

Name: _____

Date: _____ Period: _____

Measuring the Earth

The Physical Setting: Earth Science

Lab Activity: Quadrangle Maps

INTRODUCTION:

In previous exercises you have studied latitude, longitude, compass direction, the field quantity of elevation and horizontal distance scales. In addition, topographic maps show many natural and cultural features.

Back in the late 1980's, the United States Geologic Survey completed mapping the entire country on maps called Quadrangle Maps. The most common was the 7.5-minute series which helped subdivide latitude and longitude into a smaller scale and covers only 49 to 71 square miles.

OBJECTIVE:

Using the Bay Shore East Quadrangle Map you will be able to apply your knowledge of contour mapping to interpret actual topographic maps.

VOCABULARY:

Cultural Features -

Natural Features -

Quadrangle -

Elevation -

7.5-Minute Series -

Gradient -

PROCEDURE:

Using the Bay Shore East Quadrangle Map, answer the following questions onto the report sheet.

Lab Activity: Quadrangle Maps

QUESTIONS:

1. What is the scale for the Bayshore East Quadrangle?
2. According to the bottom of this map, in what three units can you measure distance?
3. How many miles from north to south does this map cover?
4. How many miles from east to west does this map cover?
5. Traveling from Ocean Beach to Heckscher State Park, what compass direction are you heading?
6. What does the "purple tint" indicate on the Bayshore East Quadrangle?
7. What year was this map last "photorevised"?
8. What is the contour interval for this map?
9. Record the latitude and longitude of the northwest corner of the quadrangle map.
10. What is the name of the quadrangle map that would be east of the Bayshore East Quadrangle?
11. What is the elevation of East Islip High School?
12. What color are contour lines on a 7.5 Minute Series quadrangle map?
13. What is the distance from the corner of Montauk Highway and Carlton Ave to the Public Library?
14. What is the greatest water depth in the West Channel?
15. What direction is Champlin Creek flowing and what evidence supports your answer?