Nikola Tesla

By Sharon Fabian

[1] Nikola Tesla was born in 1856 in Croatia. Growing up, he had a practical side and a poetic side. He has been described as a poet and a dreamer, but he was also self-disciplined and accurate. Since his father was a priest -- a very strict one -- and also a writer, we might suspect that he got some of those qualities from his father. Nikola's mother was an uneducated woman, but she was smart. She was a hard worker and would use her creative talents to find ways to make housework easier. Nikola inherited some of her qualities too, especially her creativity.

[2] When Nikola Tesla became a young man, he studied for a career in engineering in Austria. He began working on his ideas for building motors. Tesla began to hear about the great work being done in the field of electricity by Thomas Edison. In 1884, he sailed to America and began to work with Edison. Just about the only things he brought with him were some of his poems and some plans for new inventions.

[3] It turned out that Edison had one good way of working on his experiments, which involved a lot of trial and error. Tesla had another good way of coming up with new ideas, which involved working out everything first in his head and then building a finished product. It must have been hard for them to work together; eventually Tesla moved on to a new job.

[4] Tesla went on to become one of the most productive inventors ever in the field of electricity. He is probably best known for inventing the Tesla coil. A Tesla coil is a machine that transforms the electric current it receives into quick pulses of extremely high voltage. It was used in early radio transmitters and to supply high voltage for TV sets. Tesla coils may be best known because they are sometimes featured in science museum displays. Tesla coils can produce arcs of electricity that make a great special effect.

[5] Tesla's main work involved the whole process of producing and delivering electricity. He invented a generator that produced AC -- or alternating current -- electricity, the kind we use today. He also invented 20 different kinds of motors that used AC electricity, and transformers to help deliver electricity to the customers. His discoveries about AC electricity were based the idea of a rotating magnetic field.

[6] While Tesla was improving and promoting AC electricity, Thomas Edison and his company were continuing to improve and promote direct current electricity. The competition between these two electricity giants was at its high point just in time for the Chicago World's Fair. Both General Electric, which had taken over Edison's company,

and Westinghouse, Tesla's company, bid for the contract to do the lighting at the great fair. Since AC was cheaper to produce, Westinghouse could offer a lower bid, and it won the contract. Westinghouse and Tesla created an amazing display for the fair that consisted of hundreds of thousands of lights and earned the nickname "City of Lights" for the World's Fair buildings.

7 The Chicago World's Fair seemed to be the turning point in the battle between AC and DC. After the fair, 80% of the electrical machines that people bought were powered by AC. Today, whenever we plug in a refrigerator, a radio, a computer, or any of the thousands of other electrical devices available today, we are using Nikola Tesla's idea of alternating current.

Name _____ Date _____

Nikola Tesla

1. In this article, AC stands for _____. (A) Direct current (B) Electricity (C) Air conditioning (D) Alternating current	2. This article is mainly about Tesla's career as a(n)_____. (A) Inventor (B) Businessman (C) Electrician (D) Poet
3. Tesla was also a _____. (A) Mechanic (B) Computer technician (C) Poet (D) Teacher	4. Tesla coils are featured in _____. (A) Grocery stores (B) Museums (C) Libraries (D) Elementary schools
5. Nikola Tesla was born in _____. (A) Africa (B) Asia (C) Europe (D) North America	6. He studied engineering in _____. (A) Africa (B) Europe (C) North America (D) Asia
7. His company did the lighting for the World's Fair in _____. (A) Africa (B) North America (C) Asia (D) Europe	8. AC electricity was _____ than DC electricity. (A) More powerful (B) More expensive (C) Cheaper (D) Brighter

Nikola Tesla - Answer Key

1 (D) Alternating current
2 (A) Inventor
3 (C) Poet
4 (B) Museums
5 (C) Europe
6 (B) Europe
7 (B) North America
8 (C) Cheaper

Return to edHelper.com

Nikola Tesla

Reading Comprehension

PDF format

Reading Comprehension: PDF (2 columns per page)

Reading Comprehension: PDF (full page)

HTML format

Reading comprehension

Puzzles using Word List

Word Search

Word Search (PDF and options)

Make Words

[Word building activity]
[Word building activity (with word search)]

Word Shapes

[Word Shapes (easier - one letter filled in)]
[Word Shapes (fill in word shapes and also write the word)]
[Word Shapes]