## **Engineering Design Toolkit Instructional Guide - Catapult Activity**



Figure 1: Replica of a Petraria Arcatinus

## **Problem Description**

Sarah a soldier of the medieval area wants to build a catapult to shoot a ping pong ball onto a wall of plastic cups that is placed at a distance of 5ft. Sarah does not know how to adjust the correct angle to reach her goal of knocking down the castle wall made up of plastic cups. Sarah needs help building the catapult.



Figure 2: Materials Needed for the Catapult Activity

## **Engineering Design Process**

Use the engineering design process below to help your team design and build a catapult that will allow Sarah to knock down the wall of cups.

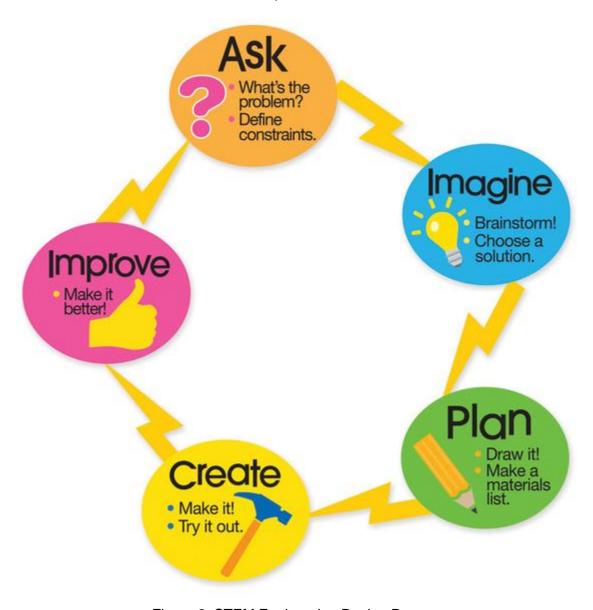


Figure 3: STEM Engineering Design Process

Source: http://shop.dowlingmagnets.com/p/engineering-design-process-magnets