

# Agenda

## Homework:

- Scatterplots Study Guide
- Scatterplots CR on FRIDAY
- AM

## Materials:

- Calculator
- Ruler

## Do Now:

- Take out homework
- Set up Graph Paper (see TV)

# Height vs. Jump Height Experiment

- Set up Graph Paper

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Pd: \_\_\_\_\_

## Height vs. Jump Height Experiment

- 1) Hypothesis:** What type of relationship (positive, negative, or none) do you think there will be between a person's height and how high they can jump? Explain.

# The Experiment Logistics

- Assign each table group member a role:
  - **Leader**: Should know the experiment procedures and makes sure all group members are ON TASK
  - **Recorder**: Must write down any data taken during the experiment and then record onto [class website](#)
  - **Timer**: Keep track of time and move group along if they are taking too long
  - **Measurer**: Use the tape measure with precision to take accurate measurements (in inches)

# The Experiment Logistics

- **Procedures:**

1. MEASURE ALL group member's heights in INCHES using the tape measure & RECORD on scratch paper
2. Once everyone is measured, go outside to measure jump height
  1. Students will use the "jump indicator" by trying to tape it as high up as they can along the wall
  2. Measurer will then (with the assistance of a chair) measure, in INCHES, how high the indicator was placed
  3. Recorder will record the data on the same scratch paper
3. Return inside to record all data onto the [class website](#)

# The Experiment Results

- Once all data is collected, teacher will share the results spreadsheet with the class
  - While waiting, work on homework (Study Guide)
- Recorder MAKE A COPY of the data from their Google Drive, then...
  - Sort the data by gender
  - Then, sort the data by student height
- Use the data to create 2 graphs (one for males and one for females) that show the relationship between height and jump height

# Height vs. Jump Height Graphs

## 2) The Data:

Height vs. Jump Height  
(Males)

Height vs. Jump Height  
(Females)

# Analyzing the Data

- Create a line of best fit for each of your graphs
- Then determine the equation for each line using 2 points on your line

3) Line of best fit (Slope-Int Form):

Be sure to show your work.

Males:

Females:

# Background Info

- [Tallest Male Teenager](#)
- [Tallest Female Teenager](#)



# Analyzing the Data

- Use your lines of best fit equations to estimate how high the tallest teenager would be able to jump.

## 4) **Follow up:**

Tallest Male: 7' 3"

Estimated Jump Height: (show calculations here)

Tallest Female: 7'

Estimated Jump Height: (show calculations here)