

Activity Sheet 4



Dear Scientists,

We are designing and making fuel cells that offer a more sustainable way of generating electricity for running electric vehicles.

We have asked your teacher to show you our plan for using water to get electricity. Then we'd like your help with some problems we are facing:

- We have created a fuel cell, but it doesn't generate enough electricity to power the car headlights and make them shine brightly enough. Please can you investigate this to help find a solution?
- To make our fuel cells work better, we have been testing an ingredient used to coat the fuel cells that speeds up electricity generation to run vehicles.

Currently, this ingredient is in big lumps, and we think smaller pieces might help make everything work faster. Could you investigate this please, with ingredients you have access to?

- If you discover that smaller pieces will help, we'd also like some ideas on how to make the big lumps smaller.

We look forward to hearing from you with solutions to our problems.

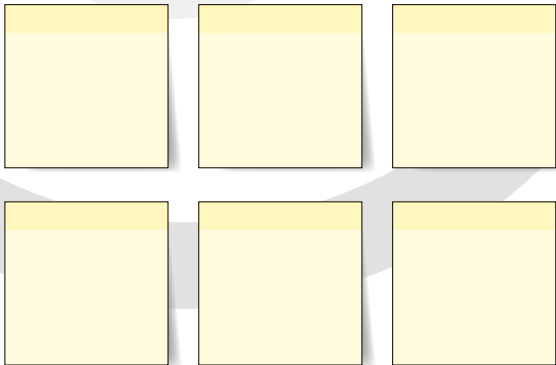

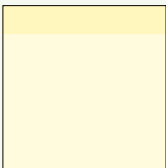
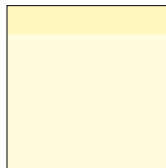
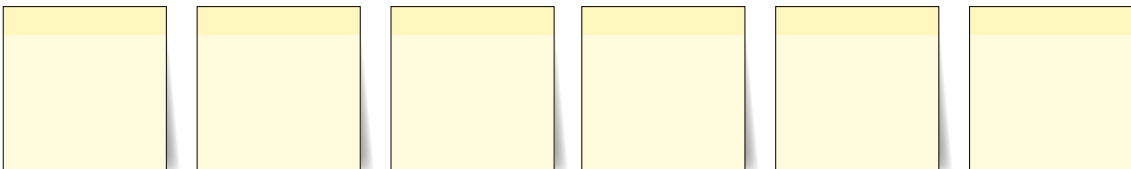
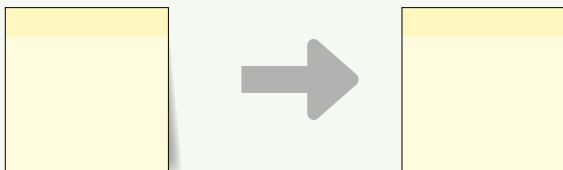
Yours sincerely,

Emily Nesling

Emily Nesling

Scientist

Activity Sheet 5

<p>We could change</p> <div data-bbox="188 586 746 949"></div>	<p>We could measure/observe</p> <div data-bbox="834 586 1393 949"></div>
<p>We will change</p> <div data-bbox="555 1106 721 1272"></div>	<p>We will measure/observe</p> <div data-bbox="1187 1106 1353 1272"></div>
<p>We will keep these the same...</p> <div data-bbox="223 1364 1359 1532"></div>	
<p>When I change... What will happen to?</p> <div data-bbox="497 1644 1062 1812"></div> <p>I think that _____</p> <p>because _____</p>	

Activity Sheet 6

Grinding material	Mass (g) or volume (ml)	Coarse or fine?	Observations