



THE DEMOCRATIC SCHOOL

**Design Subject Overview
MYP Years I-V**

MYP-I

S r · N o	Unit Name	Key concepts	Related concepts	Global context	Statement of inquiry	MYP Objectives	Approaches to learning	Content	Summative Assessment
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1	<p>What role might our learning environment walls play in our learning environment ?</p>	<ul style="list-style-type: none"> •Systems 	<p>Design</p> <ul style="list-style-type: none"> •Evaluation 	<p>Identities and relationships</p> <p>Focus exploration(s)</p> <ul style="list-style-type: none"> • Physical, psychological and social development 	<p>We must evaluate the role played by individual parts of the system we belong to, if we hope to improve them.</p>	<p>Design</p> <p>Year 1 Objectives</p> <p>Objective A: Inquiring and analyzing</p> <ul style="list-style-type: none"> -i. explain and justify the need for a solution to a problem <p>Objective B: Developing ideas</p> <ul style="list-style-type: none"> -i. develop a list of success criteria for the solution <p>Objective C: Creating the solution</p> <ul style="list-style-type: none"> -iii. follow the plan to create the solution, which functions as intended -iv. list the changes made to the chosen design and plan when making the solution. 	<p>Collaboration skills</p> <ul style="list-style-type: none"> •Help others to succeed <p>Organization skills</p> <ul style="list-style-type: none"> •Set goals that are challenging and realistic •Plan strategies and take action to achieve personal and academic goals <p>Reflection skills</p> <ul style="list-style-type: none"> •Identify strengths and weaknesses of personal learning strategies (self-assessment) <p>Information literacy skills</p> <ul style="list-style-type: none"> •Access information to be informed and inform others •Make connections between various sources of information •Collect and analyze data to identify solutions 	<ul style="list-style-type: none"> * Third Teacher * Poster Designing * Primary and secondary sources 	<p>Create a Canva poster for your chosen learning environment, copying your art card poster as closely as possible.</p> <p>Criterion C: Creating the solution (iii & iv)</p>
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						<p>and make informed decisions</p> <p>Creative-thinking skills</p> <ul style="list-style-type: none">•Apply existing knowledge to generate new ideas, products or processes <p>Critical-thinking skills</p> <ul style="list-style-type: none">•Gather and organize relevant information to formulate an argument•Revise understanding based on new information and evidence•Consider ideas from multiple perspectives•Propose and evaluate a variety of solutions		
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2	<p>How can we design products to support someone with limited mobility?</p>	<p>•Development</p>	<p>Design</p> <ul style="list-style-type: none"> •Ergonomics •Innovation •Function 	<p>Fairness and development</p> <p>Focus exploration(s)</p> <ul style="list-style-type: none"> • Human capability and development 	<p>Creating innovative products, especially designed for an individual's needs, can help lessen inequalities.</p>	<p>Design Year 1 Objectives</p> <p>Objective A: Inquiring and analyzing</p> <ul style="list-style-type: none"> -i. explain and justify the need for a solution to a problem -iii. describe the main features of an existing product that inspires a solution to the problem -iv. present the main findings of relevant research. <p>Objective B: Developing ideas</p> <ul style="list-style-type: none"> -ii. present feasible design ideas, which can be correctly interpreted by others -iii. present the chosen design -iv. create a planning drawing/diagram, which outlines the main details for 	<p>Information literacy skills</p> <ul style="list-style-type: none"> •Access information to be informed and inform others •Collect and analyze data to identify solutions and make informed decisions •Process data and report results <p>Communication skills</p> <ul style="list-style-type: none"> •Use intercultural understanding to interpret communication <p>Critical-thinking skills</p> <ul style="list-style-type: none"> •Propose and evaluate a variety of solutions <p>Collaboration skills</p> <ul style="list-style-type: none"> •Practice empathy •Give and receive meaningful feedback <p>Creative-thinking skills</p> <ul style="list-style-type: none"> •Apply existing 	<p>Introduction to Assistive Technology:</p> <p>Explore how technology aids individuals with limited mobility. Understand basic concepts of assistive technology.</p> <p>Activity: Identify common assistive devices used by people with limited mobility. Basic Needs and Assistive Design:</p> <p>Introduce Maslow's Hierarchy of Needs and its connection to assistive design for basic human needs.</p> <p>Activity: Create a simple poster illustrating how assistive products</p>	<p>Design a basic adaptive tool to assist individuals with a selected mobility challenge. Create a simple sketch and a short description of how the tool addresses the specific needs of the chosen disability.</p> <p>Criterion B: Developing ideas (ii, iv)</p>
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					<p>making the chosen solution.</p> <p>Objective C: Creating the solution</p> <ul style="list-style-type: none"> -i. outline a plan, which considers the use of resources and time, sufficient for peers to be able to follow to create the solution -ii. demonstrate excellent technical skills when making the solution -iii. follow the plan to create the solution, which functions as intended <p>Objective D: Evaluating</p> <ul style="list-style-type: none"> -i. outline simple, relevant testing methods, which generate data, to measure the success of the solution -ii. outline the success of the 	<p>knowledge to generate new ideas, products or processes</p> <p>Organization skills</p> <ul style="list-style-type: none"> •Set goals that are challenging and realistic •Use appropriate strategies for organizing complex information 	<p>fulfill different levels of Maslow's Hierarchy. Introduction to Ergonomics:</p> <p>Explore the basics of ergonomics in product design, focusing on comfort and efficiency.</p> <p>Activity: Experiment with making simple adjustments to everyday items for better ergonomics</p>	
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						<p>solution against the design specification</p> <ul style="list-style-type: none">-iii. outline how the solution could be improved-iv. outline the impact of the solution on the client/target audience.			
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3	<p>Can we use emojis to show we are internationally minded?</p>	<ul style="list-style-type: none"> •Communication 	<p>Design</p> <ul style="list-style-type: none"> •Adaptation •Invention 	<p>Scientific and technical innovation</p> <p>Focus exploration(s)</p> <ul style="list-style-type: none"> • Digital life, virtual environments and the Information Age 	<p>We can adapt to our ever-changing world by inventing new innovative ways to communicate..</p>	<p>Design Year 3 Objectives</p> <p>Objective A: Inquiring and analyzing</p> <ul style="list-style-type: none"> -i. explain and justify the need for a solution to a problem -iii. analyze a group of similar products that inspire a solution to the problem -iv. develop a design brief, which presents the analysis of relevant research <p>Objective B: Developing ideas</p> <ul style="list-style-type: none"> -i. develop a design specification, which outlines 	<p>Organization skills</p> <ul style="list-style-type: none"> •Use appropriate strategies for organizing complex information <p>Communication skills</p> <ul style="list-style-type: none"> •Interpret and use effectively modes of non-verbal communication •Paraphrase accurately and concisely •Make effective summary notes for studying <p>Transfer skills</p> <ul style="list-style-type: none"> •Inquire in different contexts to gain a different perspective •Combine knowledge, understanding and skills to create products or solutions <p>Creative-thinking skills</p> <ul style="list-style-type: none"> •Use brainstorming and 	<ul style="list-style-type: none"> * Definition and Function of Emojis * Catalog of Emojis * Evolution and History of Emojis * Audience and Usage of Emojis * Emojis as a Form of Language 	<p>Create 10 emojis for a large communication company.</p> <p>Criterion C (ii, iii,iv) & Criterion D (i,ii, iii)</p>
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						<p>the success criteria for the design of a solution based on the data collected</p> <p>-ii. present a range of feasible design ideas, which can be correctly interpreted by others</p> <p>-iii. present the chosen design and outline the reasons for its selection</p> <p>-iv. develop accurate planning drawings/diagrams and outline requirements for the creation of the chosen solution.</p> <p>Objective C:</p>	<p>visual diagrams to generate new ideas and inquiries</p> <ul style="list-style-type: none"> •Make unexpected or unusual connections between objects and/or ideas •Make guesses, ask “what if” questions and generate testable hypotheses •Apply existing knowledge to generate new ideas, products or processes <p>Information literacy skills</p> <ul style="list-style-type: none"> •Use critical-literacy skills to analyze and interpret media communications •Access information to be informed and inform others •Evaluate and select information sources and digital 		
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						<p>Creating the solution</p> <p>-i. construct a logical plan, which outlines the efficient use of time and resources, sufficient for peers to be able to follow to create the solution</p> <p>-ii. demonstrate excellent technical skills when making the solution</p> <p>-iii. follow the plan to create the solution, which functions as intended</p> <p>-iv. explain changes made to the chosen design and plan when making the</p>	<p>tools based on their appropriateness to specific tasks</p> <p>Critical-thinking skills</p> <ul style="list-style-type: none"> •Gather and organize relevant information to formulate an argument •Consider ideas from multiple perspectives 		
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4.	Unleashing Creativity with Adobe Photoshop	<ul style="list-style-type: none"> •Communication 	Design <ul style="list-style-type: none"> •Function 	Scientific and technical innovation Focus exploration(s) <ul style="list-style-type: none"> • Systems, models, methods 	Innovative systems empower communication in graphic design, exploring functions and content through diverse technical methods	Design Year 1 Objectives Objective B: Developing ideas <ul style="list-style-type: none"> -ii. present feasible design ideas, which can be correctly interpreted by others -iii. present the chosen design -iv. create a planning drawing/diagram, which outlines the main details for making the chosen solution. Objective C: Creating the solution <ul style="list-style-type: none"> -ii. demonstrate excellent technical skills 	Organization skills <ul style="list-style-type: none"> •Set goals that are challenging and realistic •Plan strategies and take action to achieve personal and academic goals Transfer skills <ul style="list-style-type: none"> •Inquire in different contexts to gain a different perspective Reflection skills <ul style="list-style-type: none"> •Develop new skills, techniques and strategies for effective learning 	Understanding Adobe Photoshop: <ul style="list-style-type: none"> ● Introduction to Adobe Photoshop as a digital image editing tool. ● Overview of the Photoshop workspace: tools, panels, and menus. ● Importance of Photoshop in graphic design and digital media. 	Demonstrate your understanding by creating a visually compelling graphic design project using Adobe Photoshop. Showcase effective communication through innovative use of tools and techniques. Include a brief written reflection on your design choices.
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						when making the solution		Basic Tools and Functions: <ul style="list-style-type: none">● Overview of essential tools: selection tools, brush tool, text tool, etc.● Understanding layers and their significance in digital design.● Hands-on practice with basic tools through guided exercises. Working with Colors:	Criterion B Criterion D
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								<p>Introduction to the color picker and swatches.</p> <p>Basic color theory: understanding the concepts of hue, saturation, and brightness.</p> <p>Practical application: creating a simple color palette.</p> <p>Image Editing Basics:</p> <p>Cropping and resizing images. Adjusting brightness and contrast. Removing backgrounds and basic retouching techniques.</p>	
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								<p>Guided exercises on image editing.</p> <p>Creating Simple Designs:</p> <p>Combining learned tools and techniques to create a basic design project.</p> <p>Project options: designing a personalized bookmark, simple poster, or digital card. Encouraging creativity and individual expression in design.</p>	
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MYP-II

Sr. No	Unit Name	Key concepts	Related concepts	Global context	Statement of inquiry	MYP Objectives	Approaches to learning	Content	Summative Assessment
1	What role might our learning environment walls play in our learning environment?	<ul style="list-style-type: none"> Systems 	Design <ul style="list-style-type: none"> Evaluation 	Identities and relationships Focus exploration (s) <ul style="list-style-type: none"> Physical, psychological and social development 	We must evaluate the role played by individual parts of the system we belong to, if we hope to improve them.	Design Year 1 Objectives Objective A: Inquiring and analyzing -ii. state and prioritize the main points of research needed to develop a solution to the problem Objective B: Developing ideas -i. develop a list of success criteria for the solution Objective C: Creating the solution -iii. follow the plan to create	Information literacy skills <ul style="list-style-type: none"> Access information to be informed and inform others Make connections between various sources of information Collect and analyze data to identify solutions and make informed decisions Critical-thinking skills <ul style="list-style-type: none"> Gather and organize relevant information to formulate an argument Revise understanding based on new information and 	Introduction to 3D Printing: Simplified Explanation: Discover the magic of 3D printing. Learn how we can create objects from a computer! Explore simple shapes and designs. Activity: Create a basic 3D drawing on paper. Noise Analysis in Our Classroom:	Use Canva to design a poster that represents your ideal learning environment. Apply what you learned about 3D printing by incorporating simple shapes and designs into your poster. Consider the impact of noise on learning, and use your understanding to create a visually

						<p>the solution, which functions as intended</p> <p>-iv. list the changes made to the chosen design and plan when making the solution.</p>	<p>evidence</p> <ul style="list-style-type: none"> •Consider ideas from multiple perspectives •Propose and evaluate a variety of solutions <p>Reflection skills</p> <ul style="list-style-type: none"> •Identify strengths and weaknesses of personal learning strategies (self-assessment) <p>Collaboration skills</p> <ul style="list-style-type: none"> •Help others to succeed <p>Creative-thinking skills</p> <ul style="list-style-type: none"> •Apply existing knowledge to generate new ideas, products or processes <p>Organization skills</p> <ul style="list-style-type: none"> •Set goals that are challenging and realistic •Plan strategies and take action to achieve personal and academic goals 	<p>Simplified Explanation: Understand the impact of noise on learning. Discuss quiet and noisy times and their effects.</p> <p>Activity: Conduct a simple noise level experiment in the classroom.</p>	<p>balanced and engaging poster.Criterion C: Creating the solution (iii & iv)</p>
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2	How can we design products to support someone with limited mobility?	<ul style="list-style-type: none"> •Development 	Design <ul style="list-style-type: none"> •Ergonomics •Innovation •Function 	Fairness and development Focus exploration (s) <ul style="list-style-type: none"> • Human capability and development 	Creating innovative products, especially designed for an individual's needs, can help lessen inequalities.	Design Year 1 Objectives Objective A: Inquiring and analyzing -i. explain and justify the need for a solution to a problem -iii. describe the main features of an existing product that inspires a solution to the problem -iv. present the main findings of relevant research. Objective B: Developing ideas -ii. present feasible design ideas, which can be correctly	Information literacy skills <ul style="list-style-type: none"> •Access information to be informed and inform others •Collect and analyze data to identify solutions and make informed decisions •Process data and report results Communication skills <ul style="list-style-type: none"> •Use intercultural understanding to interpret communication Critical-thinking skills <ul style="list-style-type: none"> •Propose and evaluate a variety of solutions Collaboration skills <ul style="list-style-type: none"> •Practice empathy •Give and receive meaningful feedback Creative-thinking skills <ul style="list-style-type: none"> •Apply existing 	Advanced Assistive Technology: Delve deeper into the world of assistive technology, exploring advanced devices and their functionalities. Activity: Research and present a case study on a cutting-edge assistive technology device. Maslow's Hierarchy in Depth: Investigate Maslow's Hierarchy of Needs and its nuanced application in designing	Collaboratively design an inclusive product, integrating advanced assistive technology, in-depth understanding of Maslow's Hierarchy, and advanced ergonomic principles. Present the design concept with a focus on the specific disability chosen. Criterion B: Developing ideas (ii, iv)
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					<p>interpreted by others</p> <p>-iii. present the chosen design</p> <p>-iv. create a planning drawing/diagram, which outlines the main details for making the chosen solution.</p> <p>Objective C: Creating the solution</p> <p>-i. outline a plan, which considers the use of resources and time, sufficient for peers to be able to follow to create the solution</p> <p>-ii. demonstrate excellent technical skills</p>	<p>knowledge to generate new ideas, products or processes</p> <p>Organization skills</p> <ul style="list-style-type: none"> •Set goals that are challenging and realistic •Use appropriate strategies for organizing complex information 	<p>products for enhanced inclusivity.</p> <p>Activity: Analyze and discuss real-world examples where assistive products address higher-level needs.</p> <p>Advanced Ergonomic Principles:</p> <p>Explore advanced ergonomic principles, focusing on user experience and accessibility.</p> <p>Activity: Design a user-friendly interface for a digital assistive device, considering advanced ergonomic factors.</p>	
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						<p>when making the solution</p> <ul style="list-style-type: none">-iii. follow the plan to create the solution, which functions as intended <p>Objective D: Evaluating</p> <ul style="list-style-type: none">-i. outline simple, relevant testing methods, which generate data, to measure the success of the solution-ii. outline the success of the solution against the design specification-iii. outline how the solution could be improved-iv. outline the impact of the			
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						solution on the client/target audience.			
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3	How can we be ethical entrepreneurs?	•Systems	Design •Sustainability	Personal and cultural expression	Effective entrepreneurs ensure the sustainability of the systems in which they operate.	Design Year 1 Objectives Objective A: Inquiring and analyzing -i. explain and justify the need for a solution to a problem -ii. state and prioritize the main points of research needed to develop a solution to the problem -iii. describe the main features of an existing product that inspires a solution to the problem -iv. present the main findings of relevant research.	Creative-thinking skills •Use brainstorming and visual diagrams to generate new ideas and inquiries Critical-thinking skills •Gather and organize relevant information to formulate an argument •Evaluate evidence and arguments Transfer skills •Make connections between subject groups and disciplines •Combine knowledge, understanding and skills to create products or solutions Information literacy skills •Access information to be informed and	* Food Systems and Supply Chains * Origins of our Food Supply * Ethics in the Food Industry * Integrating the IB Learner Profile into Entrepreneurship for Ethical Practices * Responsibility for Ethical Food Practices: Companies vs. Consumers	Create a recipe for your food product and then make the product and test the product. Criterion B (iv) Criterion C (ii, iii,iv) & Criterion D (i, ii, iii)
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						<p>Objective B: Developing ideas</p> <ul style="list-style-type: none"> -i. develop a list of success criteria for the solution -ii. present feasible design ideas, which can be correctly interpreted by others -iii. present the chosen design -iv. create a planning drawing/diagram, which outlines the main details for making the chosen solution. <p>Objective C: Creating the solution</p> <ul style="list-style-type: none"> -i. outline a plan, which considers the 	<p>inform others</p> <ul style="list-style-type: none"> •Collect and analyze data to identify solutions and make informed decisions <p>Organization skills</p> <ul style="list-style-type: none"> •Use appropriate strategies for organizing complex information <p>Collaboration skills</p> <ul style="list-style-type: none"> •Take responsibility for one's own actions •Make fair and equitable decisions 		
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						<p>use of resources and time, sufficient for peers to be able to follow to create the solution</p> <ul style="list-style-type: none">-ii. demonstrate excellent technical skills when making the solution-iii. follow the plan to create the solution, which functions as intended-iv. list the changes made to the chosen design and plan when making the solution. <p>Objective D: Evaluating</p> <ul style="list-style-type: none">-i. outline simple, relevant			
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						<p>testing methods, which generate data, to measure the success of the solution</p> <ul style="list-style-type: none">-ii. outline the success of the solution against the design specification-iii. outline how the solution could be improved-iv. outline the impact of the solution on the client/target audience.			
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4	How can we provide access to clean water for all?	<ul style="list-style-type: none"> •Communities 	Design <ul style="list-style-type: none"> •Resources 	Scientific and technical innovation. Focus exploration <ul style="list-style-type: none"> ● Products, processes and solution 	Products and resources design to benefit individual can have an impact on a whole community.	Design Year 1 Objectives Objective A: Inquiring and analyzing <ul style="list-style-type: none"> -i. explain and justify the need for a solution to a problem -ii. state and prioritize the main points of research needed to develop a solution to the problem -iii. describe the main features of an existing product that inspires a solution to the problem -iv. present the main findings of relevant research. 	Transfer skills <ul style="list-style-type: none"> •Inquire in different contexts to gain a different perspective Creative-thinking skills <ul style="list-style-type: none"> •Create novel solutions to authentic problems •Make unexpected or unusual connections between objects and/or ideas •Apply existing knowledge to generate new ideas, products or processes Collaboration skills <ul style="list-style-type: none"> •Practice empathy •Listen actively to other perspectives and ideas 	Find out: How many people don't have access to clean water . Explore: Ways designer can improve access to clean water. Take Action: By designing a solution to provide access to a clean water.	Design a water purification system that addresses the specific needs of a community lacking access to clean water. Create a detailed product prototype, considering materials, cost, and scalability. Present your design, explaining its potential impact on both individual users and the broader community. Criterion A Criterion B Criterion C
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						<p>Objective B: Developing ideas</p> <ul style="list-style-type: none">-ii. present feasible design ideas, which can be correctly interpreted by others-iv. create a planning drawing/diagram, which outlines the main details for making the chosen solution. <p>Objective C: Creating the solution</p> <ul style="list-style-type: none">-i. outline a plan, which considers the use of resources and time, sufficient for peers to be able to follow to create the			
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						<p>solution</p> <ul style="list-style-type: none">-ii. demonstrate excellent technical skills when making the solution-iii. follow the plan to create the solution, which functions as intended <p>Objective D:</p> <p>Evaluating</p> <ul style="list-style-type: none">-ii. outline the success of the solution against the design specification-iii. outline how the solution could be improved			
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5	Eco-friendly Packaging	•Development	Design •Sustainability •Evaluation •Perspective Maths •Space	Globalization and sustainability Focus exploration (s) • Consumption, conservation, scarcity	Statement of Inquiry: Sustainable products can be developed through an understanding of different perspectives. Conceptual Understanding: Throughout this unit, students will develop an appreciation for the sustainable design of products, ensuring they meet the diverse needs of users. This will be achieved through an inquiry into various perspectives that significantly contribute to product development. In	Design Year 1 Objectives Objective A: Inquiring and analyzing -iii. describe the main features of an existing product that inspires a solution to the problem Objective B: Developing ideas -ii. present feasible design ideas, which can be correctly interpreted by others Objective C: Creating the solution -iii. follow the plan to create the solution, which functions as	Critical-thinking skills •Analyze complex concepts and projects into their constituent parts and synthesize them to create new understanding Transfer skills •Combine knowledge, understanding and skills to create products or solutions	Design Know * Fundamental safety expectations for working with cardboard/paper fabrication tools and materials * Basic perspectives influencing packaging design, including Graphic Design, User considerations, and Recycling principles * The Elements and Principles of Graphic Design Understand * The positive/negati	Product Students will create eco-friendly packaging for a food item by considering various viewpoints and assessing eco-friendly material choices through the application of mathematical principles. Reflection/Report Students will compile a unit reflection
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				<p>this context, the application and assessment of mathematical principles will guide the sustainable use of materials, particularly in the prototyping and production phases.</p> <p>Additionally, students will explore the nature and sustainability of product packaging, considering perspectives from different design stakeholders such as packaging designers, users, recyclers, marketers, and retailers. The</p>	<p>intended</p> <p>Objective D: Evaluating</p> <p>-iii. outline how the solution could be improved</p> <p>-iv. outline the impact of the solution on the client/target audience.</p> <p>Maths Year 1 Objectives</p> <p>Objective C: Communicating</p> <p>-i. use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements</p> <p>-ii. use appropriate</p>		<p>ve impact of choices related to tool safety on their peers</p> <p>* The collaborative contribution of each perspective to the overall product design process</p> <p>* How the Elements and Principles of Graphic Design synergize to visually communicate information in existing products</p> <p>Be Able To</p> <p>* Safely and responsibly develop product packaging using appropriate tools and</p>	<p>document and contemplate the creative journey involved in crafting their eco-friendly packaging. This assessment, emphasizing the process, aligns with the MYP Design Cycle, evaluating</p> <p>IDU - A1/A2, B1/B2, and C1/C2.</p>
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					<p>incorporation of geometric calculations and reasoning will form the foundation of their decision-making processes related to sustainability and materials usage in packaging design.</p>	<p>forms of mathematical representation to present information</p> <ul style="list-style-type: none"> -iv. organize information using a logical structure. <p>Objective D: Applying mathematics in real-life contexts</p> <ul style="list-style-type: none"> -i. identify relevant elements of authentic real-life situations -ii. select appropriate mathematical strategies when solving authentic real-life situations -iii. apply the selected mathematical strategies successfully to reach a 		<p>materials</p> <ul style="list-style-type: none"> * Navigate the balance between the needs and preferences of diverse perspectives while conceptualizing product ideas and/or final products * Skillfully combine the Elements and Principles of Graphic Design to effectively convey information about their own products * Make design decisions grounded in a sustainable understanding of efficient materials usage, applying mathematical 	
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						<p>solution -v. describe whether a solution makes sense in the context of the authentic real-life situation.</p>		<p>skills.</p> <p>Maths Content</p> <p>Know</p> <ul style="list-style-type: none"> * The basic formulas for calculating the surface area of a rectangle (and square), triangle, and circle * The basic formulas for calculating the volume of a cuboid, prism, and cylinder <p>Understand</p> <ul style="list-style-type: none"> * How to apply formulas to calculate the surface area of an existing shape * How to apply formulas to calculate the volume of an 	
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								<p>existing form</p> <ul style="list-style-type: none"> * How to develop a net for an existing 3-dimensional shape. <p>Be Able To</p> <ul style="list-style-type: none"> * Select the correct methods for analyzing the design decisions of others based on mathematical reasoning * Be able to justify their use of materials by calculating the surface area and 3-dimensional volume of their product * Develop a net of a 3-dimensional shape/construction 	
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MYP-III

Sr. No	Unit Name	Key concepts	Related concepts	Global context	Statement of inquiry	MYP Objectives	Approaches to learning	Content	Summative Assessment
1	What role might our learning environment walls play in our learning environment?	<ul style="list-style-type: none"> Systems 	Design <ul style="list-style-type: none"> Evaluation 	Identities and relationships Focus exploration (s) <ul style="list-style-type: none"> Physical, psychological and social development 	We must evaluate the role played by individual parts of the system we belong to, if we hope to improve them.	Design Year 1 Objectives Objective A: Inquiring and analyzing -ii. state and prioritize the main points of research needed to develop a solution to the problem Objective B: Developing ideas -i. develop a list of success criteria for the solution Objective C: Creating the solution -iii. follow the plan to create	Collaboration skills <ul style="list-style-type: none"> Help others to succeed Organization skills <ul style="list-style-type: none"> Set goals that are challenging and realistic Plan strategies and take action to achieve personal and academic goals Reflection skills <ul style="list-style-type: none"> Identify strengths and weaknesses of personal learning strategies (self-assessment) Information literacy skills <ul style="list-style-type: none"> Access information to be informed and inform others Make connections between various sources of 	Learning Environment Walls: Explore how classroom walls can be like a third teacher, impacting our learning. Discuss the colors, displays, and messages that make a positive learning space. Activity: Design a simple poster showcasing what you think makes a	Using Canva, create a poster envisioning your ideal learning environment , integrating elements inspired by the Third Teacher, augmented reality, creative collages, and digital storytelling. Criterion C: Creating the solution (iii & iv)

						<p>the solution, which functions as intended</p> <p>-iv. list the changes made to the chosen design and plan when making the solution.</p>	<p>information</p> <ul style="list-style-type: none"> •Collect and analyze data to identify solutions and make informed decisions <p>Creative-thinking skills</p> <ul style="list-style-type: none"> •Apply existing knowledge to generate new ideas, products or processes <p>Critical-thinking skills</p> <ul style="list-style-type: none"> •Gather and organize relevant information to formulate an argument •Revise understanding based on new information and evidence •Consider ideas from multiple perspectives •Propose and evaluate a variety of solutions 	<p>good learning environment.</p> <p>Interactive Learning with Augmented Reality:</p> <p>Learn about new technology that brings learning to life! Explore how augmented reality can make pictures and posters interactive.</p> <p>Activity: Create a basic augmented reality experience using a simple AR app.</p> <p>Creative Collage with Found Objects:</p>	
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								<p>Use everyday objects to create a beautiful collage on your classroom wall. Discuss how creativity can be found in the simplest things. Activity: Collect and bring objects to class for a collaborative collage project. Exploring Digital Storytelling:</p> <p>Learn how stories can come alive with digital tools. Explore basic digital storytelling</p>	
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								<p>using pictures and words. Activity: Create a short digital story about a favorite topic or experience. Mindful Spaces:</p> <p>Understand the importance of quiet spaces for learning. Discuss noise levels and create a relaxation corner with calming visuals. Activity: Design a mini-relaxation corner using art materials.</p>	
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2	<p>How can we design products to support someone with limited mobility?</p>	<ul style="list-style-type: none"> •Development 	<p>Design</p> <ul style="list-style-type: none"> •Ergonomics •Function •Innovation 	<p>Fairness and development</p> <p>Focus exploration (s)</p> <ul style="list-style-type: none"> • Human capability and development 	<p>Creating innovative products, especially designed for an individual's needs, can help lessen inequalities.</p>	<p>Design Year 3 Objectives</p> <p>Objective A: Inquiring and analyzing</p> <ul style="list-style-type: none"> -i. explain and justify the need for a solution to a problem -iii. analyze a group of similar products that inspire a solution to the problem -iv. develop a design brief, which presents the analysis of relevant research <p>Objective B: Developing ideas</p> <ul style="list-style-type: none"> -ii. present a range of feasible design ideas, which can be correctly interpreted by 	<p>Creative-thinking skills</p> <ul style="list-style-type: none"> •Apply existing knowledge to generate new ideas, products or processes <p>Organization skills</p> <ul style="list-style-type: none"> •Set goals that are challenging and realistic •Use appropriate strategies for organizing complex information <p>Collaboration skills</p> <ul style="list-style-type: none"> •Practice empathy •Give and receive meaningful feedback <p>Communication skills</p> <ul style="list-style-type: none"> •Use intercultural understanding to interpret communication <p>Information literacy skills</p> <ul style="list-style-type: none"> •Access information to be informed and inform others 	<p>Cutting-Edge Assistive Technologies:</p> <p>Explore the latest trends and innovations in assistive technologies, including AI and robotics.</p> <p>Activity: Group discussion on the potential impact of emerging technologies on the field of assistive products.</p> <p>Application of Maslow's Hierarchy in Design Thinking:</p> <p>Apply Maslow's Hierarchy in a design</p>	<p>Develop an innovative prototype of an assistive product that integrates cutting-edge technologies , advanced understanding of Maslow's Hierarchy, and human-centered design principles. Present the prototype along with a comprehensive report on the design process and user testing results.Criterion B: Developing ideas (ii, iv)</p>
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						<p>others</p> <ul style="list-style-type: none"> -iii. present the chosen design and outline the reasons for its selection -iv. develop accurate planning drawings/diagrams and outline requirements for the creation of the chosen solution. <p>Objective C: Creating the solution</p> <ul style="list-style-type: none"> -i. construct a logical plan, which outlines the efficient use of time and resources, sufficient for peers to be able to follow to create the solution -ii. demonstrate 	<ul style="list-style-type: none"> •Collect and analyze data to identify solutions and make informed decisions •Process data and report results <p>Critical-thinking skills</p> <ul style="list-style-type: none"> •Propose and evaluate a variety of solutions 	<p>thinking context, considering emotional and self-fulfillment needs.</p> <p>Activity: Collaborative workshop on ideation and brainstorming for assistive products, emphasizing holistic design.</p> <p>Human-Centered Design for Assistive Products:</p> <p>Understand the principles of human-centered design and user feedback in refining assistive products.</p>	
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						<p>excellent technical skills when making the solution</p> <ul style="list-style-type: none">-iii. follow the plan to create the solution, which functions as intended <p>Objective D: Evaluating</p> <ul style="list-style-type: none">-i. describe detailed and relevant testing methods, which generate accurate data, to measure the success of the solution-ii. explain the success of the solution against the design specification-iii. describe how the solution could be improved-iv. describe the impact of the		<p>Activity: Conduct a simulated user testing session for a prototype assistive device, collecting and analyzing feedback.</p>	
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						solution on the client/target audience.			
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3	How can we improve a toy to improve the life of a refugee child?	<ul style="list-style-type: none"> •Communities 	Design <ul style="list-style-type: none"> •Perspective •Evaluation 	Fairness and development Focus exploration (s) <ul style="list-style-type: none"> • Inequality, difference and inclusion 	To foster a more equitable world, it is essential to assess and comprehend the requirements of diverse communities.	Design Year 3 Objectives Objective A: Inquiring and analyzing <ul style="list-style-type: none"> -i. explain and justify the need for a solution to a problem -ii. construct a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem -iii. analyze a group of similar products that inspire a solution to the problem -iv. develop a design brief, which presents the analysis of relevant 	Collaboration skills <ul style="list-style-type: none"> •Practice empathy •Listen actively to other perspectives and ideas Transfer skills <ul style="list-style-type: none"> •Inquire in different contexts to gain a different perspective Creative-thinking skills <ul style="list-style-type: none"> •Create novel solutions to authentic problems •Make unexpected or unusual connections between objects and/or ideas •Apply existing knowledge to generate new ideas, products or processes 	Definition and Characteristic s of Refugees: Illustrate a globe with marked displaced individuals. Icons for forced migration, seeking asylum, and diverse backgrounds. Statistics on Refugee Children: Bar chart showcasing global statistics on refugee children. Use Illustrator's chart tools for clarity.	Create a toy, you might create a toy through Illustrator, model making. Criterion C (ii, iii) & Criterion D (ii, iii)
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						<p>research</p> <p>Objective B: Developing ideas</p> <p>-ii. present a range of feasible design ideas, which can be correctly interpreted by others</p> <p>-iv. develop accurate planning drawings/diagrams and outline requirements for the creation of the chosen solution.</p> <p>Objective C: Creating the solution</p> <p>-i. construct a logical plan, which outlines the efficient use of time and resources, sufficient for</p>		<p>Challenges Faced by Refugee Children:</p> <p>Visual collage with icons for common challenges. Symbols like broken chains represent obstacles.</p> <p>Impact of Toys on Well-being:</p> <p>Heartwarming scene: child playing with a redesigned toy.</p> <p>Include statistics or quotes highlighting the positive impact.</p> <p>Empathy and Understanding:</p>	
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						<p>peers to be able to follow to create the solution</p> <p>-ii. demonstrate excellent technical skills when making the solution</p> <p>-iii. follow the plan to create the solution, which functions as intended</p> <p>Objective D: Evaluating</p> <p>-ii. explain the success of the solution against the design specification</p> <p>-iii. describe how the solution could be improved</p>		<p>Illustration of diverse hands reaching out. Symbols of understanding , like open books or hearts.</p> <p>Balancing Needs in Refugee Support:</p> <p>Balanced scale: basic needs (food, shelter) vs. emotional well-being (toys, education). Emphasize the importance of addressing both aspects.</p>	
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4	Unleashing Creativity with Adobe Illustrator	•Communication	Design •Function	Scientific and technical innovation Focus exploration (s) • Systems, models, methods	Innovative systems empower communication in graphic design, exploring functions and content through diverse technical methods	Design Year 3 Objectives Objective A: Inquiring and analyzing -ii. construct a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem -iii. analyze a group of similar products that inspire a solution to the problem -iv. develop a design brief, which presents the analysis of relevant research Objective B: Developing ideas	Transfer skills •Inquire in different contexts to gain a different perspective Reflection skills •Develop new skills, techniques and strategies for effective learning Organization skills •Set goals that are challenging and realistic •Plan strategies and take action to achieve personal and academic goals	* Introduction to Adobe Illustrator and Basic Tools * Advanced Shape Manipulation and Color Theory * Logo Design Principles * Poster Design	Create an imaginative character through sketching, and then transform it into a digital illustration using Adobe Illustrator. Criterion B (iv) Criterion C (ii)
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						<p>-ii. present a range of feasible design ideas, which can be correctly interpreted by others</p>			
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5	How might stickers help a good cause?	Communication	Markets and trends; innovations	Personal and cultural expression	The products we own communicate a lot about our beliefs and values.	<p>Criterion A</p> <p>i. explain and justify the need for a solution to a problem</p> <p>ii. construct a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem</p> <p>iii. analyse a group of similar products that inspire a solution to the problem</p> <p>iv. develop a design brief, which presents the analysis of relevant research.</p> <p>Criterion B</p> <p>i. develop a design specification which outlines the</p>	<ul style="list-style-type: none"> ● Communication Skills Use a variety of speaking techniques to communicate with a variety of audiences ● Collaboration Skills Listen actively to other perspectives and ideas ● Information Literacy Skills Collect and analyse data to identify solutions and make informed decisions. Process data and report results. ● Critical thinking skills Gather and organize relevant information to 	<p>Find out about fundraising Explore if consumers needs influence design , or wise versa. Take action: By creating stickers to raise money for a charity or non-profit organization of our own choosing.</p>	<p>Create a sticker design for teachers ,when they give feedback own their students work or according to the school community needs and raise fund promoting a chosen cause. Consider visual elements, symbolism, and messaging to effectively communicate the cause's importance.</p>
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					<p>success criteria for the design of a solution based on the data collected</p> <p>ii. present a range of feasible design ideas, which can be correctly interpreted by others</p> <p>iii. present the chosen design and outline the reasons for its selection</p> <p>iv. develop accurate planning drawings/diagrams and outline requirements for the creation of</p>	<p>formulate an argument. Draw reasonable conclusions and generalizations</p> <ul style="list-style-type: none"> ● Creative thinking skills <p>Apply existing knowledge to generate new ideas, products or processes. Use brainstorming and visual diagrams to generate new ideas and inquiries</p> <ul style="list-style-type: none"> ● Transfers Skills <p>Apply skills and knowledge in unfamiliar situations</p>	<p>Present your design with a brief explanation of its intended impact on beliefs and values. You could open your own online shop, selling your sticker design.</p> <ul style="list-style-type: none"> ● You should assess the stickers against your design specifications also gather general feedback about your stickers
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						<p>the chosen solution.</p> <p>Criterion C</p> <p>ii. demonstrate excellent technical skills when making the solution</p> <p>Criterion D</p> <p>iv. describe the impact of the solution on the client/target audience.</p>			<p>from the people you sold the stickers and measure the impact of your product</p> <p>.</p> <p>Criterion B</p> <p>Criterion C</p> <p>Criterion D</p>
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MYP -IV

Sr no.	Unit Name	Key concepts	Related concepts	Global context	Statement of Inquiry	Design Objectives	Approaches to learning	Content	Summative Assessment
1	How can we use our design skills to promote service activities in our schools?	Communication	Identities and Relationships	Globalization and Sustainability	Innovative methods of communication can raise awareness of initiatives happening within our institutions.	A - Inquire & Analyse <ul style="list-style-type: none"> • explain and justifies the need for a solution to a problem for a client/end-user/target market • identify and prioritize the research needed to 	Communication skills <ul style="list-style-type: none"> • Paraphrase accurately and concisely. • Write for different purposes • Organize and depict information logically. Collaboration skills	What service projects are happening in our community? How might the existing service projects be better promoted? How can we make sure this information is communicated clearly?	Design a prototype for your own mobile app using Adobe XD . Your app should creatively promote and communicate information about community service projects. Focus on UI/UX , interactive features, and a clear communication strategy. Criterion A Criterion C

						<p>develop a solution to the problem analyse a range of existing products that inspire a solution to the problem</p> <ul style="list-style-type: none"> • summarize the analysis of the findings from a range of sources relevant to the development of a possible 	<ul style="list-style-type: none"> • Help others to succeed • Listen actively to other perspectives and ideas <p>Critical-thinking skills</p> <ul style="list-style-type: none"> • Gather and organize relevant information to formulate an argument • Practise observing carefully in order to 	<p>USER INTERFACE (UI) AND USER EXPERIENCE (UX)</p>	
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						<p>solution, cited appropriately.</p> <p>B- Develop Skills</p> <ul style="list-style-type: none"> • Develop a design specification which clearly states the success criteria for the design of a solution . • Present and justify the final chosen design with 	<p>recognize problems</p> <p>Creative-thinking skills</p> <ul style="list-style-type: none"> • Apply existing knowledge to generate new ideas, products or processes. • Create novel solutions to authentic problems 		
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						<p>detailed reference to the design specification develop accurate and detailed planning drawings /diagrams and outline the requirements for the creation of the chosen solution.</p> <p>C- Creating the Solution</p> <ul style="list-style-type: none">• construct a logical			
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						<p>plan, which describe s the efficient use of time and resource s, sufficien t for peers to be able to follow the plan to create the solution</p> <ul style="list-style-type: none">• justify changes made to the chosen design and plan when making the solution			
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						<p>D-Evaluating</p> <ul style="list-style-type: none">• Design detailed and relevant testing methods , which generate data, to measure the success of the solution• critically evaluate the success of the solution against the requirements based on authentic tests			
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						explain how the solution could be improved explain the impact of the solution on the client/target market.			
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2	How can designers help people share their feelings?	Function	Communication	Identities and Relationships : Designing for emotional expression intersects with how individuals perceive and relate to themselves and others, influencing their mental well-being.	The form of a product can help it better function to enable people to communicate their feelings.	A (Inquiring and analyzing) <ul style="list-style-type: none"> • Explain and justify the need for a solution to a problem for a specified client/end-user. • Identify and prioritize the research needed to develop a solution to the problem analyse a range of existing products that inspire a solution to the problem .	<ul style="list-style-type: none"> • Communication skills <p>Give and receive meaningful feedback.</p> <p>Use a variety of media to communicate with a range of audiences.</p> <p>Share ideas with multiple audiences using a variety of digital environments and media.</p> <ul style="list-style-type: none"> • Research skills 	<ul style="list-style-type: none"> • What mental health issues do children and teenagers often face? • What psychological issues do people find hard to discuss? • Why do we find it hard to say how we feel? • Is a problem shared a problem halved? 	Students have to improve their initial drawings, create a detailed plan, and make a video about the design process. The video should explain the steps they took, show feedback, and justify any changes. We're checking how well they follow the unit's idea: "How can designers help people express their feelings?" —focusing on making designs that help share emotions.
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						<ul style="list-style-type: none"> summarize the analysis of the findings from a range of sources relevant to the development of a possible solution, cited appropriately. <p>B (Developing ideas),</p> <ul style="list-style-type: none"> Develop a design specification which clearly states the success criteria for the 	<p>Collect, record and verify data.</p> <p>Access information to be informed and inform others.</p> <p>Collect and analyse data to identify solutions and make informed decisions</p> <p>Process data and report results</p> <ul style="list-style-type: none"> Critical thinking skills <p>Interpret data.</p> <p>Use critical-literacy skills to analyse and interpret</p>	<ul style="list-style-type: none"> Design testing 	<p>Criterion A</p> <p>Criterion D</p>
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						<p>design of a solution.</p> <ul style="list-style-type: none">• Develop a range of feasible design ideas using appropriate media and detailed annotation which can be correctly interpreted by others present and justify the final chosen design with	<p>media communications.</p>		
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						<p>detailed reference to the design specification develops accurate and detailed planning drawing s/diagrams and outline the requirements for the creation of the chosen solution.</p> <p>C (Creating the solution)</p> <ul style="list-style-type: none">• Construct a logical			
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						<p>plan, which describe s the efficient use of time and resource s, sufficien t for peers to be able to follow the plan to create the solution .</p> <ul style="list-style-type: none">• demonst rate excellent technica l skills when making the solution follow the plan			
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						<p>to make the solution which functions as intended</p> <p>D (evaluating)</p> <ul style="list-style-type: none">• Design detailed and relevant testing methods , which generate data, to measure the success of the solution critically evaluate the success of the			
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						<p>solution against the requirements based on authentic tests</p> <ul style="list-style-type: none">• Explain how the solution could be improved explain the impact of the solution on the client/target market.			
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3.	Spreadsheet Analysis /Data Models	Systems	Function Innovation Collaboration	Scientific and Technical Innovation Exploration – Systems, Models, Methods, Processes and solutions	Collaboration leads to better creation of systems and Products scientifically.	<p>A – Inquiring and Analyzing</p> <p>Summarize the analysis of the findings from a range of sources relevant to the development of a possible solution, cited appropriately.</p> <p>B – Developing Ideas</p> <p>Develops accurate and detailed planning drawings/diagrams and outline the requirements for the creation of the chosen solution.</p> <p>C – Creating the Solution</p> <p>Construct a logical plan, which describes the</p>	<p>Research Skill:</p> <p>Research self management.</p> <p>Collect, record and verify data.</p> <p>Information skill</p> <p>Collect and analyse data to identify solutions and make informed decisions.</p> <p>Process data and report results.</p> <p>Understand and use technology systems.</p> <p>Organization Skills</p>	<ul style="list-style-type: none"> • Moving around the Worksheet / Spreadsheet, Rows, Columns, Cells Entering, Editing and Formatting Data Entering, Editing and Formatting Data - Continuation Auto fill and Custom Lists Managing Worksheets Changing 	<p>Students embark on the "Data Decipher" challenge. Each team assumes a role (Mathematician, Accountant, Analyst, and Designer) to collaboratively construct an intricate spreadsheet model. The model must integrate the covered content: formulas, functions, charts, and data analysis tools. Students should creatively</p>
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					<p>efficient use of time and resources, sufficient for peers to be able to follow the plan to create the solution.</p> <p>Demonstrate excellent technical skills when making the solution</p> <p>D – Evaluating</p> <p>Design detailed and relevant testing methods, which generate data, to measure the success of the solution</p>	<p>Keep an organized and logical system of information files/notebooks .</p> <p>Use appropriate strategies for organizing complex information</p> <p>Reflection Skills</p> <p>Develop new skills, techniques and strategies for effective learning</p> <ul style="list-style-type: none"> • Identify strengths and weaknesses of personal learning strategies. 	<p>Rows and Columns Formatting Numbers</p> <ul style="list-style-type: none"> • Understanding Formulae • Common Formulae • Relative and Absolute <p>Changing Views Conditional Formatting Outline, Sort, Filter and subtotal</p> <ul style="list-style-type: none"> • Cell Ranges - Range Names • Logical Functions 	<p>apply these skills to devise a system addressing a real-world scenario (e.g., school performance analytics). The assessment emphasizes effective collaboration, role-based contributions , and a succinct presentation of their data model's scientific utility.</p> <p>Criterion A</p> <p>Criterion B</p>
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							<ul style="list-style-type: none">• Text Functions• Date and Time Functions <p>Introduction to Charts</p> <ul style="list-style-type: none">• Formatting Charts• Adding Graphics to Spreadsheets• Look-ups - Exact match, appropriate match• Pivot Tables• Protecting Data• Printing• Connection• Mathematics, Accounts, what-if analysis <p>Service As Action</p>	
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								<ul style="list-style-type: none">• Students will create data models that can help teachers to calculate• Analyze the student performance in examinations and many more.	
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4	Photoshop.	Communities	Innovation	Personal and cultural expression	Innovation of designing a small 2D yearbook and/or other designs will reflect the communities' personal and cultural expressions.	<p>A – Inquiring and Analyzing</p> <p>Explain and justify the need for a solution to a problem for a specified client/end-user.</p> <p>Identify and prioritize the research needed to develop a solution to the problem</p> <p>Analyse a range of existing products that inspire a solution to the problem</p> <p>Summarize the analysis of the findings from a range of sources</p>	<p>Communication skills: Negotiate ideas and knowledge with peers and teachers.</p> <p>Social skills: Manage and resolve conflict and work collaboratively in teams, Negotiate effectively, Give and receive meaningful feedback.</p> <p>Self-management skills: Keep and use a weekly planner for assignments, Keep an organized and logical system of information files/notebooks.</p>	<p>Introduction to types of pictures, definitions, colour and size. ☑ Introduction to the software (Photoshop)</p> <p>Start using Photo-shop Tools(Move tool, paint brush Tool, magic wand tool, selection tool....).</p> <p>Retouching(Crop tool, colour levels, colour balance...).</p> <p>Advance layer technique (Rulers, layer mask, aligning layer, layer adjustment, typing tool...). ☑ Create different and small tasks.(Combine</p>	<ul style="list-style-type: none"> • Design an eye-catching marketing product using Photoshop to promote a fictional product or service. • Incorporate key elements such as product imagery, compelling text, branding, and a call-to-action. • Then, market it within your surroundings , community, or through an online shop.
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						<p>relevant to the development of a possible solution, cited appropriately</p> <p>B – Developing Ideas</p> <p>Develop a design specification which clearly states the success criteria for the design of a solution.</p> <p>Develop a range of feasible design ideas using appropriate media and detailed annotation which can be correctly interpreted by others.</p>	<p>Reflection skills: Identify strengths and weaknesses of personal learning strategies (self-assessment).</p> <p>Research skills: Identify primary and secondary sources.</p> <p>Thinking skills: Interpret data, Evaluate evidence and arguments, Troubleshoot</p>	<p>many pictures in one, magazine cover, 3D pictures).</p>	<p>Criterion A</p> <p>Criterion C</p>
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						<p>Present and justify the final chosen design with detailed reference to the design specification.</p> <p>Develops accurate and detailed planning drawings/diagrams and outline the requirements for the creation of the chosen solution.</p> <p>C – Creating the Solution</p> <p>Demonstrate excellent technical skills</p>			
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						<p>when making the solution</p> <p>D –Evaluating</p> <p>Critically evaluate the success of the solution against the requirements based on authentic tests.</p>			
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MYP-V

1.	Web Design Mastery with Figma	Proficiency	Interface Prototyping	Identities and Relationships : Exploring how web design shapes online identities and relationships on a global scale.	Through the immersive exploration of web design using Figma, students will acquire advanced skills to shape online identities and relationships globally, fostering an understanding of the significant role web design plays in digital interactions.	<p>Figma Mastery:</p> <p>Develop advanced proficiency in utilizing Figma's design tools.</p> <p>Create intricate design compositions within the Figma platform.</p> <p>Responsive Web Design Excellence:</p> <p>Understand and apply advanced responsive design principles.</p> <p>Design web interfaces that provide optimal user</p>	<p>Communication Skills:</p> <ul style="list-style-type: none"> • Give and receive meaningful feedback. • Use intercultural understanding to interpret communication. • Use a variety of media to communicate with a range of audiences. <p>Information Literacy:</p> <ul style="list-style-type: none"> • Collect, record and verify data • Access information to be informed and inform others 	<p>Introduction to Figma:</p> <ul style="list-style-type: none"> • Navigating Figma's interface and tools. • Creating basic design elements. • Advanced Figma Features: • Prototyping interactions and animations in Figma. • Collaborative design using Figma's real-time features. • Responsive Web Design in Figma: 	<p>Survey: Conduct a brief survey to understand global preferences in web design. Utilize Google Forms or a similar tool to gather insights on color preferences, user interface expectations, and global themes.</p> <p>Wireframes : Based on survey results, create simple wireframes for your website using Figma.</p> <p>Design key elements like the homepage layout, navigation bar, and sections that reflect global perspectives.</p> <p>Design :Build on your wireframes by incorporating</p>
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					<p>experiences across devices.</p> <p>User-Centric Design Expertise:</p> <p>Explore and implement advanced user experience design principles.</p> <p>Apply user-centric design thinking to enhance digital interactions.</p>	<p>Critical Thinking</p> <ul style="list-style-type: none"> • Gather and organize relevant information to formulate an argument • Recognize unstated assumptions and bias <p>Interpret data</p>	<ul style="list-style-type: none"> • Techniques for creating responsive web layouts. • Designing for mobile and desktop screens. 	<p>advanced design elements.</p> <p>Experiment with different color schemes to reflect the global theme. Choose a unique and meaningful name for your website. Consider cultural nuances in your design choices.</p> <p>Prototype : Using Figma, create an interactive prototype of your website. Ensure each section is clickable and navigable. Test the prototype to ensure a seamless user experience.</p> <p>Written Reflection : Write a brief reflection (100-150 words) summarizing</p>
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									<p>your design choices. Discuss how survey insights influenced your decisions, including thoughts on the website name, color schemes, and the overall user experience.</p> <p>Criterion C</p> <p>Criterion D</p>
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2	<p>How can animation help us understand complex issues?</p>	Communication	Human impact on the environment	Change in behaviour	By communicating key issues about human impact on the environment, we can change consumer behaviour.	<p>A - Inquire & Analyse</p> <ul style="list-style-type: none"> • explain and justify the need for a solution to a problem for a specified client/end-user . • identify and prioritize the research needed to develop a solution to the problem. • analyse a range of existing products that inspire a solution to the problem. 	<p>Communication skills Interpret and use effectively modes of non-verbal communication. Organize and depict information logically. Share ideas with multiple audiences using a variety of digital environments and media</p> <p>Collaboration skills Listen actively to other perspectives and ideas.</p> <p>Organization skills Set goals that are challenging and realistic</p> <p>Reflection skills</p> <p>Transfer Skill: Combine knowledge,</p>	<p>What actions are humans doing that are negatively impacting the environment?</p> <p>Which campaigns have been successful with raising awareness of human impact on the environment?</p> <p>How can designers change consumer behaviour?</p> <p>Should information shared about</p>	<p>Create a 2-minute animated video addressing the statement of inquiry, "By communicating key issues about human impact on the environment, we can change consumer behavior." Demonstrate how animation helps in understanding complex environmental issues. Evaluate and discuss your creative choices in a 5-minute reflection at the end.</p> <p>Criterion D</p>
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						<ul style="list-style-type: none"> summarize the analysis of the findings from a range of sources relevant to the development of a possible solution, cited appropriately. <p>B-Develop Skills develop a design specification which clearly states the success criteria for the design of a solution. develop a range of feasible design ideas using</p>	<p>understanding and skills to create products or solutions</p> <p>Information literacy skills Collect and analyse data to identify solutions and make informed decisions. Access information to be informed and inform others</p> <p>Critical-thinking skills Interpret data.</p> <p>Creative-thinking skills Apply existing knowledge to generate new ideas, products or processes</p> <p>Media Literacy skills: Demonstrate awareness of</p>	<p>human impact on the environment be purely factual?</p>	
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						<p>appropriate media and detailed annotation which can be correctly interpreted by others.</p> <p>present and justify the final chosen design with detailed reference to the design specification.</p> <p>C- Creating the Solution</p> <ul style="list-style-type: none">• demonstrate excellent technical skills when making the solution .• follow the plan to make the solution which functions	<p>media interpretations of events and ideas (including digital social media).</p>		
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						<p>as intended fully .</p> <ul style="list-style-type: none">• justify changes made to the chosen design and plan when making the solution <p>C- Evaluating</p> <ul style="list-style-type: none">• critically evaluate the success of the solution against the requirements based on authentic tests <p>explain how the solution could be improved</p> <p>explain the impact of the solution on the</p>			
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						client/target market			
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3.	Netweb	Development	Adaptations , Perspectives	Globalisation and Sustainability	Modern perspectives help in adapting to emerging global development	<p>A- (Inquiring and analyzing)</p> <p>explain and justify the need for a solution to a problem for a specified client/end-user.</p> <p>summarize the analysis of the findings from a range of sources relevant to the development of a possible solution, cited appropriately.</p> <p>B -(Developing ideas)</p> <p>present and justify the final chosen design with detailed reference to the design specification.</p>	<p>Information literacy skills</p> <ul style="list-style-type: none"> ● Finding, interpreting, judging and creating information ● Understand and use technology systems ● Create references and citations, use footnotes/end note sand construct a bibliography according to recognized conventions ● Identify primary and secondary sources Thinking <p>Creative thinking skills :</p>	<p>Web Design-Basic skills</p> <p>in website designing (HTML, SharePoint or any web authoring software), creative thinking. (Also STEM to be included) Procedural knowledge WEBSITE designing using a suitable softwareDr eamweavr CS6/ FrontPage/ HTML . Including the following</p>	<p>Demonstrate mastery in web design.Utilize Dreamweaver CS6/FrontPage/HTML to craft a website showcasing menus, hyperlinks, text, pictures, links, tables, and CSS files.</p> <p>Elevate the impact by uploading the site online and embedding video/music, all while incorporating creative thinking and integrating STEM concepts to promote environmental awareness and sustainability.</p> <p>Criterion B</p> <p>Criterion C</p>
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					<p>develops accurate and detailed planning drawings/diagrams and outline the requirements for the creation of the chosen solution.</p> <p>B- (Creating the solution),</p> <p>construct a logical plan, which describes the efficient use of time and resources, sufficient for peers to be able to follow the plan to create the solution.</p> <p>demonstrate excellent technical skills</p>	<ul style="list-style-type: none"> ● Generating novel ideas and considering new perspectives ● Use brainstorming and visual diagrams to generate new ideas and inquiries ● Create novel solutions to authentic problems Create original works and ideas; use existing works and ideas in new ways Learner Profile ● Caring ● Balanced ● Principled 	<ul style="list-style-type: none"> ● Menus ● Hyperlinks ● Text ● Pictures ● Links ● Tables ● CSS files ● Uploading the website on the net ● Embedding video and music. 	
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						<p>when making the solution.</p> <p>follow the plan to make the solution which functions as intended.</p> <p>justify changes made to the chosen design and plan when making the solution</p> <p>D -(evaluating)</p> <p>explain the impact of the solution on the client/target market.</p>			
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4.	CAD in Product Design	Design	Technology Innovation Precision	Scientific and Technical Innovation	Exploring the mastery of CAD tools in product design empowers designers to create precise and innovative digital representations, bridging the gap between creativity and technical precision.	<p>A (Inquiring and analyzing): explain and justify the need for a solution to a problem for a specified client/end-user.</p> <p>identify and prioritize the research needed to develop a solution to the problem .</p> <p>analyse a range of existing products that inspire a solution to the problem .</p> <p>summarize the analysis of the findings from a range of sources relevant to the development of a possible solution, cited appropriately.</p> <p>B (Developing ideas):</p>	<p>Research Skills: Explore and understand advanced features of CAD software.</p> <p>Critical Thinking Skills: Analyze and evaluate the application of CAD in various design scenarios.</p> <p>Communication Skills: Present and articulate design concepts using CAD tools effectively.</p> <p>Technical Skills: Develop proficiency in using CAD software for intricate design tasks.</p> <p>Problem-Solving Skills: Apply CAD</p>	<p>Introduction to CAD:</p> <p>Overview of CAD software and its role in product design.</p> <p>Historical context and evolution of CAD tools.</p> <p>CAD Software Familiarization:</p> <p>Introduction to popular CAD software (e.g., SolidWorks,</p>	<p>Design and model an Urban Oasis—a structure that serves as a residential building, incorporates innovative interior design elements, and contributes positively to urban planning and landscaping. Utilize advanced CAD features covered in the unit. Present the design, highlighting precision, innovation, and ethical considerations.</p> <p>Criterion A</p> <p>Criterion C</p>
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						<p>develop a design specification which clearly states the success criteria for the design of a solution .</p> <p>develop a range of feasible design ideas using appropriate media and detailed annotation which can be correctly interpreted by others</p> <p>D-(evaluating):</p> <p>explain the impact of the solution on the client/target market.</p>	<p>tools to solve complex design challenges.</p>	<p>AutoCAD, Rhino).</p> <p>Understanding the user interface and basic functionalities.</p> <p>Advanced CAD Techniques:</p> <p>Exploring advanced features such as parametric modeling, assemblies, and surface modeling.</p> <p>Efficient use of shortcuts and workflows</p>	
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								<p>for increased productivity</p> <p>.Precision and Accuracy in Design:</p> <p>Emphasizing the importance of precision in digital representations.</p> <p>Techniques for accurate measurement and alignment.</p> <p>Innovative Design Applications:</p>	
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							<p>Case studies showcasing innovative product designs created using CAD.</p> <p>Exploring the role of CAD in bringing creative concepts to life.</p> <p>Collaborative CAD Projects:</p> <p>Group projects to encourage collaboration using CAD tools.</p> <p>Emphasis on teamwork, file</p>	
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							<p>management, and version control.</p> <p>Rendering and Visualization:</p> <p>Using CAD tools for realistic rendering and visualization of product designs.</p> <p>Enhancing presentations with high-quality visuals.</p> <p>CAD in Prototyping:</p> <p>Integrating CAD with prototyping</p>	
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								<p>tools for physical model creation.</p> <p>Understanding the transition from digital to physical representation.</p> <p>Ethical Considerations in CAD Design:</p> <p>Discussing ethical considerations related to digital representation and intellectual property.</p> <p>Responsible and ethical</p>	
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								<p>use of CAD tools.</p> <p>Reflective Practice:</p> <p>Reflecting on the advantages and challenges of using CAD in product design.</p> <p>Identifying opportunities for continuous improvement and learning.</p>	
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