

History of Electricity Reading Comprehension Answers

YEAR 5 AND 6 READING OBJECTIVES COVERED IN GREEN.

Continue to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks

- What does the word 'electricus' mean? (retrieve, record and present information from non-fiction)
 Electricus was the name given to static electricity by Gilbert. (It comes from the Greek word for amber elektron)
- 2. What key discoveries did the following scientists make? (Pick only **one**) (retrieve, record and present information from non-fiction)

William Gilbert distinguished between magnetism and static electricity.

Alessandro Volta created the first battery using the voltaic pile.

Michael Faraday invented the first electrical motor.

Thomas Edison redesigned the lightbulb.

Lewis Latimer invented a filament that would stay lit for longer.

- 3. Did Thomas Edison invent the lightbulb? (retrieve, record and present information from non-fiction)

 No, the lightbulb had already been invented. Edison improved it by redesigning it.
- 4. Name two modern appliances that use electricity and explain why you think they are useful. (retrieve, record and present information from non-fiction)

Any electrical appliances with a motor for example, car, drill, food processor, etc.

- 5. The voltaic pile ensured a steady electric current. Why did this lead to the wider use of electricity? (provide reasoned justifications for their views)
 - Children should refer to the fact that a steady electric current could be used to power appliances. An unsteady current would mean the appliance would go on and off.
- 6. How are the AC and DC currents different? (retrieve, record and present information from non-fiction) At least two of the following should be part of the answer.

AC current can be increased and decreased, the DC current can't.

AC current can travel long distances while the DC current needs to be closer to the building it supplies.

AC current requires transformers which the DC current does not as it is steady.

AC currents are higher in voltage than DC currents.

7. Who won the war of the currents and why? (provide reasoned justifications for their views)

Children should state that:

- It was the AC current that won.
- Transformers allowed an AC current to be transferred safely, cheaply and efficiently.
- The AC current supplies the mains electricity we use in our homes.

