

Name _____ Date _____
Letchworth State Park

Letchworth State Park, renowned as the "Grand Canyon of the East," is one of the most scenically magnificent areas in the eastern U.S. The Genesee River roars through the gorge over three major waterfalls between cliffs--as high as 600 feet in some places--surrounded by lush forests. (NYS Parks website)

Warning: Be careful when walking near steep slopes. Do not go near the water! You can be very seriously injured or killed if you fall. Do not engage in horseplay (don't goof around).

On the way there...

What landscape region is Hilton located in?

What general category of rock is under Hilton?

What four specific rock types are found under Hilton?

How old are the rocks under Hilton?

Era: _____ Period: _____ Epoch:

Millions of years: _____

About 40 minutes into the ride, what is the road is generally doing? (going up or down)

What landscape region are we driving into?

About an hour into the ride there is a pile of white rock on the left hand side of 390. What kind of rock is this and what is it used for?

Are we there yet? (yes / no)

First stop (Where's the dam tour?)

What is the name of this dam?

What is the dam's purpose?

What year did the dam save Rochester?

How old is the dam?

What river is the dam blocking?

How tall is the dam?

What made the valley that the dam is in?

If you look upstream you will see a cable that floats to catch trees that float on down the river. Do you see it? (yes / no) If you answered yes: cool, huh? (yes / no)

Second stop (Middle Falls)

You are now located at about the “G” in the word Genesee on the Generalized Bedrock Geology of New York State Map. Using the map, how many kilometers away from Hilton are you?

Using the map, how many miles away from Hilton are you?

To the nearest tenth of a degree, state the latitude and longitude of the “G” in the word Genesee on page 3 of the ESRT.

Why is there a waterfall here?

What factors increase the rate of erosion?

What factors decrease the rate of erosion?

Make three observations at start of hike our hike.

What category of rock are the walls of the canyon composed of?

How is this rock created (pg. 6 ESRT)?

What is the grain size of shale?

Sketch the valley as you look downstream



Second stop, continued...

Describe how humans have affected this area.

Estimate the amount of water (in gallons per minute) flowing over the falls.

How old are the rocks you are looking at?

Era: _____ Period: _____ Epoch: _____

Millions of years: _____

What geologic Period could rocks 1000 feet under the falls be?

Where was North America located when the rocks were created (pg. 9 ESRT).

What river flows through Letchworth?

What direction is the river flowing?

What do you think created the gorge you are looking at?

Where are the oldest rocks found in the wall you are looking at?

What living things do you see?

What clouds do you see?

For 1000 imaginary extra-credit points, who was Mary Jemison and what is her significance?

Third stop (Archery Field)

What do you see?

Where does the water move faster?

What must the topography (surface) of the land be like to allow a river to meander?

Fourth stop (AT WATER LEVEL) St. Helena Area

As you walk down to water level, what landscape feature are you walking on?

Estimate how much water is flowing past you in gallons per minute.

Draw a picture of a rock that you see in the water. Why does it look like this?



Look across the river at the rocks on the other side. How thick is the soil on top of the rocks?

Look downstream. Which side is flowing faster? (left / right) The faster side is on the (inside / outside) of the meander.

Write some observations about the plants on the side you are standing on.

Now look on the other side of the river and make some observations about the plants there. Why are they different?

Ready for an 80 minute ride home? ___ Me neither. How will our elevation change as we drive back to Hilton?

General Questions

How will the altitude of the noon sun be different tomorrow than it is today?

How will the length of the noon shadow of a tree in NYS change in the next week?

There were several Native American Indian settlements in the Letchworth area up until the late 1700s. **Mary Jemison** (1743–1833) was an American frontierswoman and an adopted Seneca Indian. What benefits were there for the Native Americans to settle here?

What were some disadvantages to settling at Letchworth?

Directions to Letchworth State Park

Along the Genesee River, 35 miles south of Rochester. Exit 7 Interstate 390- follow the signs.

Contact Information:

1 Letchworth State Park
Castile, NY 14427

Phone:
(585) 493-3600

Useful links:

- <http://nysparks.state.ny.us/parks/info.asp?parkID=12> – NYS Parks site
- <http://www.letchworthparkhistory.com/sehga.html> -park history
- <http://www.letchworthparkhistory.com/councilgr.html> - Council Grounds information

The [My Place in the Finger Lakes](#) project will utilize the Finger Lakes environment (built, natural, urban, suburban and rural) as part of the learning experience and incorporate inquiry and firsthand experiences into curriculum modules following the New York State Math Science and Technology Standards.

This curriculum will give students the chance to learn more about the Finger Lakes region: the history, geography, geology and ecology. One of the goals of this curriculum is to enhance opportunities to provide students with a context for learning science and keep them interested in the sciences as they progress through the higher grade levels.

McDowell- Hilton High School
My Place in the Finger Lakes