

# Innovations in the 19th Century

# Worksheet

Although the use of electricity was not wide spread in 1889, the use of electric batteries\_\_\_\_\_\_\_ were used commercially in a few applications.

Electricity by means of direct\_\_\_\_\_\_ current batteries was the innovation that powered many important 19th century innovation.

The most important of the 19th century innovations with electricity was the electric telegraph\_\_\_\_\_\_\_\_\_\_\_\_.

Alessandro Volta\_\_\_ is credited with the discovery of the battery.

The voltaic\_\_\_\_\_ pile, was the name for the first battery.

Electricity by means of direct current batteries\_\_\_\_\_\_\_ was the innovation that powered many important 19th century innovations.

In the USA railroads provide the motivation to improve the telegraph\_\_\_\_\_\_\_\_\_\_\_.

Also, not mentioned in the movie, the North in the civil war found it essential for communication.

On August 5th, 1858, a successful wire connection was laid across the Atlantic\_\_\_\_ Ocean\_\_\_\_\_\_ using undersea cables to connect Newfoundland to Ireland.

This marked the beginning of instantaneous communication\_\_\_\_\_\_\_\_\_\_\_ between Europe and the United States which continues today.

An entire pavilion was dedicated to the telephone\_\_\_\_\_\_\_\_\_.

An amplified composition at the World’s Fair was called “Fanfare\_\_\_\_\_\_ Ader\_\_\_\_.”

Performers in one location would sing\_\_\_\_\_ into microphones that were then broadcast through the trumpet-like bells.

The electric energy was carried by wires\_\_\_\_\_ from the microphones to the speakers.

Thomas Edison’s new innovations further included the broadcast of music over wires. This was titled “telephonic\_\_\_\_\_\_\_\_\_\_\_\_ auditions” at that time.

Notice that the recordings are of small\_\_\_\_\_\_ groups of instruments since these were easier to record at that time than larger groups.

Edison’s 1880s phonograph featured music recordings\_\_\_\_\_\_\_\_\_ on a cylinder.

# Further Information from Other Videos and Readings

The men in the video clip from *Pride and Prejudice* are wearing (choose 1):

Tuxedos or Tails.

The music in the video clip from *Pride and Prejudice* is ac\_\_\_\_\_\_\_\_\_\_.

Learning d\_\_\_\_\_ steps would help wealthy women and men attract suitors in the 18th and 19th centuries.

*Aida* takes place in what country?

The video on *Aida* has about \_\_\_ performers on stage.

In the video on Berlioz’s *Symphonie fantastique*, are the made flute bodies out of wood or metal? (see 1 min. 6 sec.)

In the video on Berlioz’s *Symphonie fantastique*, are the trumpets using valves? (See 1 min. 37 sec.)

In the video on Berlioz’s *Symphonie fantastique*, are the horns using valves? (See 1 min. 43 sec.)