



Weather Challenge

Wind Warning!

STEAM Project



Challenge

Design and make a device or invention that will help your teacher to decide how strong the wind is and if it is safe to go outside at break time.

Before you begin, it may be a good idea to explore Energy and Forces with your class.

Question Prompts

- What materials do you need?
- What is unique about your device?
- How will you know if your device works?

Possible criteria for pupils:

You need to draw the design of your wind device. Colour where possible.

Please consider the following;

- Label your design with the materials needed to create your device.
- Include any mechanical features that help your device to function.
- Describe with words or drawings how your device will work.
- Your drawing might not be to scale. So include the measurements you would expect your design to be in real life.
- Build your prototype of your device and test it out. Remember to Explore, Plan, Make and Evaluate.

**Decoration & visual presentation will get extra credit.*

Extensions to criteria to increase challenge

Teachers consider some of the following suggestions to challenge pupil's learning further;

- Collect data over the course of a week or two weeks from the wind device and present this data to the class. Does everyone have the same data?
- Prepare and present a weather broadcast to share the results of your wind device.
- Write and perform a theme tune or jingle for your weather broadcast.
- Integrate recyclable material. Can you design & make your device using only material from your recycling Bin? What will you use and why?

**This STEAM challenge card is to assist teachers in planning their STEAM unit of work. Please adapt as necessary. Key to this challenge is to nurture pupils' creativity & let their individuality shine in their final results!*