

# 7. Electricity in the 20th Century

# Worksheet

Applications of e\_\_\_\_\_\_\_\_\_\_\_ were one of the most significant characteristics of the 20th century. It was a “game changer.”

Electricity is supplied in two ways:

* D\_\_\_\_\_\_\_\_\_\_ C\_\_\_\_\_\_\_\_\_\_\_ (DC)
* A\_\_\_\_\_\_\_\_\_ C\_\_\_\_\_\_\_\_\_\_\_ (AC)

Direct current is supplied by b\_\_\_\_\_\_\_\_\_\_. In the video they supply an example of a AA b\_\_\_\_\_\_\_\_\_.

The polarity of DC is always in one direction\_\_\_\_\_\_\_\_\_\_, that is its polarity is always the same. Positive energy flows out of the positive terminal. Over time batteries will run out of e\_\_\_\_\_\_\_\_\_\_. Thus, its voltage will drop.

USA uses Alternating Current for electricity. AC changes p\_\_\_\_\_\_\_\_\_\_.

Incandescent bulbs are actually flashing on and off over 50 times per s\_\_\_\_\_\_\_\_\_\_!

Towson University classrooms, concert halls, and living spaces in West Village primarily use this for power (choose 1):

1. Direct Current
2. Alternating Current

Thomas Edison was an advocate for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Nikola Tesla was an advocate for \_\_\_\_\_\_\_\_\_\_\_ .

The lighting in movie theaters, opera houses, and concert halls made use of AC electricity in the 20th century. So too did these (circle correct items):

1. Electric Fans
2. Elevators
3. Ping pong balls
4. Vacuum cleaners
5. Grand pianos

One of the most significant ways in which music was distributed in the early 20th century was through r\_\_\_\_\_\_. The first commercial radio station was KDKA in P\_\_\_\_\_\_\_, PA.

The iconic electronic music playing device in 1950s USA was the jukebox\_\_\_\_\_\_\_. Soda\_\_\_\_ shops were gathering places for teens, who listened to the newest hits on vinyl recordings.

Circle the correct answer. Dr. Ewell attended the :

a. 1889 Paris Worlds Fair,

b. 1893 Chicago World’s Fair,

c. 1962 Seattle World’s Fair,

d. 2020 Dubai World’s Fair.

# Further Information from Other Videos and Readings

The necessary ingredients for a DC battery are c\_\_\_\_ metal, zinc metal, and a conducting medium.

Batteries can be hooked up in sequence by connecting the copper metal to the z\_\_\_\_ metal conductor.

These vegetables can be used as a conducting medium:

* A. Potato
* B. Carrot
* C. Orange

The advantage of AC over DC is that it can tr\_\_\_\_\_\_\_ much further over power lines.

George W\_\_\_\_\_\_\_\_\_\_\_\_\_ and Tesla won the bid to light the 1893 Chicago World’s Fair.

The electric lighting display at the 1893 Chicago World’s Fair shaped e\_\_\_\_\_\_\_ technology in the coming 20th century.

DC lightbulbs produced more h\_\_\_ than AC lightbulbs. This was another reason that AC was chosen over DC for household and business electricity.