Design and Technology

Year 7 Remote learning Curriculum map		
Term	Topics	Resources
Autumn1	**Graphics skills** • 2D elevations • Isometric • 1-point perspective • Rendering techniques These techniques should be practiced working toward mastery of the skills. Theory and understanding • Contexts/users • Design opportunities • Investigating Needs and wants • Writing a brief and specification	https://www.technologystudent.com/pdfs/custprf1.pdf https://www.technologystudent.com/designpro/problem1.htm
Autumn 2	**Designing (kitchen Bin project)** • Investigating a problem • Writing a brief and specification • Generating ideas • Developing and presenting ideas Theory and understanding • Sources and Origins of timbers • Working with timbers	https://www.technologystudent.com/pdf11/artrichy11.pdf https://technologystudent.com/pdf18/metals-and-woods-map1.pdf
Spring 1	**Textiles** History and purpose of masks Research design and create a mask of your choice. Any material Any theme Must be wearable Knowledge and understanding • Sources and origins of fibres • Woven /felted • Technical textiles	Attenborough clip about Mali masks Japanese Masks (sketch the masks) https://www.bbc.co.uk/bitesize/guides/zjc3rwx/revision/1
Spring 2	Chocolate Packaging Knowledge and understanding • Forces and stresses • Sources and origins of paper	https://technologystudent.com/pdf18/paper-boards-map1.pdf
Summer 1		
Summer2		

Year 8 Remote learning Curriculum map Note Where you rotate into Food will dictate when you do each topic , but they will be in this order		
Term		Resources
Term 1	Graphics skills • 1 point perspective • 2 point perspective • Line weights • Crating • Shading • Annotation These techniques should be practiced working toward mastery of the skills. Theory and Understanding • Working with Contexts • Design Strategies • Environmental and social challenges	https://youtu.be/_fnhWl2Z-Gw https://youtu.be/SZ_bF7KnWQg https://youtu.be/YEYQe_81M4U https://youtu.be/_uzSMAI5AuE https://youtu.be/FLrCO4K2Wkw https://youtu.be/JCyW4NI9znE Contexts class powerpoint https://technologystudent.com/PDF3/prod_dev1.pdf https://technologystudent.com/pdf16/poster_strategies1.pdf https://technologystudent.com/pdf14/POSTER_ECO_USE_MATERIALS1.pdf https://technologystudent.com/pdf19/environmental-issues-knowledgemap1.pdf Answer the questions on the knowledge map
Term 2	Designing • Systems approach to design • INPUT/PROCESS/OUTPUT • Identifying user needs • Iterative approach to development • Developing and testing prototypes	Systems approach to design class powerpoint https://technologystudent.com/pdf19/electronics-knowledge-map1.pdf (answer the questions on the knowledge map) https://youtu.be/kkShIDVJuJo https://youtu.be/fkWFGmSqtHI https://simplicable.com/new/iterative-design https://youtu.be/Rnsk5lA52ps Make notes on iterative design , explain what it is
Term 3	Mechanisms • Types of motion • Levers • Linkages • Pulleys and gears • Cams	https://technologystudent.com/pdf18/mechanisms-map1.pdf https://technologystudent.com/pdf18/FORCES-map1.pdf Answer questions on Knowledge maps https://www.focuselearning.co.uk/s/26fvzlhbfzsp Complete the **ALL TOPICS** multiple-choice quiz and submit a screen shot of your score
Term 4	Ergonomics and access able design • Anthropometric data • History of games controllers • Modelling and testing	https://technologystudent.com/pdf19/ergonomics-knowledge-map1.pdf Answer the questions on the knowledge map

Year 9 Remote learning Curriculum map

Note Where you rotate into Food will dictate when you do each topic , but they will be in this order

Term		Resources
Term 1	Design thinking Covid 19 project • Empathise • Define • Ideate • Prototype • Test Knowledge and understanding Metals • Sources and origins of metals •Environmental effects • Classifications • Typical applications • Cutting and forming • Joining • Finishing	Class power point Develop and refine ideas using feedback from potential users. Use the allocated lesson time to develop the ideas as well as the skills required to communicate your ideas clearly and effectively. https://technologystudent.com/pdf18/metals-and-woods-map1.pdf Answer the metal section of the knowledge map
Term 2	Graphics skills • 1 point perspective • 2 point perspective • Line weights • Crating • Shading • Annotation **These techniques should be practiced working toward mastery of the skills.**	https://youtu.be/_fnhWl2Z-Gw https://youtu.be/SZ_bF7KnWQg https://youtu.be/YEYQe_81M4U https://youtu.be/_uzSMAI5AuE https://youtu.be/FLrCO4K2Wkw https://youtu.be/JCyW4NI9znE
Term 3	Modernist Architecture • History of Bauhaus • Researching Architects work • Drawing Elevations (2D Views) • 2 point perspective architectural sketches • Sketch plans • Simple modelling **These techniques should be practiced working toward mastery of the skills.**	https://youtu.be/ZQa0BajKB4Q https://youtu.be/DBCa_jbxGfI For sketching resources see above – this is put the skills learnt into practice
Term 4	**Folding Furniture – context project** • Origami in space • Simple origami structures • Analysing a context • Designing and prototyping folding structures/products **Knowledge and understanding** • Forces /stress on sheet materials • What is paper made from	https://youtu.be/Ly3hMBD4h5E https://youtu.be/SKyApq49gYY https://www.technologystudent.com/designpro/richpic1.htm

Year 10 Remote learning Curriculum map		
Term		Resources
Term 1	Designing skills Dieter rams project To use a range of graphical communications techniques to develop a bedside clock/lamp inspired by the work of dieter rams • 2D elevations • Isometric sketching • Perspective sketching • Line weight • Shading /shadows Knowledge and understanding Unit 6 designing principles • Investigation primary and secondary data • The work of others • Design Strategies • Communication of Design Ideas	All resources on Teams / Moodle
Term 2	Modelling Skills • Working with Card • Working accurately • Orthographic projection Knowledge and understanding • Materials • Timbers • Metals • Polymers • Textiles	
Term 3	**Frankfurt kitchen** • Observing User experience • Room Planning • 1 point visualisations • 2 point visualisations • Room layout software	
Term 4	**MINI NEA** Contextual challenge project (MINI NEA) To analyse a context and identify design opportunities . To use iteration and user centred design to develop a bespoke solution.	
Term 5	**GCSE NEA released 1st June 2021**	
Term 6		