Lab 9 pp.C62 & C63 Answers

- I. Normal Behavior
 - The reason why the male cricket was isolated for a week prior to our experiment was so the male would mot have any stimulus and it would only display it's normal behavior. This isolated male was then considered the "control" for the experiment
 - Stridulation during this time by the isolated male should have been just the calling song.
 - > The last 2 questions are from your observations.
- II. Courtship Behavior
 - During the courtship behavior you may have observed the courtship song (high frequency, wings of male move very fast), rocking, grooming, aggression, rearing and display of spermatophore (if lucky).
- III. Aggressive Behavior
 - If you had a larger stock male than the isolated male, you may have seen the stock male be more aggressive than the isolated male.
 - It may have been displayed by mandible flair, kicking, biting, aggressive song, etc.
 - If the isolated male was larger, the opposite may have happened. Your data would have been much different.
- IV. Phototaxis
 - > Hypothesis should have been written in an If....then statement.
 - > You had to come up with the experimental design.
 - You may have witnessed more movement when the cricket was placed in a lighted area in respect to a dark area.
 - > What was your control and what was the variable?
- V. The file and the scraper are used to produce sound in the male crickets only.
 - > They are located on the wings of the male
 - > The tympanic membranes are located on the foreleg of the cricket.
 - o Both male and females have them
 - They are used to hear with.(just like human eardrum)
- VI. Optional Experiment and Anatomy
 - > Make sure you understand the control and variables in your experiment.
 - > What was your hypothesis and how did you conduct your experiment?
 - The cricket would have to make his wings move faster for the courtship song and slower for the aggressive and calling song.
 - The tympanic membranes are located closest to the ground and its antennae so the cricket can hear its prey. Also, so it can hear anything coming towards it. Think about how the cricket defended itself when it was put with another male.