

Name _____
Astor Collegiate Academy

Date _____
Teachers: Ms. Feeney, Dr. Dave

Explain the Local Water Features As You See Them

Do Now: Get a computer, open Google Earth, zoom in to the school, then zoom out and pan around to answer the following questions, and paste the images when needed. Write captions to explain the images. At the end, mail the file to dr.daveastor@gmail.com

Location - (Where is this place?) Give the latitude and longitude, place name, or other ways to describe the general location with words.

a. **Conditions (Site)** - (What is at this place?)

When you find a significant local water feature, cut and paste an image here, then shrink its size to about 3 inches wide and write a caption to explain it.

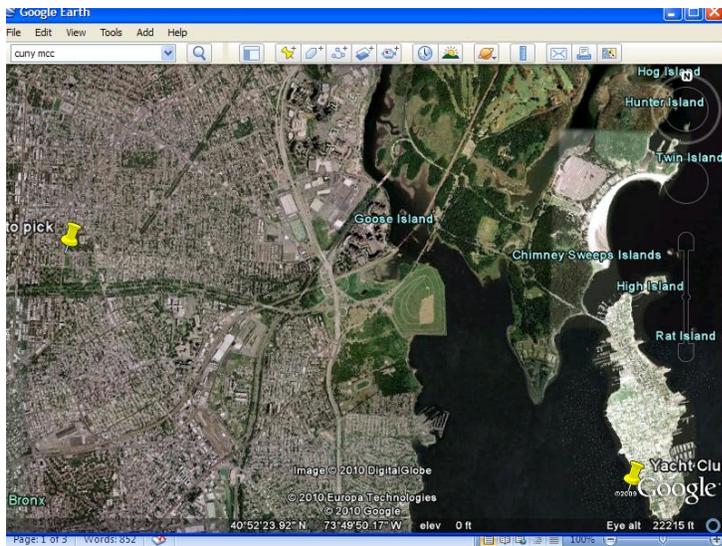


Figure1. Map shows Astor and my yacht club.

b. **Connections (Situation)** - (How is this place linked to other places?)

How far did you have to go to find a river? A bay? An ocean? Use the measure tool to find out. Cut and paste an image of all three, shrink its size to about 3 inches wide and write a caption to explain the connections between them. Consider using the elevation of each to help explain.

Aspects of Spatial Thinking

1. **Comparison** - (How are places similar or different? How can we compare them fairly?)

Find another place with rivers, bays and oceans. Cut and paste an image and shrink its size to about 3 inches wide. Write a caption to explain how it compares to the image above.

2. **Aura (Influence)** - (What effect(s) does a feature have on nearby areas?)

Can you see how rivers, bays, or oceans have affected the surrounding human habitat? Cut and paste an image, shrink its size to about 3 inches wide and write a caption to its aura.

3. **Region** - (What nearby places are similar to each other and can be grouped together?)

Consider the area around the school and see what areas can be grouped together because they look like they are similar enough to consider as a whole. Use the polygon tool to draw an outline around the similar areas. Cut and paste an image, shrink its size to about 3 inches wide and write a caption to explain the regions.

4. **Hierarchy** - (Where does this place fit in a hierarchy of nested areas?)

What would you consider as upstream from Astor? Downstream? Cut and paste an image, shrink its size to about 3 inches wide and write a caption to what is upstream and downstream from Astor.

5. **Transition** - (Is the change between places abrupt, gradual, or irregular?)

When you pan away from Astor to surrounding areas, is there a gradual or abrupt change in what you see? Try to find an example of this transition. Cut and paste an image and shrink its size to about 3 inches wide and write a caption the type of change you see.

6. **Analog** - (What distant places have similar situations and therefore may have similar conditions?)

Is there another major coastal city like New York? What makes it similar? Cut and paste an image and shrink its size to about 3 inches wide and write a caption to explain how it is similar to NYC.

7. **Pattern** - (Are there clusters, strings, rings, waves, or other non-random arrangements of features?)

Is there something in the images of your hometown that seem like they are in a pattern? Cut and paste an image, shrink its size to about 3 inches wide and write a caption to explain it.

8. Association (Correlation) - Do features tend to occur together (have similar spatial patterns)? Are there key components to your hometown that have to be in place for its to exist? If so, cut and paste an image, shrink its size to about 3 inches wide and write a caption to explain it.

Spatio-Temporal Thinking - (How do features change through time?)

9. Change in conditions (e.g. climate, military control, land use, etc) at a place over time. See if your hometown area has old imagery available for it. If so, create a before and after image for that area. Cut and paste those images, shrink their size to about 3 inches wide and write a caption to explain them.

10. Movement of something (e.g. train, hurricane, political border, ec.) over time. Do things move in your hometown? What and why? If it shows up in your imagery, cut and paste an image and shrink its size to about 3 inches wide. Write a caption to explain it.

11. Expansion or Contraction of something (e.g., disease, urban area, rumor, etc.) over time. Is there something about your hometown that is getting bigger or smaller? If so, cut and paste an image, shrink its size to about 3 inches wide. Write a caption to explain it.

12. Exceptions - Where are places that do not seem to follow an observed "rule"? Is there anything that looks like it doesn't belong in your hometown? if so, cut and paste an image and shrink its size to about 3 inches wide. Write a caption to explain it.