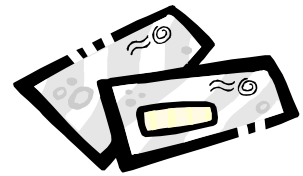



Electricity Bills



How to read your electricity bill

 Tamworth Electricity		
Previous meter reading	5 6 4 7 2	← This shows the number of units used. This is the same as kWh.
Present meter reading	5 6 9 4 3	
Number of units used	4 7 1	← Present reading - previous reading
Cost per unit (pence)	7.35	
Cost of electricity used	£ 34.62	← Number of units x cost per unit.
Fixed quarterly charge	£ 9.49	
Total Bill	£ 44.11	← Cost of electricity + fixed charge

Complete the following electricity bills using the one above as a guide.

Previous meter reading	4 7 0 4 1
Present meter reading	4 7 5 2 5
Number of units used	_____
Cost per unit (pence)	7.35
Cost of electricity used	_____
Fixed quarterly charge	£ 9.49
Total Bill	_____

Previous meter reading	2 6 9 3 5
Present meter reading	2 7 6 0 1
Number of units used	_____
Cost per unit (pence)	7.35
Cost of electricity used	_____
Fixed quarterly charge	£ 9.49
Total Bill	_____

These bills were for the summer quarter (May, June, July). What difference would you expect for a winter (November, December, January) bill? Why?

The number of units is the same as the number of kilowatt hours.
This is how much electricity is consumed or the amount of electrical energy transferred. This is calculated using the formula;

Energy transferred (kilowatt-hour, kWh)	=	power (kilowatt, kW)	x	time (hour, h)
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1. Use the formula to calculate how much electricity the following appliances consume;

(Remember to use kilowatts and hours.)

- a. 100W lamp on for 2 hours.
b. 500W TV on for 5 hours.
c. 2kW kettle on for half an hour.
d. 10W electric blanket on for 15 minutes.



2. Use the formula to work out which of the two appliances consume the most electricity.

(Remember to use kilowatts and hours.)

- a. 2kW heater for 2 hours or 3kW heater on for 3 hours.
b. 900W toaster for 15 minutes or 2kW grill for 10 minutes.
c. 100W radio for 2 hours or 500W radio for 45 minutes.
d. Which appliance would be cheaper to use in each case?