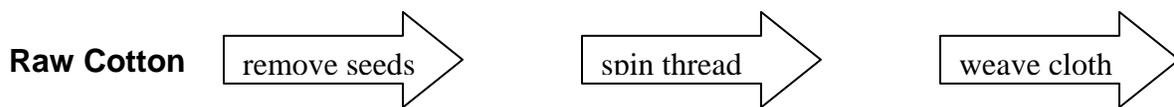


## The Industrial Revolution Making Cloth: The Industrial Revolution Begins

The Industrial Revolution got its start in the textile industry. Before the Industrial Revolution, making cloth was a very slow process. Cotton from cotton plants is puffy and full of seeds. First, the seeds had to be taken out, by hand. Next, the cotton had to be spun and stretched into thread, by hand. Finally, the thread was woven into cloth, by hand. Every step along the way required the full concentration of one person. Making cloth took a long time.



In 1764, the **process**<sup>1</sup> of turning cotton into cloth began to change. The three main steps stayed the same. But people began to use machines instead of doing everything **manually**.<sup>2</sup> The machines did each step faster and faster. Some of the machines were huge. They couldn't fit into a person's home. The first factories were built to house machines and the workers needed to run them.

Look at the timeline below. It describes the most important textile machines that were invented. Use it to answer the questions that follow.

**1764:** The "Spinning Jenny" was invented by James Hargreaves. This machine made it easier to make thread.

**1769:** Sir Richard Arkwright invented the water frame. Now weavers could keep up with all the thread that was being made. After the invention of the water frame, one weaver could weave the yarn from four spinners! The water frame was too big for homes. It only fit in factories. The process of making cloth was becoming industrialized.

**1779:** Samuel Crompton developed the Spinning Mule. His invention made thread stronger and faster than all other machines.

**1785:** The power **loom**<sup>3</sup> was invented. This machine sped up the weaving process even further. Now weavers could use all the thread coming from the new Spinning Mule!

<sup>1</sup> **Process** – an organized series of actions that produce a result

<sup>2</sup> **Manually** – done by hand

<sup>3</sup> **Loom** – a machine used for weaving cloth

**1793:** Eli Whitney, an American, invented the cotton gin. The cotton gin removed the seeds from the cotton. Now, spinners had much more cotton to work with. They just couldn't spin fast enough.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Which of the following is the correct order to make clothes?

- a. weave cloth, spin thread, remove seed.
- b. remove seeds, weave cloth, spin thread
- c. weave cloth, remove seeds, spin thread
- d. remove seeds, spin thread, weave cloth

2. The “Spinning Jenny”

- a. was invented in 1779.
- b. made it easier to make thread.
- c. made thread stronger and faster than other machines did.
- d. was invented by Eli Whitney.

3. How did the water frame change how cloth was made?

- a. One weaver could weave the yarn from four spinners.
- b. It removed the seeds from cotton.
- c. It was too big to fit in a house, which increased the need for factories.
- d. It increased the speed at which cotton was picked.

4. Which of the following happened last?

- a. The power loom was invented.
- b. The “Spinning Jenny” was invented.
- c. One weaver could weave the yarn from four spinners.
- d. The “Spinning Mule” was invented.

5. Which invention removed the seeds from cotton?

- a. the “Spinning Mule”
- b. the “Spinning Jenny”
- c. the cotton gin
- d. the water frame

6. What was the effect of all the textile inventions listed above?

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7. What does the timeline of the textile inventions show about the improvement in the textile industry?

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8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

The industrial revolution allowed workers to use machines \_\_\_\_\_ of doing all of their work manually.

- a. because
- b. instead
- c. first
- d. last

9. Answer the following questions based on the sentence below.

After the invention of the water frame, one weaver in a factory could weave the yarn from four spinners.

Who? one weaver

(could do) What? \_\_\_\_\_

When? \_\_\_\_\_

Where? \_\_\_\_\_

10. **Vocabulary Word:** textile: a type of cloth or woven fabric.

Use the vocabulary word in a sentence: \_\_\_\_\_

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**Teacher Guide and Answers**

**Passage Reading Level:** Lexile 600

**Featured Text Structure:** Descriptive--- the writer explains, defines or illustrates a concept or topic

**Passage Summary:** This passage discusses the change in the textile industry during the industrial revolution. Before the revolution, workers had to follow many tedious steps to create cloth by hand. With the invention of several machines through the years, this process eventually became much faster and easier.

1. Which of the following is the correct order to make clothes?
  - a. weave cloth, spin thread, remove seeds.
  - b. remove seeds, weave cloth, spin thread.
  - c. weave cloth, remove seeds, spin thread.
  - d. remove seeds, spin thread, weave cloth.**
  
2. The “Spinning Jenny”
  - a. was invented in 1779.
  - b. made it easier to make thread.**
  - c. made thread stronger and faster than other machines did.
  - d. was invented by Eli Whitney.
  
3. How did the water frame change how cloth was made?
  - a. One weaver could weave the yarn from four spinners.**
  - b. It removed the seeds from cotton.
  - c. It was too big to fit in a house, which increased the need for factories.
  - d. It increased the speed at which cotton was picked.
  
4. Which of the following happened last?
  - a. The power loom was invented.**
  - b. The “Spinning Jenny” was invented.
  - c. One weaver could weave the yarn from four spinners.
  - d. The “Spinning Mule” was invented.
  
5. Which invention removed the seeds from cotton?
  - a. the “Spinning Mule”
  - b. the “Spinning Jenny”
  - c. the cotton gin**
  - d. the water frame

6. What was the effect of all the textile inventions listed above?

**Suggested answer:** Each of the inventions made the process of creating textiles easier and faster.

7. What does the timeline of the textile inventions show about the improvement in the textile industry?

**Suggested answer:** Each invention built upon the inventions made up until that point and helped to improve the efficiency of the textile industry as the different innovations in the development of the machines worked to improve one another.

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

The industrial revolution allowed workers to use machines \_\_\_\_\_ of doing all of their work manually.

- a. because
- b. instead**
- c. first
- d. last

9. Answer the following questions based on the sentence below.

After the invention of the water frame, one weaver in a factory could weave the yarn from four spinners.

Who? one weaver

(could do) What? **weave the yarn of four spinners**

When? **after the invention of the water frame**

Where? **in a factory**

10. **Vocabulary Word:** textile: a type of cloth or woven fabric.

Use the vocabulary word in a sentence: answers may vary.