Project FOCUS Best Lessons FIRST GRADE

<u>Title of Lesson:</u> What is Science? Theme: Physical Science

Unit Number: Unit Title:

Performance Standard(s) Covered (enter code):

S1CS6

S1CS7

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- **Works in a group**
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- **Observes using senses**
- Draws and describes observations

Content (key terms and topics covered):

Science, scientists, experiments

Learning Activity (Description in Steps)

Abstract(limit 100 characters): This lesson intruduces students to the ideas of what science is and what a scientist does.

Details: I asked the students the following questions to see how much they previously knew about scientists:

1) What is a scientist? A scientist is a person who studies the world around them.

2) What does a scientist do? A scientist asks questions about the world around them and uses scientific methods to find the answers

3) What does a scientist study? Scientists study many things such as weather, plants, animals, planets, fossils, people, etc.

4) What tools do scientists use? Scientists use good questioning skills, hand tools, observation skills, and experiments.

5) What are experiments and why do scientists use them? An experiment is a set of procedures that when done gives you an answer to a question or helps you discover something new.

6) What are the safety procedures that all scientists should follow? No messing around in laboratory settings, wear safety clothing for protection such as goggles, gloves, and lab coats.

With their feedback, I helped lead them to the right answers to each question, although many students had enough previous knowledge to get the correct answers on their own. Read the book

What is a Scientist? and it helps to give many examples and explain thoroughly the tasks of a scientist. Ask the class who are scientists, then let them know that everyone can be a scientist. Tell the class that now we will perform an experiment. Ask a volunteer to come forward. Ask the class what the scientist should wear to protect themselves. Have the student put on the lab coat, goggles, and gloves. Then, have the student pour water in the clear jar. Ask the students to predict what will happen when we pour oil in to mix with the water. Then, see what actually happens compared to what the students thought. Next, ask what the students think will happen when you pour some salt into the oil and water mixture. Pour the salt in and continue to do so until you get a reaction. This can be repeated several times. Have several students perform the experiment. Then, have the students each record their observations on the piece of paper by drawing a step of the experiment and writing about what happened. Ask the questions from the beginning again to reinforce the correct answers about scientists.

<u>Materials Needed (Type and Quantity):</u> The book What is a Scientist? by Barbara Lehn Paper for each student Markers, crayons, pencils Clear jar Vegetable oil Water Salt Lab coat, safety goggles, gloves

Notes and Tips (suggested changes, alternative methods, cautions):

Sources/References: 1) What is a Scientist? by Barbara Lehn 2) 3)