



## Ice

Ice: you've seen it and probably didn't think much about how amazing it really is. Ice is the only solid that is known to float on a liquid of the same material. Most materials sink when they become solid. If water did that, then lakes would freeze from the bottom up! Ice skating would be impossible. Not only that, but it takes a great deal of energy to make ice. It happens naturally in many places, but very few countries get usable quantities of natural ice. The rest is all man-made.

It wasn't always that way. Until the 1840s, people didn't have access to ice to chill or freeze food. Modern fridges and freezers weren't invented until 1913, so people had to use fresh ice to keep food fresh.

The first company to make the most of this idea was called the Wenham Lake Ice Company. They had a shop in London but were named after Wenham Lake in Massachusetts, USA. In 1844, they started displaying an enormous block of ice in the window. They replaced it with a new block each day. Nobody in England had ever seen a block of ice that big before. Natural ice that thick doesn't occur in Britain, so it was a novelty.

Because the ice was created naturally and in a lake, it was crystal clear. The shop displayed a newspaper behind the ice to show that you could read through it! The company became so famous that Queen Victoria insisted on buying ice from them to use at Buckingham Palace.

Finally, wealthy people had a way to keep food fresh for longer. Unfortunately, it was impossible to transport the ice on a large scale. There also wasn't any demand for it in the beginning. Ice was useless on its own; it just melted away. It needed places to store it.

The man who found a way to solve these problems was called



Frederic Tudor. He was determined to find a way to ship ice from North America to countries around the world and to find a way to make money from it. It wasn't an easy job. Most people considered his idea mad. When the first shipment arrived in Britain, it took the people at the port so long to work out what to do with it that it melted!

Another problem he had to overcome was that sailors didn't want ice on their ships. After all, they spent most of their time keeping water on the outside of their boats!

Eventually, he managed to find a way to transport ice around the world and became very rich from it. For a time, ice was the second-biggest crop to be exported from America! He found ways to insulate it so that it didn't melt. This meant that ice was even regularly shipped from North America to India, a journey of over 16,000 miles and 130 days!

In the end, other countries caught on. By 1850, most ice shipped into Britain came from Norway. However, North America itself was soon the biggest market for ice in the world.

## VOCABULARY FOCUS

1. Which word means that Queen Victoria demanded something happened?
2. Find and copy a phrase that means "a lot of".
3. Which word describes the size of the block of ice in the shop window?
4. Find and copy a phrase that tells you how transparent the lake ice was.
5. If you "overcome" a problem, what does it mean?

## VIPERS QUESTIONS

**R**

Who was the first person to work out how to ship ice around the world?

**R**

What was the Wenham Lake Ice Company named after?

**I**

Why was ice so important?

**I**

Why was it a big achievement to get ice to India?

**R**

Where did most ice in Britain come from, in the end?