

Read the short story. Then answer each question.

Barrels of Ideas

In a time before plastic and cardboard boxes, people used barrels to store and transport food, liquids, and other things. Maria Beasley learned about barrels as a little girl. Her grandfather's factory used thousands of them to transport liquids.

However, Maria's grandfather had a problem. He could not find enough barrels for his factory.

Each wooden barrel being used all over the world had to be made by hand. The men making the barrels were called "coopers."



It took a lot of skill to make a barrel. The curved pieces of wood (the “staves”) had to fit together perfectly in a circle so that liquids would not leak out. The staves were held in place by strong metal hoops so that the barrels would not fall apart. A hard-working cooper might make 5 barrels a day.

Maria wanted to help her grandfather with his problem. She studied how the coopers made the barrels. She learned each step in making a barrel. Maria saw that putting the hoops on was the hardest part.

Maria began to study different types of machinery. In 1876, Maria went to the World’s Fair when it came to her hometown. She examined all the new machines she saw. None of the machines made barrels, but they did give her some ideas. Maria decided to invent a barrel making machine.



This was followed by 5 years of hard work. Five years of trial and error. Five years of mistakes, setbacks, and failures. Five years of lessons learned. However, at the end of the five years, Maria had invented the world's first barrel making machine.



The machine could create 1,700 barrels a day! News of the invention quickly spread. At the next big fair, Maria's machine was put on display. Factory owners like her grandfather from all around the world wanted the machine. Maria became rich and famous.

Maria has solved her grandfather's problem, but she wasn't done with her work. She made her machine even better. Maria thought up new ideas. She later invented a new type of life raft and a device to stop trains from coming off their tracks. Inventions which, like her barrel making machine, made life better for millions of people around the world.

Exercises:

1. Fill in the blanks.

- a. Maria wanted to invent a _____
that could do the work of a _____.
- b. Maria was _____ by ideas on
display at the _____ when it came
to her hometown.
- c. Barrels are made of curved pieces of wood
called _____.

2. True or False?

Barrels were once used to store food.	True	False
Maria's machine could make 30,000 barrels a day.	True	False
Maria learned about barrels from the internet.	True	False

A man who built barrels was called a cooper.	True	False
The hardest part of making a barrel was putting on the hoops.	True	False
Maria never made any money as an inventor.	True	False

3. Draw a picture of an invention you would like to build and write a description of how it works.



Answers:

1. Fill in the blanks.

- a. Maria wanted to invent a machine that could do the work of a cooper.
- b. Maria was inspired by ideas on display at the World's Fair when it came to her hometown.
- c. Barrels are made of curved pieces of wood called staves.

2. True or False?

Barrels were once used to store food.	<input checked="" type="radio"/> True	<input type="radio"/> False
Maria's machine could make 30,000 barrels a day.	<input type="radio"/> True	<input checked="" type="radio"/> False
Maria learned about barrels from the internet.	<input type="radio"/> True	<input checked="" type="radio"/> False
A man who built barrels was called a cooper.	<input checked="" type="radio"/> True	<input type="radio"/> False
The hardest part of making a barrel was putting on the hoops.	<input checked="" type="radio"/> True	<input type="radio"/> False
Maria never made any money as an inventor.	<input type="radio"/> True	<input checked="" type="radio"/> False

3. Answers will vary.