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WEB & WIRELESS TECH

Guglielmo Marconi

The Father of Wireless Radio

Sending Signals Without Wires

Guglielmo Marconi was an Italian inventor who lived from 1874 to 1937. When he was young, he became fascinated by invisible radio waves. He wanted to use them to send messages through the air without any wires. This idea was called wireless telegraphy.

In 1895, Marconi sent his first wireless signals about 1.5 miles. He kept improving his machines. In 1901, he made history by sending the first radio signal across the Atlantic Ocean. The message was the Morse code letter 'S,' which is three dots. It traveled from England all the way to Canada, about 2,200 miles!

Marconi's invention changed the world. His wireless radios were placed on ships so they could call for help at sea. In 1912, Marconi operators on the Titanic sent distress signals that helped rescue many survivors. In 1909, Marconi won the Nobel Prize in Physics for his amazing work.

WORDS TO KNOW

- **transmitter:** A machine that sends out radio signals.
- **receiver:** A machine that catches radio signals and turns them into messages.
- **Morse code:** A way to send messages using short and long taps called dots and dashes.

Part 1 • Reading Comprehension

1. What country was Marconi from?

2. In what year did Marconi send the first signal across the Atlantic Ocean?

3. What Morse code letter did Marconi send across the Atlantic, and what does it look like?

4. How did Marconi's radios help the Titanic?

Morse Code Math

The Morse code letter 'S' is three dots. Let's do some radio math!

1 The letter 'S' is 3 dots. How many dots would you tap to send three S's in a row?

2 Marconi's first signal traveled about 1.5 miles. If he doubled that distance, how far would it reach?

3 The Atlantic signal traveled about 2,200 miles. The first test went about 2 miles. About how many more miles did the Atlantic signal travel?

Part 3 • Think About It

Why do you think it was important for ships to have wireless radios?
