

	Autumn	Spring	Summer
Starter topics	<ul style="list-style-type: none"> ➤ Basic 2D shapes ➤ Templates ➤ Colour application ➤ Isometric cuboids 	<ul style="list-style-type: none"> ➤ Isometric ➤ Isometric crating techniques ➤ Shading & light source 	<ul style="list-style-type: none"> ➤ Rendering to add texture/material ➤ Isometric cylinder ➤ Exploded isometric ➤ Dimensioning
Project & Objectives	<p>Board Game Project Students develop a board game of their choice, using a variety of graphics and CAD/CAM methods. A selection of templates are available to get started, making this project achievable for all.</p>	<p>Steady Hand Game Project The game is themed to raise awareness for a charity, chosen by the student. The electronic circuit and components are constructed using soldering equipment and students test their games at the end of the project.</p>	<p>Pewter Pendant Initial research involves analysing jewellery, including that worn by indigenous/minority groups. Students create a mould from wood and then cast their pendant from pewter. Once cast, the pendant needs to be filed, drilled and polished for a quality finish.</p>
Acquired Knowledge / Skills	<ul style="list-style-type: none"> • Identifying client/user needs • Colour wheel • Font types • Using CAD templates • CAD development • Vectorising a bitmap image • Tapping a thread • Laminating with contact adhesive • Packaging nets/symbols 	<ul style="list-style-type: none"> • Charities/branding (RRS) • Gluing & clamping with adhesives • Marking-out & drilling holes accurately • Circuit diagrams/symbols/components • Soldering an electronic circuit • Flowcharts • Painting/finishing • Testing & problem solving (circuit) 	<ul style="list-style-type: none"> • Extraction of metals/ores • Minority/indigenous groups (RRS) • Properties/uses of metals • Casting using moulds • Use of file & emery cloth with metal • Polishing wheel • Pillar drill • Blister packaging & vacuum forming • Branding/marketing
Target Vocabulary Rights Respecting	<p><u>Tier 2 vocab:</u> Develop, client, profile, strategy, needs. <u>Tier 3 vocab:</u> Isometric, cuboid, CAD, vectorise, aesthetics, <u>Social interaction.</u> Article 24: Right to health & health services.</p>	<p><u>Tier 2 vocab:</u> Charity, structure, feedback, process, sequence. <u>Tier 3 vocab:</u> Crating, ergonomics, jig, circuit, flowchart, brand, logo <u>Students research and choose their own charity for the project.</u> Article 13: Freedom of expression Article 14: Freedom of thought & belief</p>	<p><u>Tier 2 vocab:</u> Minority, culture, indigenous, community. <u>Tier 3 vocab:</u> Cast, mould, pewter, polish, blister pack, thermoplastic <u>Jewellery linked to cultural imagery or minority groups/communities.</u> Article 30: Rights of children from minority groups/indigenous (Ensuring we have classrooms that are respectful and welcoming to all)</p>
Assessment	<p>Students submit both a design folder & product:</p> <ul style="list-style-type: none"> ➤ 40 marks - Design folder ➤ 40 marks - Making ➤ 20 marks - End of project test ➤ <u>Total of 100 marks</u> <p>% then converted to 1-9 level for overall progress</p>	<p>Students submit both a design folder & product:</p> <ul style="list-style-type: none"> ➤ 40 marks - Design folder ➤ 40 marks - Making ➤ 20 marks - End of project test ➤ <u>Total of 100 marks</u> <p>% then converted to 1-9 level for overall progress</p>	<p>Students submit both a design folder & product:</p> <ul style="list-style-type: none"> ➤ 40 marks - Design folder ➤ 40 marks - Making ➤ 20 marks - End of project test ➤ <u>Total of 100 marks</u> <p>% then converted to 1-9 level for overall progress</p>