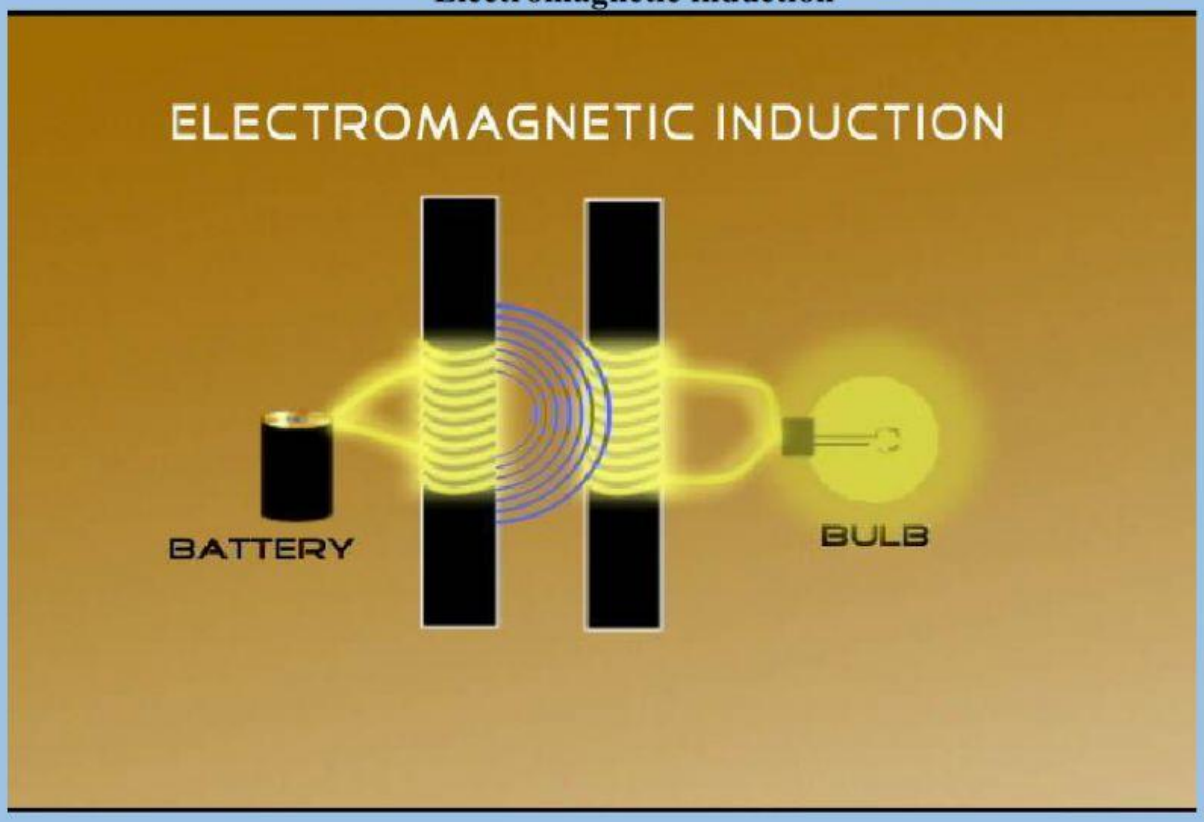
Electromagnetic induction



Task 1. Work at pronunciation

Electromagnetic induction	Электромагнитная индукция
External	Внешний
Toward	По направлению к
To induce	Вызывать
Application	Приложение
Turn	Виток
To notice	Заметить
Electromotive Force	Электродвижущая сила

Task 2. Pronounce the words.

Electromagnetic induction	Электромагнитная индукция
External	Внешний
Toward	По направлению к

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To induce	Вызывать
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Task 3. Read the text. Fill in the gaps. Use the hints below

Electromagnetic _____is the induction of current in a conductor because of a changing external magnetic field. Electromagnetic field can be caused only by a changing magnetic field. Stationary magnetic fields don't induce current. If we move a magnet toward a wire, then current is created in a certain direction. Moving the magnet away from the wire induces a current in the opposite direction. If the magnet is stationary, no current is induced. Electromagnetic induction is possible because of the electrons in the conducting material. As the magnet is moved, the magnetic field moves with it.

To induce a direct current, a magnet can be moved toward a wire. To induce an alternating current, a _____can be moved toward and away from the conductor in a cyclical motion. Practical applications for electromagnetic induction are electric generators, induction cookers, induction motors.

Electromagnetic induction was discovered by Michael Faraday. Michael Faraday noticed that when he moved a permanent magnet in and out of a coil it induced an Electromotive Force. Michael Faraday's _____of electromagnetic induction states that a voltage is induced in a circuit whenever relative motion exists between a conductor and a magnetic field and that the magnitude of this voltage is proportional to the rate of change in the flux. The amount of voltage depends on 3 factors: the number of _____of wire in the coil, the speed of the motion between the coil and the magnet, the strength of the magnetic field.

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turns

law

Induction

magnet

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