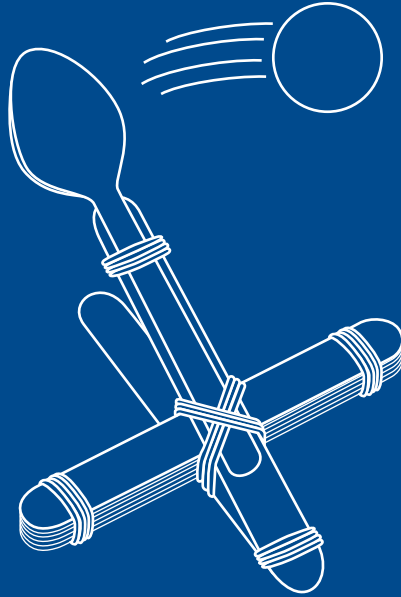


STEM



CATAPULT

STRUCTURAL, POTENTIAL
& KINETIC ENERGY STUDY

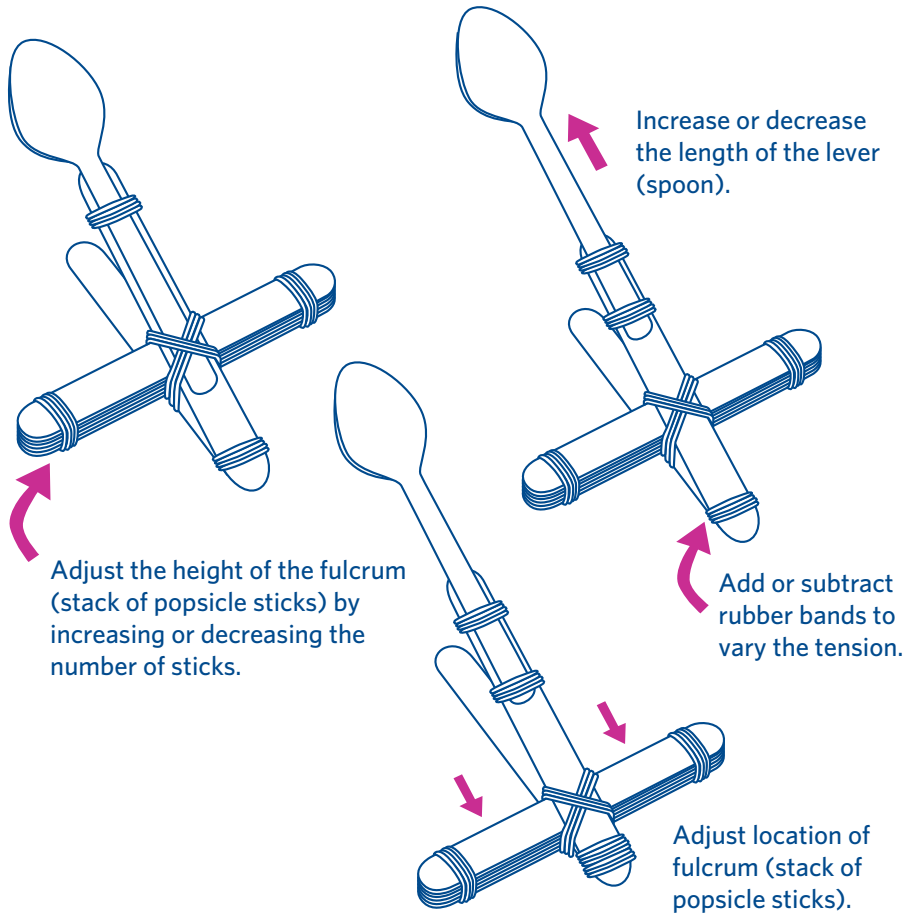
Build a catapult with popsicle sticks, a spoon and rubber bands to launch a ping-pong ball. Try different catapult designs and see how it affects the distance your ping-pong ball will go!



EMERSONTM

CATAPULT INSTRUCTIONS:

Review 3 catapult examples below. Sketch your own design in the provided notepad and build your catapult using objects provided. Launch ping-pong ball and measure how far it goes. Record your findings. Modify your design (see suggestions below) and see which modification launches your ping-pong ball the farthest. Avoid launching toward people or fragile objects.



HOW IT WORKS:

Rubber band tension on the fulcrum creates potential energy when the free end of the fulcrum is held down. This energy is released as kinetic energy when you let go, launching your ping-pong ball into the air.