

<b>Topic:</b> Evolution and inheritance	Year 6 Age 10-11	<b>Title:</b> Camouflaged moths
<b>Working Scientifically</b> <b>Do:</b> Record observations in a results table 	<b>Concept Context</b> Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution	
<b>Assessment Focus</b> <ul style="list-style-type: none"> <li>• Can children observe carefully?</li> <li>• Can children record their observations clearly in their own results table?</li> </ul>		
<p><b>Activity</b> <i>Today we are evolutionary biologists.</i>          Share the story of the <a href="#">Peppered moth</a> (darker moths survived in polluted areas). Which moths would survive the longest on our outside walls/tree trunks? (<i>at school/home</i>) Discuss possible simulations e.g. count number of moths seen (eaten): try dark and light paper moths on different walls/surfaces or try range of sizes/colours on the same wall (if limited for space).          Discuss observations which could be recorded e.g. distance from wall when first able to see (if trying different walls); order of colours/sizes spotted (if make range of moths e.g. different colours or dark/spotted/light); or number of each colour spotted in a set time (if make multiple light/dark moths). Note the focus of recording clearly in a table to enable comparison of results.          In small groups, decide on a simulation and create a mix of dark and light paper moths.           Children draw own results tables to collect their observations and carry out their investigation. Discuss clarity of results tables and findings, e.g. does camouflage make much of a difference to survival chances?</p>		
<p><b>Adapting the activity</b>  <b>Support:</b> Agree which simulation and which observations they will need to record.  <b>Extension:</b> Design a new butterfly/moth who would be more likely to survive in a specific area.  <b>Other ideas:</b> Alternative simulation - different coloured wool/paper 'worms/caterpillars' scattered in a set indoor/outdoor area, which children collect in a set time, recording the order of colours collected.</p>		
<p><b>Questions to support discussion</b></p> <ul style="list-style-type: none"> <li>• What observations are you recording?</li> <li>• Are you counting, measuring or timing?</li> <li>• What goes in this part of your table?</li> <li>• What makes a table easier to read?</li> <li>• Were our findings similar or different?</li> <li>• Does camouflage help much?</li> </ul>		
Ilik Saccheri, <a href="#">BBC</a>		Chris Manley, <a href="#">Moths Count</a>
<p><b>Assessment Indicators</b>  <b>Not yet met:</b> Recorded findings are not clear enough to be understood by others.  <b>Meeting:</b> Findings are recorded in a table that can be understood by others.  <b>Possible ways of going further:</b> Can explain the limitations of the simulation. May record in more detail or repeat observations.</p>		