**Vocabulary:** **Sight vs. Sound Reactions**



**Vocabulary**

* Histogram – a graph that shows how many data points are in each category.
	+ On a histogram, the *x*-axis is divided into equal categories.
	+ The *y*-axis shows how many values are in each category.
* Mean – the sum of a set of numbers divided by the number of items in the set.
	+ The mean of a set of numbers is also known as the set’s *average*.
	+ The symbol for the mean is *μ*.
	+ For example, the mean of 4, 4, 5, 7, and 10 is .



**Normal distribution**

* Normal distribution – a data distribution that has a “bell” shape when graphed as a histogram.
	+ Many kinds of data will tend to have a normal distribution. For example:
		- Weight of adult men
		- Height of adult women
		- Distance that 10-year-old boys can throw a football
* Range – the difference between the greatest and least value in a data set.
	+ For example, the range of 4, 4, 5, 7, and 10 is 10 – 4 = 6.
* Standard deviation – a statistic that describes how widely the points of a data set are distributed.
	+ The symbol for standard deviation is *σ*.
	+ If data points are very close, the standard deviation will be low.
	+ If data points are spread out, the standard deviation will be high.
	+ If the data set has a normal distribution, then about 68% of the data will be within one standard deviation of the mean (*μ* ± *σ*).
* Stimulus – something that causes an organism to respond.