



[«Science Lesson Plans](#)

First 20 Days of Science

Published on August 28, 2008 by Gina Oles

Description

I begin the school year in my 5th grade science classes with a strong focus on Scientific Process and Inquiry Skills. Students learn so much from "hands-on" activities and I try to give them every opportunity to perform labs throughout the entire year. The first 20 activities which I have put together help the kids understand what skills they will need to use during the labs and also what I expect from them. I believe these "hands-on" activities allow the students to be active learners and help develop their love of science.

I start out with Rules and Expectations. We set up our Notebooks, and then we head right into the following skills and processes:

Observation, Formulating Hypothesis, Predicting, Study of Variables, Estimating, Measuring, Classifying, Interpreting Data, Making Graphs, Making Models, Communicating, Collecting Data, Inferring, Defining Operationally and finally a Performance Event.

Please remember that as you move from one skill to another, recognize and reinforce that the previously taught skills continue to be used. The students will use a combination of several of these skills as they work in labs. The skills work together, not independently.

Grade Level

3rd - 6th grade

Lesson Objective

To become familiar with and practice the Scientific Process and Inquiry Skills.

GLEs

Strand 7, Scientific Inquiry

Depth of Knowledge

Level 3

Instructional Strategies

Identifying similarities and differences

Summarizing and notetaking

Homework and Practice

Nonlinguistic representations

Cooperative Learning

Generate and test Hypothesis

Cue, question and advance organizers

Time Needed

20 class periods

Materials

Materials are listed for each activity.

Academic Vocabulary

scientific process, scientific inquiry

Lesson Plan

 [First 20 days of science](#)

Resources

Worksheets pp. 16, 25, 42, 53, 54, 59, 64, 65, 66, 67, 68, 73, 77, 80, 86, 103, 104

and Lab Page Format

 [First 20 days worksheets](#)

LAB PAGE FORMAT

QUESTION:

HYPOTHESIS:

OBSERVATIONS: *(Depending on the lab, this can be an area used for drawing or jotting down notes. It can also be used for a formal observation if it is required.)*

VARIABLES: *(List independent, dependent and constant variables)*

DATA:

GRAPH: *(If applicable)*

CONCLUSION: *(Results)*

LOL:

Literature links

Science Process Skills: Assessing Hands-on Student Performance by Dr. Karen L. Ostlund

Assessments for the Science Process Skills of Inquiry by Dr. Karen Ostlund and Sheryl Mercier

Key concepts: [Inquiry Skills](#) [Scientific Process](#)

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