

Challenge Title Be a Scientist		
Authors: Suzanne Brosseau Petrova Elementary School	Content area: Science	Grade level: 4
Standards / Knowledge or Skills addressed: Tour of Saranac Lake as we walk to the Saranac Laboratory Parts of a microscope, using a microscope, viewing an x-ray		
Investigative Question: (needs to be a specific question that will guide and focus students throughout the activity) Lab Centers: What are the parts of a microscope? (Lab worksheet) How can you identify disease using a microscope? (Lab worksheet) Which x-ray shows disease? (Lab worksheet)		
Challenge: (Defines what the students will do – ex: write a lab report, create a brochure, prepare a debate...) Compete a three part lab report.		
Context and prior knowledge: History of E.L. Trudeau View and use a microscope		
Materials: (List resources needed, student handouts necessary, lab supplies...) Chart labeling parts of a microscope Lung plates - one healthy, one with TB 7 - slides with healthy cells, 7 - slides with diseased cells 3 part lab report for each student		
Directions for Students: (attach all handouts and worksheets needed to complete the challenge) Day 1 - Prior to departing for trip explain to students the 3 part lab report. Explain each aspect and that they will be working independently in 2 parts, and in group for 1 part. Each student will be responsible for their own lab report. Explain rubric and point system.		

Day 2 - Take Saranac Lake Historical Society Tour while walking to the Saranac Laboratory.

Once at the lab break students into three working groups.

Scientists Group 1

Parts of a Microscope.

Scientists Group 2

Use a Microscope to view diseased and healthy tissue.

Scientists Group 3

View lung plates as a group.

Day 3 -

Discuss findings of lab reports.

