Psychology of Learning

Read chapters 4 and 5 in the Sniffy book; the appendix may also be helpful. **Keep in mind that your project can be saved and restarted at any time!**

- <u>Behavioral observations</u>: Note Sniffy's behaviors within the operant chamber. Observe Sniffy's initial behavior in regards to number of bar presses, rearing up, and exploring the chamber (if you find the "behavioral repertoire" window and click "record" the program will count all of Sniffy's unique behaviors for you).
- 1 <u>Magazine Training</u>: Wait until Sniffy closely approaches the food hopper and then deliver the food pellet either by pressing the space bar or clicking your left mouse button (on the lever in the Skinner box). Give her several pellets in rapid succession in order for an association to form with the sound of the magazine and a pellet in the hopper. You can let Sniffy wander away before giving her the next pellet. Keep an eye on the Operant Associations mind window. Sniffy is fully magazine trained when the vertical bar for the Sound-Food Association reaches between 75% and the maximum level.

You should now save your Sniffy. Be sure to save Sniffy under <u>Save As</u>: *YourLastName-MT*. So, you should have a file with your name on it (e.g., Paul-MT.sdf).

2 <u>Acquisition: Shaping Sniffy to press the bar</u>. Open the "Experiment" drop-down then select the "Design Operant Conditioning Experiment" option. Select the continuous reinforcement schedule. Then choose the appropriate "Recorded Behavior" option from the drop-down menu ("Press Bar"). Then click the "APPLY" and then "CLOSE" button.

Begin to reinforce Sniffy when she rears up *anywhere* in the chamber. Next, reinforce Sniffy *only* when she rears up against the back wall where the bar is located. Gradually require Sniffy to rear up closer and closer to the bar. Sniffy will be reinforced automatically whenever she presses the bar (note the Bar-Sound level will rise in the Operant Associations mind window which you should probably open). If Sniffy does not press the bar, and you reinforce her anyway, the Bar-Sound level will fall. Be patient, eventually Sniffy will begin to press the bar in rapid succession. At this point SAVE Sniffy under the name "*YourLastName-BP*" so that you can come back to this point should the need ever arise.

- 3 <u>Extinction</u>: Adjust the program so that Sniffy's bar presses are no longer reinforced (open the "Design Operant Conditioning Experiment" option. Select "extinction" then "apply" and "close"). She no longer receives food as a consequence of bar pressing. Extinction is met when Sniffy presses the bar no more than twice in a 5-minute period (save "*YourLastName-EX*").
- 4 <u>Spontaneous Recovery</u>: Once extinction has occurred, select "Remove Sniffy for Time-Out" from the **Experiment** menu. When Sniffy reappears, her bar-pressing rate should be *higher* than it was at the end of extinction, but *lower* than it was before extinction. Compare the number of responses made and the time it takes to reach extinction this second time (save "*YourLastName-SR*").

<u>Grading</u>: Now you will need to <u>print out</u> the cumulative record portion of the screen. Before you can do this, you must first be sure that the **Cumulative Record** window is "<u>active</u>" by clicking once on that window. You should see that the title bar looks highlighted relative to the title bars of the other windows on the screen. Next, click on the **File** drop-down menu and highlight "**Print window**."

Once the Cumulative Record has printed out, indicate (circle) where steps 2, 3, and 4 from above occurred. This will be the sheet that you turn in for a grade.

YOU'RE DONE!