## Histogrenms

A histogram is a graphical display of data using bars, with the numbers grouped into ranges.
Histograms are used to plot the frequency at which groups of data occur.

| Height <br> range | Frequency | Number |
| :---: | :--- | :--- |
| $48-51^{\prime \prime}$ |  |  |
| $52-55^{\prime \prime}$ |  |  |
| $56-59^{\prime \prime}$ |  |  |
| $60-63^{\prime \prime}$ |  |  |
| $64-67^{\prime \prime}$ |  |  |
| $68-71^{\prime \prime}$ |  |  |
| $72-75^{\prime \prime}$ |  |  |

Our Class Heights


Does this histogram tell us what the range of heights is?

Does this histogram tell us what the median height is?

What height range is the most-often-occurring?

Below is the list of the $4^{\text {th }} 6$ weeks Math Report Card grades for a group of students.
Fill in the frequency table using this data, then create a histogram of the data.
$88,82,77,73,86,92,58,84,90,98,81,74,74,85,85,88,97,98,59,72,76,91,98,82,89$

| Grade | Frequency | Number |
| :---: | :---: | :---: |
| $51-60$ |  |  |
| $61-70$ |  |  |
| $71-80$ |  |  |
| $81-90$ |  |  |
| $91-100$ |  |  |



What's the difference between a histogram and a bar graph?!?


According to the data in the histogram, about how many people over the age of 60 attended Disney World on the day this data was collected?
A 1
B 50
C 100
D 200

On average, children under the age of 10 spend $\$ 50$ per day on souvenirs while at Disney World. About how much revenue can Disney World expect on this day from this group?
A \$500
B \$2,500
C \$5,000
D \$25,000

## Rolling dice

Roll 2 dice, then find the product of those numbers. Fill your data in the frequency table as you go. After rolling 50 times, make a histogram of your data.

Rolling Dice

| Product | Frequency | Number |
| :---: | :--- | :--- |
| $1-6$ |  |  |
| $7-12$ |  |  |
| $13-18$ |  |  |
| $19-24$ |  |  |
| $25-30$ |  |  |
| $31-36$ |  |  |

What range of products occurred the most often in your experiment?

What is the ratio of the number of products in the 1-6 range to the number of products in the 31-36 range?

