



#FontanaTogether

## Angry Birds Plastic Spoon Catapult

A **catapult** is a type of machine used as a weapon to throw rocks or other things such as hot tar that would cause damage to something else. Often, catapults were set on higher ground or on castle towers to let them shoot farther. They shot rocks to break castle walls, or pitch or hot tar to set the target on fire.

A catapult is a simple machine called a lever. When you push a lever around a fulcrum, you can move something. In this case the spoon is pushed around the tube and it moves the angry birds, piggies or toys! Now, you will find that it is all about how you position the spoon/tube with your hand. If you roll it forward a bit, you can get more tension on the spoon and a longer flight path. More energy is stored (potential energy) as you push the lever (spoon) around the fulcrum (tube). The biggie or bird has potential energy until the catapult releases and then it has kinetic energy as it flies through the air.

### Materials:

- Plastic Spoon
- Rubber Bands
- Hard Cardboard Tube {rolled newspapers, mailing tubes, etc. will work too}
- Angry Birds or a small toy



### Instructions:

1. Use the 2 rubber bands to secure the end of the spoon to the cardboard tube.
2. Keep winding the rubber bands until the spoon is on tightly to the tube.



## TO FIRE YOUR ANGRY BIRDS CATAPULT:

1. Hold the tub firmly with one hand.
2. Put your toy or angry bird on the spoon.
3. Pull the spoon back, aim, and fire away. (Why not set up a tower of plastic cups. We love the 100 cup tower challenge. )

