

Name: Key

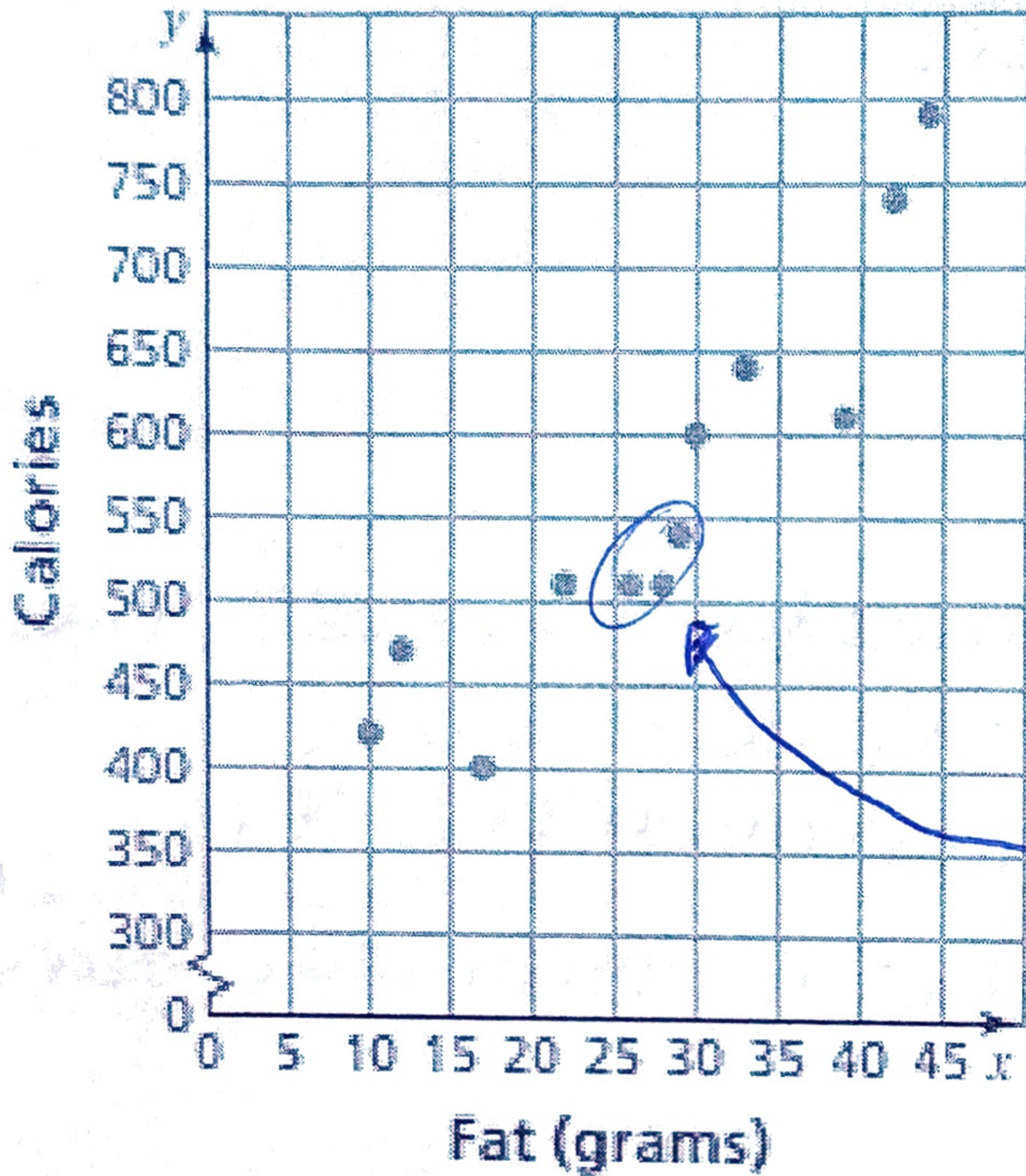
Date: _____

HW # 17: Scatterplot Vocab

For each graph:

- 1) Describe the correlation of each scatter plot. The first one gives you a sentence frame to use for the others.
- 2) Circle any clusters.
- 3) Put an x on any outliers and identify them by their ordered pair.

Restaurant Sandwiches



As the Fat grams increases the Calories goes up.

Therefore this graph has positive correlation.

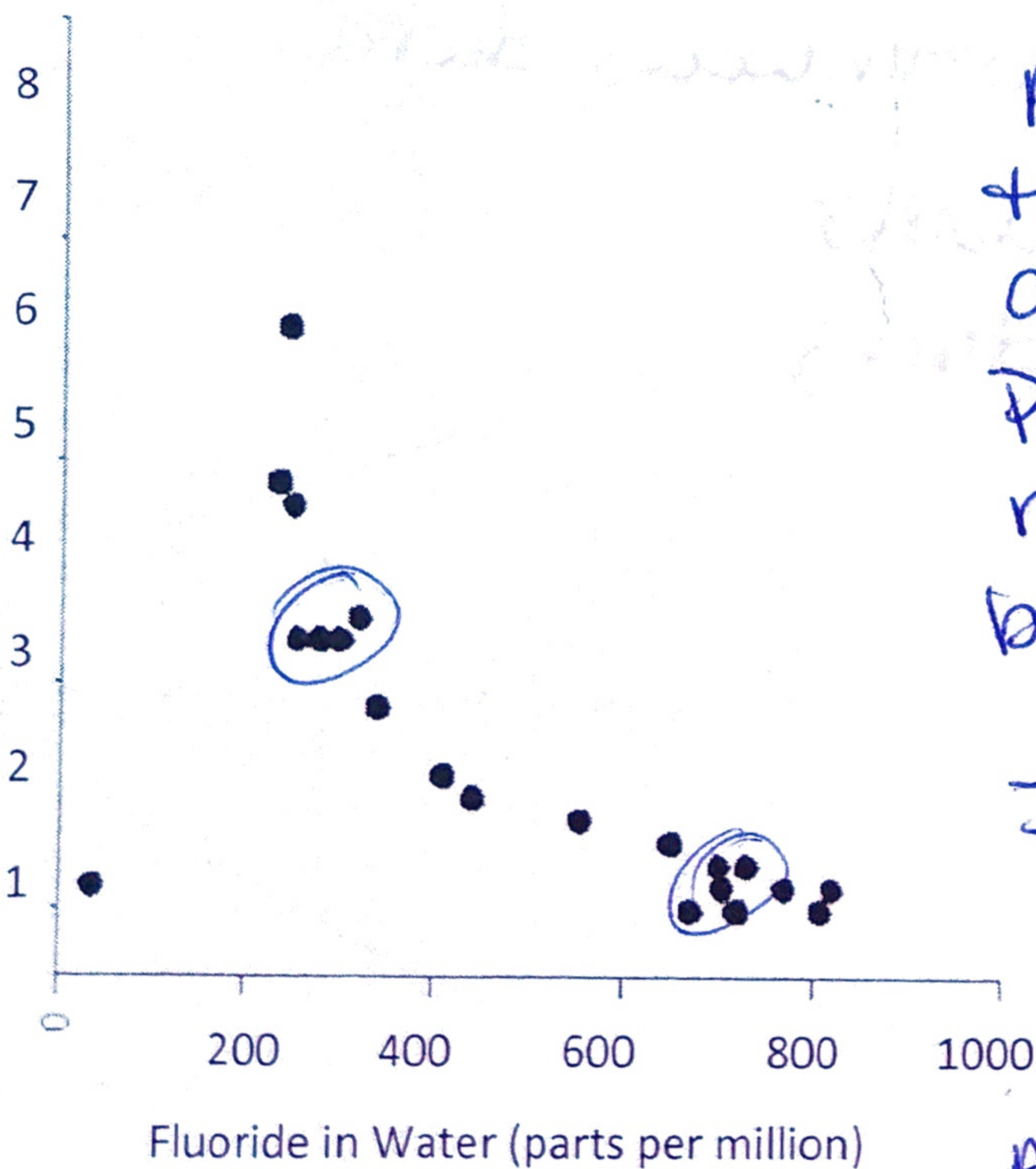
The positive correlation is of strong strength ($r \approx 0.95$) and it is linear because it is best modeled by a line.

This is a causal relationship.

The data is discrete (continuous).

Could argue that this is a cluster
No outliers

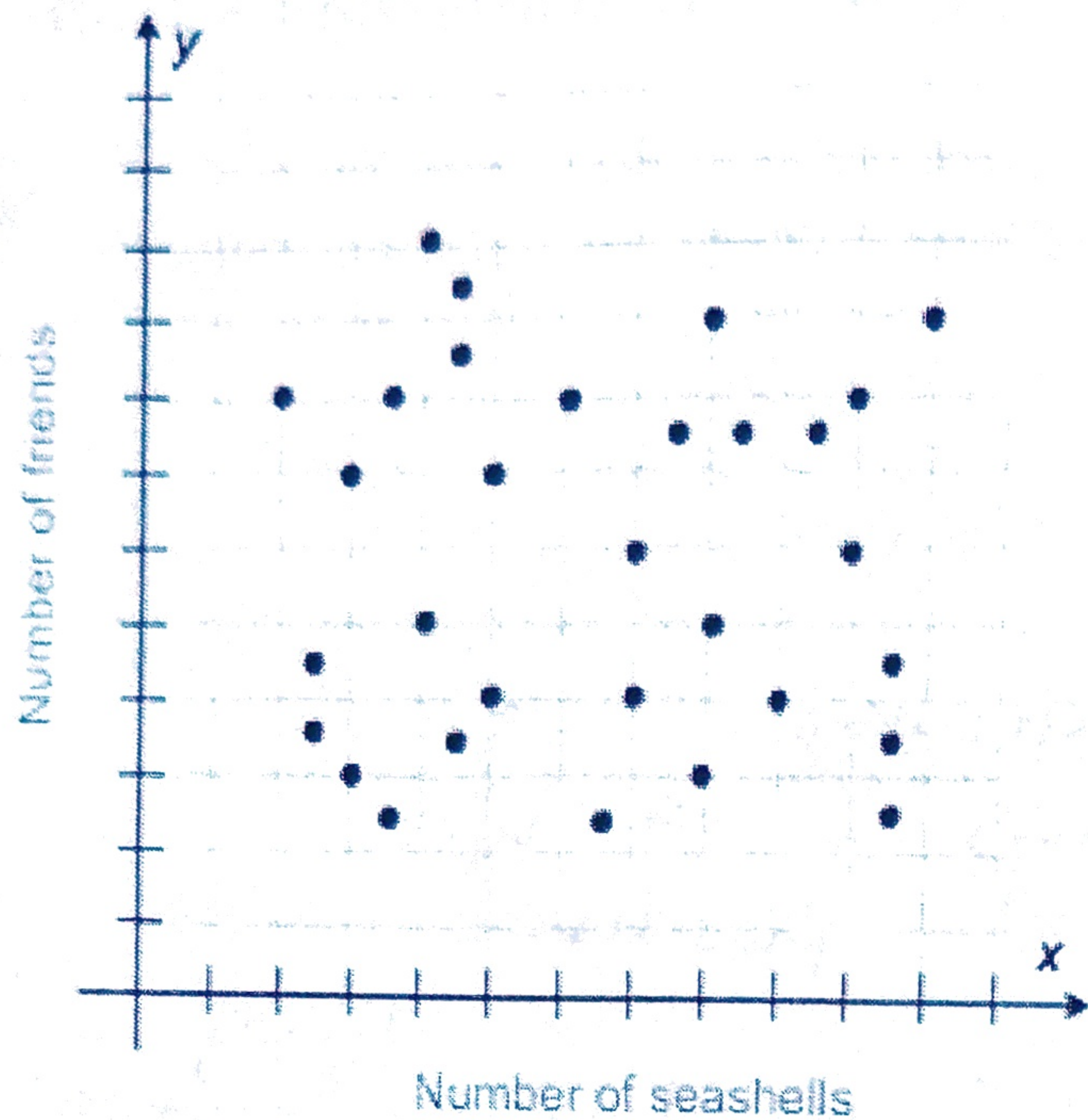
Cavities Per 100 Children



As the fluoride in water increases the cavities go down so this is a negative correlation. It is pretty strong ($r \approx -0.95$) & it is non-linear b/c it is best modeled by a curve.

It is most likely a causal relationship. The data is discrete.

Arguable clusters
outlier $\approx (10, 1.1)$

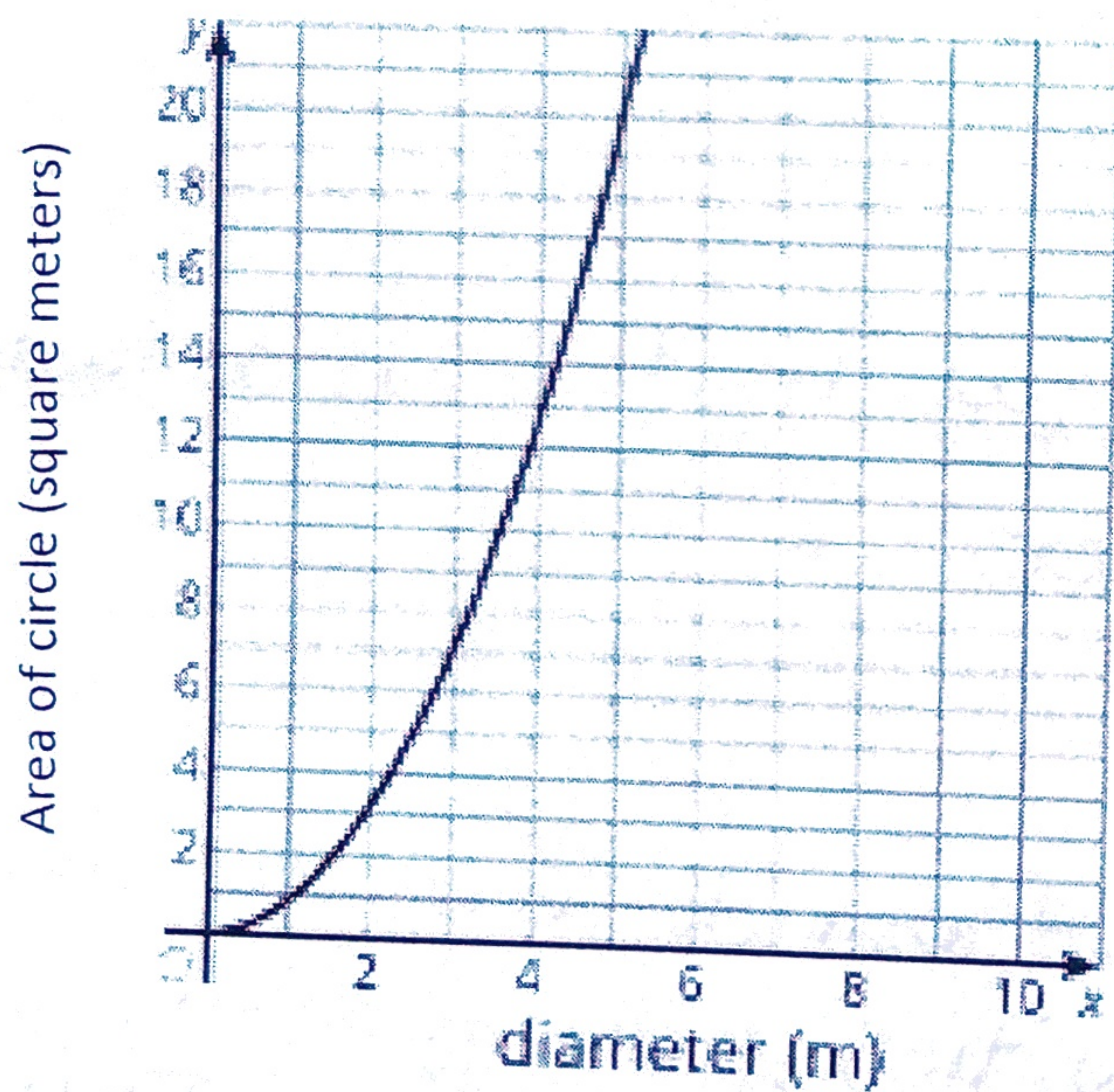


As the number of seashells increases, the # of friends is scattered all over. Therefore this has no correlation ($r=0$).

Discrete Data

No clusters

No outliers



As the diameter increases, the area goes up so this is a positive correlation. It is a perfect ($r=1$) non-linear curve.

This is a causal relationship of continuous data.

No clusters

No outliers