Subject	Year 7 Threshold Concepts	How to support students' learning
	During Year 7 students will be on a rotation; they will undertake **two Art & Design projects** and **two Technology projects** during the course of the year. You can find details of each project listed below	Please find below a range of ways that students' learning can be supported when they study each of the Art & Design or Technology projects
Art & Design	**Oceanic Project** **Key concept: how can artists create work which has meaning and message?** In the Oceanic project students will produce creative work which explores issues facing sealife and the ocean. They will learn to record observations using freehand drawing, gridding techniques and printmaking processes. They will explore ideas in a range of media in the development of a mixed media piece. During the project they will also gain knowledge about a number of artists and designers as well as analysing and evaluating their own and others' artworks. **Skills and Processes:** Drawing ,Gridding, Mark-making, Analysis, Wet-in-Wet, Colour wheel, Relief printing, Font and lettering, Ombre effects, Papercutting **Key Vocabulary:** Gridding, Intersecting, Tone, Texture, Refinement, Blending, Printmaking, Contrast, Layering, Overlapping, Slogan , Font, Embellish, Detail, Composition, Collage, Transparent **Artists / Context:** Tim Jeffs, John Shaw**,** Colleen Wilcox**,** Paul Doeman **,** Papercut Artists, Environmental artists	• Encourage your child to learn about different animals and their environments as well as undertaking some of the activities for students found on the World Wildlife Fund's website here: https://www.wwf.org.uk/learn/wildlife • Encourage your child to watch the BBC series 'Blue Planet which can be found here: https://www.bbcearth.com/shows/blue-planet • Encourage your child to research the effects of plastic pollution and climate change on our oceans and to consider ways in which this can be combatted • Encourage your child to carry out further research about the artists we are studying in this project or about other artists whose work makes a statement about caring for the environment • Encourage your child to draw and create on a regular basis in order that they gain confidence in mark making
Technology	**CAD/CAM Magic Mirrors**	

	You will learn how to use **Computer Aided Design (CAD)** and **Computer Aided Manufacture (CAM)** to aid the design and manufacture of your project. You will design and manufacture a fun mirror using a range of CADCAM tools and equipment. Your brief is to design and make a portable and decorative mirror. **Skills and Processes** Techsoft software, Client profile, Inspirational moodboards, product assembly/finishing/decoration, Basic electronics and Microbit programming **Key Vocabulary** Computer Aided Design, Computer Aided Manufacture, Computer Numerical Control, Manufacture, Novelty, Quality, Situation, Design Brief, Client Profile, Specification, 2Dimensional, 3Dimensional, Isometric drawing, Techsoft software, Power Point, e-portfolio, Presentation, Evaluation, re-design, circuit, buzzer, LED, switch speaker, lamp, microcontroller, voltage, Volts, current, Amps, resistance, Ohms, integrated circuit, PIC, Microcontrollers	• Encourage your child to collect further information about their chosen client to add detail to the client profile started in session. Pictures of the client together with their pictures of their likes and dislikes could also be collected. • Encourage your child to use the 'virtual desktop' from home so that they can practise the tools in the Techsoft Software in preparation for the design sessions • Encourage your child to use the Design and Technology online library • Encourage your child to change the batteries in a simple product • Encourage your child to extend their learning of Microbit tutorials that were not completed in session • Access BBC Teach – A range of clips and resources which will inspire your child to learn more about all aspects of Design and Technology https://www.bbc.co.uk/teach/ks3- design-and-technology/z6y96v4. • • Access STEM – Your child can explore a variety of activities and challenges that can be used to support their learning in Design and Technology https://www.stem.org.uk/homelearning/secondary-design-technology.
Art & Design	**Creature Creations Project** **Key concept - how do artists develop and create work which is developed from the imagination?** In the Creature Creations project students will produce highly imaginative and creative work which explores character design and expressions. They will explore ideas using a variety of recording techniques and processes; sometimes on their own and sometimes as part of a group task. They will evaluate the work of	• Encourage your child to develop their imaginative work by drawing in a cartoon style – some different tutorials can be found here: https://www.youtube.com/channel/UCrd1j_IoMQDv_MEEGKLoFJg • Encourage your child to carry out further research about the artists we are studying in this project • Encourage your child to draw and create on a regular basis; the focus for this project is creating exaggerated features and expressions. There are many resources online; they could

	other artists and designers and develop their artistic language skills. Students will be introduced to a range of art forms such as illustration, cartoon work and graffiti fonts. **Skills and Processes:** Drawing, Analysis, Imagination, Creating features, Expressions, Compositions, Experimentation, Painting, Colour theory, Lettering, Font , Evaluation **Key Vocabulary:** Line, Monoprint, Watercolour, Colour Wheel, Tone, Gradient, Abstract, Composition, Refinement, Draft, Shape Combination **Artists/Context:** John Burgerman Graffiti Fonts Nathan Wyburn	experiment with making 'coffee blot monsters' such as shown in this video: https://www.youtube.com/watch?v=uHtr-gFjJvU •
Art & Design	**Chinese Dragons Project** **Key concept: How have artists used visual language and 3D elements from different cultures?** In the Chinese Dragons project students will produce creative work which explores 2D and 3D elements of dragon design. They will record observations and ideas in a range of media including drawing, painting, printmaking and sculpting. They will be introduced to a number of artworks and designs from Chinese culture and will analyse these in order to inform their own ideas. Key terms will be introduced which will help them to further develop their use of artistic language and they will gain understanding of a number of different art forms including relief work.	• Encourage your child to carry out further research about Chinese New Year celebrations – a good starting point can be found here: https://www.bbc.co.uk/newsround/38668427 • Encourage your child's dexterity with manipulating materials – some starter ideas here: https://www.weareteachers.com/cardboard-activities/ • Encourage your child to draw and create on a regular basis. The focus in this project is Chinese masks and dragons; they could start by practicing drawing a Chinese dragon using this resource: https://www.youtube.com/watch?v=ANcwbdO-QYM

	Skills and Processes: Drawing , Washes, Monoprint, Tonal work, Mark making, Continuous line, Mask making, Symmetry, Relief work, Cutting, Constructing , Painting **Key Vocabulary:** Monoprint , Line, Tone , Gradient, Cross hatching, Mark making, Relief , Intaglio, Texture, Emboss, Dry Brush, Acrylic **Artists / Context:** Dragon designs Relief/cardboard artists Chinese New Year Chinese text/font	
Technology	**Workshop – Funny Money** You will learn how to use a **range of different workshop tools, equipment and machinery, safely and accurately** in order to manufacture a high-quality product. Your brief is to design and manufacture a coin drop money box that appeals to a client of your choice, using workshop tools and equipment. You will learn about why designers often redesign their products and about different mechanical systems and how they work. You will then apply this knowledge to your own product and redesign your money box so that it includes at least one mechanical system. **Skills and processes** Design brief and specification, drawing, design and annotation skills, isometric drawing, rendering,	• Encourage your child to develop their design skills by drawing an everyday object around the house and then redesigning it in their own creative style • Encourage your child to learn about different mechanical systems, by looking at and researching mechanical objects they use on a daily basis. • Encourage your child to use the Design and Technology online library • Access BBC Teach – A range of clips and resources which will inspire your child to learn more about all aspects of Design and Technology https://www.bbc.co.uk/teach/ks3- design-and-technology/z6y96v4. • • Access STEM – Your child can explore a variety of activities and challenges that can be used to support their learning in Design and Technology https://www.stem.org.uk/homelearning/secondary-design-technology.

	accurate measuring, marking and cutting, workshop skills including use of cutting tools, hand drills and sanding machines, product assembly, painting/finishing a product, why designers redesign their products, basic movement and mechanical systems, evaluating your own work. **Key vocabulary** Design brief, specification, client, isometric drawing, rendering , mitre angle, mitre joint, right angle, annotation, 2Dimensional, 3Dimensional, diameter, radius, millimetres, coping saw, tenon saw, Hegner (fret) saw, belt sander (band facer), sand paper, sanding block, bench vice, bench hook, hand drill, drill bit, screw, MDF (Medium Density Fibreboard), acrylic, steel rule, try square, PVA glue, bumpers, siderails, front panel, backboard, high quality finish, technology push, market pull, redesigning, linear motion, rotary motion, reciprocating motion, oscillating motion, cams, cam profiles, followers, slides, cam shaft, levers, linkages, effort, load, fulcrum (pivot), gears, gear trains, simple gear train, idler gear, bevel gears, pulleys and belts, chains and sprockets, evaluation	