Class Activity - Data Collection

## Step 1:

Measure your hand span in inches using the ruler.
Step 2:
Convert your hand span from inches to mm.
(you may need to go to cm first then to mm)

Step 3: Write your answer in the table.
Step 4: Copy table into your notebook


## Step 4: Using the Graph I gave you, create a bar graph of the hand span data.

£ EACH HAND SPAN SHOULD HAVE TWO BARS!!
-1 for girls
$\rightarrow 1$ for boys
$\downarrow$ Color code the bars (choose a color for girls and choose a color for boys)

Step 5: convert your height in inches to cm

Step 6: Fill in chart on the board
Step 7: Fill in chart in your notebook

Step 8: Create Scatter plot of the data on graph provided
£ A biologist studying ponds in Alaska wants to determine if the temperature of a pond affects the length of the fish in that pond. He traps and measures fish in each pond, gathering the following data:

| Pond | Pond A | Pond B | Pond C | Pond D |
| :---: | :---: | :---: | :---: | :---: |
| Temperature | $10^{\circ} \mathrm{C}$ | $14{ }^{\circ} \mathrm{C}$ | $18{ }^{\circ} \mathrm{C}$ | $20^{\circ} \mathrm{C}$ |
| Fish Size | $\begin{aligned} & 4 \mathrm{~cm}, 8 \mathrm{~cm}, \\ & 14 \mathrm{~cm}, 10 \\ & \mathrm{~cm}, 6 \mathrm{~cm}, 2 \\ & \mathrm{~cm} \end{aligned}$ | $6 \mathrm{~cm}, 8 \mathrm{~cm}$, $10 \mathrm{~cm}, 10$ $\mathrm{cm}, 12 \mathrm{~cm}$ | $\begin{aligned} & 5 \mathrm{~cm}, 8 \mathrm{~cm}, \\ & 12 \mathrm{~cm}, 14 \\ & \mathrm{~cm}, 10 \mathrm{~cm}, \\ & 20 \mathrm{~cm} \end{aligned}$ | $8 \mathrm{~cm}, 10 \mathrm{~cm}$, $10 \mathrm{~cm}, 14$ cm, 24 cm |

1. Choose a way to represent this data using either a bar graph or a scatter plot. (Don't Forget TAILS)
2. Justify why you chose that graph
3. Then write a summary of the data to answer the question as to whether temperature is related to the size of fish.
