



Word	Definition
apparatus	The technical equipment or needed for a particular activity or purpose
modify	Changing something to improve or fix it.
plan view	A 2-D diagram used to describe a place or object from above with annotations and other details such as measurements.
vice	A piece of equipment used to hold an object still while you work on it.
rigid	Something that is unable to bend or be forced out of shape; not flexible.
durable	Something that is able to withstand wear, pressure, or damage. It is hard-wearing.
cladding	A covering or a coating on a structure or material.
panel	A section of a surface that is set apart from the area around it by being raised, sunken, or decorated.
secure	Fixed or fastened so as not to give way, become loose, or be lost.
base	The lowest part or edge of something, especially the part on which it rests or is supported.

How can we design and build our own playground prototype?

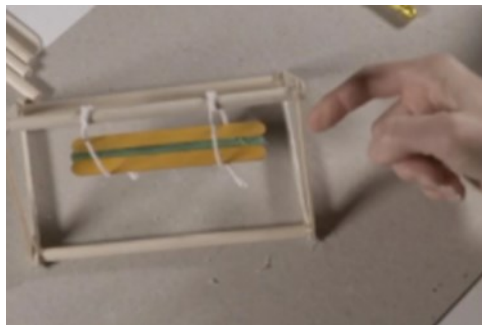
Key Knowledge and Concepts

A design criteria for a playground should include 'it must be safe' and 'it must be fun'.

A glue gun can be extremely hot and the glue dries quickly so we need to be safe.

To strengthen a structure we can use extra pieces of wood to brace a structure or use card triangles to strengthen corners.

To select a material, thought must be given to the properties so appropriate materials are selected.



Cladding can provide thermal insulation, weather resistance and improve the appearance of structures.

Sometimes the cladding needs to be attached first before building the main structure.

It is difficult to glue sides of objects with a small surface area so folded pieces of card can help to reinforce these joins.



Outcome

As a class you will explore different examples of playground equipment, evaluate their strengths and weaknesses. Then produce a model prototype for your equipment.