Unit 6 Summary Packet   **Name:**
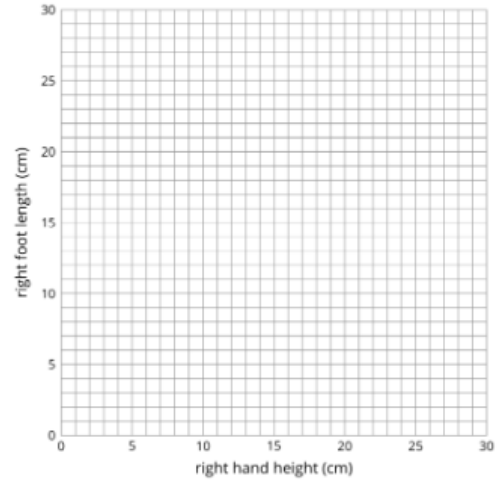
Lesson 1 - Organizing Data
What is a scatterplot? How is it different from a function?

Lesson 2 - Plotting Data
Make a scatterplot from the data.

Circle the point that represents Person B.

	right hand length (cm)	right foot length (cm)
Person A	19	27
Person B	21	30
Person C	17	23
Person D	18	24
Person E	19	26

Lesson 3 - What a Point in a Scatter Plot Means
What kind of information does a point in a scatterplot represent?

Do trends in a scatterplot apply to every individual in the data set?

Lesson 4 - Fitting a Line to Data
A line can be used to make _____ about the data.
A point that is close to the line _____ the prediction. A point that is far from the line does not.
An outlier is a point that:

Lesson 5 - Describing Trends in Scatter Plots
Positive association: as one variable _____, the other variable _____
Give an example of two variables that have a positive association:

Negative association: as one variable _____, the other variable _____
Give an example of two variables that have a negative association:

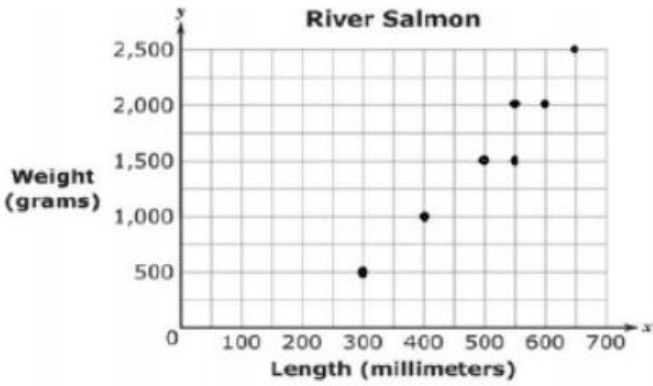Give an example of two variables that have no association:

Sketch a scatterplot that matches each description.

Positive, Linear	Negative, Linear	None	Positive, non-linear	Negative, non-linear

Lesson 6 - The Slope of a Fitted Line

Data about the length and weight of a sample of River Salmon is organized into a scatterplot. Would a linear model fit the data? Explain.

Which of the following lines would best fit the graph?

A $y = 5x - 1000$ **C** $y = -5x + 3500$

B $y = x - 1000$ **D** $y = -x + 2000$

What does the slope of the line mean?

Use the model to predict the weight of a river salmon whose length is 850 mm.

River Salmon

Weight (grams) vs Length (millimeters)

Lesson 7 - Observing More Patterns in Scatter Plots

What is a non-linear association? What does a non-linear association mean?

What are clusters in data? What do clusters usually mean?

Lesson 8 - Analyzing Bivariate Data

Find the missing values.

a =   b =   c =   d =   e =

What association do you see?

	MP3 Player	No MP3 Player	Total
Cell Phone	57	a	78
No Cell Phone	13	9	b
Total	c	d	e

Lesson 9 - Looking for Associations
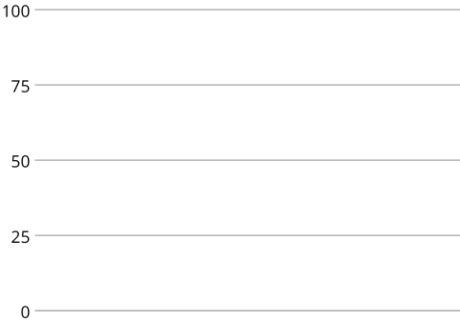
	TV	Internet
7th grade	13	49
8th grade	20	68

How many total students were surveyed?
Find the relative frequency by row.
Create a segmented bar graph.
What association do you see?

Lesson 10 - Using Data Displays to Find Associations

The segmented bar graph shows data about track athletes who did or did not meditate before competing and whether they reported feeling agitated or calm right before their event. Write two different statements about what the association could mean.