## **ALIEN RESCUE: HOW SCIENTISTS WORK**

## **EXAMPLE SOLUTION**

## Alien Rescue: How Scientists Work

How do scientists work? Think about how you have been working during *Alien Rescue* and consider how it is similar to the way you think scientists work. List at least four different facts you think describe how scientists work. For each fact, explain what you mean and why you think it's important.

For example, let's look at how architects work.

- 1. Architects make a lot of sketches. This helps them to think about and improve their designs.
- 2. Architects study how buildings have been designed in the past. They get ideas by considering what's good and bad about those designs.
- Before architects design buildings they think about how people will use those spaces. They try to design so the spaces will be comfortable and make the tasks people do in them easier.
- 4. Architects build models so they can look at their designs in three dimensions.
- 5. Architects show their designs to others to get new ideas and catch possible problems before people start building.
- Scientists collaborate. By working together, they can get more done and combine skills.
  Scientists make hypotheses. These hypotheses guide their investigation.
  Scientists rarely get it right the first time. They make many mistakes and learn from each one.
  Scientists always back up their opinions with facts and data. They never simply say they believe something without being able to explain why, and this helps them be trusted.
  Scientists publish their findings. In this way they add to what other scientists know.
  Others build on this information.