

**AMERICAN GENIUS**  
**Episode 8: Edison vs Tesla**

**Name:** \_\_\_\_\_  
**Period:** \_\_\_\_\_

- 1 What was Thomas Edison's first major invention?
- 2 What was Edison's breakthrough in October of 1879?
- 3 What is the next challenge facing Edison to make electrical lighting possible?
- 4 What radical new idea does Nikola Tesla envision?
- 5 What is Edison's version of an electrical system? What does he claim are the advantages? What is the main disadvantage?
- 6 What advantages does AC offer according to Tesla? What disadvantage is known at the time?
- 7 Why does Tesla leave the Edison Company?
- 8 Describe the unusual demonstration that Tesla shows investors to earn their trust.
- 9 How is Tesla able to "fill the gaps" that are present in AC current?
- 10 What extra advantage does Tesla's AC have besides "turn on lights at a great distance?"
- 11 In today's dollars, how much does George Westinghouse pay Tesla for AC system patents?
- 12 What is dangerous about AC transmission?
- 13 What European invention allows the AC system to bring current safely to a home?
- 14 What does Edison do to dramatically show that AC high voltage can be dangerous?
- 15 Where does the final showdown occur in the battle between AC and DC?
- 16 The power of falling water at Niagara Falls each *second* is equivalent to
- 17 What does the Board of Edison's company do behind his back? Why?
- 18 Who wins the battle of the current war? How?
- 19 What does Tesla do to save Westinghouse from bankruptcy?
- 20 What mental illness did Tesla suffer from? How did it affect his future?