

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

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