

## Guided Notes: Data Collection

There are three ways to collect data:

1. Survey - involves the use of a questionnaire to measure the characteristics and/or attitudes of people.  
→ Can I get the answer by asking?

2. Observational Study - individuals are observed and certain outcomes are measured, but no attempt is made to affect the outcome.  
→ Can I get the answer by watching?

3. Experiment - treatments are imposed prior to observation, only way to show cause-and-effect relationship.  
→ Compare, associate, treatment, etc.

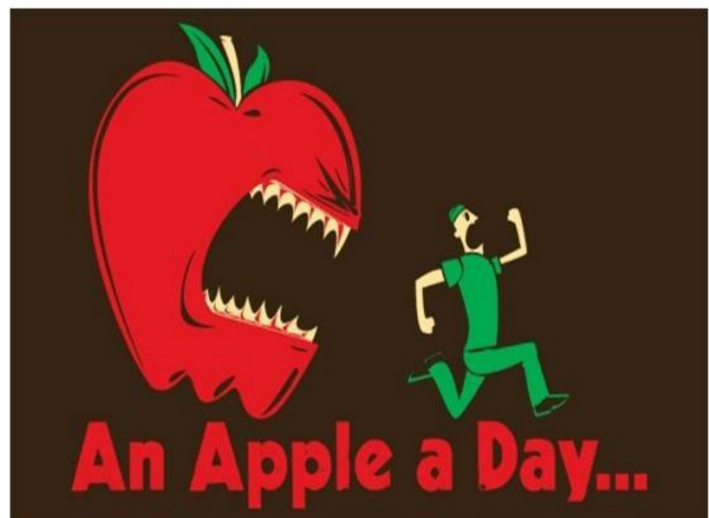
## Experimental Vs Observational Study

EX1. Fifty people with clinical depression were divided into two groups. Over a 6 month period, one group was given a traditional treatment for depression while the other group was given a new drug. The people were evaluated at the end of the period to determine whether their depression had improved.

Experiment

EX2. To determine whether or not apples really do keep the doctor away, forty patients at a doctor's office were asked to report how often they came to the doctor and the number of apples they had eaten recently.

## Survey



EX3. To determine whether music really helped students' scores on a test, a teacher who taught two U. S. History classes played classical music during testing for one class and played no music during testing for the other class.

# Experiment

**Homework is Page 3.7 in Packet**