

| Activity name | Building Bridges CREST Challenge - Bronze Level | |
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| Activity Descriptor | <p>Building Bridges is a team activity where participants must design a bridge to go across the Learning River, considering the client's expectations regarding drainage, sustainability, aesthetics and the environment.</p> <p>The project should commence with a site visit to at least one bridge. There is no requirement for this to be a 'live' site.</p> <p>Participants need to be supported in their work by a mentor. This person can be from industry or alternatively could be an activity lead or a group leader.</p> | |
| Activity Aims | <p>CREST Awards aim to raise awareness of Science, Technology, Engineering and Maths (STEM) amongst young people and to highlight the careers linked to these subjects.</p> <p>By the end of the project participants should have produced a site plan of the bridge and surrounding area and an individual reflective report on what they have learned. They should also outline each individual's role within the team.</p> | |
| Activity Length <i>All timings given are approximate and for the basic activity described here. Additional time should be allowed for extensions.</i> | <p>The completed project should evidence 10 hours' work on behalf of the participants, including a two-hour site visit.</p> | |
| Preparation Required | <ul style="list-style-type: none"> • Planning time with the Civil Engineering company/individual • Planning time for site visit • All documents can be photocopied • Please see 'Resources Required' section below • There is a small per-student fee for each Award registration. Please visit britishscienceassociation.org/crest-getting-started for more details. | |
| Group Size <i>Remember that the overall size of the group/audience involved may affect timings.</i> | <p>We recommend a maximum group size of 15-20, with four or five in each team. Companies hosting site visits may need to restrict numbers accessing a 'live' site at a given time.</p> | |
| Audience <i>Recommended age range for activity.</i> | <p>11-16 years.</p> | |
| Suggested Timetable | <p>Must be negotiated between Civil Engineering company/participants/group leader.</p> | |
| Extension Ideas | <p>CREST Awards are offered at four levels: Discover, Bronze, Silver and Gold. Participants could progress onto a higher level CREST Award.</p> | |
| Resources Required | <ul style="list-style-type: none"> • Standard stationery resources required, e.g. paper, pens, A3 paper, etc • Internet access also required for participant research | |
| 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"> • Employer Guide • Employer PowerPoint • Activity Lead's Guide • National Curriculum Mapping • Tour Guide for Participants • Team Brief • Participant Visit Worksheet • Participant Guide to Critical Path Analysis • Critical Path Planning Table • Site Plan | |
| Employability Skills Involved | <ul style="list-style-type: none"> • Planning • Teamwork | <ul style="list-style-type: none"> • Timekeeping • Research |
| Curriculum Links | <ul style="list-style-type: none"> • Engineering • English • Technology | <ul style="list-style-type: none"> • Maths • Science |
| Construction Sector Links | <ul style="list-style-type: none"> • Engineering • Civil Engineering | <ul style="list-style-type: none"> • Infrastructure |