**TAPS Scotland**

**Focused assessment of scientific skills**

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| **Topic:** Planet Earth: Energy | Primary 4Age 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?
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| **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?
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| **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. See TAPS pyramid for more examples.