**TAPS Scotland**

**Focused assessment of scientific skills**

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| **Topic:**  Planet Earth: Energy | Primary 4  Age 7-8 | | Activity title:  Wind power vehicles |
| Logo for reviewing strand of Working Scientifically**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? | | | |
| **Card sail attached to pre-made carCard sail attached to home made carActivity** *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.  **With skewers for axles, through straws to attach to car bodyExtension:** 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. | | | |

[Teacher box 5 - adapt teaching](https://taps.pstt.org.uk/responsive-teaching/) Teacher box 5 - adapt teaching. See TAPS pyramid for more examples.