## THE MECHANICAL UNIVERSE Video 37 - Electromagnetic Induction Class: 1. Describe how the current moves in practically all modern electric generators: 2. Who were masters at windmills? 3. What coal powered engine replaced windmills? 4. Faraday sought to link together what two fundamental forces of nature? 5. Describe the world's first electric motor:

In what year did Faraday discover the connection between magnetism and electricity?

Faraday found that changing what quantity through a circuit induced a current?

What scientist opposed Edison's method of current flow to deliver electricity?

What city did Thomas Edison strive to light up?

How is it possible to make electric fields circulate?

What does the demonstration involving the torroid illustrate?

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Explain Lenz's Law?

What is "self induction?"