

SUPER POWER: Force!

SUPER SEESAW

LAB NOTES...



TO MAKE YOUR SEESAW...

- Blu-tack the tube to a flat surface
 if you don't have a tube you can make one from card.
- 2. Place the handle of your spoon on top of the tube and tie in place with the string.
- 3. Place your projectile on the bowl of the spoon.
- 4. Push down quickly on the handle of the spoon to launch your projectile.
- 5. See if you can get your projectile to land in a bowl or box.

YOU WILL NEED

Kitchen roll inner tube	()
(or thin card)	_
String	0
Blue tack	
Long-handled spoon	
Your projectile of choice!	
(try a paper or foil ball first!)	

Change the amount of force that you put into your catapult. Does this affect how far you can throw?

Move a target very close to the catapult - what do you need to change to do a gentle throw?

How many times in a row can you hit a target? Try this at different distances!

Move the spoon up and down the tube to change the lever length - how does this change your throw?

Can you slide the spoon to a position where both ends are off the ground and it's balanced?

Super seesaws?

A seesaw is an example of a lever where the fulcrum (the tube) is right in the middle, and the two sides are the same length. When two people sit on a seesaw they provide the force pushing with their legs when they are on the ground. In your catapult, you provide the force to throw the projectile by pushing down on the end of the spoon with your finger.

You can change the length of the lever by sliding the spoon up or down which will change how easy or hard it is to launch your projectile.