Scatter Plots ..*continued*

Recall from last day:

A ***scatter plot*** is a graph that shows the _____ between **two** variables.

The points in a scatter plot often show a pattern, or _____.
From the pattern or trend you can describe the _____.

Example:
Julie gathered information about her age and height from the markings on the wall in her house.

Age (years)	1	2	3	4	5	6	7	8
Height (cm)	70	82	93	98	106	118	127	135

a) Label the vertical axis.

b) Describe the trend in the data.

c) Describe the relationship.

Variables

The *independent variable* is located on the _____ axis.
This variable does _____ depend on the other variable.
The *dependent variable* is located on the _____ axis.
This variable depends on the other variable.

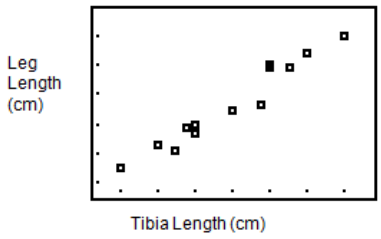
Note:
The independent variable comes *first* in the table of values.

Independent variable: _____

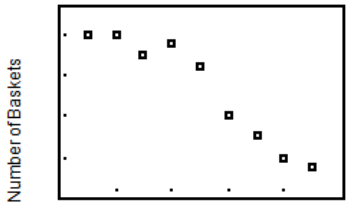
Dependent variable: _____

Use the whiteboards to provide your answer to the following:

Is There a Relationship?
As a person gets taller their armspan _____. (*gets wider, gets smaller, stays the same*)
The longer a person's legs are _____ they run. (*the faster, the slower, will make no difference to how fast*)
As a person's foot size increases, their walking stride _____. (*gets longer, gets shorter, stays the same*)
As a person's forearm gets longer, their armspan _____. (*gets longer, gets shorter, stays the same length*)
The longer a person's thumb is _____ their index finger. (*the longer, the shorter, will make no difference to the length of*)
As a person gets taller, their foot size _____. (*gets longer, gets shorter, is not affected*)



1. The graph shows the plotted points rising upwards to the right.
   - Agree
   - Disagree
   - Pass
2. As the length of the tibia increases the length of the leg increases.
   - Agree
   - Disagree
   - Pass
3. The graph can be used to determine the length of a person's leg if you know the length of the tibia bone.
   - Agree
   - Disagree
   - Pass



1. The graph shows the plotted points falling to the right.
   - Agree
   - Disagree
   - Pass
2. As the distance from the net increases the number of baskets made decreases.
   - Agree
   - Disagree
   - Pass
3. The graph can be used to determine the number of baskets you will make if you know the distance from the basket.
   - Agree
   - Disagree
   - Pass

1. The graph shows the plotted points scattered.

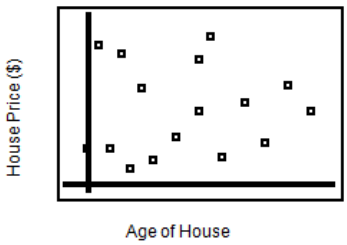
- Agree Disagree Pass

2. As the age of the house increases the price of the house is either large or small.

- Agree Disagree Pass

3. The graph can't be used to determine the price of the house if you know how old it is.

- Agree Disagree Pass



Class Data Collection - Is There a Relationship Here?

With a partner, measure and record each measurement to the nearest centimetre
Enter your data into the class data collection chart.

Name	Height (cm)	Armspan (cm)

Independent variable: _____

Dependent variable: _____