

# Candy Dispenser Design Brief

Names: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

## Situation:

Date: \_\_\_\_\_

Your aunt Laura, the “candy connoisseur” and “part-time scientist” has innovated a new way to make candy that has different flavors. For example, she has discovered a way to make candy that taste like chocolate ice cream, hot dogs with ketchup, and peanut butter and jelly. She would like to share her new type of candy with the public by offering them free samples in stores. She hopes that by offering free samples, they will like them so much that they will go out and buy them by the jars and make her rich and famous. However, she needs someone to “invent” for her a candy dispenser.

## Challenge:

In this small group activity, your team is to design and develop (invent) a prototype (working model) of a small candy dispenser.

## Criteria and Constraints:

- Your candy dispenser must be made with at least 7 different items.
- You must decide on a name for your candy dispenser.
- The candy dispenser must be able to hold at least 4 ounces of candy and be able to dispense a small “free sample” of approximately 4-8 pieces of candy.
- You may not use any items that will create a safety hazard (glass, sharp metal)

## Tools, Materials and Equipment (optional). You may bring additional items from home.

- |                 |                   |
|-----------------|-------------------|
| ▪ 3 Straws      | ▪ 1 Cup           |
| ▪ 1 Bowl        | ▪ 2 Pipe cleaners |
| ▪ 1 CD          | ▪ 2 Rubber Bands  |
| ▪ Tape          | ▪ 1 File Folder   |
| ▪ 2 Paper Clips |                   |

## Procedure:

1. Students, working in groups of 3, will use the engineering design process to invent a new Candy Dispenser.
2. Student groups will:
  - a. Assign a group leader.
  - b. Discuss the problem (complete document #1 EDP Worksheet).
  - c. Discuss ideas for solving the problem (make sketches).
  - d. Choose the “best idea” (make final sketch).
  - e. Obtain materials and build a prototype (working model).
  - f. Evaluate and test your prototype, refine as needed.
  - g. After the prototype is finished, name it - be creative.
  - h. Complete document #2 – Candy dispenser analysis worksheet
  - i. Email document #1 to teacher
  - j. Make an oral presentation to the class describing the completed “Candy Dispenser.”