

TAPS Scotland Focused assessment of scientific skills



Topic:Primary 4Activity title:Planet Earth: EnergyAge 7-8Wind power vehicles

Scientific skills focus

Presents: Reports in writing, orally or visually using a variety of media.



Curriculum link

I am aware of different types of energy around me and can show their importance to everyday life and my survival. SCN 1-04a

Assessment focus

- Can children compare wind powered vehicles?
- Can children present their findings about wind power?

Activity Today we are wind vehicle engineers.

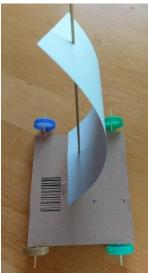
Show some pictures of vehicles/boats that use wind power. Note the many different shapes and sizes of the sail.

Either explore pre-made vehicles or boats (whose design can be tweaked/sail added) or support children to make a simple vehicle, in school or at home (adapt as appropriate for your class). Children could compare different sail sizes/shapes.

Pause to discuss successes and difficulties with making/testing the sails.

Ask children to present their top tips for using a sail/wind power (e.g. orally with an instruction 'video' or visually with a labelled diagram).





Adapting the teaching

Support: Provide support to make a sails or provide pre-made sails to test.

Extension: Compare two designs in report.

Other ideas: Research/explore windmills or other alternative energy sources e.g. use a solar panel in an electric circuit.

Questions to support discussion

- What happens when you blow it?
- What does the wind energy do?
- How far does it go? Does this one go further?
- What do you need to do to get it to catch the wind?
- What tips do you have for someone else making/using one?
- Can you explain to them how it works?

Benchmark indicators

Working towards: Pupils draw or describe their vehicle, but do not explain how it works or the role of the wind.

Achieved: Pupils present their ideas clearly, explaining how to make their wind vehicle work, using evidence from their explorations.

Possible ways to go further: Pupils consider the audience in their reporting of findings. They may link their explorations of wind vehicles to windmills or other sources of alternative energy.

