

Engineer's Workbook

Engineer's Name: **EXAMPLE**

Date: _____

Work in teams on creating a chain reaction with materials available to you.

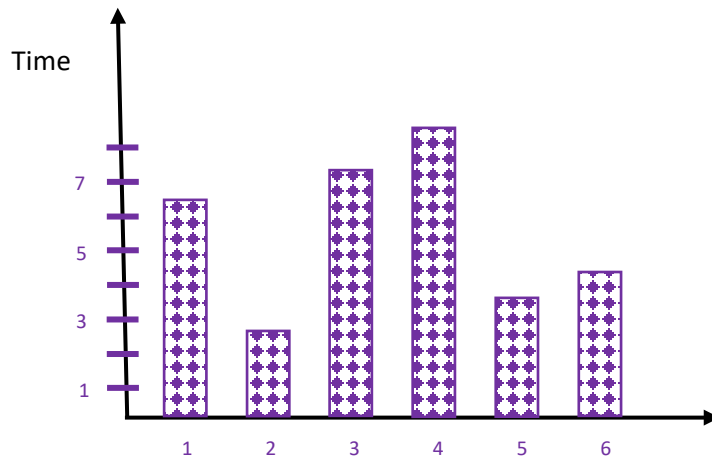
Planning. What shape/form would you like to create? Draw your design in box below. If time allowed work on 2 designs.



Activate your chain reaction and measure the time it takes to reach rest condition. Time in seconds: First trial: 3.2, Second Trial: 6.5

How does your design compare to other students in the room/class? Create a histogram (create bars for each team).

Team	Best Time (in seconds)
1	6.2
2	2.5
3	7.0
4	8.2
5	3.5
6	4.2



$$\begin{array}{r}
 5.2\bar{6} \\
 6 \overline{)31.6} \\
 \underline{-30} \\
 16 \\
 \underline{-12} \\
 40 \\
 \underline{-36} \\
 4
 \end{array}$$

Calculate the average of the best time of all teams (do it manually): 5.26

$$6.2 + 2.5 + 7 + 8.2 + 3.5 + 4.2 = 31.6$$

$$31.6 / 6 = \text{average} = 5.26$$