# Ants fight back

### Answers

1. –
   1. Long-chained cuticular hydrocarbons
   2. Identify ants from the same colony
   3. Glands around the body, including poison glands and mandibular glands
   4. Have soldier ants for physical threats, but also produce antibiotics and antifungals
   5. Compound
   6. Four carbon, four hydrogen, two nitrogen
2. –
   1. By producing the correct blend of CHCs so the ants think that they are one of them.
   2. Colony devotes food and resources to feeding and protecting the caterpillars.
   3. 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:
   1. Done
   2. 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.
   3. 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.