



“Survival- Natural Disaster” Interdisciplinary project that includes elements of Food, Textiles and Product Design. The project explores the contextual theme of responding to the unexpected. It is based on the scenario of a large-scale disaster, where the means to carry out everyday life have suddenly and dramatically been removed. The challenge is to create a rescue design that supports people or communities who find themselves in this situation.	Core	Research- Students research the types and magnitude of natural disasters. Research the health and well-being, cultural, religious and socio-economic contexts of their intended users. Match and select suitable materials considering their fitness for purpose. Design- Generate, develop, model, and communicate ideas. This project is designed to have open-ended outcomes. It does not set out to define products or systems which might make good designs. Rather, it puts emphasis on the students identifying and developing good designs. The variety of possible solutions enables students to retain a degree of autonomy over their design and decision-making. This may mean that some students create prototypes that do not achieve great functionality. It is important to recognise this as a normal and useful function of the design process. Take creative risks when making design decisions. Combine ideas from a variety of sources. While students should aim to create a high-quality final prototype, our goal is for students to practice the non-linear and iterative design process. Evaluate – Own ideas and existing products. Recognise relevant feedback and use it to make appropriate conclusions. Make judgements according to evidence. Test, evaluate and refine their ideas and products against a specification, considering the views of others.	Project aligns with NC by incorporating essential aspects of learning and skill development. The project not only covers specific technical skills and knowledge but also embodies the broader educational goals of fostering creativity, practical problem-solving, and interdisciplinary learning. The project is intended primarily to inspire students to think of design and engineering solutions to real human problems. Problem-Solving: Throughout the project, students will encounter various challenges that require them to apply problem-solving skills. This aligns with the curriculum's focus on iterative design and practical problem-solving. Students will learn how to take risks, be resourceful, be innovative and be enterprising. Understand how to use real design techniques to solve real problems. Analyse and apply iterative design processes. Identify and master the technical skills needed to produce design solutions. Understand and use the properties of materials and the performance of structural elements to achieve their intended functional solutions.	Previous Core group task in Year 7. Participate in and understand effective teamwork, communication, roles, and responsibilities. High Performance Learning (HPL)- Collaboration and teamwork. Designers/Engineers are problem-solvers. They research and develop ideas for new products and think about how to improve existing products. This project aims to demonstrate prior knowledge of this. Design Thinking and Problem Solving: Understanding the design process — from identifying the problem and brainstorming ideas to creating prototypes and evaluating their effectiveness. Research Skills: Ability to gather and analyse information to understand needs and constraints within the design context. Collaborative Work: Skills in working effectively as a team, incorporating group ideas, and managing different opinions. Innovation and Creativity: Ability to think creatively to design innovative solutions that integrate food, textiles, and product design for survival purposes. Cross-Curricular Link- Geography: Insights into different types of natural disasters, their effects on human settlements, and geographical considerations in disaster response.	Research Design Evaluate Problem solving Material properties Collaborative HPL Communication skills Presentation skills CAD Skills
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