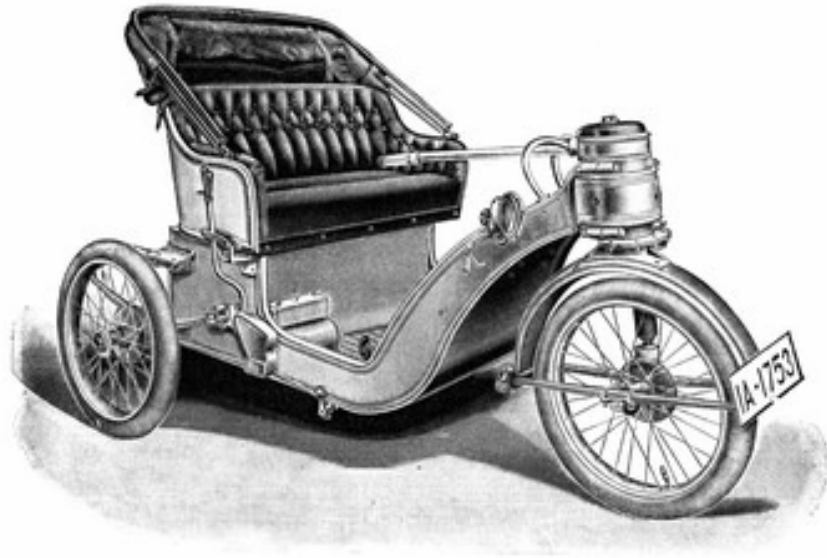


THE FIRST ROAD TRIP, part I

One morning in August 1888, Bertha Benz and her two sons, Eugen (15), and Richard (13), woke up early. They got dressed very quietly, so as not to waken the head of the family, Karl Benz. They left a note that said, "We are going to visit Grandma." They crept out to Mr. Benz's workshop, opened the door, and pushed out a three-wheeled vehicle. It was the fruit of Mr. Benz's long and hard work - the first engine car.



Imagine it: a wooden construction more similar to a horse carriage than to the cars we have now: no roof, no hood, two wheels in the back but only one wheel in the front, a kind of handle instead of a steering wheel, leather-covered seats, and, the most important part, a 2.5 horsepower single-cylinder four-stroke engine.

The car that Mrs. Benz and her sons rolled out of the workshop had gone through a great deal of development since its registration (no. DRP 37435) two years before, but Mr. Benz felt it needed even more work and improvement. He believed that most people would not trust such a new thing enough to be willing to buy it, and so it seemed to him that the prospects for any success on the market were not good. In contrast, his loving and energetic wife believed immensely in his abilities, and was more than certain that the fruit was ripe enough to be picked. Her plan was to make a long-distance journey in her husband's invention, which would persuade everyone of the benefits and reliability of the new "horseless carriage".

Name _____ Date _____

ANSWER THE QUESTIONS ABOUT *THE FIRST ROAD TRIP, part 1*

1. When does this story take place?
 - a. in the late 1800s
 - b. at the end of the 19th century
 - c. in August
 - d. all of the above

2. In what ways was Mr. Benz's invention different from cars we drive today?

3. In what year had Mr. Benz gotten the car registered? _____

4. What do you think Mr. Benz would say if he knew his wife was taking his car for a trip? Write a short note to Mrs. Benz from Mrs. Benz, telling her what you think of her visit to Grandma's.

THE FIRST ROAD TRIP, part II

After pushing the car a sufficient distance from their house, the trio jumped in and set off on their trip. It was a long and troublesome journey, 65 miles from Mannheim over the hills of the Black Forest to Pforzheim. There were no gas stations, no repair workshops, and no shops with spare parts.

The adventurous technical pioneers were dedicated to their cause. When the engine needed water for cooling, they took it from village wells and puddles along the roads. When the brake lining became worn, they went to a shoemaker to have new pieces of leather nailed to the brake blocks. When the chains broke, they found a blacksmith who was able to fix them.

When they were short of gasoline, they visited a pharmacy. Gasoline was quite expensive at that time. People would buy it at the pharmacy in little bottles, and use it only for removing stains from clothes. Imagine the pharmacist's surprise when he saw a strange machine carrying a woman and two teenagers who then came in and bought a half-gallon of gasoline—all the remaining stock. He probably didn't realize it, but he had just become the owner of the first gas station in the world.

There were problems that nobody could help them with, and they had to use all their wits to solve them. Despite enough gasoline in the tank, the car suddenly coughed and stopped. After some examination, they discovered that the carburetor fuel pipe was clogged. After a bit of thought, Mrs. Benz pulled out a kind of needle, called a hat pin, which, as was the fashion, was holding her hat onto her hair. She used her hat pin to clean the carburetor.

When the car stopped a second time, the situation was even worse: the ignition cable insulation was completely frayed in one place. Without the electricity provided by the cable, the engine was dead. Again, Mrs. Benz found a solution. She reached under her long skirt and pulled out a piece of her garter belt (a piece of elastic which was used to hold her stockings up) and they were able to fix the cable. The sun was sinking behind the mountain, and the trio was near their destination. They had one last difficult problem to solve: the engine was too weak to drive the car up the last and steepest slope of their trip. With the help of a farmer, they managed to reach the top of the hill, and all of their problems were behind them.

It was already dark as they arrived in Pforzheim, tired and covered with dust, but happy and proud. They had managed to make the first long distance journey by car. The reliability of the horseless carriage had been proven.

Name _____ Date _____

ANSWER THE QUESTIONS ABOUT *THE FIRST ROAD TRIP, part 2*

1. Who drove the car? _____

2. Who invented the car? _____

3. Who went on the trip? _____

4. When was the car invented (hint: NOT 1888)? _____

5. Where does the story take place? _____

6. How long was the trip? _____

7. Several things went wrong on the trip. Name two things that went wrong on the trip, and tell how they were solved.

8. Do you consider Mrs. Benz's idea (of proving that the car was reliable) a success or a failure? Why do you think so?

THE FIRST ROAD TRIP ANSWERS

Part 1:

1. d
2. no roof, no hood, only one wheel in front, a handle instead of a steering wheel, a 2.5 horsepower engine
3. 1886
4. answers will vary; he may have been very angry

Part 2:

1. Bertha Benz
2. Karl Benz
3. Bertha, Eugen, and Richard Benz
4. 1886
5. Germany (in Mannheim, through the Black Forest, and in Pforzheim)
6. 65 miles
7. needed water- got it from village wells and puddles
brake lining - a shoemaker replaced it
broken chains- a blacksmith fixed them
gasoline- bought it at a pharmacy
clogged pipe- cleaned with a hat pin
frayed insulation- replaced with a garter belt
getting up a hill- help from a farmer
8. answers will vary; students may say the trip was a success because they reached their destination, or they may argue that it was a failure because the car broke many times, which wouldn't prove its safety.

page 4: answers will vary

FOR FUN!

Divide students into groups of four. Tell the students to imagine that Bertha Benz and her sons have come home from their trip. Karl Benz is home. Have the students choose (or you may assign) which role they want to play. How will Bertha Benz tell her husband about their adventure? Are the boys happy, or tired, or some combination? Is Karl Benz glad that the car is back and that the trip was successful, or angry that they took the car without him?

NOTE:

This story is so well-known in Germany that it is almost a legend. Have students think of other historical events or people that have become legends (Benjamin Franklin's kite is a good example). How can we separate facts from fiction? This may make a good topic for discussion or research with upper grades (or motivated students at any level).