



Design and Technology Progression Overview – Construction Strand



Textiles progression Overview

Year 1	In Year 1, pupils will learn how to use a range of materials to create models. They will observe a glue gun being used by an adult and talk about how structures can be made stronger.
Year 2	In Year 2, pupils will develop by learning to securely attach wheels to a chassis using an axle. During this year they will also use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels. They will join appropriately for different materials and situations e.g. glue, tape, mark out materials to be cut using a template and investigate how structures can be made stronger, stiffer and more stable.
Year 3	In Year 3, pupils' learning will progress as they begin to make structures more stable by giving them a wide base. They show clear progression by using glue gun with close supervision (one to one) compared to Year 1 and Year 2 observing this. Children can now choose materials based on their functional properties and aesthetic qualities
Year 4	In Year 4, pupils' progression will be clear as they create shell or frame structures and strengthen frames with diagonal struts. Children will also be able to incorporate a circuit with bulb or buzzer into a model and choose materials based on their functional properties and aesthetic qualities.
Year 5	In Year 5, pupils' learning will progress as they learn to use a hand drill to drill tight and loose fit holes, cut strip wood, dowel, square and join materials using appropriate methods. Children will also incorporate motor and switch into a model, control a model using an ICT control programme and use a cam to make an up and down mechanism. Progression is shown again as children now use a glue gun with close supervision and choose materials based on their functional purposes and aesthetic qualities.
Year 6	In Year 6, pupils' learning will progress as they learn to use bradawl to mark hole positions. Additionally, children will build frameworks using a range of materials (eg wood, card and corrugated plastic to support mechanisms) and carefully choose materials based on their functional purposes and aesthetic qualities. Now, children can apply their understanding on how to strengthen and stiffen more complex structures and understand and use mechanical systems (gears, pulleys, cams, levers and linkages).