



# STANWOOD HIGH SCHOOL

## ENGINEERING DESIGN 1

### PROJECT NAME: Candy Machine

#### Purpose (Student Learning Target):

Apply precision measurement skills  
Apply Rhino Modeling skills  
Apply Design Process

#### Design Statement/ Parameters:

Your task is to design a Candy Dispenser that will give out distribute a specified number of M&M or Gum balls at a time. The device must use a mechanical system to accomplish the task. Below are some ideas/ resources. Your design must be aesthetically pleasing and be able to hold at least 1 package of M&M's.

#### Materials:

1/8" Plywood (12"x24" sheets)  
1/4", 1/8", 1/2" Diameter Dowels  
Pint Mason Jars  
1/16" Acrylic sheets (12"x12") Limit 1 per project  
3D Printed parts

#### Equipment:

You may use the 3D Printer and/ or Laser cutter to make the parts for your candy machine.

#### Finished Product: The following items must be turned in to earn credit

Create a portfolio entry that includes:

- 2-3 Rendered Rhino pictures
- 2-3 Pictures of the finished model
- Materials list
- Working drawings of parts w/ dimensions
- Working drawings of assembly

#### Connections:

Math:

Art:



<http://woodgears.ca/schulteiss/dispenser.html>

<http://woodgears.ca/reader/index.html>