

* Electromagnetic Induction *

- Discovered by Faraday in 1830's

- a change in magnetic flux through a conducting loop induces an emf and a current in the loop.

$$\Phi_B = \int_{\text{area}} \vec{B} \cdot d\vec{a} \rightarrow \text{magnetic flux } \text{Wb} = \text{T} \cdot \text{m}^2$$

كسب

Lenz's law:

$$\mathcal{E} = - \frac{d\Phi_B}{dt}$$

↳ rate of change of magnetic flux
↳ Induced emf

* Induced current flows in such a direction as to oppose the change in magnetic flux that produced it.



- ريولساتت بسفرمها لتغير التيار *

الحزاف لليسر بجها بما اطفئي التيار
بيمنوف باسجة الثانية

ليس لها تجربة عملية فقط شرح وتعطى اونلاين.