HOW ARE FINANCIAL SERVICES DISTRIBUTED? (FLOOR MAP DAY)

Overview
This lesson has two objectives. First, students explore and become familiarized with a map of New York City, paying particular attention to the location of the five boroughs. Second, we begin to address the idea of what constitutes “fair” and “equal” in the distribution of resources such as financial institutions like pawn shops and banks.

Introduction
We have been talking about pawn shops as an example of an AFI’s (remind them of what this is: check cashers, wire transfer, etc). Where are these pawn shops and other AFI’s?

Orientation to the NYC map
Goal: We want them to come away from this knowing where the 5 boroughs are and how to find the location of their school.
Note: Familiarize yourself with the plan below. However, be aware that it is likely that many of the explorations outlined will occur organically. Try to follow students’ lead.

• Setup: Lay out the table map in the middle of the room and have students gather around it.
• Finding the school: Start out with 1 marker on the location of the school. You may ask a student to figure this out and do this.
• Exploring the map:
  o Guided. Give group scavenger hunt locations
  o Open-ended. Give each student 3 markers (or write with marker). Ask them to put down a marker at 1-3 locations they are familiar with.
    Encourage them to find places both near and far from the school if they can.
• Questions to ask students during exploration:
  o What is this location?
  o How did you find it on the map?
  o Do you know in which borough it is located?
  o What do you know about the neighborhood? What is it like? Who lives there? What kinds of buildings, stores, etc. are there?
• Conclusion: NYC boroughs
  o Ask a volunteer to take the students on a walking tour outlining the NYC boroughs.

Distributing pawn shops
• Introduction
  o There are about 450 pawn shops in total in New York City. How many should each borough have?
Choose 5 students to each represent a borough. Have each student stand on the borough on the map.

- **Same number per borough.**
  If each borough had the same number of pawn shops, how many would be in each borough?
  - Have students figure this out
  - Hand each borough a sign that says “90 pawn shops”
  - Students might indicate that Manhattan should have more, etc. and press for explanations about this --- explain that we’re getting to exactly this issue!

- **In proportion to households**
  Now return to issue of more people: distribution of pawn shops proportional to households in each borough.
  - Let’s work with this spread of households. [Put placard with the number of households in each borough or have student hold it.] Let’s say that there were 100 households in these 5 boroughs. This is how those 100 households would be distributed:
    - Brooklyn 30
    - Bronx 15
    - Manhattan 25
    - Queens 25
    - Staten Island 5
  - Now, if we were distributing the 450 pawnshops so that every borough had the same number of households per pawnshop, how would we do this? The idea here is that we would distribute the 450 exactly in the way that the households are distributed. In other words, Brooklyn has 30% of the households, so if everything is even, it would have 30% of the pawnshops.
    - So Brooklyn, 30% of 450 (ONE WAY IS 0.03x450) would have 30+30+30+30+15, or 135 pawnshops.
    - Or 30/100 (450)
  - Continue with the other 4 boroughs.
    - Brooklyn 135
    - Bronx 67.5
    - Manhattan 112.5
    - Queens 112.5
    - Staten Island 22.5
  - Explain that this is how it would look if the households per pawnshop were EQUAL across all of the boroughs.
  - Questions: These numbers are not equal. Why not? What does it mean for there to be equal numbers of households per pawn shop? (This is a key idea!)
  - Actual
    - We figured out what the distribution of pawn shops would look like if there
were an equal number per borough (90 in each) and we figured it out if there were an equal number of households per pawnshop in every borough. Now let’s look at the actual numbers (show these on map with chips)

<table>
<thead>
<tr>
<th></th>
<th>Actual distribution</th>
<th>Equal by households</th>
<th>Equal per borough</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brooklyn</td>
<td>105</td>
<td>135</td>
<td>90</td>
</tr>
<tr>
<td>Bronx</td>
<td>112</td>
<td>67.5</td>
<td>90</td>
</tr>
<tr>
<td>Manhattan</td>
<td>154</td>
<td>112.5</td>
<td>90</td>
</tr>
<tr>
<td>Queens</td>
<td>59</td>
<td>112.5</td>
<td>90</td>
</tr>
<tr>
<td>Staten Island</td>
<td>11</td>
<td>22.5</td>
<td>90</td>
</tr>
</tbody>
</table>

441

- Brooklyn has fewer pawn shops than if we were dividing them up by households, but BRONX has nearly double the number! Manhattan has more, but you’d expect that. Queens and Staten Island, interestingly, has much less than its share. It seems that the Bronx and Brooklyn seem to have something interesting going on with the pawn shops.

Distribution of banks

- But wait a second! There are about 2000 banks in NYC. If we divided up the banks equally by borough, we would have 400 in each borough. But we already discussed that there are more households in some of the borough, so if we distributed the banks in proportion to the number of households, we would have:
  - Brooklyn: 30% (2000) = 600
  - Bronx: 15% (2000) = 300
  - Manhattan: 25% (2000) = 500
  - Queens: 25% (2000) = 500
  - Staten Island: 5% (2000) = 100

- Here is the actual distribution:
  - Brooklyn: 374
  - Bronx: 149
  - Manhattan: 960
  - Queens: 430
  - Staten Island: 139
  - (Total: 2052)

- Again, the Bronx number is way out of line with what we might expect. The other boroughs are closer.

Concluding Discussion

- We have more pawn shops per household in the Bronx AND less banks per household in the Bronx: why do you think this makes sense?
- Introduce notion of looking by NEIGHBORHOOD and that we’ll do this tomorrow
Exit Ticket
1. On the map below,
   a. Label the five boroughs (Bronx, Brooklyn, Manhattan, Staten Island, Queens)
   b. Mark and label the location of your school.
   c. Mark and label one more location that you recognize.

2. Write down 2-3 things that you’re curious to check into about your neighborhood and pawn shops.