Project: The X-Games

Background:
All products (food, electronics, household goods, crafts, etc.) are examples of matter. These products all contain properties that we, as consumers, find important. We usually purchase these products based on our experience with their properties. For example, we buy the brand of cookies that tastes the best and the paper towels that absorb the most water. How do we know which product is best? Our past experiences with these products usually help us to decide. How accurate are our opinions about these products? In this project, you will be designing and conducting scientific experiments to help answer these questions.

You will begin this project by choosing a product, such as paper towels, and a property of this product that you feel is important, such as absorbency. You will work with your team to design an experiment to test three different brands of your product. In your plan, you will describe the step-by-step experimental procedure that you will use, as well as how you intend to measure, record, and interpret your data. You will then conduct three trials of your experiment, collect data for these three trials, and draw conclusions.

Your project will include:
- Step-by-step procedure, information about how you intend to measure, record, and interpret your data, and data tables.
- Explanation how you will “control” your experiment.
- A graph of your data (line graph, bar graph)
- Teacher-approved plan
- Samples of your product to test (bring from home)

Suggested Materials:
You may choose any product that you want to study, but...you must be able to conduct your test during a 50 minute class period!
Some examples include: adhesive tape (ex. strength), oils, syrups, ketchups (ex. speed of flow), dish/laundry soaps (cleaning ability). Make sure you pick materials that are easy to get, inexpensive, and will allow you to get measurable results.