Week number: #2 [Sept. 10th – 14th, 2018]
Week topic: Scientific Method, Data Analysis, & a POP Quiz

DAY ONE

Objective: Understanding the Scientific Method
Materials: scientific method worksheet, notebook
Assessment: Reading, Written, & Oral Communication
Vocabulary: observation, inference, objective, subjective, qualitative, quantitative, prediction, hypothesis, independent variable, dependent variable, control variable

5 minutes Warm -Up	**07:45-07:50**

Ask the students the question: How can our five senses help in conducting science experiments? Answer – our five senses can help make hypothesis, observations, and get results! Ask students: Which sense do scientists never use in the lab? Taste!

10 minutes Thinking like a Scientist	**07:50-08:00**

- Ask students: How would you think like a scientist. Possible answers: conduct an experiment, ask questions, formulate a hypothesis
- Inform students that scientists use the scientific method approach to formulate hypotheses or questions and conduct experiments to determine the result
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Discuss the following hypothesis example with the students
Example: **Hypothesis – Seventh-grade students prefer to drink milk instead of orange juice with breakfast.** Ask the question how would you conduct an experiment to test this hypothesis?

10 minutes Scientific Method – A Method to the Madness	**08:00-08:10**

- Read along the worksheet entitled “Scientific Method – A Method to the Madness” asking students to highlight or underline the key words in bold letters and their definition.

13 minutes Scientific Method – A Method to the Madness	**08:10-08:23**

- Students to complete the questions that accompanied the reading sheet

5 minutes Exit Slip	**08:23-08:28**

Exit Slip – "What is the difference between inference and prediction?"

Homework: Students to complete the questions on Scientific Method and are to copy the definitions in their notebook.

DAY TWO

Objective: Scientific Method – Observation experiment
Materials: Observation experiment worksheet, tortilla or potato chips, paper plates, crayons/colored pencils, pens, exit slips Assessment: Lab grades, Written communication
Vocabulary: observation
Laboratory Safety Precautions: clean-up of all materials used in the experiment

10 minutes Warm-up	**07:45-07:55**

The following journal entry will be written on the board for students to respond to in their notebooks.

Journal entry: What is one thing you always observe that is on the wall when you come into the classroom?

Ask for two or three student volunteers to share their responses.

20 minutes Observation Experiment	**07:55-08:15**

- Have student volunteers distribute the observation experiment worksheet and review with the class the contents of the worksheet

30 minutes Conduct Observation Experiment	**08:15-08:45**

- Students to be assigned a number from 1 to 4 and then divide off into groups according to what number they have been assigned. I will then distribute the chips to each member in the group

***Remind students that this is a lab activity with safety rules, to be respectful of others and materials used in the experiment and any unruly behavior will dismiss the student from being included in the activity.

20 minutes Independent Time	**08:45-09:05**

- Students will have time in class to work on the questions from the observation experiment.

6 minutes – Wrap up	**09:05 – 09:11**

- Clean-up of materials used in the experiment and students gather their belongings in preparation for next class.

Homework: to have the experiment questions completed by the following class

DAY THREE

Objective: Scientific Method – POP Quiz
Materials: scientific method worksheet, lined paper, textbook, notebooks
Assessment: Written communication
Vocabulary: observation, inference, objective, subjective, qualitative, quantitative, prediction, hypothesis, independent variable, dependent variable, control variable

5 minutes Warm-up	**07:45-07.50**

- Allow students to review the definitions on their homework paper before asking for a student volunteer to collect the papers.

10 minutes Scientific Method POP Quiz	**07:50-08:00**

- Students on a lined piece of paper are asked to list all the steps needed in the completing the scientific method. When students are finished writing the steps they will be asked to turn their papers over and place their pencils down on the desk.

10 minutes Making Learning Easier	**08:00-08:10**

- Use the flow chart on page 15 to show how to conduct the steps involved in the scientific method
- Use a **mnemonic** device to help remember the steps in the scientific method: Allow students a few minutes to devise their own mnemonic and have volunteers share with the class.
- Offer the following mnemonic for those students struggling to find one: ***Only, Quiet, Hands, Ever, Answer, Calmly, and Correctly – which stand for***: Observations, Questions, Hypothesis, Experiment, Analyze results, Conclusions, Communication

13 minutes Section Review – Studying Life	**08:10-08:23**

- Students to work independently on questions 1 to 4 on page 16 in the textbook, writing answers in their notebooks.

5 minutes – Wrap up	**08:23-08:28**

- Students to gather materials in preparation for the next class

Homework: to complete unfinished questions on page 16