

Activity name	GO BRIDGE CHALLENGE
<p><b>Activity Descriptor</b></p>	<ul style="list-style-type: none"> <li>• This is a simple bridge building activity which highlights the different styles of bridges and focuses on the role of civil engineers.</li> <li>• There is emphasis on small groupwork and teamwork, time management, and working with limited resources.</li> <li>• Teams use their creativity and knowledge of bridge designs to build their own bridge. It must be strong enough to carry a weight of 100g and be suitable for a small toy car to cross from one side to the other.</li> </ul>
<p><b>Industry Ambassador Support</b></p>	<p>The Go Bridge Challenge will be greatly enhanced by the support of a Constructon Industry Ambassador who works in the field of civil engineering. Ideally, they should lead the activity. The Industry Ambassador should present their own career story before introducing the activity to the participants. To request Industry Ambassador support, email <a href="mailto:experience@goconstruct.org">experience@goconstruct.org</a>.</p> <p><b>If you are an Industry Ambassador leading this activity</b></p> <p>Start the activity by delivering a 5 –10 minute presentation covering:</p> <ul style="list-style-type: none"> <li>• what sparked your interest in the industry</li> <li>• your career pathway, including your qualifications</li> <li>• your current role and responsibilities</li> <li>• any additional skills and attributes required for your role, e.g. time management, good communication skills, good IT skills and analytical thinking.</li> <li>• your future ambitions</li> <li>• the benefits of working in the construction industry.</li> </ul> <p>The presentation can be formal or informal, depending on the situation.</p>
<p><b>Introducing the Activity</b></p>	<ul style="list-style-type: none"> <li>• The PowerPoint presentation should be used to introduce the participants to civil engineering. Slide 1 illustrates the importance of civil engineers and the impact that their work has on our everyday lives. Make the connection between ‘civil’ and ‘civilisation’.</li> <li>• Go through the various types of bridge design. Each slide has corresponding notes to help any Activity Lead deliver the presentation, but a civil engineer may wish to add extra information based on their expertise.</li> <li>• Slides 23–26 outline the team activity, including instructions, resources and timescales.</li> <li>• Team members should be encouraged to agree their designs and draw out possible solutions on the blank design sheets.</li> <li>• Make it clear to the participants that any prototypes they make will come from their stock of resources and will need to be destroyed before the construction phase.</li> </ul>

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<p><b>Setting and Delivering the Activity</b></p>	<p>Put the participants into groups of between 2 and 4.</p> <p>Each team will require two tables or two chairs with a span of 0.5m as well as:</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>• One or two bridge design sheets</li> </ul> <p>For judging purposes you will need:</p> <ul style="list-style-type: none"> <li>• A small toy car</li> <li>• A 100g weight (e.g. two Mars Bars)</li> <li>• A tape measure to check the distance of the gap</li> </ul> <p><b>Tip:</b> It is a good idea not to give participants the resources immediately, as they may be distracted by them during your presentation or introduction, rather than listening.</p>
<p><b>Feeding Back on the Activity</b></p>	<ul style="list-style-type: none"> <li>• Ask the participants if they enjoyed the activity.</li> <li>• Ask what they learnt from the planning phase.</li> <li>• Ask if the completed build differed from the design or prototype. If so, why?</li> <li>• Discuss what bridge types the teams used and why. Was one type used more often than the others?</li> </ul>
<p><b>Concluding the Activity</b></p>	<ul style="list-style-type: none"> <li>• Discuss what skills participants have used during the activity, and what they have learnt about civil engineering.</li> <li>• Ask each team to collect their resources and clear them away.</li> <li>• You may wish to thank them for their teamworking skills and say you hope they enjoyed the task.</li> </ul>