

High-Intermediate 3
Unit 1 Reading
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Eureka means “I’ve found it” in Greek and it alludes to the story of Archimedes, the Greek scientist, who discovered the density of materials while he was taking a bath.

Who **put together** the first personal computer? You may think that it was scientists working in a lab. In fact, two college dropouts working in a garage **came up with** this invention that changed the world. Inventors are often elementary schoolchildren, homemakers, or the guy next door working on his car. They **dream up** ideas in classrooms, kitchens, and home workshops.

How do inventors **come up with** new ideas? What is the key to invention if it isn’t education, age, or a laboratory? It’s creativity, and everyone has it. This ability to **think up** something new seems like magic to many people, but in fact, anyone can develop the qualities that **go along with** creativity.

go along with = accompany

put sth together = assemble sth



Steve Jobs & Steve Wozniak

college drop-out = a person who has given up his studies at college

come up with = find

dream sth up = imagine sth

think sth up = imagine sth

Curiosity comes first. Inventors are people who want to **find out** why things happen the way they do. For example, when George de Mestral, a Swiss inventor, took his dog for walks in the mountains, burrs would get stuck in the dog's coat. De Mestral wondered why they were so hard to remove. Acting on his curiosity, he examined the burrs through a microscope. When he saw the many tiny hooks on each burr, he realized that he was looking at the perfect fastener. Years later, de Mestral developed this idea into Velcro®, now used to fasten everything from sneakers to space suits.

Imagination is also crucial for an inventor. This quality helps inventors **put** things **together** in a new way. One U.S. sixth grader invented a solar-powered bicycle light by combining solar cells and his bicycle. When he rides his bike during the day, the sunlight **charges up** two batteries. Then at night, when he needs the light, he **switches** it **on**. Imagination can also mean seeing a new use for a common object. The original Frisbee® was a pie pan that two truck drivers were tossing to each other in a parking lot. As he watched the two men **playing around**, Walter Morrison **came up with** his idea for a new toy that became popular all over the world.

Inventors are often problem solvers. When fifteen-year-old Chester Greenwood's ears got frostbitten during Maine's bitter winters, he **didn't give up** and stay indoors. Instead, he attached fur cups to the ends of a piece of wire, and wrapped

find sth out = understand sth

swiss = from Switzerland



sneakers (American) = trainers (British)

crucial = important

charge sth up = charge sth completely

switch sth on = turn sth on

object = thing



toss = throw

parking lot (American) = car park (British)

frost = very cold weather conditions

Maine = a state in the Northeast of the United States

the wire around his head. His friends made fun of him at first, but soon the idea **caught on**, and they wanted earmuffs too. The Greenwood family had to work hard to **keep up with** the orders. Chester patented his invention when he was only nineteen.

After an inventor says "Eureka!" (Greek for "I've found it!") there's still a lot of work to do. Another quality found in successful inventors is tenacity—the ability to **stick with** a project until it is completed. This usually involves **looking up** information related to the idea. George Eastman, inventor of the Kodak® camera and film, spent years researching chemicals and photography. Tenacity also involves **trying out** different materials and designs. De Mestral experimented with many kinds of materials before he perfected Velcro®.

Finally, inventors need a lot of self-confidence. They have to believe in their ideas and be willing to learn from failures. Gail Borden developed a process for condensing and canning milk, but the government **turned down** his first application for a patent. He **kept on** trying to perfect his method and after years he finally succeeded. His invention probably saved many lives at a time when there was no way to refrigerate milk. Borden's motto is engraved on his tombstone: "I tried and failed; I tried again and again and succeeded."

catch on = become popular

keep up with = keep pace with

patent (v.) = register an invention

patent (n.) = official registration of an invention



tenacity = perseverance

stick with = continue

perfect (v.) = complete

condense = make (something) denser or more concentrated

turn sth down = reject sth; decline sth

application = request

keep on = continue

motto = slogan

Main Ideas:

Creativity & Innovation => the key to being an inventor

This passage is mainly about the qualities which are necessary for being a successful inventor:

- **Curiosity** = Wanting to know why things happen the way they do.
- **Imagination** = Putting things together in a new way or seeing a new use for a common object
- **Problem-Solving**
- **Tenacity** = The ability to stick with a project until it is completed and trying out different materials and designs
- **Self-Confidence** = Believing in one's own ideas and the willingness to learn from failures