

UKS2 - DT - Marbulous Structures- Knowledge Organiser

Assessment of Key Skills

...all children should be able to:

- Explore existing free standing structures and explain what gives them strength, reinforcement and stability.
- Select tools and equipment to join card together.
- Design, build and improve a simple marble run.

...most children will be able to:

- Apply their understanding of free standing structures to help build them.
- Use a wider range of tools and equipment to perform practical tasks accurately.
- Use appropriate cutting & shaping techniques that include cuts within the perimeter of the material such as slots.
- Select appropriate joining techniques.
- Design and build a marble run which incorporates some varied bends.
- Consider the aesthetics when building a marble run.
- Consider the views of others to improve their work

...some children will be able to:

- Build tall free standing structures strong and stable.
- Cut materials with accuracy and precision and refine the finish with appropriate tools such as a craft knife.
- Pay close attention to aesthetics when creating joins.
- Demonstrate a clear ability to be creative and imaginative with their ideas when designing and building a marble run.
- Improve their work to ensure it has a high quality finish.

I can investigate free standing structures.

I can apply my understanding of structures.

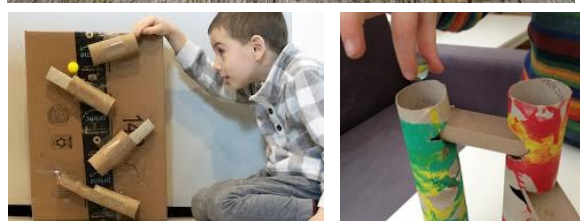
I can use a wider range of tools and equipment to perform practical tasks accurately.

I can develop a range of practical skills to create bends.

I can investigate existing products

I can select from and use materials and components to make a marble run.

I can evaluate and improve my design and technology work.



Key Vocabulary

Free standing, structure, support, stiffen, sturdy, stable, reposition, strengthen, reinforce. Accurate, join, shape, cut aesthetics, tools, equipment, functional. Bend, skills, tools, existing, product., iterative process, Test, evaluate, design criteria, improve.

Different joins, bridges and bends

