

Design Technology –

Structures - Marble Run

Year 6

Key Vocabulary	
Free-Standing Structure	Any object that stands on its own, supported by a base or foundation.
Stability	The state of being stable and not likely to give way or overturn.
Join	A place where two or more things are connected or fastened together.
Component	A part of a larger whole, e.g. one piece of a machine.
Functional Properties	The characteristics of a component or series of components that dictate its behaviour during a process.
Aesthetics	The look or style of an object.

Free-Standing Structures



Wide, heavy base



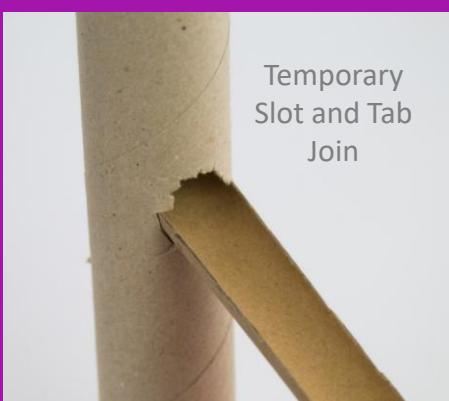
Tripod Frame

Key Knowledge

Joins



Fixed
Tape Join



Temporary
Slot and Tab
Join

- A design brief will give you the purpose that the structure should be able to complete.
- A structure is something that is made from parts joined together to support loads and keep its shape.
- Components in a structure can be reinforced to make them stronger and more rigid through bracing.
- Slopes and curves can be utilised within the design to slow the marble down.

DT Skills

- Evaluate existing products to establish an effective design that fits a brief.
- Create a structure by joining a series of separate components.
- Test and improve structures during a build.
- Evaluate a final design suggesting improvements.