

# Statistics

**Question:** how many ounces of water do you drink a day?

**Sampling type:** convenience sampling

**Plan:** gather 20 data points with people close by

**Population:** 308 6th graders

**Sample:** 20 6th graders

**DATA:**

2, 10, 10, 16, 16,  
24, 24, 24, 32, 32,  
33, 40, 48, 50, 60,  
64, 64, 66, 96, 120

## TENDENCIES

minimum: 2      mad: 23.5  
lower quartile: 20      mode: 24  
median: 32.5      outliers: 2, 96, 120  
higher quartile: 55      iqr: 35  
maximum: 120      # of data points: 20  
mean: 41.55

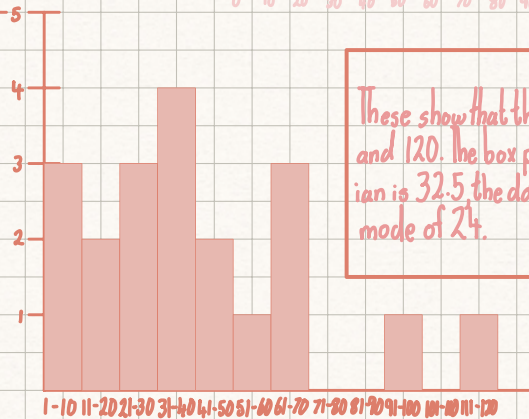
**Dot Plot:**



**Box Plot/Whisker Plot:**



group	tally	number
1-10		3
11-20		2
21-30		3
31-40		4
41-50		2
51-60		1
61-70		3
71-80		0
81-90		0
91-100		1
101-110		0
111-120		1



These show that the outliers are 96 and 120. the box plot shows the median is 32.5 the dot plot shows the mode of 24.