

TEACHER/PRESENTER NOTES

Wind power: Are you a Fan? (A workshop for KS2 pupils)

OVERVIEW

This workshop was developed in 2021 for British Science Week the theme for which was Innovating for the Future, funded by the Ogden Trust.

It aims to introduce children to wind power, stimulating their thinking about the role of wind power in sustainable energy generation, learning new terms and including messages about STEM careers. It enriches the Year 5 forces topic and reinforces the idea of iterative development in the technology curriculum. There are optional experimental and follow-up activities.

It could be used as a science lesson or an enrichment activity, and is designed to be led by a teacher or other presenter (such as a STEM Ambassador). It is suitable for a class or larger group e.g. in a hall, and can be adapted to last from 30 mins to a whole afternoon. The presenter may need to adapt content to the audience, taking into account SEND or EAL provision.

SUMMARY

Section 1 is essential; all others are optional and can be used independently after section 1. The slides have useful notes for the presenter. Some slides with instructions are hidden.

Section	Area covered	Format	Approx. timing	Slide numbers
	Risk assessment & curriculum links			Slides 1-2
1	Introduction to wind power, including careers	Presentation, discussion, demonstration	15-25 mins	Slides 3-17
2	Effect of different blades on wind turbine power	Demonstration (using Bright Sparks kit or pictures) and discussion	5 mins	Slides 18-20
3	Design-Build-Test activity	Either using Bright Sparks kit	45-60 mins	Slides 21-26
4		Or using DIY kit (with lolly sticks)	45-60 mins	Slides 27-32
5	Wind speed & future innovations	Presentation	8 mins	Slides 33-36
6	Optional recording activity as follow-up	Making a 'zine'	approx. 60 mins	Slides 37-41
7	Summary – what have we learned?	Presentation/discussion	3-5 mins	Slides 42-45

The Bright Sparks wind turbine kits are available from <https://www.brightsparksedu.com/> - please enquire for price. For information about STEM Ambassadors visit <https://www.stem.org.uk/stem-ambassadors/schools-and-colleges> Please contact Christina Astin if you have any questions: christina@astinconsulting.com Thanks to the Ogden Trust for funding the development of these workshops: <https://www.ogdentrust.com>