

Choice Chamber Experiment

Choice chambers are an investigative method used to study animal behavior and to determine the favored conditions for bugs and other animals in their habitat. You can set up a choice chamber for any ground burying insect that you find on your bug hunt or in your neighborhood. You can pick up pill bugs, worms or ants for your study.

Materials for your choice chamber:

- A minimum of 5 ground burying bugs
- A collection jar or container
- Two small dishes with lids
- Coffee filters
- Black construction paper
- Scissors

Instructions

1. In your collection jar, put in some dirt and dried leaves. Start looking under stones and sticks for some bugs and put them in the jar. Keep the bugs in the jar while you get your experiment dishes ready.
2. Draw around the lid of your experiment dish onto the coffee filter paper. Cut it out and fold in half. Wet it and place it one side of the dish.
3. Add your bugs and over time see which side they prefer over time (about 5 minutes to let them adjust to their surroundings). The side that most of all of bugs migrate to is the side they prefer.
4. You can then repeat this experiment using the dark paper to block out one side of the lid to see whether they prefer dark or light conditions.

You can follow the pictures below.

Bonus: Can you make a hypothesis (an educated guess) before you get started on either the bug you choose will go to the damp or dry side? The light or dark side? Think about their habitat (home where you found them). What were the conditions like where you collected the bugs and what does that say about what those bugs like.



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1. Collect bugs in a jar and place them in container with dirt and some leaves. Before



2. Cut coffee filter to size and place in half of container. Dampen the coffee filter.



3. Take bugs from jar and put them in container with dampened coffee filter.



4. Try the experiment again with a dark piece of paper.



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