

Bryte Lesson Plan (Day 1)

Content standards:**Investigation and Experimentation**

Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:

- b. Develop a testable question.
- c. Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.
- d. Identify the dependent and controlled variables in an investigation.
- g. Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.
- h. Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.

Learning objectives:

1. Students will be able to develop a testable question and plan and conduct a simple investigation.
2. Students will be able to identify the controlled and dependent variables in an investigation.
3. Students will be able to record data by using graphs, charts, and tables.
4. Students will be able to develop conclusions from scientific evidence and tell whether further information is needed.

Formal and Informal Assessments:

TBA

Instructional Procedures:

1. A group introduction will be given by another teacher and we will split into smaller groups to begin our project.
2. Students will be given a handout that has charts and graphs they will need to fill in as we continue our investigation.
3. Students will also be given instructions on how to build the prototype parachute.
4. After students are given necessary handouts I will begin by reiterating to the students what we will be doing (building a parachute).
5. The students will split up into two groups and build two prototype parachutes. As the students are working on their parachutes, Emily and I will go around and help the students.
6. After the students are done building their prototype parachutes they will be able to

- test them in the classroom from a safe launching point, recording how long it takes the parachute to hit the ground.
7. For the last five to ten minutes of the class period I will ask the students what things they think could be changed about their parachute so that it would stay in the air longer. We will write a list and the students will write their answers on one of the provided worksheets.
 8. At the end we will tell the students exactly what we will be changing about the parachutes the following time we are at the school.
- *All of the fifth grade teaching groups will be doing one introduction so that we are all on the same page when we separate into smaller groups.

Differentiated Instruction:

To make accommodations for students with different needs such as English learners or students with IEPs, they will be placed in groups with other students that can help them build the parachute. Also, I will be coming around to make sure they understand what is going on and that they are participating in the activity and not being left out. For GATE students who may finish early they will be able to test their parachutes in different locations and time it so they will have plenty of activities to keep themselves occupied. Other accommodations will be handled as necessary.

Resources and Materials:

Plastic table cloth

Ruler

Stopwatch

Nut

String

Scissors

Worksheets