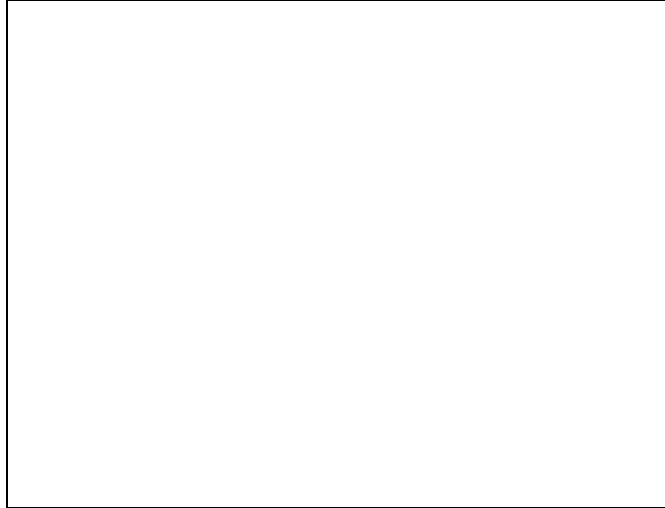


INVESTIGATION: WHAT MAKES A BLADE OF GRASS STAND UP?

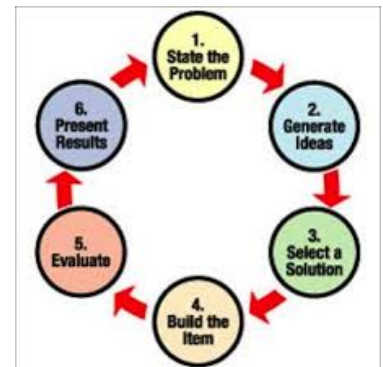
1. Pick a long blade of grass
2. Place the blade of grass into the Foldscope and make a detailed sketch of what you see below:



3. Using your observations and sketch, explain below...what makes the blade of grass stand by itself like a tower?

ENGINEERING CHALLENGE: create the strongest tower! Copy nature by using the materials provided to create a self-standing tower. As an extra challenge your tower must support a “load” (weight) that represents weight real structures need to hold from snow and materials. The tallest structure that holds the most load wins.

Materials: 2 cups marshmallows, 1 cup cotton balls
strips of cardstock, straws, spaghetti, tape (as per teacher)



Steps 1) Discuss 2) Create a plan 3) Test

4. Reflection:

1. Describe how you copied the natural structure of the grass and used it in your design

2. Was your team successful? Why or Why not? Could you have used any of the materials differently?
