

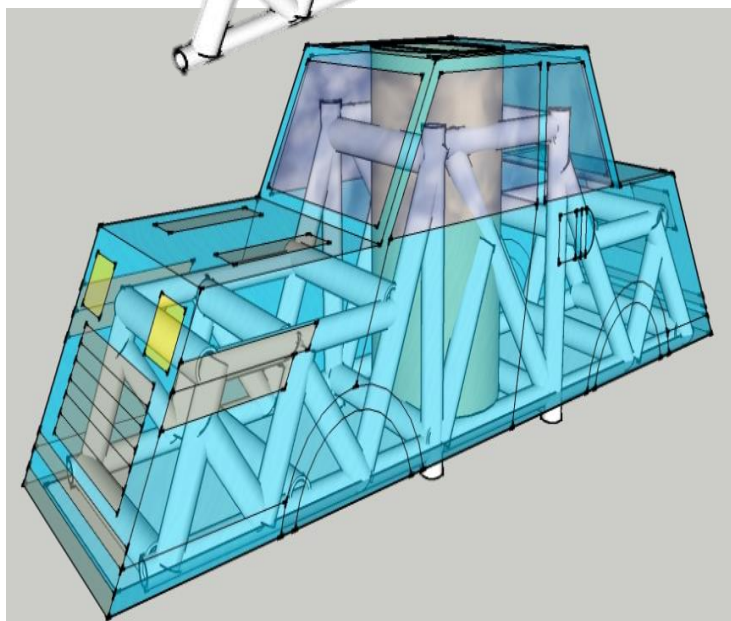
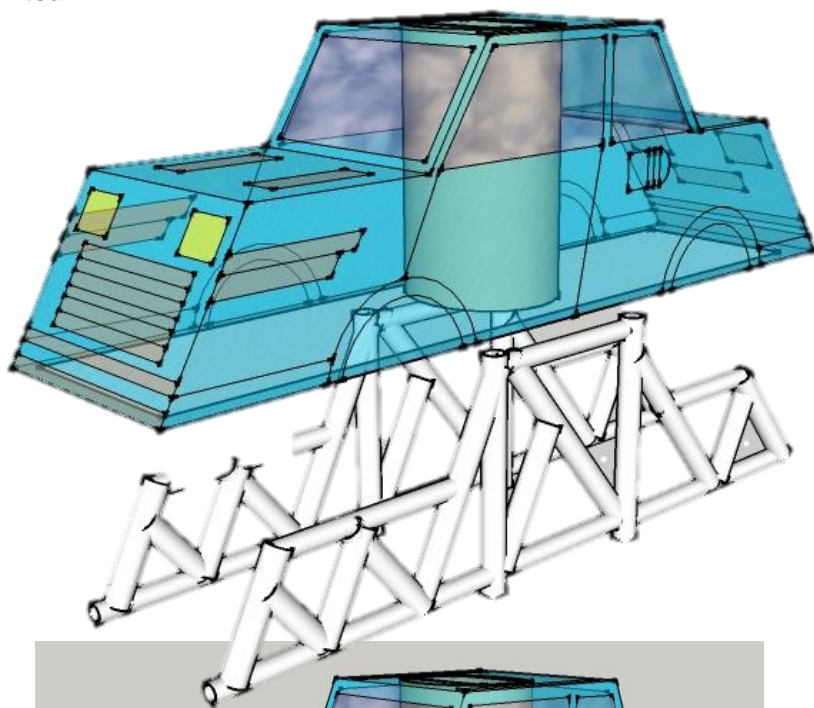


Context

Structures are used for a wide range of things in every day life. In this project you will learn how and why they are used, and using the knowledge you gain you will complete a number of tasks using the methods and techniques used in modern day construction to develop a range of structures that will hold set weights and protect important objects that must not be damaged.

Design Task

You are a car designer working for a firm that specializes in designing rally racing cars. You are to design a car that is able to survive the rigors of rally racing and crash impacts. You also need to design branding and advertising for the exterior of the car. **The winning designs will be awarded a lucrative contract to build for the local Toyota race car team.**



Learning Objectives / Nodau Dysgu:

- You will understand the risks associated to yourselves and others in a workshop and work accordingly to reduce the risk of accident.
- You will learn how to classify different types of forces and how they act in or upon a structure.
- You will learn how to manufacture two dimensional objects into three dimensional objects.
- You will learn how to test your structure designs and evaluate them to take into account weaknesses in your design and offer suitable alternatives

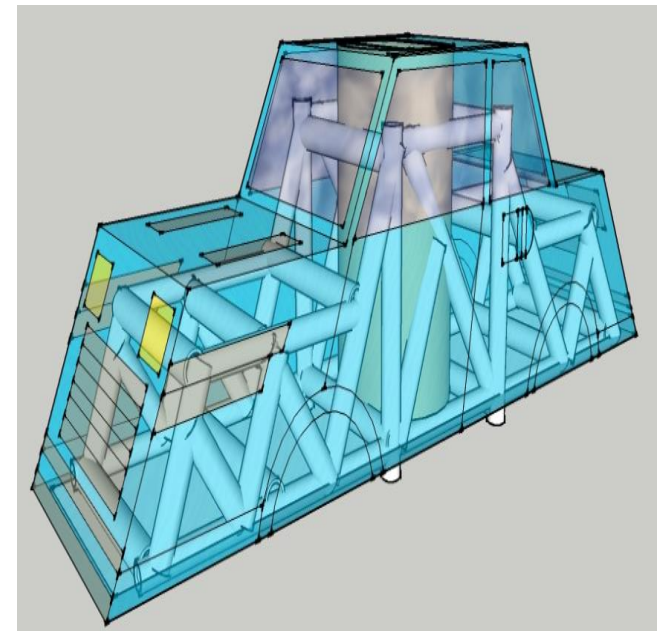
Design Portfolio		
Structures Project	Week 1	Structures Research
	Week 2	Forces
	Week 3	Car Design
	Week 4	Car Design and Nets Development
	Week 5	Car Structure Manufacture
	Week 6	Car Structure Manufacture
	Week 7	Car Structure Manufacture
	Week 8	Car Structure Manufacture and Testing
	Week 9	Evaluation
	Week 10	End of Unit Test

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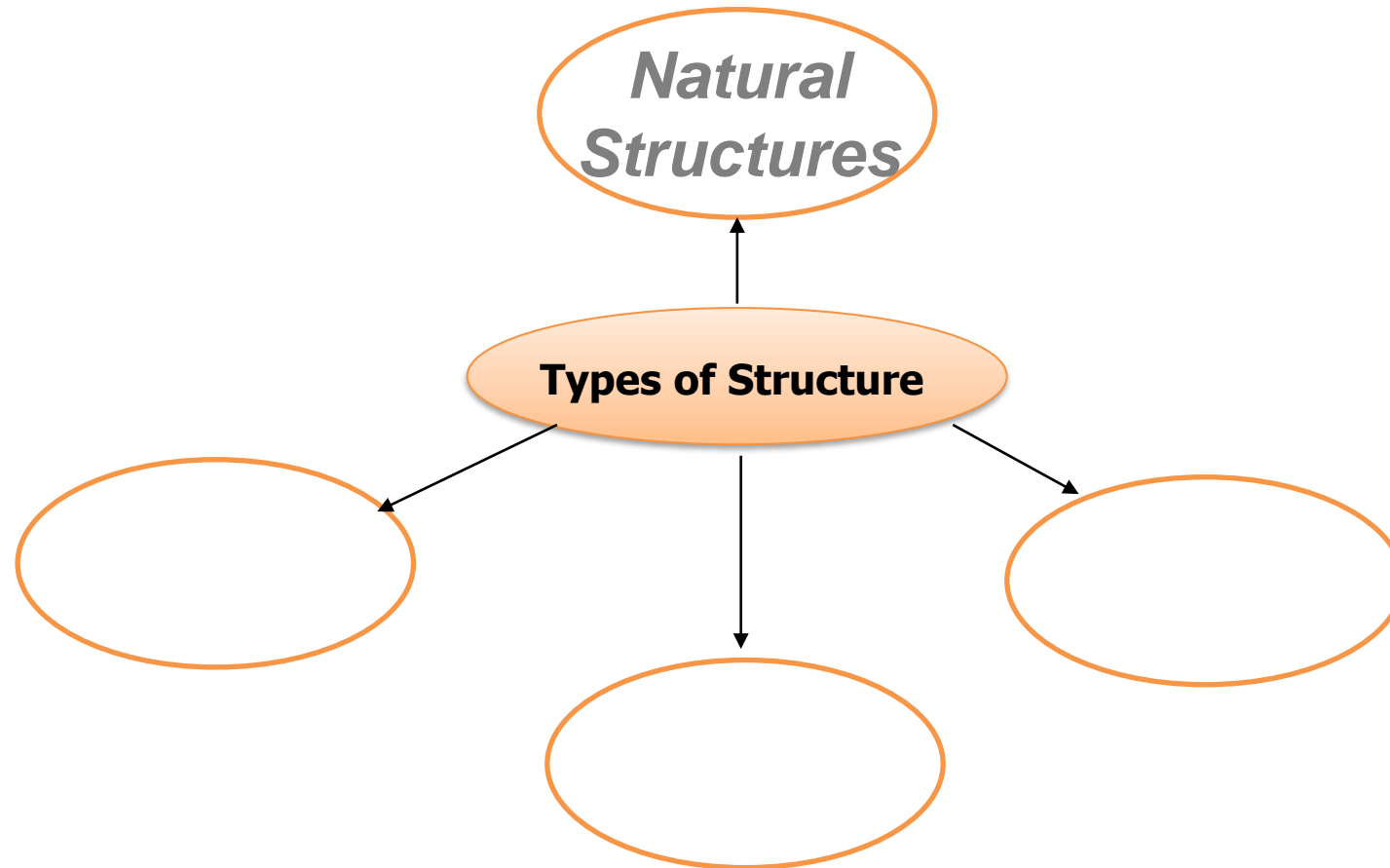
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TASK 1: Structure Classifications

What are the 4 main types of structure classifications. Label and draw an examples of each.....



Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to research and identify past and present structures
- Pupils should be able to research and identify the different classification of structures
- Pupils should be able to correctly place different structures under the correct classification



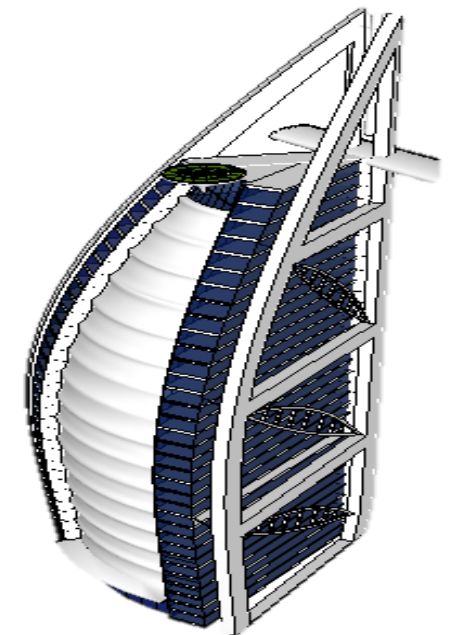
TASK 2: Past and Present Structures

Research and draw some world famous structures from the past and from the present

Past Structures



Present Structures



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