

2.2.2 Location, Location, Location

Through this activity your group will create a graph to convey information about the number of people in a location over time. You will also interpret a graph prepared by another group and try to determine a location that fits the graph. To prepare, think about a place you go with some regularity. How many people are in that place at various times during the day?

To maximize the interest level, each group must choose very different types of locations. It helps if the numbers of people who go to the place each day are large. Secrecy of choice is critical! Make sure other groups cannot overhear your group's discussions!

Complete the following with your group:

1. Choose a location and a day of the week to analyze. Get your teacher's approval before continuing (to assure that your group chose a unique location).

2. Estimate how many people are likely to be in the location at the beginning of each hour of the day, starting at 6 AM and ending at 5 AM the following day. Record the data.

3. Create a graph to accurately represent the data.

- Use the horizontal axis to indicate the hour of the day.
- Use the vertical axis to indicate the estimated number of people in the location at the beginning of each hour.
- Do not include any information on your graph that identifies the location your team is analyzing.

When you have accomplished the above, your teacher will share your graph with another group and provide another group's graph for your group to analyze.

4. For the new graph:

(a) Decide what location the graph likely represents.

(b) Explain to each other why the graph could represent the location you think it does.

(c) Write questions you have about the graph.

5. What features of graphs help you interpret them? What makes these features helpful?

6. Share the graph with the class when asked to do so. Ask questions to help you and others analyze the graph.

[Location, Location, Location](#) is adapted from Annenberg Learner, Teaching Math: A Video Library, 5-8, *The Location, online website*¹⁸, retrieved April 16, 2019.

