

# The Water Frame - The most important invention of its time



## What was the water frame?

The water frame was a very important invention. Some people believe it was one of, if not the most important invention of its time. It was a machine that could mechanically spin thread. It was the first spinning machine that was water-powered and automatic.

## Who invented the water frame?

The water frame was developed by a man called Richard Arkwright. Arkwright was born in 1732 and he became a very important man in the early years of the industrial revolution in England. He was a leading **entrepreneur** and also an inventor. He patented the technology in the water frame in 1769. This invention made him a very rich man. His work also earned him a knighthood. This meant he was known as Sir Richard Arkwright.

## What could the water frame do?

The spinning frame was the first machine that could spin cotton threads. The spinning frame was also an invention that produced stronger threads for yarns. The early models were powered by waterwheels. That is why it became known as the water frame. Because it used water power, it meant that factories near rivers would be needed to be built. This meant manufacturing cloth moved from cottages to factories.

## What happened after this machine was invented?

Businessmen and entrepreneurs started to see the benefits of building factories. Richard Arkwright built his first textile mill in a place called Cromford, England in 1774. He was a very well organized man and this helped him to be very successful. People saw what he did and thought it was a good idea. People believe he is the creator of the modern factory system. In fact, Arkwright became known as 'the Father of the Industrial Revolution'.

After he had built his factory in Cromford, Arkwright realized that he would need more people to work in it. Cromford was only a small town and there were not enough people to do all the work he needed. Arkwright built many cottages near his textile mill and brought people from the surrounding areas to come and live in them and work in his mill. He encouraged families to move to the area. In total, he employed more than 1,000 people.

## What was this factory like?

It wasn't only the adults who worked in the mill. Arkwright had all the family work in his mill. There were children as young as seven years old working there. In fact, after the mill was established, about 60% of the **employees** were children. Life was hard for the workers. **They** only got one week holiday a year, and even then, they couldn't leave the village.

1. According to the article, why is the water frame considered an important invention?
  - a) It was the first invention to be powered by electricity.
  - b) It was developed by a man called Richard Arkwright.
  - c) It was the earliest water-powered and automatic spinning machine.
  - d) It was the first spinning machine that was animal-powered and automatic.
2. According to the article, when did Richard Arkwright become an important person?
  - a) in 1372
  - b) in 1732
  - c) at the start of the industrial revolution
  - d) at the end of the industrial revolution
3. The word 'entrepreneur' in paragraph 2 could be replaced with:
  - a) employee
  - b) businessperson
  - c) corporation
  - d) entertainer
4. According to the article, when was the technology in the water frame patented?
  - a) in 1732
  - b) in 1769
  - c) in 1774
  - d) it does not say
5. According to the article, what did Arkwright become known as?
  - a) the father of many children
  - b) the father of the Industrial Revolution
  - c) the richest entrepreneur in the world
  - d) the destroyer of the Industrial Revolution
6. The word 'employees' in paragraph 6 could be replaced with:
  - a) workers
  - b) employers
  - c) masters
  - d) emperors
7. The word 'they' in paragraph 6 refers to:
  - a) workers
  - b) children
  - c) his family
  - d) his children

Answers: 1. (c) 2. (c) 3. (b) 4. (c) 5. (b) 6. (a) 7. (a)

