Impact 3
Unit 3
Main Video Script
Scene 3.1: *Smarter by the Swarm*

Narrator: Hey, you! Think you're smarter than ant? You're probably right. After all, your brain is about 40,000 times bigger. But do you think you're smarter than a colony of 40,000 ants? If you watch an ant try to do something by itself, you'll notice it looks lost, as if it has no direction at all. But when that ant is in a colony of other ants, it suddenly knows exactly where it's going. That's because of something researchers call swarm intelligence. When ants bring back food to the nest, they leave a scent trail that leads other ants to more food. Think about it. One ant can't possibly bring back an entire box of cereal from your kitchen, but imagine if each ant in the colony carried one piece. Ants not only tell each other where the food is, but the fastest way to get there and back. This gave people an idea: if tiny ants who aren't very smart on their own can work together to solve big problems, why can't people—who are pretty smart even by themselves—work together to solve even bigger problems? Many companies now mimic ants by searching for the best delivery routes for their products and leaving digital trails for delivery trucks to follow. An airline company even uses an ant-based model to help its planes find the best gates for arrivals and departures. Studying swarm intelligence continues to lead to new ideas. If humans can learn from ants how to work together to be more efficient, do you think humans can program robots to do the same? And if we can, what would you have them do?

Copyright © 2017 National Geographic Learning, a part of Cengage Learning.