

Name: _____

Paper Airplanes & Scientific Methods

Scientific Inquiry refers to the many different ways in which scientists investigate the world. Scientific investigations are done to answer questions and solve problems. Many times investigations are said to follow a **Scientific Method**. Scientific methods are steps that are followed during an investigation to make sure that the information gained during the investigation is accurate and fair. The steps usually followed are:

- 1 A **Question or Problem is Identified and Stated.**
- 2 **Background Research or Literature Review** is done to find out what is already known about the topic.
- 3 A **Hypothesis** is formed - this is an educated guess about the result of the experiment based on the information learned during background research.
- 4 A very detailed, step-by-step **Procedure** is developed to test the hypothesis. This is also called the **Experimental Design or Methodology**. It includes a list of **Materials**.
- 5 The investigation is conducted and **Data is Collected**.
- 6 The **Data is Analyzed**.
- 7 **Conclusions are Drawn**. What does the data mean?
- 8 **Results are Communicated**. Other scientists review the results of the investigation.

During this investigation, you will practice the steps listed above as well as different science skills. Be sure to read everything in this handout and refer to your textbook handout whenever you find it necessary.

