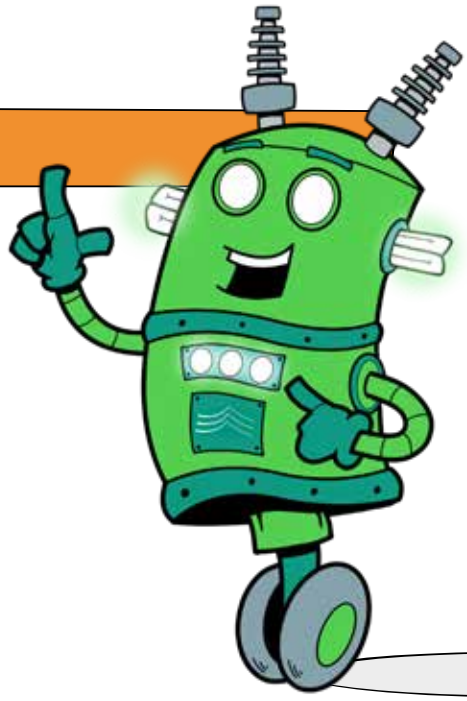
ECOBOT'S ENERGY CHALLENGE

WESTERN POWER DISTRIBUTION
Serving the Midlands, South West and Wales

Year 6 Maths | Energy Saving Bulbs



RESOURCE A

Electrical Power Consumption (watts)	
Traditional Bulb	L.E.D. Bulb
40	7
60	10
100	26

RESOURCE B

Traditional	KW (Divide by 1000)	KWH (Multiply by 5)	Total Cost (Multiply by 13p)
40w	0.04	0.2	2.6p
60w			
100w			

L.E.D.	KW (Divide by 1000)	KWH (Multiply by 5)	Total Cost (Multiply by 13p)
7w	0.007	0.035	0.455p
10w			
26w			

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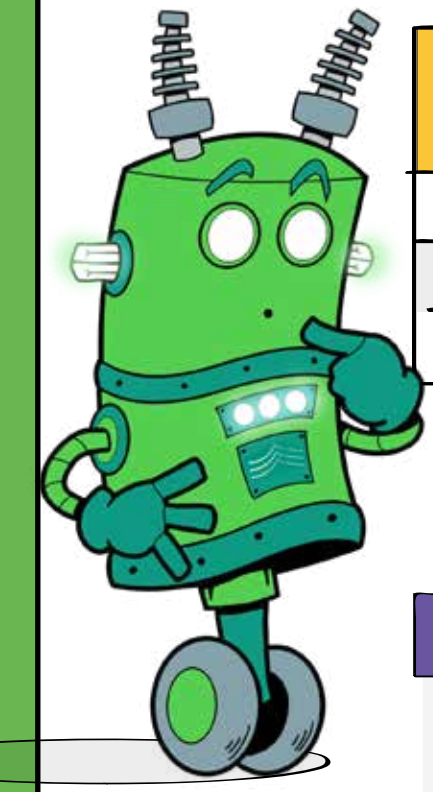
RESOURCE C



L.E.D bulb	Saving per day (to the nearest penny)	Saving per week	Saving per year (365 days)	Saving after 5 years
7w				
10w				
26w				

EXTENSION

Use the table to answer these questions. Show your working out.

1. Kelly thinks she can save at least £50 a year on her electricity bills by changing 8 of her 60w bulbs to new L.E.D bulbs. Is she correct?

2. Jacob thinks he can save more than Kelly by changing 12 of his 40w bulbs for new 7w L.E.D bulbs. Is he correct?

3. If there are 15 houses in Kelly's street and they all make the same changes as Kelly, how much would they save in total on their electricity bills in one year?