

Year 7	Focus:	Design and make project for a desk tidy/ phone holder, this project introduces the design cycle and the role of the designer, it covers some 3D drawing skills, and CAD CAM utilising the laser cutter, as well as hand skills.	Making Skills- Using manufactured boards, Accuracy in tool use. Dry assemble of parts and quality control. Using adhesives and quality of finish.
	Assessment:	<p>This project is it assessed internally they receive grades for designing, this will make up 50% of their overall grade.</p> <p>The skills I will be assessing for are:</p> <p>Written communication skills (design brief)</p> <p>Visual communication skills sketching (design ideas)</p> <p>Visual communication skills rendering (design ideas)</p> <p>CAD skills 2D design</p> <p>In addition to assessed skills students will learn:</p> <p>3D technical drawings 2 point perspective</p> <p>woods theory</p> <p>Importance of testing a product</p> <p>Evaluative and self-reflection</p>	<p>This project is it assessed internally they receive grades for designing, this will make up 50% of their overall grade.</p> <p>The skills I will be assessing for are:</p> <p>Accurate mark making</p> <p>Accurate cutting Tenon Saw/Coping Saw</p> <p>Safe and accurate cutting Scroll Saw</p> <p>Safe and accurate sanding (wood)</p> <p>Accurate construction of a Butt Joint</p> <p>Safe and accurate use of the line bender</p> <p>Accurate adhesive application</p>

CEIAG: Develop of communications skills while working as a team, the ability to read instructions and follow a logical order of work. Department has a careers board.

SMSC: DT teaches students key life skills. Students have to learn how to work together in a team and share the space and equipment. Students understand the needs of others & inclusive design.

Enrichment: trip, careers.

British Values: Students have to learn how to work together in a team and share the space and equipment. Ethics around materials choice and moral decisions are discussed. Students design their own product to suit personal beliefs and the given design context. Students have to show tolerance of others decisions. Students develop self-esteem and responsibility, students explore tolerance, mutual respect and individual liberty. GCSE topics cover materials, environmental and energy choices and branding including different religions, moral choices, ethical choices.

Year 8	Focus:	Design and make a laser cut mood light, using hand tools and machinery, and an electronic circuit. This project builds on prior learning improving design presentation skills and preparing pupils to use a wide variety of tools, materials and equipment, this will give them a good practical grounding for GCSE.	Making Skills- Using softwood and manufactured boards, Accuracy in tool use and mark making. Using adhesives and quality of finish.
	Assessment:	<p>This project is it assessed internally they receive grades for designing, this will make up 50% of their overall grade. The skills I will be assessing for are:</p> <p>Written communication skills (design brief)</p> <p>Visual communication skills sketching (design ideas)</p> <p>Visual communication skills rendering (design ideas)</p> <p>CAD skills 2D design</p> <p>3D technical drawings isometric</p>	<p>This project is it assessed internally they receive grades for making, this will make up 50% of their overall grade. The skills I will be assessing for are:</p> <p>Cutting skills Safe and accurate use of a craft knife</p> <p>Accurate mark making</p> <p>Accurate cutting Tenon Saw/Coping Saw</p> <p>Safe and accurate cutting Scroll Saw</p> <p>Safe and accurate sanding (wood)</p> <p>Accurate comb joint</p> <p>Construction using panel pins</p> <p>Safe use of an electrical screwdriver</p> <p>Accurate adhesive application</p>

CEIAG regular promotion of careers in lessons.

SMSC: Sustainable design. Ecological issues in the design and manufacture of products. Natural resource depletion and the knock on effects for local communicates and the environment.

Enrichment: trip, careers.

British Values: Cultural differences between different countries. How designing for other cultures can change, interpretation. Working with others, teamwork.

Year 9	Focus:	Design and make jewelry box, this project requires more challenging technical skills and a variety of woodwork joints with increasing complexity, using hand tools and machinery, and an electronic circuit. This project builds on prior learning improving design presentation skills and preparing pupils to use a wide variety of tools, materials and equipment, this will give them a good practical grounding for GCSE.	Making Skills- Using softwood and manufactured boards, Accuracy in tool use and mark making. Using adhesives and quality of finish.
	Assessment:	<p>This project is it assessed internally they receive grades for designing, this will make up 50% of their overall grade. The skills I will be assessing for are:</p> <p>Written communication skills (design brief)</p> <p>Visual communication skills sketching (design ideas)</p> <p>Visual communication skills rendering (design ideas)</p> <p>CAD skills 2D design</p> <p>3D technical drawings isometric</p>	<p>This project is it assessed internally they receive grades for making, this will make up 50% of their overall grade. The skills I will be assessing for are:</p> <p>Cutting skills Safe and accurate use of a craft knife</p> <p>Accurate mark making</p> <p>Accurate cutting Tenon Saw/Coping Saw</p> <p>Safe and accurate cutting Scroll Saw</p> <p>Safe and accurate sanding (wood)</p> <p>Accurate woodworking joints</p> <p>Accurate and safe use of the power drill</p> <p>Construction using panel pins</p> <p>Safe use of an electrical screwdriver</p> <p>Accurate adhesive application</p>

CEIAG trip: regular promotion of careers in lessons.

SMSC: Sustainable design. Ecological issues in the design and manufacture of products. Natural resource depletion and the knock on effects for local communities and the environment.

Enrichment: trip, careers.

British Values: Cultural differences between different countries. How designing for other cultures can change, interpretation. Working with others, teamwork.

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10	Focus:	Robot Project Tron Mini project 3D sketching CAD Card model making <u>NEA skills builder</u> Theory topics: Paper and Card Metals Material properties	Box project Wood work skills Measuring Marking Cutting Sanding Joining Evaluative <u>NEA skills builder</u> Theory Topics: industry and enterprise Sustainability CAD/CAM	Lamination project mini skateboard Sketching skills Digital manipulation Packaging Pizza Handle project Styrofoam modelling Ergonomics Anthropometrics <u>NEA skills builder</u> Theory Topics: smart/modern materials Textiles Timbers	House project LED's circuits CAD Soldering Model making <u>NEA skills builder</u> Theory Topics: energy generation Energy storage Systems design	Chair project Ergonomics Anthropometrics Forces and stresses Trebuchet project <u>NEA skills builder</u> Theory Topics: Forces and stresses Mechanical devices Ergonomics Anthropometrics	Theory Topics: Functionality and improvement 6r's Scales of production Soldering NEA launch 1 st June Class work begins 5 th June 2024
	Assessment:	Retrieval practice Exam questions End of unit tests	Retrieval practice Exam questions End of unit tests	Retrieval practice Exam questions End of unit tests	Retrieval practice Exam questions End of unit tests	Retrieval practice Exam questions End of unit tests	Retrieval practice Exam questions End of unit tests

CEIAG: regular promotion of careers in lessons.

SMSC: Students learn social responsibility. Students should have a knowledge and understanding of the ecological and social footprint left by designers. Ethical factors and the social footprint of materials used in products. Selection of materials based on ethical factors and social and environmental footprints. Excellent design focus and full understanding of the impact on society including; economic and social effects. Sustainable design and the 6R's. Ecological issues in the design and manufacture of products. Natural resource depletion and the knock on effects for local communities and the environment. Fair trade. Oceanic and atmospheric pollution. Ethical resource sourcing.

Enrichment: Practical kinaesthetic lessons. Trip.

British Values: Cultural differences between different countries. How designing for other cultures can change, interpretation. Working with others, teamwork.

