

NAME \_\_\_\_\_

PERIOD \_\_\_\_\_



# LANDSCAPES OF NEW YORK STATE

## **INTRODUCTION**

Landscape forms result from the interaction of uplifting forces raising the land and erosional forces wearing it down. Different landscapes form in different regions due to many factors. The most important factors are the climate of a region, the surface area of exposed rocks, and the different composition (and therefore hardness) of bedrock.

## **MATERIALS**

colored pencils                      NYS area elevation map                      NYS watersheds map  
*Earth Science Reference Tables*

## **THE PROCEDURE**

### **A. Area Elevation**

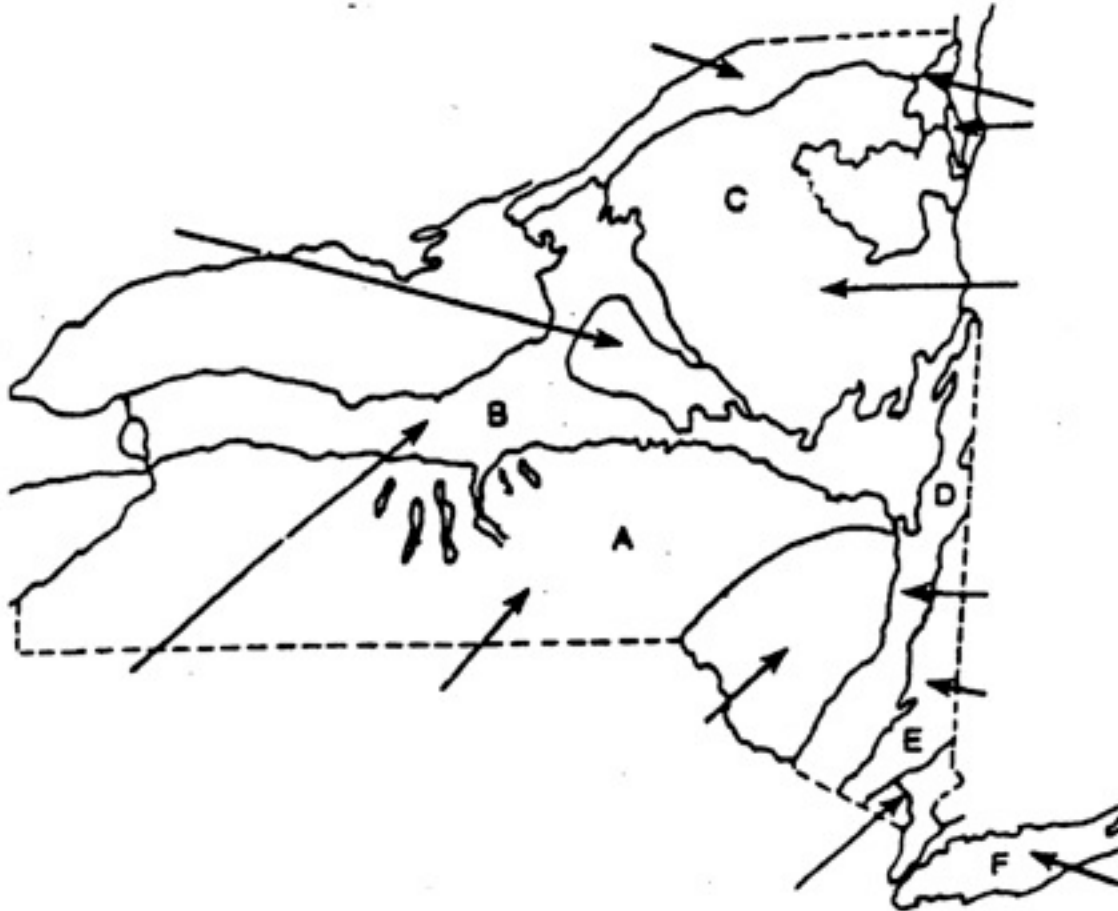
Compare Map 1 (p. 2 of this lab) to the Generalized Landscape Region map (p. 2) and the Generalized Bedrock Geology map (p. 3) in the *Earth Science Reference Tables*.

1. On Map 1 (on page 2), label each area as either high elevation, middle elevation, or low elevation. Lightly shade each area using the following color key:

High elevation	--	<b>red</b>
Middle elevation	--	<b>yellow</b>
Low elevation	--	<b>blue</b>

2. On Map 1 on the next page, write in the name of each landscape region in the correct location.

## MAP 1: AREA ELEVATION



### **B. Surface Drainage Systems**

In addition to elevation, the patterns of water drainage on a land surface play an important role in landscape formation. Map 2 (below) shows some of the rivers, streams, and lakes in New York State.

1. Refer to the Generalized Bedrock Geology map (p. 3) in the *Earth Science Reference Tables* to find and label the following water features on Map 2. **Use a blue pencil** to trace over and highlight each feature.

- |                       |                      |                   |
|-----------------------|----------------------|-------------------|
| a. Susquehanna River  | e. Niagara River     | i. Atlantic Ocean |
| b. Hudson River       | f. Lake Erie         | j. Lake Champlain |
| c. St. Lawrence River | g. the Finger Lakes  |                   |
| d. Lake Ontario       | h. Long Island Sound |                   |

## MAP 2: WATERSHEDS



2. The area inside the dotted lines represents a watershed or drainage basin. Lightly shade each watershed using a different color for each one.

3. What major river system is in Watershed A? \_\_\_\_\_

4. What major river system is in Watershed B? \_\_\_\_\_

5. Watershed C drains into what body of water? \_\_\_\_\_

6. Watershed D drains into what body of water? \_\_\_\_\_

7. Watershed E drains into what body of water? \_\_\_\_\_

8. Watershed F drains into what body of water? \_\_\_\_\_

**C. Geographic Areas and Bedrock Geology**

Compare the Generalized Bedrock Geology map (p. 3) in the *Earth Science Reference Tables* with your completed Map 1, and answer the following questions

1. In the area of high elevation, what is the bedrock type and age? (By age, we mean the geologic period in which it was formed.)
2. In the low coastal plain region (Area F) describe the bedrock in terms of type and age.
3. Area A includes the Catskill Mountains (a plateau dissected by streams, which gives the appearance of being mountains). Describe the bedrock in terms of type and age.
4. Describe the Lake Area Lowland (Area B) in terms of rock type and age.
5. Describe Area D in terms of rock type and age.
6. Describe Area E in terms of rock type and age.

**QUESTIONS**

1. **Name** all of the landscape regions of high, medium, and low elevation in New York State.

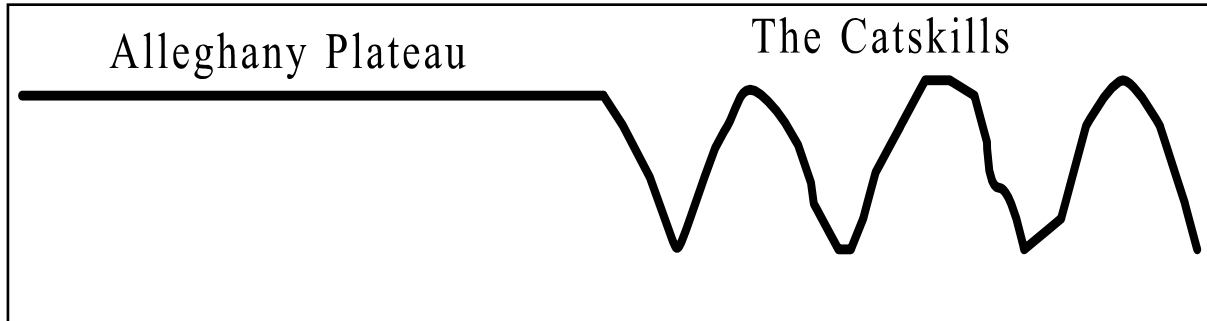
**High**

**Medium**

**Low**

2. Which regions show evidence that crustal uplift was dominant over erosional forces in the past?

3. Using the information in this lab and the cross-section shown below, explain why the Catskill Mountains are not really considered to be



mountains.

4. How many major drainage systems are there in New York State?

5. In which drainage system is your school located?

6. What caused the development of the different drainage systems in New York State?

7. In which landscape region of New York State is the most resistant bedrock found? How do you know the bedrock is so hard?

**CONCLUSION:** List the factors that result in the formation of landscapes?  
(Be sure to list **ALL** the factors that result in the formation of landscapes!)

