Statistical Reasoning

6.1 – Guided Notes – Experiments: Good and Bad

Read pages 257-265. Using your textbook, define the words below:

1. Experiments –
2. Explanatory Variable –
3. Response Variable –
4. Subjects –
5. Treatment –
6. Confounding –
7. Lurking Variable –
8. Clinical Trial –
9. Placebo –
10. Placebo Effect –
11. Randomized Comparative Experiment –
12. Control Group –

**Randomized Comparative Experiment**



Subjects:

Treatments:

**Principles of Experimental Design:**

1)

2)

3

**Example 1: Can Aspirin help prevent heart attacks?**

The Physicians' Health Study (a large medical experiment involving 22,071 male physicians) attempted to answer this question. One randomly selected group of 11,037 physicians took aspirin every second day, while the rest took a placebo. After several years, the study found that subjects who took aspirin had significantly fewer heart attacks.

1. Identify the subjects, explanatory variable, and response variable.

1. Use a diagram to outline the design of the experiment.
2. How were each of the 3 principle of experimental design addressed.