

Station #4 SAVING FIRE ISLAND LIGHTHOUSE

Aim: Students will

- Research the history of the lighthouse
- Draw the lighthouse in cross-section, indicating its functional parts
- Describe a Fresnel lens, explain its function
- Calculate the height of the lighthouse from the length of its shadow
- Relate one story about a real lighthouse keeper at F.I. light
- Build a vocabulary list.

Materials:

1. Selected reading materials
2. Art supplies necessary to create the lighthouse diagram
3. Overhead projector

Protocols:

Note: Students will benefit most from a visit to a lighthouse. The library will also provide books for background materials, as well as having student do a web search, making a list of lighthouses, and then visiting the web sties of two or three of the lighthouses.

- 1.) Using a “jigsaw” cooperative learning model, give students in each group a partial history of Fire Island Lighthouse or the lighthouse of your choice. Excerpts can be made from the material researched. Have each student read and learn the material they have been given, and share what they have digested with the rest of the group. Encourage students to be creative in their sharing strategies. Use notes, diagrams, pictures, and readings of short excerpts.
- 2.) The Book Discussion Group
Using a book of your choice about life in and around lighthouses, create a reading circle and book discussion group with your cooperative learning groups. Two books I recommend dealing with the U.S. Life Saving Service are:

Storms, Ships and Surfmen ISBN 0-915992-18-3, and
Surfmen and Life Savers ISBN 0-87155-117-9.

Suggested Questions:

- Why did they need a life saving service if they had lighthouse?
- Can you explain how the surfmen used their equipment to save lives?
- What do you think of the life of the surfmen?
- How many persons were assisted by the surfmen?
- What happened to the surfmen when the U.S. Coast Guard was formed?
- Please relate your favorite story from the book?
- What characteristics do you think a light house keeper should have?
- What about a surfman?
- What do you think the lives of the families of either keepers or surfmen were like?
- Explain what you would do if you had the job of either a keeper or a surfman.

3.) Prepare a handout of a longitudinal section of F.I.

Lighthouse, or one of your choice.

a.) Have students break into groups.

b.) Assign each group a light house feature.

c.) Using a SMARTBOARD or overhead projector, have a spokesperson from each group explain their feature.

d.) Students can then complete their lighthouse diagram.

e.) Use these websites to investigate the lenses used by lighthouses in the past.

.science.howstuffworks.com/question244.htm,

www.michiganlights.com/fresnel.htm.

4.) Have students share their favorite lighthouse story with the class, write the story with illustrations, or make an historic journal.

www.nps.gov/fiis/index.htm

www.loving-long-island.com/fire-island-lighthouse.html

www.lighthousefriends.com/light.asp?ID=390