

# Properties of light

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## Electromagnetic radiation

Gauss's Law

$$\nabla \cdot \mathbf{E} = \frac{\rho}{\epsilon_0}$$

No magnetic monopoles

$$\nabla \cdot \mathbf{B} = 0$$

Faraday's Law

$$\nabla \times \mathbf{E} = -\frac{\partial \mathbf{B}}{\partial t}$$

Ampere's Law

$$\nabla \times \mathbf{B} = \mu_0 \mathbf{J} + \mu_0 \epsilon_0 \frac{\partial \mathbf{E}}{\partial t}$$

