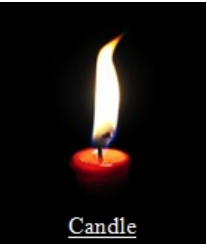
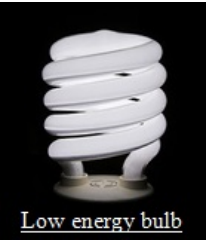



Lighting

Shane and Elena are choosing how to light a room. They can get the room to the same brightness by using the lights shown in the table.

Type of light	Number needed to get the same brightness	Total energy used every second (joules)	How long does it last?
 Candle	120 candles	4800 J	2 hours
 Low energy bulb	1 low energy bulb	18 J	2 years
 Filament bulb	1 filament bulb	100 J	9 months

Images source: Wikipedia

Which type of lighting would be good if there was an electrical power cut?

a) i) _____

Explain your choice.

ii) _____

b)i) Which type of lighting is best for saving energy? _____

Explain your choice.

ii) _____

The candles and bulbs all produce light and heat. The table shows lighting that produces the same amount of light.

c)i) Which type of lighting produces least heat energy? _____

Explain your choice.

ii) _____

Fill in the table below, describing one advantage (good thing) and one disadvantage (bad thing) of each type of light.

Type of light	Advantage	Disadvantage
i) Candle		
ii) Low energy bulb		
iii) Filament bulb		

