

HW Question

(b) Appliances vary in the amount of electricity they use depending on their power rating. A tumble drier has a high power rating of 2.5 kW.

- (i) Name another appliance found in the home that has a high power rating.
- (ii) Name an appliance found in the home that has a low power rating.

The ESB charges for electricity at a rate of 12 cent per kW h. A tumble drier of power rating 2.5 kW is used for 2 hours each week for 4 weeks.

- (iii) How many units of electricity are used?
- (iv) What is the cost, in cent, of using the tumble drier?

(JC, OL, 2006)

▲ Fig 43.15

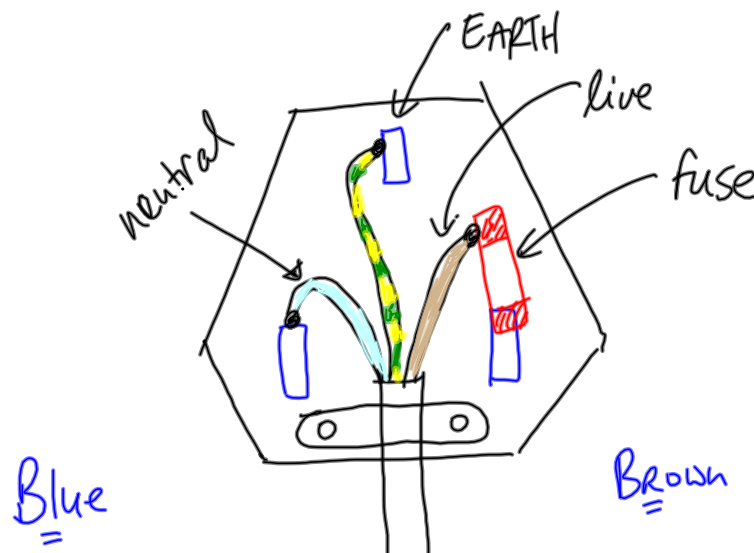


▲ Fig 43.16

units? kWh? $\text{Power} \times \text{Time} = (2.5) (2 \times 4) = 20 \text{ kWh}$
 (kW) (h)

$\text{Cost} = \text{units} \times \text{per unit price} = (20)(12) = 240 \text{ c} = \text{€}2.40$

Plug



There are 2 types of Current electricity

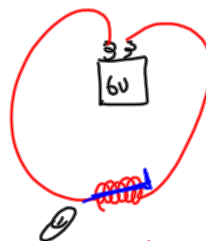
- AC [Alternating current] - mains 50 Hz
- DC [Direct current] - battery

3 effects of electricity

- ① Heating effect
- a toaster uses this



- ② Magnetic effect
used by - radio
- fan



- ③ Chemical Effect

Electrolysis
Hoffman's Voltmeter

