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SPACE TECH SERIES

Elon Musk & SpaceX

Reusing Rockets to Reach Space

Rockets You Can Use Again

In 2002, Elon Musk started a company called SpaceX. He wanted to build **reusable** rockets. These are rockets that fly to space and then come back to be used again.

For a long time, rockets were used only one time. After a **launch**, the huge bottom part, called the **booster**, fell into the ocean and was thrown away. That made going to space very expensive.

On December 21, 2015, a SpaceX rocket called the Falcon 9 launched toward space. Then its booster came back and landed standing straight up on the ground. Because the same booster can fly many times, SpaceX made reaching space cost a lot less.

SPACE WORDS TO KNOW

- **booster:** the big bottom part of a rocket that gives the first, powerful push off the ground
- **reusable:** something that can be used more than one time instead of thrown away
- **launch:** when a rocket takes off and flies up into space

Part 1 • Reading Comprehension

1. What year did Elon Musk start SpaceX?

2. Before SpaceX, what happened to a rocket's booster after a launch?

3. What did the Falcon 9 booster do on December 21, 2015?

4. Why does reusing a booster help?

How Many Rockets Do You Save?

One SpaceX booster can land and fly again. Imagine one reusable booster is used for 5 launches.

- 1 If you needed a brand-new booster for each launch, how many boosters would 5 launches need?

- 2 With one reusable booster, how many boosters are needed for those same 5 launches?

- 3 How many boosters did reusing one booster save? (Subtract your Step 2 answer from your Step 1 answer.)

Part 3 • Think About It

Why might it be helpful to make space travel cheaper?

