

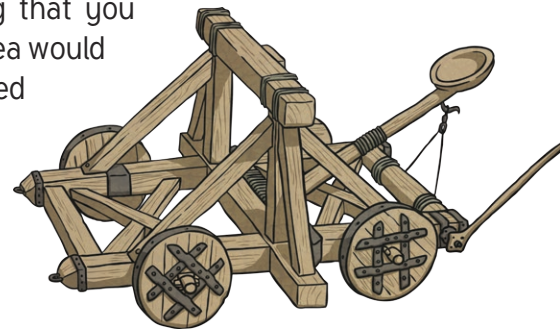


Take It Outside STEM KS2

Crazy Catapults!

Introduction

When you think of a catapult, what is the first thing that you imagine? Medieval siege weapon? A slingshot? Each idea would be correct. Neolithic man used them to hunt, David used his to triumph over Goliath and mighty fortresses have been reduced to rubble using them. Simple catapults can make an object travel or can be used to hit a target. How will you use yours?



You will need:

1 cup, 1 plastic spoon, 6 sticks or wooden lolly sticks, 4 elastic bands, tape, string.
Objects for target practice, objects for catapulting.

Key Questions

- What equipment will you choose and why?
- How will you join the equipment to make your catapult strong?
- How can you alter or improve your design to solve the problem?

What to do:

1. Set the scene by sharing images of catapults and slingshots. Discuss their uses.
2. You could present a scenario. **Can you help the bird to fly? Who can catapult the conker the furthest? Who can hit the target?**
3. Your outdoor session could fit with topic work:
 - Stone Age topic (hitting a woolly mammoth outline on a hunting trip)
 - Castles topic (build a catapult to storm the castle walls)
 - Seasonal theme (conker catapults, flight)
 - Pure enjoyment of creating a catapult (problem solving – soldier or object launcher)
4. Once the scene has been set, present the resources and allow time for the children to select the materials they would like to use. They don't have to use them all but should use at least two. Try drawing some plans.



5. Allow plenty of time for discussion. There should be lots of opportunities for communication and trial and error.
6. Test your catapults against the success criteria for the session. (Refer back to the scenario question.) **Ensure that the children are testing their designs safely and follow your school's risk assessment policy.**
7. Evaluate, improve and test again.
8. Can the children explain their design to the group? Which design worked best? Why? What improvements could be made?

If you liked this catapult idea, you could try this fantastic [Catapult Paper Toy](#) resource next time.

Ways to Support

Try mixed-ability groups so that children can support each other. Provide instructions for children to follow as a first stage, then ask them to make slight changes to the design.

Ways to Extend

Limit the resources further (e.g. 1m of string). Ask the children to explain how their catapult works and present it to the class. Can they suggest improvements?

Curriculum Links

English: Maintain attention & participate actively in collaborative conversations, staying on topic & initiating & responding to comments.

DT: Select from & use a wider range of tools & equipment to perform practical tasks accurately.