



GREAT INVENTIONS

THE AUTOMOBILE



Yesterday we went to visit my aunt and uncle. They live about fifty kilometers from home. As we drove home, I started thinking about how great it is to have a car to travel long distances; we got home in only half an hour.

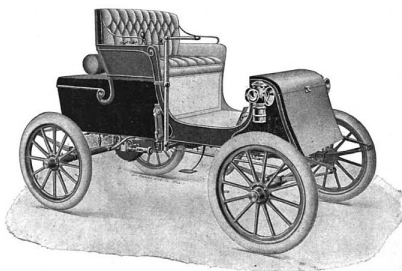
My cousin, Manolito, loves cars and knows a lot of things about this means of transport. When he grows up, he wants to be a mechanic and have his own workshop. When we were visiting, he told me a lot of interesting things about cars.

Around 1870, in Vienna, the inventor Siegfried Marcus operated the first internal combustion engine based on gasoline.

The first car built with a gasoline-run internal combustion engine was built in 1886 by the German Karl Friedrich Benz (see the photo of the tricycle on the right). Benz patented it on January 29, 1886, and began producing it in 1888.



Bertha Benz, Karl Benz's wife, made the first trip ever driven in a car in 1888. She drove a distance of about 105 km. At that time, the maximum speed of this car was about twenty km/h; so, it took Mrs. Benz more than five hours to complete the trip.



For most of the population in 1903, the car was only a dangerous toy for the rich. The press complained about the car, considering it a dangerous machine because children and horses were run over. The use of the automobile was banned in Switzerland and Austria. Also, women were not allowed to drive.

On October 8, 1908, Henry Ford began producing the Ford T on an assembly line in the United States. Before the Model Ford T, all cars were manufactured one at a time by hand. This method of manufacturing took a lot of time. With his



assembly line production, Ford produced fifteen million Model T cars over the next nineteen years.

With the price of the Model T (see photo on the left) \$850 at the beginning, it ceased to be a toy for the rich. By 1922, the cost was only \$450.

The next noticeable change for the automobile was hybrid technology, which introduced electrical technology.

This change will take determination, but it is seen as the standard of the future.

Thanks to my cousin, Manolito, I have been able to learn a lot of interesting facts about cars. What about you? What have you learned about cars?



Name _____

Date _____



THE AUTOMOBILE

ANSWER THE QUESTIONS.



1. How long did it take to get back home from my uncle's house?

- a. 50 km
- b. 30 min
- c. 5 hours
- d. two hours

2. How did Siegfried Marcus's engine run?

- a. with steam
- b. with electricity
- c. with ethanol
- d. with gasoline

3. When did Benz patent his car?

- a. in 1870
- b. in 1886
- c. in 1888
- d. in 1903

4. How long did Bertha Benz drive?

- a. about 105 Km
- b. about 20 k /h
- c. more than 5 hours
- d. about 50 km

5. What did people think of the car in 1903?

- a. It was slow.
- b. It was cheap.
- c. It was safe.
- d. It was dangerous.

6. Which countries banned the car in 1903?

- a. Switzerland and Germany
- b. Switzerland and Austria
- c. United States and Switzerland
- d. Austria and Germany

7. The Ford T was produced_____.

- a. on an assembly line
- b. by hand, one by one
- c. in a handmade process
- d. in Germany

8. How many years was the Ford T manufactured?

- a. 29 years
- b. 39 years
- c. 5 years
- d. 19 years

9. What will power cars in the future?

- a. natural gas
- b. ethanol
- c. electricity
- d. biodiesel

10. Why was the Ford T not just for the rich?
