Assignment 1 Key

1. Reduces pre-treatment differences between groups.

2. If the effects of B are permanent.

3. Learning is not necessary. Learning allows organisms to deal with short-term changes. Innate systems are good for established/long-term patterns. [Note: some students seemed to be thinking about complex animals, like higher mammals; however, there are numerous simpler animals (e.g., worms, insects, lower vertebrates) that can get by very well even in the real world's changing environment primarily by utilizing innate behavioural responses.]

4. Descriptive study. There is no hypothesis, control group, experimental group, or even a real independent variable so this is not an experimental study. All the researcher does is simply describe the average running time in graphical format.

5. This is a fixed action pattern. There are a variety of ways of demonstrating a behaviour is a FAP. For example: bring in different squirrels and try the same thing on them, take away the nut part way through, etc.

6. Bias is due to a non-representative sample. Increasing the sample size is the easiest way of reducing it. Yes, it is eliminated when you test the entire population. [Note: populations do not have to be large. For example, the 65 students registered in our course this spring comprise the entire population of Psyco 281 Spring session students.]

7. For full points students needed to explain the kinesis behaviour here specifically in the framework of the following components: comparator, reference input, actual input, action system, output, and feedback.