






<b>Science and DT topic:</b> Materials (or Forces)	Year 3 Age 7-8	Title: Egg drop packaging
<b>Enquiry Focus</b> Evaluate outcomes against success criteria		<b>Concept context</b> Properties of materials relating to their uses
<b>Assessment Focus</b> <ul style="list-style-type: none"> <li>• Can children explain how the approach/method was successful?</li> <li>• Can they describe any amendments or suggest how the approach/method could have been improved?</li> </ul>		
<p><b>Activity</b> <i>Today we will be engineers.</i> Gather a selection of materials for the children to design and build a package which will safely transport eggs without breaking. Select a context to share with the children e.g. egg drop onto island, 'eggstronaut' landers. Discuss how to make a fair comparison between the egg packaging designs - height to drop from and surface to drop onto. Agree time, resources available and whether there is a group limit (e.g. 1x balloon, 1x plastic cup, paper, tape, 1 x carrier bag/box, 1x bubble wrap/foam/shredded paper). Test each group's design and reflect on success criteria.  Ask the children to make suggestions for future improvements, explaining why. Focused recording: label photo or diagram noting successes, amendments and improvements.</p> <p><b>Adapting the activity</b> <b>Support:</b> Limit the amount of resources to choose from. <b>Extension:</b> Try other ways to test the packaging. Construct a safe package using less resources. Investigate traditional packaging materials and compare effectiveness to own design. <b>Other ideas:</b> Provide a basic kit and budget with a list of additional components which they can 'buy'. Challenge the children to 'spend' the least amount of 'money'.</p>		
<p><b>Questions to support discussion</b></p> <ul style="list-style-type: none"> <li>• What type of materials would provide suitable protection?</li> <li>• How big does the package need to be?</li> <li>• Should everyone test their packages in the same way?</li> <li>• Are there any safety factors we need to consider?</li> <li>• How will we know if the packaging is successful?</li> <li>• What have you changed about your design? Why?</li> </ul>		
		
<p><b>Assessment Indicators</b> <b>Not yet met:</b> Can say if egg landed safely or not, but does not link this to properties of materials or the way their design was constructed. <b>Meeting:</b> Apply their knowledge of materials when evaluating. Explain amendments to design and how these impacted on protecting the egg. <b>Possible ways of going further:</b> Ongoing evaluation during designing, making and testing. Makes links with real life packaging designs.</p>		

