

Deformation: Foam Compression

Name:

Date:

Pre-Activity: Define stress and strain

Hypothesis:

(What type (hard or soft) of object would require the most compression? Why?)

Materials:



Procedure:

1.

2.

3.

Strain = $(L_{change})/L$ (Eq. 1)

| Object (Hard or Soft) | Number of Motor Rotation Needed to Compress Object | L | L change | Strain | Does the Object go back to original shape? |
|--------------------------|--|---|----------|--------|--|
| | Power | | | | |
| Playdough | | | | | |
| Bread | | | | | |
| Marshmellow | | | | | |
| styrafoam | | | | | |

| Results/ | Conc | lucioni |
|----------|------|---------|
| Results/ | Conc | iusion: |

Which object had the greatest strain/ deformation?

Which object had the most rotations?