



PUZZLER

This sky diver is falling at more than 50 m/s (120 mi/h), but once her parachute opens, her downward velocity will be greatly reduced. Why does she slow down rapidly when her chute opens, enabling her to fall safely to the ground? If the chute does not function properly, the sky diver will almost certainly be seriously injured. What force exerted on her limits her maximum speed?

(Guy Savage/Photo Researchers, Inc.)

chapter

6

Circular Motion and Other Applications of Newton's Laws

Chapter Outline

- 6.1** Newton's Second Law Applied to Uniform Circular Motion
- 6.2** Nonuniform Circular Motion
- 6.3** *(Optional)* Motion in Accelerated Frames
- 6.4** *(Optional)* Motion in the Presence of Resistive Forces
- 6.5** *(Optional)* Numerical Modeling in Particle Dynamics