

## Slinky

Did you know that Slinky<sup>®</sup>, the spring toy that goes down stairs by itself, did not start out as a toy but as an invention to stop ship instruments from vibrating?

In the 1940s, Richard James, an engineer, was trying to develop springs that could be used to keep the gauges on a ship from being thrown off kilter by the motion of waves. One day, James accidentally knocked one of his experimental springs off a shelf. Instead of toppling to the floor, the spring uncoiled to a lower shelf, then systematically plopped itself onto a stack of books and a tabletop, and finally came to rest upright on the floor. It went down stairs with equal success. James' wife, Betty, decided that the spring would make a great toy. She finally chose the name "Slinky" because it described the way the toy moved, like a snake.

The Slinky was first marketed in 1946. James designed his own machines to transform the 80 feet of wire required into a 2-inch coil. The same machines are still used to make Slinkys today, although the current version is made from American metal rather than Swedish steel.

Besides being a toy, Slinkys have been used for other purposes. During the Vietnam War, it was used as a kind of radio antenna. Slinkys also have been carried aboard space shuttles to test the effects of gravity on springs. In space, a Slinky moves more like a wave than a spring. Slinkys also have been used to pick pecans, hold drapes, repel pigeons, and protect gutters.

Over the years, the amount of wire used to make Slinkys – 50,000 tons – could wrap around the world more than a hundred times. Enough Slinkys have been sold for everyone in the United States to own one. Fifty years after its inception, the Slinky sells for only about twice its original cost, which was one dollar.

## Unit 6

- According to a recent survey, 90% of Americans know what a Slinky is. Why do you think this innovation became so popular?
  
- If you were going to market a new toy, what sorts of things would you investigate?
  
- If you had to analyze how a Slinky works, what procedures would you use?