The Physics of Energy, Explained Simply & The Physics of Energy For Beginners

Electrical Energy Questions

Equation: $\mathbf{E} = \mathbf{P} \times \mathbf{t}$

E = Electrical Energy (J), P = Power (W), t = Time (s)

- 1. A device with a power rating of 100 W operates for 60 seconds. How much electrical energy does it use?
- 2. A kettle rated at 2000 W is used for 120 seconds. Calculate the electrical energy consumed.
- 3. A 500 W heater runs for 300 seconds. How much energy is transferred?
- 4. A 60 W light bulb is left on for 180 seconds. How much electrical energy does it use?
- 5. A 750 W microwave operates for 90 seconds. Find the electrical energy used.

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- 6. A 1000 W hairdryer is used for 150 seconds. Calculate the energy transferred.
- 7. A 150 W fan is on for 240 seconds. How much energy does it consume?
- 8. A 300 W computer runs for 360 seconds. What is the electrical energy used?
- 9. A 400 W television is turned on for 600 seconds. Calculate the energy consumption.
- 10. A 250 W vacuum cleaner operates for 200 seconds. How much energy is used?

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