Name: _____ Date: _____ Class: _____

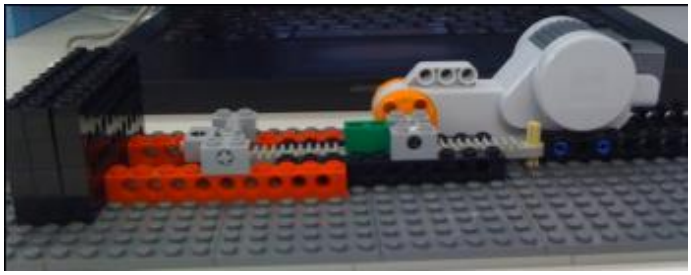
Deformation: Foam Compression Worksheet

Pre-Activity Define stress and strain.
Stress is:

Strain is:

Hypothesis
What type of object, hard or soft, requires the most compression? Why?

List Materials



Write the Procedure
1.

2.

3.

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Data Collection

Equation 1: Strain = $(L_{change})/ L$

Object (hard or soft)	Number of motor rotation for compression (power)	L (cm)	L_{change} (cm)	Strain	Does the object go back to its original shape?
Play-Doh					
bread					
marshmallow					
foam					

Graphing

Create a graph of the number of rotations (x-axis) vs. the strain (y-axis) for the objects listed in the above table

Results & Conclusions

1. Which object had the greatest strain/deformation?

2. Which object had the most rotations?