Designing an Experiment** (ILO: 1e)

Students will learn how to write up a lab report and then will design and do an experiment to test 3 brands of gum.

**Fast 5: Put the steps of the scientific method in order (paper strips in an envelope)**

**Power Point and Notes: Writing a Lab Report and Introduction to the Lab.**

Hands on Activity: **Bubble Gum Lab**