

## **MARS IN A MINUTE: How Do You Land on Mars?**

How do you land on Mars?

Very carefully! Your spacecraft hurtles toward the planet at thousands of miles per hour, so you'll have to hit the brakes in a hurry!

First, your capsule needs a heat shield. It protects the spacecraft inside from the heat and friction of entry into the atmosphere.

Friction slows you down over 90%, but not enough to land safely. Use a parachute to slow down even more. Still falling at over 100 miles per hour, you need the right system to land safely! Here are some options:

1. With a small- to mid-size rover, use a cushion of airbags along with retro rockets. Impact at 30 miles an hour and bounce to a stop!
2. With a large lander, use retro rockets and landing legs to touch down, going about six miles an hour.
3. Or, with a large, heavy rover, use a big jetpack to slow down to under two miles an hour. Then, gently lower it on cables to land on its wheels.

Any way you do it, you'll need skill and hard work: there's nothing easy about landing on Mars!