

Year	Autumn	Spring	Summer
7	• Construction lines – planning a drawing • Grid method – scaling/copying a drawing • 3D drawing using the oblique method • Rendering – colour, texture, tone/shading • Manufacturing skills – workshop health and safety and hand tools.	• CAD/CAM – laser cutter focus • Timbers • Papers and Boards • Manufacturing skills – workshop health and safety and hand tools. • CAD/CAM skills – 2d Design (CAD), laser cut keyring	• Packaging • Product Analysis • Design Specification • CAD/CAM skills – 2d Design (CAD), laser cut keyring • Design and make project – Rag Doll sewing skills project
8	• Isometric Sketching and crating • Rendering – colour, texture, tone/shading, thick and thin lines. • Structures – bridge challenge group project	• CAD/CAM - 3d printer focus • Timbers • Papers and boards • Polymers • Structures – bridge challenge bridge challenge group project with electronics/coding. • Motion, forces, mechanisms – mechanical toy design and make project	• Health & Safety • Tools & Machinery • Smart Materials

9	• Design brief • Research & exploration • Manufacturing equipment • Design ideas	• Initial design ideas • Prototyping • Final designs • Engineering/orthographic drawings	• Phone holder project • 3D CAD skills building – 3D printer • 2D CAD skills building – laser cutter • Production plan and risk assessment • Manufacturing • Testing & feedback
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Curriculum Overview – DT- Biddick