

Medium Term planning for KS3 - Mrs McTeigue

Construction in Design and Technology

Topic work/skills work/Consolidation - Project Based

Autumn 1 - Year 6 & 7 - Transition, Health & Safety & Pencil Holder

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	To be able to keep safe in the workshop. To know the names of some workshop tools. To be able to find and locate some tools. To keep a tidy environment.	Transition / Health & Safety Lesson - Students to be told the rules of the workshop, how to use certain equipment, safety buttons, aprons and goggles etc.	To design a poster To discuss health & safety issues	Health and safety poster. Tool identification sheet / PowerPoint
Lesson 2	To be able to use tools correctly	Students to use tools correctly.	To read & research information.	Recycling - read the PowerPoint uploaded - create a PowerPoint of your own with 5 slides or a leaflet on the topic recycling.
Lesson 3	Pencil Holder - To design a pencil pot holder. To locate resources & equipment independently.	Research pencil pot holders. Sketch and label their designs. List the resources and tools needed	To identify tools To verbally understand tool usage.	Provide a list of 10 tools or resources for the students to create a PowerPoint. For each slide add the title of the tool, a picture and a sentence about the tool. Band saw, pillar drill, Tenon saw, file, screwdriver, g-clamp, hack saw, jigsaw, sander, chisel
Lesson 4	Pencil Holder - to make a pencil pot holder to hold the objects.	Make a pencil pot holder to hold/store 10 pencils or coloured pencils in. Try to follow your plan.	To be able to sketch ideas To label a drawing	Sketch 4 designs of pencil holders - label, list tools & resources.
Lesson 5	To independently make a product using selected materials.	Continue to make the pencil pot holder.	To research ideas around a topic.	Smart materials - to read the PowerPoint on smart materials. Produce a leaflet or poster explaining what smart materials are. Find 5 smart materials and write a sentence about each.

Lesson 6	To finish the product using varnish or paint.	Students to varnish or paint their pencil pot holder - finish the product.	To understand and research the term sustainability To understand vocabulary	Sustainability - research the topic sustainability and write two paragraphs explaining what it is.
Lesson 7 Evaluation / self-assessment of the topic	To be able to evaluate a product.	Students to sketch the product they have made, label their sketch. Write short sentences about what you liked or didn't like. What improvements would/did they make?	To be able to evaluate a product. To be able to discuss likes and dislikes To have an opinion.	Read the PowerPoint called - Evaluating a product. Choose a product from the list e.g. torch, toy car, scooter - evaluate this product. Draw the design and write / discuss as a class how the product is made, the materials used, what you like or don't like and how you could improve it.

Medium Term planning for KS3 - Mrs McTeigue

Construction in Design and Technology

Topic work/skills work/Consolidation - Project Based

Autumn 2 - year 6 & 7 - Snakes & Ladders Game / Christmas Construction (AK /CATHRYNE B)

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	<p>To use a steel rule to measure.</p> <p>To use a pencil to mark a measurement.</p> <p>To be able to design a board game.</p>	<p>Decide on the measurements that your game needs to be. Cut out the board. You will need to use a steel ruler to draw on the squares for the board game.</p>	<p>To use the internet to research products.</p> <p>To list types of games and discuss you're finding with a partner.</p>	<p>Research board games - create a board of sketched ideas. Explore old or past board games and new / more modern ones</p>
Lesson 2	<p>To explore colours in your product design.</p> <p>To understand design vocabulary.</p> <p>To understand what a target market and client are.</p>	<p>You will need to use felt tip pens or paint to add colour to the board game. The aim is to make the game attractive to children. Children like bright colours.</p>	<p>To explore games and Undset and the rules and process.</p> <p>To write a set of rules for a researched or played game.</p> <p>To develop communication skills while exploring play.</p>	<p>In the class play snakes and ladders with each other to understand the game. Write a set of rules simple enough for children 5 to 10 to understand.</p>
Lesson 3	<p>To make individual pieces for your product.</p>	<p>Decide how many counters you will need to make and what shape they will be and colours. You will also need to make a dice or two to go with the game.</p>	<p>To research and understand logos and brand names.</p> <p>To understand and assemble nets.</p> <p>To explore designs and types of font.</p>	<p>Look at logos in the classroom - research game logos and packaging. Deeside on a colour you want to paint your packaging. Think about the design and writing font. Try to use stencils to decide on the right font.</p>
Lesson 4	<p>To be able to test out your product.</p> <p>To be able to suggest and make improvements.</p>	<p>Once the game is made it is important that the class tests out each game to check if any improvements are needed.</p>	<p>To be able to sketch ideas.</p> <p>To research games with stored areas.</p> <p>To explore and research games used during travel.</p> <p>To be able to label your sketches independently using key words.</p> <p>To identify verbally or in writing the tools and materials used during the process.</p>	<p>Sketch 3 designs for a board game which could store its parts or be used on the move e.g. aeroplane or car (would magnets need to be used) label the sketches and list what materials and tools you might need.</p>

<p>Lesson 5</p>	<p>To be able to list tools used. To be able to list resources Write a set of rules/instructions independently. Type up your instructions to be stored with your product. Design diagrams to link to the written instructions.</p>	<p>List all the tools and resources you used to make the game. Also list the rules which are needed in order to play the game. Write simple instructions for how you made it.</p>	<p>To watch a video about hazards. To identify hazards. To identify protective clothing. To be able to identify tools and any hazards using them. To be able to take part in a class discussion and share ideas.</p>	<p>Identify at least 10 hazards in the workplace. Identify at least two items of protective clothing. Identify at least 5 tools and the hazards associated with them. Take part in a class discussion about how to use tools and materials safely. Take part in a class discussion about the dangers of using tools inappropriately.</p>
<p>Lesson 6</p>	<p>Research packaging for games. Explore packaging designs and logos.</p>	<p>Design the packaging to cover the game - think about aesthetics. - decorate the packaging add transfers, stick-ons, or markers</p>	<p>To be able to research and design a cube. To develop and make a net. To be able to use scissors to cut straight lines. To be able to assemble a product.</p>	<p>Designing a dice - design and make a dice - explore examples. Create a net of a cube out of paper or card with tabs. Cut out the net and use glue to assemble into a cube/dice shape.</p>
<p>Lesson 7 Evaluation / self-assessment of the topic</p>	<p>To be able to evaluate your product. To verbally explain how your product could be improved.</p>	<p>List two ways your product was successful. List two ways your product could be improved.</p>	<p>To explore mobile phone devices. To be able to evaluate a product.</p>	<p>Provide / find on the internet two different pictures of mobile phones - evaluate the products - features, things you like or didn't like, things you might add etc.</p>

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Construction in Design and Technology

Topic work/skills work/Consolidation - Project Based

Spring 1 - year 6 & 7 - Desk Tidy

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	<p>To explore existing designs.</p> <p>To research ideas independently</p> <p>To independently draw a basic plan and label using key words</p> <p>To be able to select materials.</p>	<p>Exploring at least two different desks tidy's using the internet.</p> <p>Draw a plan of the desk tidy and state what will go in each section.</p> <p>Choose at least two materials to use.</p>	<p>To use research skills</p> <p>To sketch and label designs</p> <p>To explain resources and equipment types used</p> <p>To be aware of the finish / presentation</p>	<p>Research different types of desk tidy's.</p> <p>Select 4 different types of designs and sketch and label it. List the resources and equipment needed as well as adding shading or colour.</p>
Lesson 2	<p>To be able to use tools correctly</p> <p>To work safely in the workshop</p> <p>To be able to name specific tools</p> <p>To be able to measure using a ruler in mm or cm</p>	<p>WORK SAFELY - with at least four named woodworking tools - a coping saw, tenon saw, plane & chisel</p> <p>Measure a mark out a piece of wood to dimensions.</p> <p>Cut out a piece of wood to the measured length and depth. Cut out the given shape. Join the pieces of wood by using at least 4 different ways -joints, nails, screws & glue</p> <p>Describe at least 4 ways to join wood.</p>	<p>To locate resources</p> <p>To research 3D models</p> <p>To create a 3D design</p>	<p>Use the resources you have in the classroom or at home and create a small 3D model.</p>
Lesson 3	<p>To explain reasons</p> <p>To be able to produce simple instructions</p>	<p>Explain why wood is the best material for at least 3 different purposes. E.g. Making a shelf, making a box.</p> <p>Produce at least two artefacts using given instructions e.g. a box, a shelf unit, a game</p>	<p>To be able to identify tools</p>	<p>Tool recognition -</p> <p>Identify and locate a picture or sketch a picture of -</p> <p>A tape measure, pencil, set square, saw, coping saw, bradawl, nails, screws, hammer, flat head screwdriver</p>

Lesson 4	To design & research a desk tidy	Use the internet or catalogues to explore desk tidy designs. Looks at the different materials they are made out of. Chose a design to recreate or adapt. Sketch your ideas and label your designs.	To identify tools used in the workshop	Identify and draw the flowing tools and label them - write an explanation on each tool - how the tool works. Posi-drive screwdriver, sandpaper, g-clamp, hand drill, electric drill, hand plane, electric plane, identify an electric drill, mitre block, T-square, belt sander, workbench vice, hand punch.
Lesson 5	To make a desk tidy out of recycled materials and or card/plastic tubing	Cut out / mark out all the pieces needed for the desk tidy. Locate the tools and equipment needed. Cut and measure the materials to the correct shape. Try to use a range of materials.	To identify hazards in the workshop To explain solutions to hazards verbally To create a set of rules using correct punctuation and connectives/conjunctions To create a poster using key vocabulary	Identify 6 hazards Suggest possible remedies for each hazard. Draw up a list of safety rules in the classroom. Design a safety poster to highlight one safety rule.
Lesson 6	To assemble a product & evaluate its design	Use the glue gun or other forms to stick or connect the product together. Evaluate your design and say in writing or verbally what you liked or did not like about the design as state how it could be adapted or improved.	To identify tools To write instructions independently or explain them verbally	Draw or copy & paste the following tools - chisel, mallet, gauge, marking knife, tenon saw, file sander , tri square Write a set of health and safety instructions for 5 of the tools.
Lesson 7	To evaluate a product / topic	Evaluation sheet - students to evaluate what they have done on this topic, what they have learnt etc.	To design a product which has a function To be aware of the client and target market.	Design and draw a themed key ring - design template. Add detail. Sketch about 4 possible designs around the theme - CARS or ANIMALS

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Construction in Design and Technology

Topic work/skills work/Consolidation - Project Based

Spring 2 - year 6 & 7 - Kite - Design & Make

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	Make a simple kite model	Make a paper kite as a simple model. Decide on the shape, think a a theme for the kite or colours (needs to be bright so it is seen in the air) Draw your design on the kite and all cardboard / thin dowel to make the kite strong and ridged.	To research kite designs To explore countries who have kite festivals	Create a PowerPoint on kite designs. Make a 10 slide power point. Slides can range from types of kites, countries which have kites, instructions on how to make a kite, famous festivals etc.
Lesson 2 & Lesson 3	make a more complex kite Use kite material	Look at more complex or unusual kite designs. Provide the light weight kite making kit and resources. Students to cut the kite to the shape they need. The material is quite expensive so students might need an adult to help them mark out so the material is not wasted. Cut the dowel you need and saw to size. Attach to the kite. Make the frame so the kite has structure. The kite will need string and a handle as well as a tail for balance. The tail might have bows or ribbons dangling to add weight and detail	To explore kite design	On Twinkl are a variety of resources about kite design. These can be printed off for students to work on. E.g. lets go fly a kite lesson pack 1-5 Let's go fly a kite template worksheet Let's go fly a kite unit pack Let's go fly a kite additional resources (this activity can be worked on for lesson 2 - 5 Extension - internet activity Quizizz.com
Lesson 4	To add a design	Use permanent markers or pens to draw a design onto the kite, the design needs to be bright in colour and bold so it can be seen from the air. You could add your name, your favourite football team or have a theme e.g. flags, recycling, pollution (make the kite an advertisement)		

Lesson 5	To write a set of instructions	Use the internet to type up a set of instructions. Make sure the writing has a title and each instruction is clear and easy to read.		Enter the key word to find a quiz to challenge yourself to answer the questions. This can be done individually or as a class. Key words - Kite, design, workshop tools
Lesson 6	Testing out To test out your design and make product	Students to go to Rivington Pike and test out their kites (chose a day when weather conditions are best) If weather is poor - watch a you tube video on making kites and testing them out.	To be able to answer questions	What makes a good kite? What force act on a kite? How do you make a simple kite? How long can a kite stay in the air? Is shape important in making a kite? What is a matariki kite? Measure the perimeter of the kite you made Work out the area of you kite How many lines of symmetry does your kite have? What shaped kite id the best to fly with? What does the word Deltoids mean regarding kites? What keeps a kite in the air?
Lesson 7 Evaluation / self-assessment of the topic	To be able to evaluate what you have made	To write 200 words on how you made the kite, how you tested it and finally how you feel the product worked, could you have altered the design?, could other materials have been used? Etc.	To be able to sketch ideas and label designs	Use the internet to locate the following kite designs, Create a poster of kite design ideas. For each design draw the kite as well as label the kite with its name for future reference - Flat kite, box kite, sled kite, Parafoil / Flexifoil kite, delta kite, snake kite, bird kite




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Topic work/skills work/Consolidation - Project Based

Summer 1 - year 6 & 7 **Photograph Frame, Mirror Frame**

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	To design a wooden, cardboard, plastic - /photograph frame Stage 1 - design and research	Provide a selection of pictures of photograph frames e.g. frames through history, christening, birthday, family etc. (occasion frames) Draw & label your frame design - add colour, materials	Famous designers To explore famous designers	Research designers who have produced a product to be used in the home or school e.g. dyson Create a leaflet or power point of ideas. Each slide can be a different designer.
Lesson 2	To make the product	Select the tools & equipment needed to create your product. Measure the wood or other materials used to the correct size before cutting. Sand the edges so it is smooth. Use tacks, screws, glue gun or wood glue to assemble the product together. Make a back for the frame and add a piece of wood or bracket so the frame stands up.	To be able to list and recognise tools	List the tools you will need to produce the workshop product. Find a picture of each product and write a short description of how the product is used.
Lesson 3	To make & finish (decorate the product)	Add paint, varnish, and stickers to your design to make it visually attractive. Look at how other frames are finished on the internet examples	To be able to name electrical tools and describe how they are used. To answer questions about machinery and electrical tools. To be aware of health and safety buttons in the workshop	Provide students with the names or pictures of electrical tools - both hand tools and larger workshop machines. Ask students to verbally explain the emergency stop button and why the machinery might have tape on the floor around the larger machines. Design large display labels for the larger machines to be placed next to the tool.





<p>Lesson 4</p>	<p>To design a wooden, cardboard, plastic - /mirror frame Stage 1 - design and research</p>	<p>Provide a selection of pictures of mirror frames e.g. frames through history, christening, birthday, family etc. (occasion frames) Draw & label your frame design - add colour, materials</p>	<p>To use cardboard to make a small scale model</p>	<p>Make a small scale model in the classroom using cardboard of either the picture frame or mirror frame.</p>
<p>Lesson 5</p>	<p>To make the product</p>	<p>Select the tools & equipment needed to create your product. Measure the wood or other materials used to the correct size before cutting. Sand the edges so it is smooth. Use tacks, screws, glue gun or wood glue to assemble the product together. Make a back for the frame and add a metal hook or drill a whole toad rope so the mirror can fix or hang on the wall.</p>	<p>Reusing products lesson pack (Twinkl))</p>	
<p>Lesson 6</p>	<p>To make & finish (decorate the product)</p>	<p>Add paint, varnish, and stickers to your design to make it visually attractive. Look at how other frames are finished on the internet examples - add mosaic tiles or beads to the outside - add a repeating pattern</p>	<p>Identifying and solving problems (Twinkl)</p>	
<p>Lesson 7 Evaluation / self-assessment of the topic</p>	<p>Evaluate one of the products you have made. Verbally explain what you made, what tools & resources you used and anything you can improve or change.</p>	<p>Evaluate one or both products - what went well, what you would improve, problems you had etc.</p>	<p>What am I- workshop tools activity</p>	




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Topic work/skills work/Consolidation - Project Based

Summer 2 - year 6 & 7 - **Game to store parts and board game (snakes & ladders)**

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	Design the box the game is to be stored in. To design a game to store parts or game with a lid. Stage 1 - design and research	Spend a session playing board games, look at games which store parts and how games are packaged. Provide a selection of pictures of games which store parts.	Designers and design tools activity Twinkl	
Lesson 2	To make the product	Sketch a design based on your research- draw a design/sketch.	Ergonomics - product analysis - an introduction to ergonomics. Twinkl	
Lesson 3	To make & finish (decorate the product)	Assemble the game - use glue guns or wood glue. Add paint or marker pens (coloured) add any other detail you think needs to be added for marketing e.g. logo, safety instructions, age displayed etc.	Product analysis - technology push - mobile technology (activity pack) Twinkl	
Lesson 4	To design a board game Stage 1 - design and research	Write instructions on how to play the game or explain it verbally. List the tools, resources and equipment needed.	A-Z design and technology key terms quiz Twinkl	

<p>Lesson 5</p>	<p>To make the product</p>	<p>Make the board game out of cardboard. Make sure the game can be folded. Make or find counters which are a suitable shape for the game or borrow counters from a manufactures game.</p>	<p>Materials knowledge organiser Twinkl</p>	
<p>Lesson 6</p>	<p>To make & finish (decorate the product)</p>	<p>Add colour, stickers etc. - add a think sticky clear plastic so the game is shinny and also makes it more durable.</p>	<p>Health and safety in the workshop - activity pack Twinkl</p>	
<p>Lesson 7 Evaluation / self-assessment of the topic</p>	<p>To evaluate one of the products you have made.</p>	<p>Verbally explain what you made, what tools & resources you used and anything you can improve or change.</p>	<p>Joining and forming timber Twinkl</p>	

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Construction in Design and Technology

Topic work/skills work/Consolidation - Project Based

Autumn1 - year 8 - Health & safety - Design & Make a wooden product

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	To be able to use the internet to research ideas. To be able to select a product to design or adapt. To understand the term recycling.	Research wooden products - decide which product you want to make. Try to choose at least one piece of material to be from recycled wood.	To create a mind map of ideas.	Mind map - try to think of as many words related to the topic - Wooden product. Have the theme e.g. children's wooden toy or wooded garden product. Draw your different ideas round the mind map. Think about tools, resources, safety equipment & materials
Lesson 2	To be able to select tools and equipment. To be able use a ruler to measure and a pencil to make out.	Select the tools and equipment/resources you need. Use a ruler to measure the wood and a pencil to mark out the lines/points.	To be able to explore artists /designers To use other design ideas in your work To sketch simple designs and add colour or shading.	Mackintosh - research the designs of Mackintosh and try to use this design in your practical work. Sketch and colour some of his designs.
Lesson 3	To be able to produce a mackintosh.	Stick your mackintosh design on the wood you are going to use or draw the design using black pen.	Research vocabulary associated with DT & Construction Use the internet to research Share ideas and discuss findings	Research what Fair Trade is - design a poster or leaflet in order to explain it.
Lesson 4	To make a product To use the correct tools and equipment. To be able to use sand or glass paper too smooth edges.	Spend this week making your product, use saws to cut the edges and sand paper to sand the corners and edges making it smooth. Once the pieces are made use either nails or screws to assemble the product.	To be able to design a product for a client To understand the term client and target market. To sketch ideas and label diagrams	Design one of the 3 products - <ul style="list-style-type: none"> • Trolley for an elderly person • Walking stick /aid • Chair that spins • Reading lamp

Lesson 5	To know the names of the tools of used and be able to identify them. To assemble the parts of the product.		To explore and be aware of types of woods to discuss wood type and function in design	Find out 4 soft woods Find out 4 hard woods Copy and paste a picture and label
Lesson 6	To finish the product off using paint or varnish.	Once the product is made - add colour to the product to finish it off.	To develop a poster or leaflet using key ideas To research	Create a poster with danger & warning signs for the workshop
Lesson 7 Evaluation / self-assessment of the topic	To evaluate your design and make product. To use speaking and listening skills to identify what you like or dislike and how you would improve your product.	Evaluate your product and verbally or I writing state what you liked or did not like about the product. Say how you could improve your design. List 2 improvements.	To identify a corner joint To research three different joints in construction To be able to use description when writing in sentences To use correct punctuation To write using complex sentences	Find a picture of a - Corner joint Dove tail joint Write a sentence about each one e.g. the tools which are used and how you make each joint. Look at a video first to watch the practical process (class video)

Medium Term planning for KS3 - Mrs McTeigue

Construction in Design and Technology

Topic work/skills work/Consolidation - Project Based

Autumn 2 - year 8 - Product made from recycled materials - Evaluating an existing product

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	To use recycled materials to build a wooden product. To design a recycled product using simple sketches which are labelled.	Product made from recycled materials - Research products made using recycled materials. Sketch designs - Sketch ideas and label them	To use PowerPoint independently To be able to identify issues related to recycling To use YouTube to understand the terms deforestation and pollution. To verbally describe recycling techniques.	Create a PowerPoint about recycling - Explore deforestation and pollution.
Lesson 2	To make and assemble a product made from recycled materials	Product made from recycled materials - Collect materials and equipment needed to product a recycled product.	To identify logos and use ideas to design a logo To design a logo round the theme recycling To be able to sketch designs and label To identify areas suitable to recycling	Design a new logo for a recycling plant - research logos on the internet and sketch 3 possible ideas. Explain why you chose that design and why you chose a particular colour. Provide a map of the school and students to draw bins in places they feel recycling / waste could be collected.
Lesson 3	To make and assemble a product made from recycled materials	Product made from recycled materials - Collect materials and equipment needed to product a recycled product.	To be able to evaluate a product To verbally explain positives and negatives To be able to suggest improvements.	Torch - evaluating an existing product. Explain how the product works. Explain what you like and don't like. Explain how you could improve it.

Lesson 4	To make and assemble a product made from recycled materials	Product made from recycled materials - Collect materials and equipment needed to product a recycled product.	To be able to evaluate a product To verbally explain positives and negatives To be able to suggest improvements.	Camera - evaluating an existing product. Explain how the product works. Explain what you like and don't like. Explain how you could improve it.
Lesson 5	To make and assemble a product made from recycled materials	Product made from recycled materials - Collect materials and equipment needed to product a recycled product.	To be able to evaluate a product To verbally explain positives and negatives To be able to suggest improvements.	Children's toy - evaluating an existing product. Explain how the product works. Explain what you like and don't like. Explain how you could improve it.
Lesson 6	To evaluate a product verbally or in writing	Evaluate an existing product To explore an existing product and sketch the design and label its parts Collect materials and equipment needed to product a recycled product.	To be able to evaluate a product To verbally explain positives and negatives To be able to suggest improvements.	Bike - evaluating an existing product. Explain how the product works. Explain what you like and don't like. Explain how you could improve it.
Lesson 7 Evaluation / self- assessment of the topic	To evaluate a product verbally or in writing	Evaluate an existing product To explore an existing product and sketch the design and label its parts Collect materials and equipment needed to product a recycled product.	To research how products are made. To verbally explain To record an explanation in simple sentences to using pictures.	Watch a video on how a product in made. After the video be able to explain in words or writing the process. Simple process explanation.

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Topic work/skills work/Consolidation - Project Based

Spring 1 - year 8 - **Marble Run Game**

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	To research different games	Use the internet or catalogues to research what children's games are available to students. Research games that have a ball in or marble. Sketch designs and label the diagrams.	To evaluate an existing game	Select two games which are popular with children. Play the games in the classroom with the class and explore the games. Chose one of the games to evaluate. Students to identify what they like or don't like about the game and how they could improve the game or advertise it.
Lesson 2	To design a game which can be used on the move.	Students to think about how a game can be used whilst its player / players are on the move e.g. travelling Look at games which store it parts Look at games with magnetic pieces Look at games which have lids or are covered with plastic so the pieces stop inside and don't fall out.	To compare two existing games and evaluate both	Select two further games either board games or games on the internet e.g. cool maths .com Evaluate each game and compare the games once you have played them. Make a list of 5 internet games you like to play and share them with the class. Let others play your selection and you theirs to discover new games.
Lesson 3	To make a game using hand tools and recycled materials	Use the ideas from the two previous weeks and draw / sketch design ideas. Once you are happy with the design, then select the materials and tools you need to make or build the game. Decide on how the game will be assembled, the type of finish it will have e.g. varnish or painted.	To write using correct punctuation 200 words on how you made your game or how you will make your game e.g., materials, resources, equipment, finish etc.	Write 200 words and upload it to google classroom. Focus on how you made the game, the materials and resources you used, the tools and equipment you selected and the health and safety you needed to know. Focus on the finish of your game e.g. sand paper, varnish or paint.

Lesson 4	To make the game	Use the ideas from the two previous weeks and draw / sketch design ideas. Once you are happy with the design, then select the materials and tools you need to make or build the game. Decide on how the game will be assembled, the type of finish it will have e.g. varnish or painted.	Design a LOGO for your game - look at logos or box designs from other children's games - think about aesthetics.	Match the different logos to the product given (10 in total) Design a logo or graphics for your packaging box. Use stencils if needed. Think about the colours you intend to use and the overall design. Create a PowerPoint called LOGOS - Identify 5 logos (famous)
Lesson 5	To make the game	Use the ideas from the two previous weeks and draw / sketch design ideas. Once you are happy with the design, then select the materials and tools you need to make or build the game. Decide on how the game will be assembled, the type of finish it will have e.g. varnish or painted.	How to design a net How to make and build a net	Look at nets on the internet - design out of paper a net which you could put your box inside so it is packaged correctly.
Lesson 6	To write a set of instructions and design a packaging box out of cardboard from the game.	Using either pen and paper or word on the internet - write/type up a set of instructions you need to accompany the game in its packaging before it is sold at the shops, internet or market. Look at packaging of other products not just games and discuss the term NETS. Provide a selection of nets for students to cut out and make.	Research shops / internet shopping sites which you could advertise your game on to be sold. Think about your target market and the price you wish to sell it.	Identify which product matches which shops or internet site. Provide 10 examples - for each one identifies the shop, client & Targets market.
Lesson 7 Evaluation / self-assessment of the topic	To evaluate the product - in writing or verbally say what you liked or did not like about the marble run game.	Verbally or in writing - evaluate what was good or bad about the product you made.	Upload videos for the students to watch on children's games. See how games (products) are mass produced and put on shop shelves.	Look at a you tube video on how products are mass produced. Provide 3 companies or products for students to research how that product is mass produced or manufactured

Medium Term planning for KS3 - Mrs McTeigue

Construction in Design and Technology

Topic work/skills work/Consolidation - Project Based

Spring 2 - year 8 - Garden Centre Product

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	<p>To research garden products</p> <p>To make a garden product</p> <p>To use recycled materials</p>	<p>Students to choose from a range of garden products - to make and develop their designs e.g. bird house, bird nest, bird feeder, plant pot/planter, garden seat etc.</p> <p>This might take 2 - 3</p>	To visit a garden centre	Students to visit a garden centre and take pictures of products made out of wood. Back in the classroom - the pictures to be used for design ideas and display
Lesson 2			To sketch ideas based on what you have seen	Students who did not go to the garden centre can research garden designs and products on the internet. Chose 4 designs and sketch then, add labels and colour. List the resources tools and equipment needs. Chose one idea which you feel you would be able to make in the workshop. Before this have a go at using cardboard to make a simple model.
Lesson 3			To make products to go into the garden.	Find and locate pebbles - decorate the pebbles with water proof paint / acrylic. Add names and patterns - hide the pebble in the school garden or hide them on walks when the students go on forest school.




Lesson 4	To make crafts which can be displayed in a garden	Give the students a selection of pictures with craft ideas similar to the google classroom activity. Collect the resources needed. Students focus on making one or two designs depending on how complex they are.	Use the internet To explore garden craft ideas	Find 5 things that could be made simply and could go into your garden at home or the school garden. Labelling plants using corks Labelling plants or herbs using wooden spoons Outside art designs using pebbles / twigs or leaves Making flowers from recycled plastic waste Making outside dream catchers
Lesson 5	To evaluate an existing product	Provide a selection of pre made garden products e.g. 3D or as a picture Students to evaluate the product and answer key questions about its design	To evaluate an existing product	Provide a selection of pre made garden products e.g. 3D or as a picture Students to evaluate the product and answer key questions about its design
Lesson 6	To create a landscaped miniature garden	Provide students with a tray and soil. Students to create their garden design. They can use pebbles, wood and stones to create a patio or decking, students can use grass seed or cress seed on the soil to make the lawn (keep watered). Cardboard can be used to make the shed, fencing and seating area. The workshop has other materials which students might feel they need to use to add further ideas.	To explore garden designs	Look at key features of garden design. Create a garden (using A3 paper) the garden needs a seating area, a patio, storage as well as a lawn area, vegetable/ herb area. The garden needs also to have an area for the recycled bins this might be hidden behind an object to keep to in an out of site location.
Lesson 7 Evaluation / self-assessment of the topic	To be able to evaluate a product	To evaluate the garden centre product you have made. Verbally or in writing	To explore the site Twinkl for ideas on gardening and gardening products	See land scape and city scape Garden centre pack Extension - watch a your tube video on garden designs and products Alan Tichmarch - garden designs - evaluate the programme





Medium Term planning for KS3 - Mrs McTeigue

Construction in Design and Technology

Topic work/skills work/Consolidation - Project Based

Summer 1 - year 8 - Mobile phone holder or iPad/tablet holder.

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	To design a wooden, cardboard, plastic - /mobile phone holder Stage 1 - design and research	Provide a selection of materials so students can decide which material they would like to use. Students can also use all 3 or 2 materials in the design and make. Research on the internet existing mobile phone holder designs - sketch 3 designs or print the 3 designs out and label the key areas. Verbally explain the tools you might need to use and the stages if the production making process.	Resistant materials - revision Twinkl	
Lesson 2	To make the product	Revisit the 3 designs from the previous week. Begin to select the materials, tools and equipment you need. Mark out the parts which require cutting etc. assemble the product (this might take two weeks)	The impact of new and emerging technologies Twinkl	
Lesson 3	To make & finish (decorate the product)	Once the product is assembled using the glue gun or wood glue. Make sure sandpaper is used to smooth all the rough edges. Test out the product by putting the phone in the correct position to see if it is safely balanced.	The manufacturing process Twinkl	



<p>Lesson 4</p>	<p>To design - packaging Stage 1 - design and research Ipad / table holder</p>	<p>Explore using nets - students to work with paper and cardboard to create a series on nets. Design a net which their product could fit into so it will be suitable packaged.</p>	<p>Design challenge - Charles Rene Mackintosh Twinkl</p>	
<p>Lesson 5</p>	<p>To make the product</p>	<p>Use wood and plastic as well as cardboard to make a product which could hold or balance an ipad or other product eg cooking book, magazine holder (disabled person) . reseach different designs before starting the making process and sketch out your final idea. Verbally describe to the staff in the room.</p>	<p>Computer mouse design task Twinkl</p>	
<p>Lesson 6</p>	<p>To make & finish (decorate the product)</p>	<p>Decide on a logo or finish to the product - e.g. varnish or paint Add sticker designs. Take photographs of your final design for display. Write sentences under each picture describing what you made and the tools and resources you used.</p>	<p>Workshop equipment activity Twinkl</p>	
<p>Lesson 7 Evaluation / self-assessment of the topic</p>	<p>Evaluate one of the products you have made. Verbally explain what you made, what tools & resources you used and anything you can improve or change.</p>	<p>Decide on one product from this half term to evaluate. The evaluation can be verbal or written. Explain how you could improve your design eg add a light for night time etc</p>	<p>Existing designers Philippe starck Twinkl</p>	




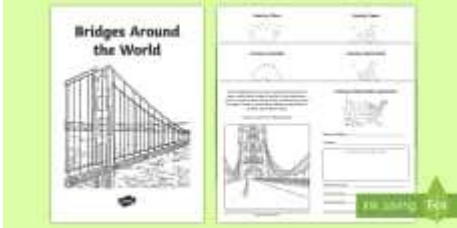
Medium Term planning for KS3 - Mrs McTeigue

Construction in Design and Technology

Topic work/skills work/Consolidation - Project Based

Summer 2 - year 8 **Enterprise - Design and Make a product to be sold.** - KEY RING, JEWELARY, STORAGE BOX, WIND CHIME, CHILDRENS TOY ETC

	Learning objective	Workshop Activity (Practical Activity)	Learning Objective - Google Classroom	Google Classroom Activity (Classroom based/Home based)
Lesson 1 - Introduction to the topic	To design a wooden, cardboard, plastic - RESEARCH PRODUCTS ON THE INTERNET Stage 1 - design and research	Produce a power point of researched ideas. Students to chose a topic to reseach. (something that interests them) Descide on a final product and sketch your ideas. Label the design with key words, tools resources and equipment you need. Verbally or in writing explain in simple instructions the stages of the design. Think about the client, target market and the price you would like to sell the product as well as the location of the venue you want to sell the product at e.g. shop, market, internet etc	Materials revision pack cards 1 Twinkl	
Lesson 2	To make the product	Once you have all your ideas and resouces - begin to mark out the details of the design on your resittant material. Cut out the pieces and assemble.	Green energy sources in design and technology Twinkl	

<p>Lesson 3</p>	<p>To make & finish (decorate the product)</p>	<p>Finish the product to be sold with paint or varnish etc Add any detail or logos you feel the product needs. Create a packaging box for the design using cardboard and add the lettering and price to the product.</p>	<p>Developing CAD skills in design and technology Twinkl</p>	
<p>Lesson 4</p>	<p>To design a wooden, cardboard, plastic - /mirror frame Stage 1 - design and research</p>	<p>Research design ideas using the internet. Explore using mosaic design or the design ideas of famous designers eg Mackintosh. Draw your final design, add colour and shading. Label and verbally explain.</p>	<p>Awareness of smart materials Twinkl</p>	
<p>Lesson 5</p>	<p>To make the product</p>	<p>Once all the equipment is out, use correct marking equipment and rulers, cut the material to the size you need. Make a wooded frame to go round the mirror or a cardboard frame. Add patterns or mosaic tiles. Decide also on the trye of room - bathroom, bedroom, childrens room etc</p>	<p>Design a bicycle Twinkl</p>	
<p>Lesson 6</p>	<p>To make & finish (decorate the product)</p>	<p>Add a back to the mirror as well as a piece of string or hook so the mirror can be hung up in a room. Paint the mirror or add grout if you have used tiles.</p>	<p>Bridges around the world - research pack Twinkl</p>	
<p>Lesson 7 Evaluation / self-assessment of the topic</p>	<p>Evaluate one of the products you have made. Verbally explain what you made, what tools & resources you used and anything you can improve or change.</p>	<p>Decide on a product to evaluate - explain what went well and what you feel you could improve. List the tools, resources and equipment you used. Verbally explain the making step by stem process.</p>	<p>Inventors and inventions - multiple choice quiz Twinkl</p>	