

ANT HILL INVESTIGATIONS

Wherever you are, there are ants. That can be good or bad! We think it's good because there are so many ways to learn from ants. For example, every playground has ant hills – or at least holes with ants going in and out. “Ant parades” are always fun, too!

Here's what you can do!

You'll need: a stopwatch, a pencil, the Ant Hill Investigations Datasheet, an Ant Hill!

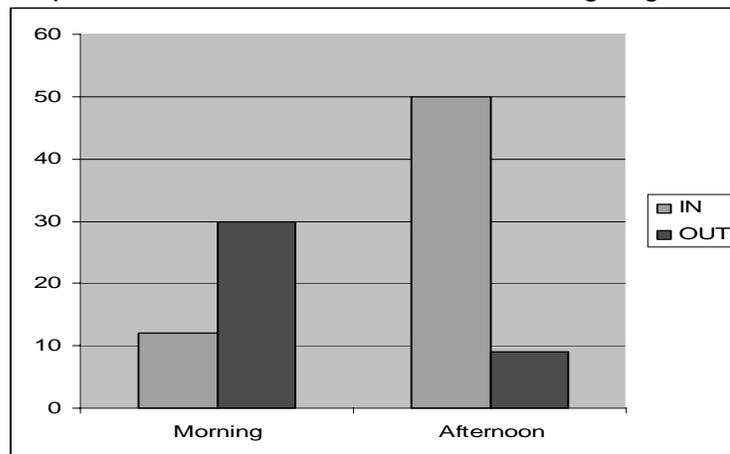
Work in groups of two. Count the ants going in and out of an ant hole. One person should watch the ants and say “in” or “out” when they see ants, while the other person scores the ins and outs on the data sheet or in a field notebook. Do you think the number of ins and outs would be different in the morning or afternoon (and say why!)? You can graph the data to see if they change (see sample below)!

What “variables” might affect the ant's behavior? (Variables are things that change) Which of these variables do you think are important?

- | | | |
|--|---|--|
| <input type="checkbox"/> Temperature | <input type="checkbox"/> Other animals
around the hole | <input type="checkbox"/> Season |
| <input type="checkbox"/> Time of day | <input type="checkbox"/> A disturbance | <input type="checkbox"/> Humidity |
| <input type="checkbox"/> The address | <input type="checkbox"/> The day of the week | <input type="checkbox"/> Type of soil |
| <input type="checkbox"/> Clouds | <input type="checkbox"/> Rain | <input type="checkbox"/> What you had for
lunch |
| <input type="checkbox"/> Amount of light | | |
| <input type="checkbox"/> Any others? _____ | | |

GRAPH OF SAMPLE DATA

Can you explain the results shown here? What's going on with the ants?



If your class is fortunate enough to find an ant parade watch their antennas as they follow the trail. Do they touch their abdomens to the ground? Have one person wet one finger and rub it across the invisible scent (pheromone) trail the ants are following. You can do this in a couple of different spots if you want to. Time how long it takes the first ant to find its way across the break, and then see if the second ant takes as long. After seeing how long it takes the ants to fully recover – like there was no break at all - try it again with *two* fingers and see if it takes twice as long!