

X

n = 5 SAMPLE SIZE

10	X ₁
5	X ₂
2	X ₃
6	X ₄
10	X ₅

$\sum_{i=1}^n X_i$
 WHERE TO STOP
 WHERE TO START

POPULATION
 N = ?
 SIZE

$$\bar{X} = \frac{\sum_{i=1}^n X_i}{n} = \frac{1}{n} \sum_{i=1}^n X_i \Rightarrow \frac{10+5+2+6+10}{5} = \frac{33}{5} = 6.6$$

$$\mu = \frac{\sum_{i=1}^N X_i}{N} = \frac{1}{N} \sum_{i=1}^N X_i$$

MODE
 MOST FREQUENT
 OBSERVATION

10 = MODE

MIN = 2 MAX = 10

RANGE = 10 - 2 = 8

MEDIAN
 LOW → HIGH

MIDDLE

2	5	6	10	10
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↑
 n = 5
 5 + 1/2 = 3

$$Z = \frac{X - \bar{X}}{S} \rightarrow \frac{\text{GRAMS} - \text{GRAMS}}{\text{GRAMS}} = \text{UNITLESS}$$

UNITLESS MEASURE

"THE # OF STANDARD DEVIATIONS
 X IS FROM THE MEAN"

WHEN WE CONVERT VALUES
 TO Z-SCORES WE CALL IT

STANDARDIZATION