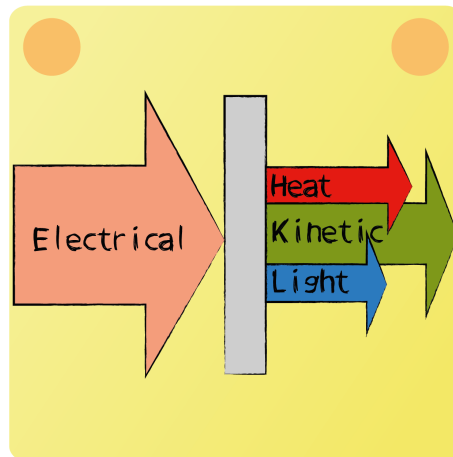# Lecture 02 - Efficiency 01

An electric car drives at night. The electrical energy is converted into kinetic energy, light and heat. Give an expression for the efficiency of the car.

During the night, the energy converted into light and kinetic energy is useful. Therefore:

$$\eta = \frac{E_{\text{kinetic}} + E_{\text{light}}}{E_{\text{electrical}}}$$