# Year 2 Baby bear's chair

## **Key Skills**

- 1. To explore different ways of making structures stronger and more stable.
- 2. To understand the meaning of strength, stability and stiffness.
- 3. Creating a structure based on design criteria.
- 4. Contributing to the design criteria.
- 5. Cutting and joining using appropriate tools and materials.
- Developing, exploring and testing to achie a desired result.



### **Vocab/Key Words**

Function—how something works.

Man-made— something that is made or manufactured by man. Eg plastic.

Mould— to form shapes out of soft squishy materials.

Natural—found in natural. E.g. a spider's web.

Stable— a object/structure does not easily wobble.

Stiff– an object or structure does not easily bend. E.g.

Structure— something that has been made and put together, it can now stand on it's own. E.g. a table.

Test-to find out if something works as it should.

Weak-something that is easily broken.

## **Key Knowledge**

- ◆ Depending on their features, some structures are more stable than others.
- ◆Structures have a function, they are designed to serve a purpose.
- ◆Depending on the choice of materials made and the way the joints are constructed, structures can be made stronger, stiffer and more stable.
- ◆Shapes that have wide flat bases are the most stable and therefore the best to use for the bases of structures.
- ◆The shape of structures effect the structure's strength.
- ◆Paper can be folded in different ways to improve it's strength.
- ◆It's important to consider the type of recycled material that is used as some can be too thick to cut through.

### **Previous Learning**

- ◆ Designing bridges (year R)
- ◆ Designing a Hi-Vis vest (Year R)
- ♦ Moving stories (Year 1)

## What I will know/be able to do by the end

I can explain the difference between natural and manmade structures, sorting and categorizing.

I can explore the concept of features and the stability of various structures.

I can explain why baby bear's chair was not strong or stable.

I can identify the features of 3D shapes by exploring and discussing vertices, corners, faces and edges.

I can measure and compare lengths.

I can select materials and tools that are best suited to my purpose.

I can create a design for my chair using drawing and communication skills, doing a mock-up if necessary.

I can create joints and structures using paper, card and tape.

I can evaluate and test my finished product against the design



### Websites/Signposting/Connection to a famous person

\_https://www.youtube.com/watch?v=qOJ\_A5tgBKM