

Design Technology Long Term Curriculum Plan- Green Zone

Vision Statement

Here at Talbot House we aim to teach Design Technology very fun, creative and relevant way. We aim to ensure that all of our children are engaged, inspired and challenged throughout each of the carefully planned topics that have been tailored to individual groups within school.

Design Technology stimulates creativity, imagination and inventiveness. It also gives our pupils the skills, concepts and knowledge necessary for them to express responses to ideas and experiences. It fires their imagination! During the design, develop and make process pupils will also develop resilience through an understanding of the frustrations and inconsistencies that will arise while developing ideas and skills, but will be given the freedom to experiment and devise solutions to problems independently in both 2D and 3D formats.

In Design Technology pupils should feel comfortable enough to communicate what they see, feel and think in a nurturing environment. They should follow the process of research, design, develop, finalise, make and evaluate, enabling them to continue to develop and secure their skill base and become proficient in resistant materials, textiles, electronics, CAD/CAM and graphics.

Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1 2	<p>Graphics AQA Unit Award Level two 109989 Comic books & Zines</p> <p><i>Skills:</i> Develop understanding of comic book layouts, word/picture combinations and panel transitions. To learn drawing techniques to produce illustrations in a comic book style. Practise critical analysis by writing a review of a comic book.</p> <p>Context/Knowledge: Comic books and graphic novels tell stories using pictures and text presented in a series of panels that represent scenes. Comic books often</p>	<p>Electronics AQA Unit Award Level one 108591 Designing & making a speaker</p> <p><i>Skills:</i> Develop understanding of modern product design by researching speaker designs. Learn isometric drawing skills, circuit building and soldering. Use hand tools to cut, shape and construct wooden box of speaker.</p> <p>Context/Knowledge: Electronic products form an integral part of modern day life. Aesthetics are an important factor when customers choose products, so considered design is</p>	<p>Woodwork AQA Unit Award Level two 111292 Design and make a wooden bird box</p> <p><i>Skills:</i> Improve research and evaluation skills by finding and analysing bird house designs. Develop 3D drawing and textured rendering skills. Further improve skills with woodwork tools such as tenon saw, hammer, drill and electric sander.</p> <p>Context/Knowledge: Woodworking is a craft that has been used for thousands of years to make furniture and many other products from tiny trinkets to grand wooden buildings. Bird boxes are used by people to encourage birds to nest in their garden and are a</p>		<p>CAD/CAM AQA Unit Award Level two 116437 Computer aided design & manufacture</p> <p><i>Skills:</i> Practise research and evaluation skills by analysing products made using computer aided manufacture e.g. laser cut or 3D printed. Learn computer aided design skills by using 2D design software such as Techsoft 2D.</p> <p>Context/Knowledge: Computer aided design (CAD) is the use of computer software to design new products in 3D. This enables businesses to visualise new designs in a</p>	<p>Textiles AQA Unit Award Level two 75268 Creating a customised fabric bag</p> <p><i>Skills:</i> Research and evaluate existing bag designs and create a range of design ideas. Measure and mark out material, cut fabric and use a sewing machine to stitch bag together. Use fabric paint or dye to customise the design of the bag.</p> <p>Context/Knowledge: Style and fashion change over time with eras often defined by key trends. Accessories such as bags can be used to express</p>

<p>1 2</p>	<p>depict superheroes, sci-fi or fantasy stories with many comic books being adapted into TV and films.</p> <p>Keywords: Comics, graphic novels, zines, magazines, panels, combinations, transitions, fonts, typography, illustration</p> <p>Suggested designers: John Romita Jr, Brian Bolland, Will Eisner, Jim Steranko, Osamu Tezuka, Steve Ditko, Frank Miller, Dave Gibbons, Steve Dillon, Jack Kirby.</p>	<p>vital if products are to be successful commercially.</p> <p>Keywords: battery, switch, wire, resistor, transistor, component, solder, soldering iron, circuit, electricity, isometric</p> <p>Suggested designers: Dieter Rams (Braun), Jonhthan Paul Ive (Apple), James Dyson, Paul Cocksedge</p>	<p>popular product sold at garden centres.</p> <p>Keywords: isometric, texture, render, measure, tri-square, tenon saw, pillar drill, hammer, sand paper</p> <p>Suggested designers: Osko+Deichmann, Gitta Gschwendtner, Chad Wright, Snøhetta, Brooks + Scarpa</p>	<p>variety of materials and send images around the world for collaboration and consultation. Once production is finalised, these designs are sent to computer aided manufacture (CAM) machines such as laser cutters, 3D printers and milling machines to be produced.</p> <p>Keywords: Computer Aided Design, silhouette, vector, Computer Aided Manufacture, 3d printer, laser cutter, CNC Router, plotter cutter, acrylic, ply wood, MDF</p> <p>Suggested research: Tatty Devine 3D printing used by the NHS</p>	<p>personal style. Tote bags are a simple but effective design which can be easily customised.</p> <p>Keywords: Textiles, fabric, material, pattern, sewing machine, dye, print</p> <p>Suggested designers: Gucci, Louis Vuitton, Burberry, Mulberry,</p>
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<p>3</p>	<p>Graphics AQA Unit Award Level one 105737 Designing a logo</p> <p><i>Skills: develop research and evaluation skills by finding and analysing existing logo designs, practise typography and rendering techniques before creating a series of design ideas. Select a final design and produce a finished logo design.</i></p> <p>Context/Knowledge: A logo is a symbol comprised of words, images, and colors that is used to identify a brand or product. Many successful companies have a distinct and</p>	<p>Electronics AQA Unit Award Level one 1085912 Designing & making a speaker</p> <p><i>Skills: Develop understanding of modern product design by researching speaker designs. Learn isometric drawing skills, circuit building and soldering. Use hand tools to cut, shape and construct wooden box of speaker.</i></p> <p>Context/Knowledge: Electronic products form an integral part of modern day life. Aesthetics are an important factor when customers choose products, so considered design is</p>	<p>Woodwork AQA Unit Award Level one 107998 Design and make a wooden stool</p> <p><i>Skills: Improve research and evaluation skills by finding and analysing stool designs. Develop 3D drawing and textured rendering skills. Further improve skills with woodwork tools such as tenon saw, hammer, drill and electric sander.</i></p> <p>Context/Knowledge: Woodworking is a craft that has been used for thousands of years to make furniture and many other products. Crickets are small wooden stools that were used by miners as they could be easily carried.</p> <p>Keywords: isometric, texture, render, measure,</p>	<p>CAD/CAM AQA Unit Award Level one 115429 Making a ruler from acrylic</p> <p><i>Skills: Practise research and evaluation skills by analysing products made using computer aided manufacture e.g. laser cut or 3D printed. Learn computer aided design skills by using 2D design software such as Techsoft 2D.</i></p> <p>Context/Knowledge: Computer aided design (CAD) is the use of computer software to design new products in 3D. This enables businesses to visualise new designs in a variety of materials</p>	<p>Textiles AQA Unit Award Level one 116138 Sewing a pencil case</p> <p><i>Skills: Research and evaluate existing pencil case designs and create a range of design ideas. Measure and mark out material, cut fabric and hand sew the pencil case together. Use fabric paint or dye to customise the design of the pencil case.</i></p> <p>Context/Knowledge: Textile designing is a field that includes fashion design, carpet manufacturing and any other cloth-related field. Clothing, carpets,</p>
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<p>3</p>	<p>recognizable logo design.</p> <p>Keywords: logo, brand, identity, typography, font, colour, outline, shadow</p> <p>Suggested designers: Paul Rand Peter Saville, Massimo Vignelli, Ruth Ansel, Aleksandr Rodchenko, Michael Bierut, Max Miedinger, Milton Glaser, Claude Garamond, Rodrigo Corral, Chip Kidd, Carolyn Davidson</p>	<p>vital if products are to be successful commercially.</p> <p>Keywords: battery, switch, wire, resistor, transistor, component, solder, soldering iron, circuit, electricity, isometric</p> <p>Suggested designers: Dieter Rams (Braun), Jonhthan Paul Ive (Apple), James Dyson, Paul Cocksedge</p>	<p>tri-square, tenon saw, pillar drill, hammer, sand paper</p> <p>Suggested designers: Charles Rennie Mackintosh, Paul Smith, Frank Lloyd Wright, Marcel Breuer, Le Corbusier, Charlotte Perriand, Charles and Ray Eames, Vico Magistretti, Arne Jacobson, Philippe Starck, Florence Knoll Bassett</p>	<p>and send images around the world for collaboration and consultation. Once production is finalised, these designs are sent to computer aided manufacture (CAM) machines such as laser cutters, 3D printers and milling machines to be produced.</p> <p>Keywords: Computer Aided Design, silhouette, vector, Computer Aided Manufacture, 3d printer, laser cutter, CNC Router, plotter cutter, acrylic, plywood, MDF</p> <p>Suggested research: Tatty Devine 3D printing used by the NHS</p>	<p>drapes, and towels are all functional products resulting from textile design. Textile design has influenced other works or trends in the field of art.</p> <p>Keywords: Textiles, fabric, material, pattern, sew, needle, thread, dye, print</p> <p>Suggested designers: Lucienne Day, Cath Kidston, William Morris, Mary White, Laura Ashley, Terence Conran, Zika Ascher</p>
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<p>4</p>	<p><u>Graphics</u> AQA Unit Award Entry Level 40635 Design and make a poster or banner</p> <p>Skills: develop research and evaluation skills by finding and analysing existing poster designs, practise typography and rendering techniques before creating a series of design ideas. Select a final design and produce a finished poster design.</p> <p>Context/Knowledge: Print advertising is a type of marketing that uses different print media channels for advertising to reach a broader target audience.</p>	<p><u>Electronics</u> AQA Unit Award Entry Level 110017 Designing and making an electric lamp</p> <p>Skills: Develop understanding of modern product design by researching lamp designs. Learn isometric drawing skills, circuit building and soldering. Use hand tools to cut, shape and construct wooden box for lamp.</p> <p>Context/Knowledge: Electronic products form an integral part of modern-day life. Aesthetics are an important factor when customers choose products, so</p>	<p><u>Woodwork</u> AQA Unit Award Entry Level 117953 Making a wooden toy</p> <p>Skills: Improve research and evaluation skills by finding and analysing wooden toy designs. Develop 3D drawing and textured rendering skills. Further improve skills with woodwork tools such as tenon saw, hammer, drill and electric sander.</p> <p>Context/Knowledge: Woodworking is a craft that has been used for thousands of years to make furniture and many other products. With plastic becoming less popular due to it being unsustainable wooden toys have become more popular again over recent years.</p> <p>Keywords: isometric, texture, render, measure,</p>	<p><u>CAD/CAM</u> AQA Unit Award Entry Level 117306 Making an acrylic photo frame</p> <p>Skills: Practise research and evaluation skills by analysing products made using computer aided manufacture e.g. laser cut or 3D printed. Learn computer aided design skills by using 2D design software such as Techsoft 2D.</p> <p>Context/Knowledge: Computer aided design (CAD) is the use of computer software to design new products in 3D. This enables businesses to visualise new designs in a variety of materials</p>	<p><u>Textiles</u> Making a decorative cushion 113194 AQA Unit Award Entry Level</p> <p>Skills: Research and evaluate existing cushion designs and create a range of design ideas. Measure and mark out material, cut fabric and hand sew the pencil case together. Use fabric paint or dye to customise the design of the cushion.</p> <p>Context/Knowledge: Textile designing is a field that includes fashion design, carpet manufacturing and any other cloth-related field.</p>
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<p>4</p>	<p>Companies advertise their products on different print advertising channels such as newspapers, direct mails, brochures, magazines, billboards, etc.</p> <p>Keywords: poster, logo, brand, identity, typography, font, colour, outline, shadow, picture, background, target market, consumer, print</p> <p>Suggested designers: John Romita Jr, Brian Bolland, Will Eisner, Jim Steranko, Osamu Tezuka, Steve Ditko, Frank Miller, Dave Gibbons, Steve Dillon, Jack Kirby.</p>	<p>considered design is vital if products are to be successful commercially.</p> <p>Keywords: battery, switch, wire, resistor, transistor, component, solder, soldering iron, circuit, electricity, isometric</p> <p>Suggested designers: Dieter Rams (Braun), Jonhthan Paul Ive (Apple), James Dyson, Paul Cocksedge</p>	<p>tri-square, tenon saw, pillar drill, hammer, sandpaper</p> <p>Suggested designers: The Wooden Wagon, Mulberry Bush, Bigjigs Toys, Scandiborn, Tenderleaf toys</p>	<p>and send images around the world for collaboration and consultation. Once production is finalised, these designs are sent to computer aided manufacture (CAM) machines such as laser cutters, 3D printers and milling machines to be produced.</p> <p>Keywords: Computer Aided Design, silhouette, vector, Computer Aided Manufacture, 3d printer, laser cutter, CNC Router, plotter cutter, acrylic, plywood, MDF</p> <p>Suggested research: Tatty Devine 3D printing used by the NHS</p>	<p>Clothing, carpets, drapes, and towels are all functional products resulting from textile design. Textile design has influenced other works or trends in the field of art.</p> <p>Keywords: Textiles, fabric, material, pattern, sew, needle, thread, dye, print</p> <p>Suggested designers: Lucienne Day, Cath Kidston, William Morris, Mary White, Laura Ashley, Terence Conran, Zika Ascher</p>
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