Ants fight back

educationinchemistry

Answers

- 1. -
- a. Long-chained cuticular hydrocarbons
- b. Identify ants from the same colony
- c. Glands around the body, including poison glands and mandibular glands
- d. Have soldier ants for physical threats, but also produce antibiotics and antifungals
- e. Compound
- f. Four carbon, four hydrogen, two nitrogen
- 2. -
- a. By producing the correct blend of CHCs so the ants think that they are one of them.
- b. Colony devotes food and resources to feeding and protecting the caterpillars.
- c. As it warns other ants of danger so they can survive.
- 3. This activity does not have 'right' answers, but below are some example answers:
 - a. Done
 - b. Leafcutter ants take leaves back to the nest because they use them to grow their fungus gardens.
 - Leafcutter ants take leaves back to the nest but many farmers consider this to be a harmful activity for their crops.
 - Leafcutter ants take leaves back to the nest so farmers use insecticides to stop them.
 - c. Some animals take advantage of the ants because they are parasites (and are adapted to do so).
 - Some animals take advantage of the ants but the ants do have some mechanisms to fight back.
 - Some animals take advantage of the ants so scientists can research how they go about this.