## Inventions 1 Questions about technology

- 1. What do you think are the 3 greatest inventions of all time?
- 2. How has technology changed the workplace?
- 3. Has technology ever *let you down?* (Have you ever been disappointed because something did not work properly?) What happened?
- 4. How has technology improved our daily lives? Give examples and explain the advantages of technological advances.
- 5. What could never be replaced by technology? Explain why not.
- 6. What things should never have been invented?
- 7. Do computers save time or do they just make us waste more time? Explain.
- 8. What would you like to see invented in the future? Explain why.
- 9. Which modern invention could you not live without? Explain your choice.
- 10. How has technology changed medical care?
- 11. How has technology revolutionized transport?

## Inventions 2 The Invention of Umbrellas

It seems natural to open an umbrella when it rains. But actually the umbrella was not invented for protection against rain. It was first used as a shade against the sun. Nobody knows who first invented it, but the umbrella was used in very ancient times. The first people to use it were probably the Chinese in the eleventh century B.C. The umbrella spread to ancient Egypt and Babylon. At that time it was a symbol of honor and authority. The umbrella was only for royalty or by those in high offices.

It is believed that the first people to use the umbrella as protection against rain were the ancient Romans.

The umbrella became popular in Europe in the eighteenth century and then started to become popular worldwide. Umbrellas have not changed much in style during all this time; however, it wasn't until the *twentieth century* that umbrellas began to be made in a variety of colors.

- 1. Who first invented the umbrella?
- 2. When did the first people start to use the umbrella?
- 3. Who were the first people to use the umbrella for protection from the rain?
- 4. When did umbrellas began being made into different colors?

### **Inventions 3**

### For good or for bad

Just a few hundred years ago, life was far different than it is today. When people wanted to travel or communicate, they had to go on foot or horseback.

Whatever people owned—from clothing to tools—had to be made by hand.

Diseases were difficult to treat without modern medicines.

Quality of life has improved over the years through the efforts of the men and women who had the brilliance, diligence, and creativity to come up with new and better ways of doing things.

Alexander Graham Bell discovered how to send sound down a wire from the speaker to the listener, and so invented the telephone, which ultimately led to the cell phone, and our modem, and a communication system that now links the entire globe.

The electric light illuminated the darkness so people could work at night. Braille made it possible for blind people to read.

These inventions, like many others, have clearly improved life by keeping people healthier, helping them to communicate and work more efficiently, and allowing them to travel farther.

Other inventions were controversial because of their potential for destruction. Some people think that the world would be better off without the invention of the hydrogen bomb.

List 5 good inventions. Explain how they have changed people's lives.

## Inventions 4 Telephone and Computers

### The Telephone

The telephone is an instrument that converts voice and sound signals into electrical impulses for transmission by wire to a different location, where another telephone receives the electrical impulses and turns them back into recognizable sounds. In 1875, Alexander Graham Bell built the first telephone that transmitted electrically the human voice.

### **Computers**

There are many major milestones in the history of computers, starting with 1936, when Konrad Zuse built the first freely programmable computer. In the 1960s computers were used by NASA to place a man on the moon. The computers then were very large.

- 1. What are the advantages and disadvantages of having a mobile phone?
- 2. Explain in 3 sentences or more how have computers changed since 1936.

### Inventions 5 The car and the camera

#### The Car

In 1769, the very first self-propelled road vehicle was invented by French mechanic, Nicolas Joseph Cugnot, (French). It was a steampowered model. In 1885, Karl Benz, (German) designed and built the world's first practical car to be powered by an internal-combustion engine. In 1885, Gottlieb Daimler (German), took the internal combustion engine a step further and developed a gas engine. He later built the world's first four-wheeled motor vehicle.

- 1. Apart from walking, how did people travel before the invention of the car?
- 2. How is the modern car different to the first car invented?

#### The Camera

In 1814, Joseph Nicéphore Niépce (French), created the first photographic image with a camera he invented. The image required eight hours of light exposure and later faded. In 1837 Louis-Jacques-Mandé Daguerre (French), invented of the first practical process of photography.

- 3. How did people produce images before the camera?
- 4. What can we do with cameras today?

## Inventions 6 The light bulb

In 1809, Humphry Davy, an English chemist, invented the first electric light. Fifty years later Thomas Edison (American), improved upon this idea. In 1878, Sir Joseph Wilson Swan, an English scientist, was the first person to invent a practical and longer-lasting electric lightbulb that burned for 13 hours. In 1879, Thomas Edison invented a carbon filament that burned for forty hours. The filament is made of tungsten wire. Tungsten is a hard metal with the highest melting point of any metal.



- 1. How did people light their homes before the invention of the electric light?
- 2. Why was Thomas Edison's invention in 1879, better than any previous attempts at making a light bulb?
- 3. Why is tungsten a suitable metal for using in a light bulb?
- 4. Draw the light bulb and label the tungsten wire filament.

# Inventions 7 Household objects

Choose five of the following objects.

Name and draw each object.

Explain how life would have been without this object, or how the job would have been done before it was invented.

- 1. Hammer
- 2. Fork
- 3. Spade
- 4. Mop
- 5. Broom
- 6. Screwdriver
- 7. Grater
- 8. Peeler
- 9. Scissors
- 10. Saucepan
- 11. Clothes peg











## Inventions 8 Household objects

Choose five of the following objects.

Name and draw each object.

Explain how life would have been without this object, or how the job would have been done before it was invented.

- 1. Mirror
- 2. Pen
- 3. Washing machine
- 4. Clock
- 5. Sewing machine
- 6. Can opener
- 7. Ironing board
- 8. Lawn mower
- 9. Saw
- 10. Drill
- 11. toothbrush



