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- 1. List of ways to cause induction
  - a. Moving a magnet near a coil
  - b. Rotating a magnet near a coil
- 2. What made you think that induction had occurred?
  - a. The light lighting up and the voltage meter changing value.
- 3. More ways to cause induction
  - a. Moving an electromagnet near a coil
  - b. Rotating an electromagnet near a coil
  - c. Changing coil size
  - d. Changing amount of loops
  - e. Changing magnet strength
- 4. Changing magnet strength may not have been shown because it not a principal way to cause induction in the real world due to the large amount of time or heat involved
- 5. Induction is the causing of current due to a changing or moving magnetic field
- 6. Voltmeters can be used to show induced current by showing a potential difference which causes current, as shown through V=IR. This is good for measuring the fact that the voltage is induced, which creates current. This is flawed though because it does not measure current directly but rather as a function of resistance. The light bulb does not have this weakness because its light is directly because of the current in the wire. However, unlike the voltmeter is does not give a good reading of what it measures. Voltmeters are precise, but lightbulbs are more of a guess.
- 7. If I were to design an experiment, I would test effects of coil size, amount of loops, magnet strength, and distance. I would have a control of 30 loops, 16 cm^2 for coil size, 5 cm from the coil, and 1 T field strength. I would run three trials for each variable with the control value, double the control value, and triple the control value.
- 8. Induction is caused by magnets, electromagnets, and coils. Magnetic field strength, coil area, and change in electromagnetic flux over time cause induction. Current changes with change in electromagnetic flux and loop amount.