**Teacher Name:** Mary Ayers

**Date and Time of Lesson: August 8 2017**

**Content/Grade Level: 6th Scientific Method**

**Science Lesson Standard**: S6CS9. Students will investigate the features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:

a. Scientific investigations are conducted for different reasons. They usually involve collecting evidence, reasoning, devising hypotheses, and formulating explanations.

b. Scientists often collaborate to design research. To prevent bias, scientists conduct independent studies of the same questions.

c. Accurate record keeping, data sharing, and replication of results are essential for maintaining an investigator’s credibility with other scientists and society.

d. Scientists use technology and mathematics to enhance the process of scientific inquiry.

**Reading Lesson Standard:** SWBAT interpret and understand instructional text and recall scientific language.

**Student Learning Objective:** SWBAT understand and apply the Scientific Method to an everyday problem and develop a series of steps to solve that problem with group members.

**Teacher Objectives:** TWBAT explain and help students develop their understanding of the scientific process. Students should be able to use this process and transfer the knowledge of this method to more complicated scientific problems.

**Differentiation:** Based on the results of the pretest, students will be placed in groups.

**Lab Safety (specific for this lesson):** N/A

**Sources:** GSE

**Developmental Analysis:** Students will create a hypothesis based on prior knowledge of the scientific method and design an experiment to solve the hypothesis, as a group.

**DOK:** Level 2 Use information or conceptual knowledge, two or more steps

**Instructional Plan**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Time** | **Anticipated Task Progression** | **Goal of Task** | **Organization and Lab Management****(Include a diagram when applicable)** | **Standards Objective** | **Application Task**  |
| 2 mins3 mins | Students enter the classroomWarm Up: 3 Question Quiz | Students will have a limited time to put away book bags and set up for class to begin. Students will pick up their folders from the designated area when they arrive and place them on their work space.3 Question Quiz: Lab Safety  |  | SWBAT remember the lab safety lesson from the day before | 3 Question Quiz will be taken up and graded  |
| 20 mins | PPT Scientific Method |  |  | SWBAT  |  |
| 10 mins | Group work Students will decide as a group what question they would like to test | During this time, the students will be applying understanding of the subject matter by performing tasks in a lab, group work or answering questions |  | SWBAT work with other group members in a constructive manner demonstrating respect by cooperating and inputting ideas  |  |
| 5 mins | Ticket out the Door |  Students will write down the question and I will go from table to table and approve the question to be tested and give feedback |  | SWBAT demonstrate understanding of the subject area by answering questions, relating feedback, turning in projects |  |
| 3 mins | Students will put away folders and clean up lab area |  Students will be aware of classroom management and be responsible for personal materials |  | SWBAT demonstrate organization skills and respect for the class by cleaning up and putting away materials in the correct space provided for them |  |
| 2 mins | Students will gather belongings and leave class |  |  |  |  |
|  |  |  |  |  |  |