

HOME LEARNING ROUTE

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Generating electricity

Key Stage 2 • Science

Conduct a wind turbine experiment and find out more about different ways to generate electricity.

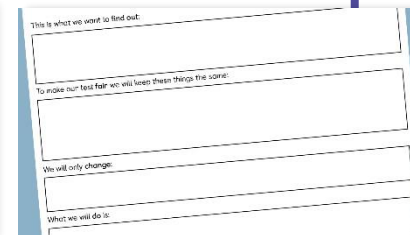
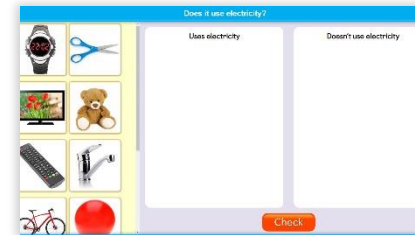
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Preview of pupil steps:

1. You're going to design and test a turbine in the form of a pinwheel. Turbines can be used to generate electricity! Let's find out how.
2. Watch this video on electricity to find out some of the different ways it can be generated and what it's used for. Why are we trying to use alternative ways of generating electricity which doesn't involve burning fossil fuels?
3. Read this factfile on electricity generation. How do wind turbines create electricity? How can using wind, solar and hydroelectric power help the environment?
4. Look to check that you understand all the terms used in the factfile and video.
5. Test your knowledge of electricity by completing this quiz. How could this electricity be generated?
6. Create a pinwheel like the one in the picture, using a square piece of paper. You're going to test how effective it is using a hair dryer and a measuring tape. How can you set up this experiment?
7. Plan your investigation. You could see how far away from the hair dryer the pinwheel needs to be before it stops rotating. This would test its effectiveness. Plan your experiment below and make sure to predict what you think will happen. Why do you think this?
8. What did you find in your investigation? What do these results suggest? Is this what you predicted would happen?



What are home learning routes? Help children learn from home with these ready-made routes through Discovery Education Espresso content. The routes include video, text and glossaries for learning, as well as art, design and creative writing challenges for children to apply and demonstrate what they know.