
All About Ants

Reading Comprehension

Leafcutter Ants

In the tropical rainforests of Central and South America, there are colonies of leafcutter ants. These ants travel throughout the forest looking for leaves that they will cut with their sharp jaws. They then carry the leaves on their backs and return to their underground burrow. A leafcutter ant can carry almost ten times its own weight—that's like a 100-kilogram man being able to lift a 1 000 kilogram car! Once back in their burrow, the ants chew the leaves into a pulp, which is then mixed into a fungus garden. The ants do not actually eat the leaves they cut. Instead, they rely on the fungus for food.

The leafcutter ant lives in a highly organized and efficient society with as many as five to ten million other ants at a time, and each one of them has their own job. There is only one queen in each nest and she is responsible for laying all of the eggs for the entire colony. In the colony, there are also soldiers. They mainly defend the nest from intruders, but they also clear the foraging trails of large debris and carry bulky items back to the nest. Then there are the workers. Worker ants have many different jobs. Some collect the leaves, some tend to the eggs, others feed the colony, and some even have adapted elaborate behaviours for taking care of the fungus crop by grooming, cleaning, and pruning it. A specialized group of ants are the "trash" workers. They carry out all of the old garden material and dispose of it in specific refuse locations.

This very complex society of ants has an important impact on the tropical ecosystems that they live in. They also demonstrate the importance of individuals working together for the common good of society.

Story Questions:

1. Based on the clues from the passage, where would you need to travel in order to see leafcutter ants in the wild?
 - a. Ottawa
 - b. Antarctica
 - c. Italy
 - d. Costa Rica

2. What happens to the leaves that are cut and carried away by the leafcutter ants?
 - a. The ants place the leaves on the forest floor.
 - b. They grow into new trees.
 - c. The ants place them near fungus on a tree.
 - d. The ants take them underground and chew them.

3. Synonyms are words that mean almost the same thing. *Refuse* is a synonym for...
- a. decline.
 - b. garbage.
 - c. sanction.
 - d. consent.

Compare and Contrast Writing

4. Leafcutter ants demonstrate the importance of individuals working together for the common good of society. **Compare and contrast** how leafcutter ants work together compared to how humans work together for the common good of society.

Math Worksheet

5. **Practise** [calculating the circumference and area of circles](#). If you don't remember the formulas needed, find them on this [page](#).

Word Problems

6. **Read** the word problems below and **write** the answers.
- ★ Iris is making a mini chocolate cream pie for her and her friend, who is coming for dinner. The distance from the outer edge of the pie to the exact centre of the pie is 6 cm. What is the circumference of the pie? What is the area of the top of the pie? Round your answers to two decimal places.

 - ★ Iris' aunt made a bigger version of the pie the following weekend. The distance from the outer edge of the pie to the exact centre of the pie is 10 cm. What is the circumference of the pie? What is the area of the top of the pie? Round your answers to two decimal places.

Fun Stuff!

7. Inspired by the photographers at [National Geographic](#), **have fun** with this [lunchtime photography project](#).