Year 6 Design and Technology: Structures

Key Learning

Design

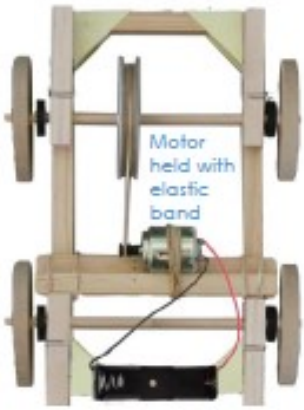
In my research, I have found _____

Features of a successful product are _____

My product will work like this _____

My product will meet the needs of its user by ___
I have applied the design specification to my product by _____

Make



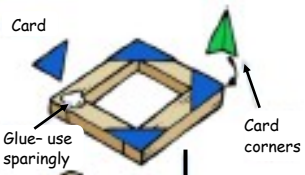
You can make a simple toy car by attaching a **motor** to your structure and using an **elastic band** as your **drive belt** to attach the **motor** to the **pulley**.

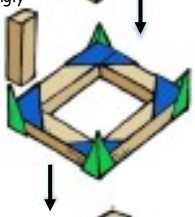
Evaluate

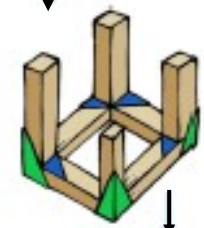
My product does / does not meeting the needs and wants of the user because ___

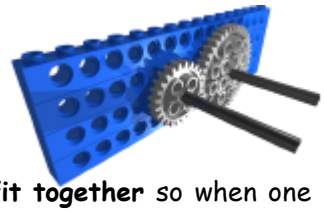
My product is / is not appealing because ___

My product is / is not innovative because __

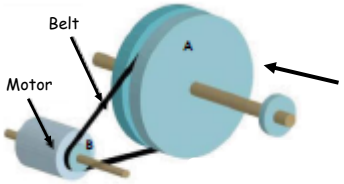








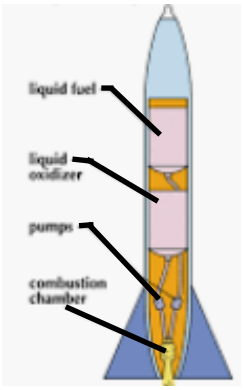
Gears can **fit together** so when one gear **rotates**, the others will too.



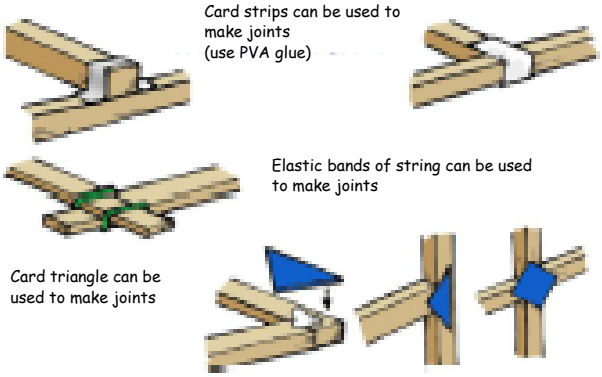
The bigger wheel is the **pulley**.

Technical Knowledge

Imagine you cut a product in half. You would see all the parts and where they sit. A drawing of this is called a **cross-sectional diagram**. You should **label** it so anyone looking at the diagram will know what all the parts are.



Joining thin sectioned pieces of wood



Creating **triangles** in your structure can **strengthen** it and make it more **stable**. There are different ways of doing this. You could glue card triangles to join two pieces of wood together, or use a another piece of wood, paper or a plastic straw to connect two corners together.

Key Vocabulary

delay	A time interval.
drive belt	A belt that connects and transfers movements between 2 pulleys.
gear	A wheel with teeth around its circumference.
motor	Electricity powered machine that supplies moving power.
pulley	Grooved wheel over which a drive belt can run.
sensor	A device that detects and responds to light, heat, motion, moisture or pressure.