

# What are the Characteristics of Your Neighborhood?

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## **Overview:**

Students will learn to use Arc View 3.1 to make a digital quad map and an aerial map of their neighborhood and school. They will then use these maps to understand spatial relationships.

## **Grade level:**

6th to 8th grade

## **Objectives:**

Students will be able to:

1. Draw a mental map of their school and neighborhood.
2. Use Arc View 3.1 to view an aerial and digital quad map of their school and surrounding neighborhood. 1 to 2 mile radius.
3. Find their school and home on said maps.
4. Find the distance of their house to specified landmarks i.e. churches, parks, etc. to each other and school.
5. Use map design to make their maps including title, compass rose, scale bar, legend, etc.
6. Graph distances to said landmarks from each other and school.

## **Connection to Curriculum:**

Geography, Science, Math, Technology

## **Connection to State Content Standards:**

Social Science Proficiency A- Know and Use Geographic Information.

Know and use geographic information, concepts, and skills to understand and analyze historical, social, economic, political, cultural, and environmental issues.

### A-1 Representation of Geographic Information:

Use, analyze, and design geographic representations to interpret and evaluate information and support conclusions.

### A-3 Analysis of Places and Regions:

Analyze interrelationships among the characteristics of places and physical, social, cultural, economic, or technological processes that shape them.

### **Connection to National Geography Standards:**

3. How to analyze the spatial organization of people, places, and environments on Earth's surface.
6. How culture and experience influence peoples' perception of places and regions.

### **Connection to Pass Proficiency:**

Geography Definition: Understand and use geographic skills and concepts to interpret contemporary and historical issues.

Pass Proficiency- Know and use geographic information, concepts, and skills to understand and analyze historical, social, economic, political, cultural, and environmental issues.

Benchmark- Read, interpret and prepare maps, charts, graphs, and other visual representations ( i.e. aerial and digital quad maps) to understand geographic spatial relationships.

### **Materials:**

1. Students individually drawn maps of school and neighborhood.
2. Ark View 3.1
3. Digital maps of your neighborhood school.
4. Aerial photo of your neighborhood and school.
5. Butcher paper large enough to draw maps of school and house with surrounding neighborhood.
6. Rulers and yardsticks.
7. Colored pencils or pens.
8. Pencils and notebook paper for notes.

### **Procedures:**

1. Each child will draw a mental map of their school and neighborhood including house, and selected landmarks i.e. grade school, churches, parks, major streets, corner markets, etc.
2. Using Arc View 3.1 in groups of 2 or 3 they will create a map of their school and neighborhood.

3. Groups will be determined by those living within a 5-block radius of each other.
4. Print aerial and quad maps of school and surrounding neighborhood.
5. Groups will compare mental with aerial and quad maps to find their house, neighborhood, and school to check for accuracy and detail.
6. Corrections and improvements will be made on mental maps
7. Using a ruler graphs will be made to measure distances 0-.25 from each other, school, and specified landmarks.
8. Students will share how data was compiled, what types of graphs were used and how their mental maps were corrected to be more accurate.
9. Data will be compiled and shared in oral presentations.
10. After all maps are completed they will then fit them together to see if they form their neighborhood.

**Assessment:**

1. Physical maps and drawings.
2. Graphing methods used and finished product showing information and representation of data.
3. Analysis of data and use of measuring distances using a ruler 0-.25 to see if finished maps form neighborhood.
4. Sharing of information as a group of how to fit maps together and what was done to make it happen.
5. Self and group evaluation of participation.
6. individual and group participation in expressing results of oral presentation.

**Extensions:**

1. Making a graph of how often trips are made to the corner markets and comparing them with others to see which are used the most.
2. Continuing on with other selected landmarks and compare.
3. Graph and compare how many students have gone to their neighborhood grade school and if they have younger family members still going.
4. How many go to the same church and how far it is to school and from their home.
5. If neighborhood maps do not fit how were they modified?