Stimulus and Response Activity – Can you beat the cup?

How a stimulus results in a behavior

Purpose: students will use a falling cup device to depict a stimulus and a response. Students should record their response time in order to determine differences in responding with their dominant hand, non-dominant hand, and with their eyes closed.

Note: The sight of the cup falling is the stimulus, the action of pulling a hand out of the way is the response.

Step 1 – Set up the device:

1. Get a cup and lid (both should have holes in them). Also pick up a dowel and a binder clip.
2. At your desk, slide the cup onto the dowel
3. Hold the dowel in the vertical position on the desk with the cup bottom facing up
4. Attach a binder clip to the dowel above the cup to act as a starting point from which to drop the cup. This limits how high the cup can be raised.

Step 2 – Make a data table to record test trials:

1. Data should be recorded as follows: Fill in the stimulus (vision) and the response (right hand) for the first data box. One person is the cup releaser; the other is the responder.
2. Each time the responder’s hand is hit, an X is recorded in the hit column; misses are recorded in the miss column.
3. Conduct the investigation three times for dominant hand, non-dominant hand, and with eyes closed.

Data Table:

Think & Write: How could you test the stimulus and response principles of behavior with your pet or with a friend’s pet? Do you expect an animal’s responses to vary in a pattern similar to your responses? (For instance, would covering an animal’s eyes have the same effect?) _______________________________