## **Pom Pom Excavation**

Engineering Curriculum - Internal Structure



(Source/Inspiration: https://littlebinsforlittlehands.com/archimedes-screw/)

# Learning Objective

About the Archimedes Screw, one of the earliest hydraulic machines, which transferred water from one location to another without the use of electricity. They will see the basic internal structures of a machine and how they function when applied to the activity. They will learn that simplicity can still be efficient.

## **Pom Pom Excavation**

Engineering Curriculum - Internal Structure

#### **Materials Needed**

- Plastic water bottles
- Cardstock paper
- Pinto beans
- Pom Pom balls
- Paper plates

### **Demo with Steps:**



## **Pom Pom Excavation**

Engineering Curriculum - Internal Structure

### Activity Procedure

- 1. We will have three containers layed out filled with pom pom balls and pinto beans.
- 2. Kids will come up to the tables that will have three containers filled with pinto beans and pom pom balls.
- 3. They will use the premade Archimedes Screws and place them in one of the three containers and start twisting the handle.
- 4. The beans and pom pom balls will rise to the top of the Archimedes Screw and fall into the paper bowl.
- 5. The kids will then filter the pinto beans from the pom pom balls and see how many balls they picked up. Each pom pom ball, depending on their size, will be worth a different amount of points like a game.