

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 true.

You want to know which paper airplane design is best. The first thing you have to do is decide what best means. This is called an operational definition – the definition you will use during the investigation. For this investigation, we will define best as the plane that flies the farthest. We will not be concerned with height or loops or straight flight.

Things you may want to consider: the length of the plane, the weight of the plane, the style of the plane, position of weights on the plane, or something else. You will need to do some research as to what affects an airplane's flight. Include the information you gather in your background information section. Use this information to help you decide your independent variable (what you are varying in your experiment).

You must decide what kind of data you will collect or what you will observe and measure (dependent variable). You need to repeat the experiment several times. Multiple trials help make sure that your data is consistent. If you only do an experiment one time, you might get some very unusual data for many reasons. Repeating the experiment allows you to be confident in your findings (lessons bias).

Your assignment is to create and test different paper airplanes to see which design flies the furthest. **You must create at least three different paper airplanes.**

As you plan and complete your experiment, fill in the sections on your report page. Each pair must only turn in one report.