

Structures and Mechanisms

Design and make a Slingshot Car

Design and build a stable structure with the capability of moving via a mechanism

Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Façade	The front of a structure.
Feature	A specific part of something.
Recyclable	Material or an object that, when no longer wanted or needed, can be made into something else new.
Scoring	Scratching a line with a sharp object into card to make the card easier to bend.
Stable	Object does not easily topple over.
Strong	It doesn't break easily.
Structure	Something which stands, usually on its own.
Tab	The small tabs on the net template that are bent and glued down to hold the shape together.
Air resistance	The level of drag on an object as it is forced through the air.
Chassis	The body of a car.
Design	To make, draw or write plans for something.
Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Function	The purpose of an object (for example a chair needs to hold a person when sitting down); or how the product works (for example a torch needs to provide light in a dark space).
Graphics	Images which are designed to explain or advertise something.
Kinetic energy	The energy that causes an object to move.
Mechanism	The parts of an object that move together as part of a machine.
Net	A flat 2D shape, that can become a 3D shape once assembled.
Structure	Something that has been made and put together and can usually stand on its own (eg a building, a bridge, a chair).



Did you know?



Some of the first toy cars were made in 1901, that's over 100 years ago!

Front view



Bird's-eye view



Side view

