

Activity name	BRICK TOWER CHALLENGE	
Activity Descriptor	<ul style="list-style-type: none"> • This is an exciting team activity where participants act as small construction companies to plan, design, cost (tender) and construct a tower made from Lego bricks • The activity starts with a PowerPoint presentation which provokes discussion on tower building design and usage, as well as exploring construction careers and enterprise skills 	
Activity Aims	<ul style="list-style-type: none"> • To promote team working, problem solving and communication skills through a simulated construction project • To explore careers in construction • To introduce enterprise skills in the form of costings, tendering and profit 	
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"> • 60–90 minutes (based on six teams) 	
Preparation Required	<ul style="list-style-type: none"> • Lego bricks may need to be purchased (see below) • Lego brick sets may need to be counted and checked before or after every use • All documents can be photocopied • Facilities for showing PowerPoint 	
Group Size <i>Remember that the overall size of the group/audience involved may affect timings</i>	<ul style="list-style-type: none"> • A maximum of 30 participants with six teams of five people is ideal but the exercise will work with fewer or larger numbers, depending on the available time and resources (especially Lego) 	
Audience <i>This is the recommended age range for this activity.</i>	<ul style="list-style-type: none"> • Ages 11–16 	
Suggested timetable	<ul style="list-style-type: none"> • Scene setting PowerPoint/challenge 10–15 mins • Planning phase 30 mins • Dismantling and submitting the tender 5 mins • Timed build 5 mins • Judging and feedback 10–15 mins 	
Extension ideas	<ul style="list-style-type: none"> • Research into other tall structures and the construction materials required to meet the design requirements e.g. Eiffel Tower • Discuss towers in the local area • Use other materials to build the tower, e.g. spaghetti and marshmallows, rolled newspaper. • Assign a cost to each Lego brick • Assign team members specific construction roles e.g. quantity surveyor, project manager • Use an online Lego tool (such as www.buildwithchrome.com) to design the tower prior to the physical build 	

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Resources Required	<ul style="list-style-type: none"> • PowerPoint presentation with notes • Per small group/team: <ul style="list-style-type: none"> • 1 set of Lego bricks per team (in box or container) • 1 participant brief per team • 1 measuring tape per team • 1 stopwatch per session • 2 x pencils and a pencil sharpener • Prizes (optional) • Additional set of bricks is recommended as spares 	
Documentation List <i>Documents may need to be photocopied/printed in multiples if dividing audience into small groups/teams</i>	<ul style="list-style-type: none"> • Introductory PowerPoint (with delivery notes) • Activity Lead delivery notes • Participant brief • Lego Requirements 	
Employability Skills Involved	<ul style="list-style-type: none"> • Planning • Teamwork • Problem solving 	<ul style="list-style-type: none"> • Timekeeping • Communication • Enterprise
Curriculum Links	<ul style="list-style-type: none"> • Engineering • Technology • Geography 	<ul style="list-style-type: none"> • Maths • Science
Construction Sector Links	<ul style="list-style-type: none"> • Civil engineering • Project management • Planning 	<ul style="list-style-type: none"> • Structural engineering • Quantity surveying • Architecture