

BUILD A CATAPULT AND MAKE THINGS FLY

A **CATAPULT** is a machine used to fling some sort of projectile. In the middle ages soldiers used catapults in sieges to launch giant boulders or flaming oil at their enemies. Catapults work by releasing stored energy.



CREATE a simple catapult using craft sticks, elastics and a recycled bottle lid. Test the catapult with a variety of projectiles and make any adjustments needed to be sure it works effectively.



PRESENT your catapult in a small group. Take turns using the catapult to show how it works. Discuss how you perfected your catapult and what you learned about how to control the way it works.



RESPOND to your classmates' catapults. Ask questions about the process people used when making adjustments. Talk about how they solved any problems they had. Compare your catapults. Set some challenges for each other and use the catapults to see what happens, for example, distance, height, speed, and different projectiles. Share your ideas.



CONNECT what you learned about catapults with human catapults. The Nevis Catapult in New Zealand is the biggest human catapult in the world. Why would someone design a human catapult? How do you think they work? Why would someone want to be thrown through the air by a catapult? Compare your ideas with what you can learn about the human catapults.