

The Ants Go Marching... Hurrah! Hurrah!

Purpose: This exercise will allow students to continue to familiarize themselves with the steps of the scientific method by observing and experimenting with ants. In the first lesson, students will compare ant behavior in two different habitats. In subsequent lessons, they will hypothesize about and test which type of food ants prefer. This activity will allow students to practice their data analysis and graphing skills.

Required background: Students should be comfortable with the scientific method, including the formulation of hypothesis, development of experiments, and accurate collection of data.

Materials:

1. Peanut butter
2. Chopsticks (2 per student)
3. Ant Bait information cards (2 per student; provided below)
4. Zip-loc© bags (2 per student)

The Ants Go Marching... Hurrah! Hurrah!

IMPORTANT: If you are allergic to bee or wasp stings, please ask for help from your parents or refrain from this activity completely. Some ants may bite and sting, so be careful not to touch the ants or disturb any ant nests. Do not wear loose clothing or slippers. The ants can get caught in this attire. Wear covered shoes and a short-sleeved shirt.

Directions:

1. Pick two different locations to place your chopsticks. Choose two locations where you hypothesize ants might be present in different numbers.
2. Dip half of your chopstick in peanut butter, leaving the other half clean. You do not need a lot of peanut butter; just a light coating will work!
3. Place the chopstick on the ground in your first chosen location. Peanut butter should be in contact with the ground.
4. Place your second chopstick in your second chosen location as described above.
5. Wait one hour before collecting your chopsticks. During this hour, make observations about the ants' behavior and answer the homework questions.
6. After the hour is over, fill out your ant bait information card #1, cut it out and place it in your first Zip-loc[®] bag.
7. Carefully pick up your first chopstick and drop it into the Zip-loc[®] bag with the bait information card #1. Seal the Zip-loc[®] bag securely with the ants inside.
8. Fill out your ant bait information card #2, place in your second Zip-loc[®] bag and collect your second chopstick as described above.
9. Place the bags in the freezer and bring them back to school next week. We will be counting the number of ants you caught and sharing our observations with each other.

Bait Card #1

Name: _____

Classroom: _____

Time put out: _____

Time collected: _____

Bait Card #2

Name: _____

Classroom: _____

Time put out: _____

Time collected: _____

Name _____

Classroom _____

Ant Attack Homework

1. Describe in detail the two locations where you placed your two ant bait cards. For example, you might say "Ant bait card #1 was put in the shade, under a bush with a lot of leaves on it."

Bait Card #1:

Bait Card #2:

2. Write your hypothesis about the number of ants that will come to each bait card. For example, you might hypothesize that "There will be more ants on the bait card by the trash because ants like garbage."

2. How long did it take for the ants to find the peanut butter in each location?

Bait Card #1:

Bait Card #2:

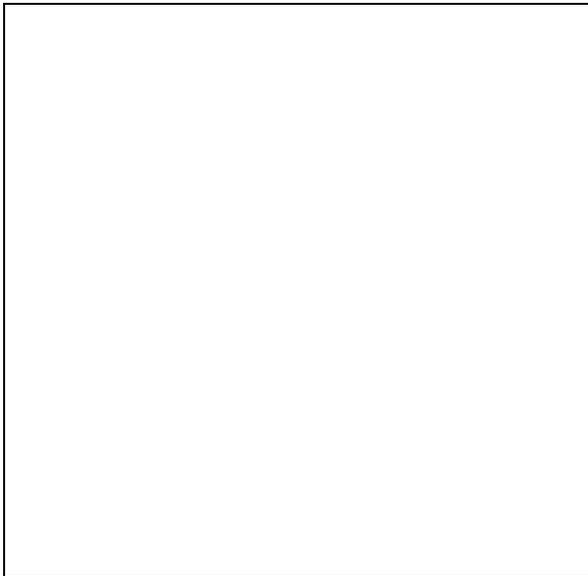
3. What are the ants doing with the peanut butter?

Name _____

Classroom _____

4. Are there different types of ants eating the peanut butter? If so, how many different types of ants do you see?

5. Draw a detailed picture of one of the ants you are observing. Describe how it looks.



6. How much of the peanut butter did the ants eat?

Bait Card #1:

Bait Card #2: