



Subject Level Descriptor

Department	Design and Technology	Year Group	7	Assessment	Bridge practical
Assessment Summary	<ul style="list-style-type: none"> - To design a successful structure using structures and force research - Produce a successful bridge using a hot glue gun safely - Understand the importance using triangles within structures 				

	Skills and creativity	Quality of final outcome	Independent learning
Level 1	A simple attempt has been made to build a bridge, with teacher help. Bridge shows no reference to research and/or does not meet specification criteria.	Overall quality requires improvement/or work is not yet finished. Bridge holds no weight or under 1000g	Frequent support required to ensure task was complete
Level 2	An attempt at using research is evident but not effective in outcome. Some work needs to be done to strengthen design	A simple bridge construction that relies on excessive amounts of glue to hold together rather than the structural shape. Bridge holds up to 2500g	Some guidance needed to support learning or reminding of safety rules
Level 3	Final bridge resembles final idea that uses ideas from research. Design has a structured framework but with weak sections.	A well-made bridge that is measured and constructed accurately using correct equipment. Bridge holds up to 3500g.	Works safely in the workshop using equipment correctly.
Level 4	Bridge successfully uses structural ideas from research to hold weight (e.g. Truss) Design meets most specification points.	Excellent quality of construction which demonstrates neat use of glue gun and accurate use of measuring equipment to fulfil task. Bridge holds up to 4500g.	Works very well in the workshop with some independence
Level 5	Successful use of forces and triangular structures clearly visible in design and used effectively in final model. Design meets all specification points.	Outstanding construction using all equipment with precision, to produce a sturdy and stable design. Overall quality shows care has been taken with presentation. Bridge holds <u>over</u> 4500g	Works independently with equipment and overcomes problems along the way

Photographic evidence will be used to help assess outcomes