

Great Inventions

THE RADIO



I found a radio station in my city that plays music I like to hear. I like the announcers and can listen to it with my new headphones.

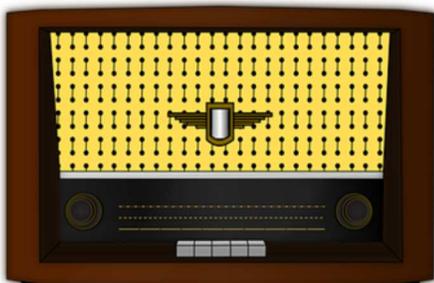
One day, while I was listening to the radio, I wondered who invented it. I started to investigate.

The invention of the radio still generates controversy today, depending on where you live. Most people believe the inventor was the Italian-American engineer Nikola Tesla. He conceived the idea of the radio around 1890 in the United States. However, you have to recognize that some other discoveries were slowly leading to the development of the radio. Therefore, several people in different countries may have developed a radio device in the same year.

Many inventors knew that in 1873 the Scottish physicist James Clerk Maxwell had formulated the theory of electromagnetic waves, which would later be the basis for the radio. Then, in 1887, the German physicist Heinrich Hertz discovered radio waves, which are called Hertzian in his honor. These and other discoveries led up to that invention. In 1894, Nikola Tesla made his first public demonstration of a radio transmission. But, he may not have been the only one to achieve it.



The first commercial radio broadcasts were made in 1920 in Argentina and the U.S. The radio station, called WWJ, began to operate in the city of Detroit on August 20, 1920 and is considered the first radio station of a regular nature.



At that time, all stations broadcast on a system known as AM. It was not of good quality and did not have a stereophonic sound. Today, we listen to the radio through a system called FM, frequency modulation, that allows a sharper, stereophonic sound. How did this happen?



In 1933, American engineer Edwin Armstrong discovered a new high-quality radio system. It allowed for stereo sound and was less sensitive to radio static than those found in the AM system used at the time. This new system was called Frequency Modulation, FM.

In the late thirties, Armstrong himself set up a radio station using the frequency modulation system, and over the years, all the main stations changed over to the FM system.

Before the appearance of mobile phones, people listened to the radio outside of their homes with pocket radios that worked using a small battery. The first company to manufacture small radio receivers was Regency.

Soon the radio became a means of mass communication. The television had not been invented; families gathered around their large radio devices to listen to the news, fashion, music, and religious programs, as well as sports and radio novels.



The radio changed the speed the public was informed. Before the radio, when something important happened in its own country, the public found out a day or two later from the newspapers. If it happened in another country, it could be weeks before the news was published. That is why people listened to the radio every day to find out the important news.

In recent years, new digital technologies have begun to change the way to listen to the radio. Now, a radio show can reach the public from all over the world, thanks to the internet. A podcast broadcasts someone's voice, using only a microphone, a computer, and a site where your followers can download the file from audio.



Many people have set up their online radio programs in the form of podcasts, with a lot of success. Podcasts have the advantage that we can download them and listen to them whenever we want, some even for free. When I finish my homework, I'll search the internet for a podcast that looks interesting.

Name _____

Date _____



THE RADIO

Answer the questions.



- Which country appears to have manufactured the first radio?
 - Scotland
 - the United States
 - Germany
 - Argentina
- What does FM mean?
 - Maximized frequency
 - Multiple frequency
 - Frequency modulation
 - Frequency minimized
- Why are radio waves called hertzian?
 - Maxwell gave it that name.
 - It was named for James Hertz.
 - Nicola Tesla gave it that name.
 - It was named for Heinrich Hertz.
- Who invented the FM system?
 - Edwin Armstrong
 - Nicola Tesla
 - James Clerk Maxwell
 - Heinrich Hertz
- What was the first radio station?
 - The 1920 Detroit
 - WWJ
 - AM 1920
 - The WXW
- When did Nicola Tesla make his first public demonstration?
 - 1773
 - 1887
 - 1890
 - 1894
- Who formulated the theory of electromagnetic waves?
 - Nicola Tesla
 - James Clerk Maxwell
 - Heinrich Hertz
 - Edwin Armstrong
- What are the radio programs downloaded from the internet called?
 - Podcasts
 - Postcards
 - Emails
 - Portals
- Why is the FM system better than the AM?

- Why was the radio so popular before TV was invented?

