

GOING GREEN

Green electricity choices

National Curriculum

This activity supports work in:

PSHE/CITIZENSHIP

Developing confidence & responsibility:

1c) To face new challenges positively by collecting information, looking for help, making responsible choices, and taking action.

Breadth of opportunities:

5h) Find information and advice.

Also supports work in:

MATHS

Ma4 Handling data, Processing, representing & interpreting data:

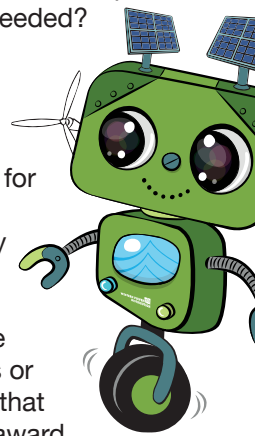
2b) Interpret tables, lists and charts used in everyday life.

Breadth of study:

1h) Using mathematics in their work in other subjects.

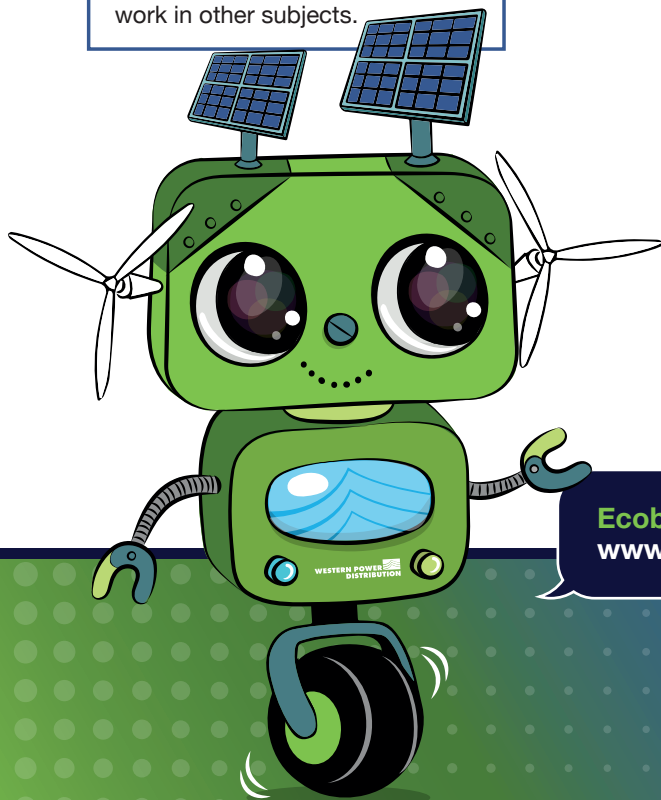
How to use the worksheet

- To introduce the worksheet, ask the children how they think we sometimes waste electricity and what we can do to avoid waste. Do they think it makes much difference if, for example, we switch off a light or television when it is not needed? (See Key electricity facts below.)
- After playing the board game, children could make a note of anything they read that surprised them and find out more about it. A starting point for finding information is their electricity company's website. They could research the energy used by the appliances mentioned in the game.
- Children could make an alternative version of the game that features different electrical appliances or different choices. They could also make a game that features point scoring. For example, they could award or deduct points according to how 'green' (or not) each choice is.
- As a maths activity, the children could calculate how many watts would be wasted in a year by one 100W light bulb being left on all night every night and convert this to kilowatts. They could then work out what this wasted electricity could have powered, and for how long.



Key electricity facts

- All electricity wastage, no matter how small, mounts up over the course of time. For instance, if a small electrical appliance, such as a lamp, uses **100 watts per hour**, this adds up to **2,400W** over the course of one day or **2.4kW**.
- A television set can use **4 watts per hour** when on standby. If it is left on standby for 12 hours per day, that's **17.52 kilowatts per year**. At **10.5p per kWh** (kilowatt hour) that is **£5.51 per year** for a house with three television sets.
- The waste of electricity (and money) mounts up when other devices, such as computers, monitors, printers, mobile phone chargers and so on, are left on standby.



Ecobot says: For more information see www.energysavingtrust.org.uk



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Play the game and find out more about how to use electricity wisely.

1. This is a game for two players. You will need a die, two counters and a pen.
2. Take turns to roll the die and move your counter around the board.
3. Keep score by ticking a box on your scorecard each time you land on a different numbered square and 'make a green choice'.
4. Keep going round the board until one player has completed their scorecard.

START →

You read a leaflet about electricity saving.
HAVE AN EXTRA GO! →

1 You tell an adult what you've learned about 'A' rated fridges. →

2 You use a screen saver. →

You go out and leave your computer on all day.
MISS A GO! ↘

3 You get a wind-up torch. ↓

4 You save hot water by having a shower instead of a bath. ↓

You leave a games console switched on all day.
MISS A GO! ↓

5 You replace an old 100w bulb in your bedroom light with a low energy one. ↙

6 You buy someone a present of a solar powered garden light. ←

You leave the fridge door open.
MISS A GO! ←

7 You tell your friend's mum about low energy dishwashers. ←

You leave your TV on standby.
MISS A GO! ↖

8 You ask your headteacher if your school could get a wind turbine. ↑

You leave a light on all night.
MISS A GO! ↑

8 You join the green committee at school.
HAVE AN EXTRA GO! ↑

PLAYER 1 SCORECARD

Fridge	1
Screensaver	2
Wind-up torch	3
Shower	4
Bedroom light	5
Solar garden light	6
Dishwasher	7
Wind turbine	8

PLAYER 2 SCORECARD

Fridge	1
Screensaver	2
Wind-up torch	3
Shower	4
Bedroom light	5
Solar garden light	6
Dishwasher	7
Wind turbine	8

Ecobot says: With your partner or in a group, make a leaflet using your own 'green' electricity ideas.