

Reading: 7th elementary



Let's practice some reading using **your book**.

- ✓ Go to page **18** and read the three texts about discoveries in the world.
- ✓ Read each text and write down in your copybook the main idea of each.
- ✓ Highlight or write down in your copybook all the words you don't know; then look for those words in a dictionary (it will help you to increase your vocabulary) some of the words you need to find are the following: *loop, perspiration, fastener, burrs, find out, take off, hook, slinky, shipyard, spring*. (you can use an online dictionary, my favorite is: www.wordreference.com)
- ✓ Create a concept map in your copybook with the ideas of each paragraph.
- ✓ Answer the following question: **"Which discovery was more important according to you?"** give reasons.

Slinky

An American engineer called Richard James was working in a shipyard in Philadelphia. He was searching for a way to make ships more stable in bad weather, so he was doing some experiments with hundreds of different springs. While he was working, he put the springs on his desk. One day, one of them fell off his desk and 'walked' down some books onto the floor. James was so surprised that he took the spring home for his children. They were delighted. Soon all the children's friends wanted one, too. His invention didn't work for ships so he decided to turn it into a toy. His wife came up with the name 'Slinky' for the spring and they decided to go into business. They created their own company but never imagined it would be so successful. When a department store demonstrated the Slinky to the public, they sold 400 of them in 90 minutes. Nowadays the firm still makes between three and four million Slinkys each year.



Velcro

The problem with the old-fashioned zip fastener was that it often broke. Georges de Mestral experienced this when a broken zip fastener on his wife's dress spoiled an evening out for the couple. It



took a country walk and careful observation for him to have the clever idea for an alternative. On his return he noticed that he and his dog were covered with 'burrs' from a type of plant. They were so difficult to take off that he decided to find out why.

When he looked at one under a microscope, he found out it had hundreds of small hooks that allowed it to stick to anything it touched. He immediately understood



how he could use the hook idea to create a better alternative to the zip fastener. With the help of his business partner Jakob Muller he developed 'Velcro'. Velcro has one side with thousands of very small loops, and another with thousands of little hooks. It is such a part of everyday life now that it is difficult to imagine how we managed without it. The name Velcro comes from the beginnings of two French words – *velours* (velvet) and *crochet* (hook).

Inspiration or perspiration?

Where and how do inventors make their discoveries? Do they spend days, weeks or even years working on a particular theory or invention? Or can it happen another way? Scientists and inventors work hard, but sometimes their ideas and hard work can take them in an unexpected direction. Chance and their observation of something unexpected often play an important part.