Faraday's Law of Electromagnetic Induction

Actions that result in a current being produced:

- Moving a conductor through a magnetic field
- Moving a magnetic field near a conductor
- Changing the strength of a magnetic field near a stationary conductor

Faraday's Law:

Moving or changing the strength of a magnetic field near a conductor causes (induces) current to flow in the conductor.

Factors affecting the magnitude of the induced current:

1. The number of turns in the coil
   (more turns → greater induced current)

2. Rate of change of motion of the inducing magnetic field.
   (greater rate → greater induced current)

3. Strength of the inducing magnetic field.
   (greater magnetic strength → greater induced current)