

Activity name	GO BRIDGE CHALLENGE
<b>Activity Descriptor</b>	<ul style="list-style-type: none"> <li>• A simple bridge-building activity which highlights the different styles of bridges and focuses on the role of civil engineers</li> <li>• The bridges need to carry a weight and a small toy car.</li> </ul>
<b>Activity Aims</b>	<ul style="list-style-type: none"> <li>• To discover more about bridges and bridge building</li> <li>• To raise awareness of the profession of civil engineering and how this job role fits into the wider spectrum of construction and the built environment</li> <li>• To emphasise small group work and teamwork, time management and working with limited resources.</li> </ul>
<b>Activity Length</b> <i>All timings given are approximate and for the basic activity described here. Additional time should be allowed for extensions</i>	<ul style="list-style-type: none"> <li>• 90 minutes – 2 hours</li> <li>• Timing can be reduced by altering the amount of bridges types covered</li> </ul>
<b>Preparation Required</b>	<ul style="list-style-type: none"> <li>• Minimal preparation is required (see Resources required section).</li> <li>• PowerPoint facilities should be available.</li> </ul>
<b>Group Size</b> <i>Remember that the overall size of the group/audience involved may affect timings</i>	<ul style="list-style-type: none"> <li>• Ideally, participants should work in small groups or teams of 2–4 people, but overall group size is unrestricted.</li> </ul>
<b>Audience</b> <i>This is the recommended age range for this activity.</i>	<ul style="list-style-type: none"> <li>• Ages 11–16</li> <li>• The extension ideas will make this activity more challenging and suitable for older audiences.</li> </ul>
<b>Suggested timetable</b>	<ul style="list-style-type: none"> <li>• General introduction 10 mins</li> <li>• Scene setting (PowerPoint/challenge) 10–15 mins</li> <li>• Design and build 60 mins</li> <li>• Testing and discussion 25 mins</li> <li>• Clearing up 5–10 mins</li> </ul>
<b>Extension ideas</b>	<ul style="list-style-type: none"> <li>• Including costs for resources and a request to tender</li> <li>• Allocating job roles to team members, e.g. quantity surveyor, design manager etc</li> <li>• Internet research on bridges</li> <li>• Participants completing a quiz.</li> </ul>

Activity name	BRIDGE BUILDING CHALLENGE
<b>Resources Required</b>	<p>Per small group/team:</p> <ul style="list-style-type: none"> <li>• A small amount of newspaper</li> <li>• 4 sheets of A4 card</li> <li>• 20 art straws</li> <li>• 2m of string</li> <li>• A roll of sticky tape</li> <li>• Scissors</li> <li>• Pencils</li> <li>• 1 - 2 bridge design sheets</li> </ul> <p>For judging purposes:</p> <ul style="list-style-type: none"> <li>• A small toy car</li> <li>• A 100g weight (Eg. two Mars Bars)</li> <li>• A tape measure to check the distance of the gap</li> </ul>
<b>Documentation List</b> <i>Documents may need to be photocopied/printed in multiples if dividing audience into small groups/teams</i>	<ul style="list-style-type: none"> <li>• Introductory PowerPoint presentation with delivery notes</li> <li>• Bridge design sheets</li> <li>• Activity Lead Delivery Notes.</li> </ul>
<b>Employability Skills Involved</b>	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Teamwork</li> <li>• Design</li> <li>• Timekeeping.</li> </ul>
<b>Curriculum Links</b>	<ul style="list-style-type: none"> <li>• Maths</li> <li>• Science</li> <li>• Technology</li> <li>• Engineering.</li> </ul>
<b>Construction Sector Links</b>	<ul style="list-style-type: none"> <li>• Civil engineering</li> <li>• Infrastructure.</li> </ul>