

What am I learning today?

**Main Ideas/
Questions**
Scatterplot

Notes

Scatterplots – Displays a relationship between 2 _____ variables measured on the SAME _____

*****Each** axis gets a variable and a LABEL
*****Each** individual will be represented as an _____ on the coordinate graph.

Explanatory and Response Variables

Explanatory Variable (x) – EXPLAINS or causes changes in the response variable; this is the _____ variable

Response Variable (y) – Measures an outcome or result of a study; this is the _____ variable

Examples: Determine if there is a clear explanatory and response variable or if it is just a relationship between two variables.

a) The amount of time spent playing video games and a student’s GPA.

EXPLANATORY:
RESPONSE:

b) The height of a person and their shoe size.

EXPLANATORY:
RESPONSE:

c) A student’s score on the Physical Science EOC and their score on the Geometry EOC.

EXPLANATORY:
RESPONSE:

d) The amount of subscribers on a YouTube channel and the number of views for their latest video.

EXPLANATORY:
RESPONSE:

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Examples

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Example 1: Construct a scatterplot for the following.

Ninth grade boys at a school go backpacking every fall. Before leaving, their backpack is weighed. Here's the data from 8 students one year:

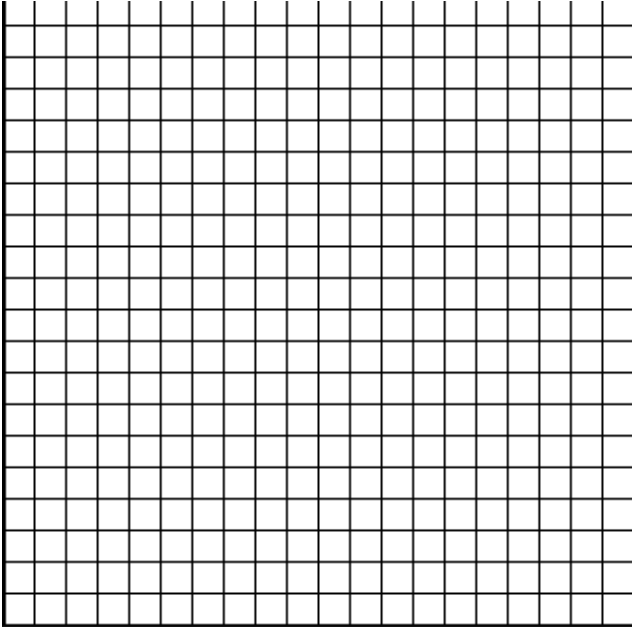
Body weight (lbs.):	120	187	109	103	131	165	158	116
Backpack (lbs.):	26	30	26	24	29	35	31	28

1. Decide which variable is the following:

Explanatory(x):

Response(y):

- 2. Label and scale axes.
- 3. Plot individual data values.



4. Draw a conclusion about the relationship of body weight and backpack weight in complete sentences.

Summary

Summarize the lesson in your own words