



**YEAR 5:**  
**Design Technology:**  
**Hydraulics**  
**Maze**

**What I should already know**

How to follow procedures safely.

Use a range of materials and components to construct.

Measure, mark out, cut and shape out materials and components.

Assemble, join and combine materials and components.

Know how free-standing structures can be made stronger, stiffer and more stable.

**By the end of this unit:**

Follow procedures for safety.

Use a wider range of materials and components to construct.

Measure, mark out, cut and shape out materials and components with some accuracy.

Assemble, join and combine materials and components with some accuracy.

Know how strong, stiff shell structures.

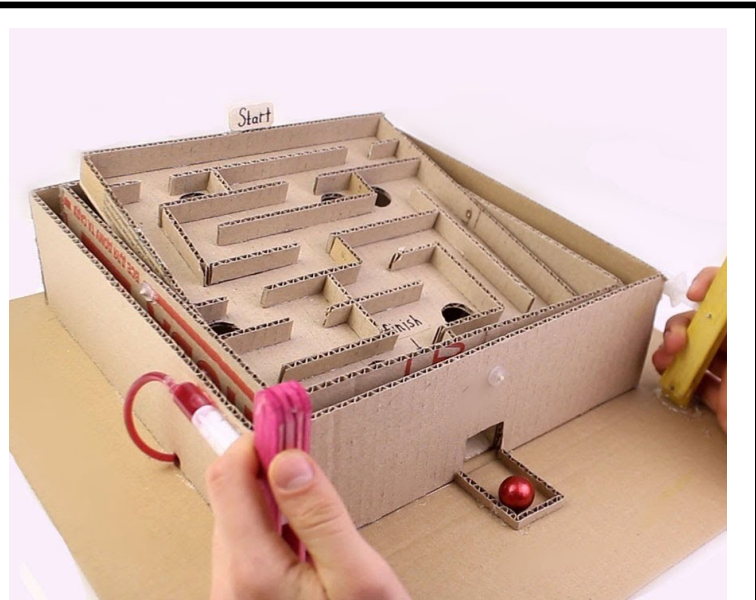
**Health and safety**

Always use safety round-headed scissors and supervise pupils appropriately during the activity.

Using PVA glue: use only water-based products and wash hands after use.

Using glue guns: use only cool melt glue guns and always under adult supervision.

Turn off glue guns if not used for 30 minutes or more.



**Vocabulary**

Assemble	Fit together the separate component parts of an object
Component	Part of a larger model or machine
Construct	Build or make something
Fit for purpose	Well equipped or well suited for its role or purpose
Glue guns	Device which melts glue sticks. The glue will be stronger and dry quickly.
Hydraulic system	A machine or device that uses water (liquid) to transmit a force
Measure	To use a ruler to make sure the measurements for each component are accurate and fit together
Moveable	A part of the model which is capable of being moved
Plan	A detailed proposal or design for the model to be built
PVA glue	Liquid glue that is safe for children to use
Syringe	A device used to inject fluids (through a tube)

**Design Criteria:**

**I am making a hydraulic moving maze for Theseus to escape from the minotaur.**

