Lab 1: Launching an Expedition

Name:__________________________________________

Part 1: What is Dendrochronology

What types of trees are best to use in research?

Stop and Think

1.1. What types of trees are the most useful for tree-ring research?

1.2. Why are trees grown in landscaped areas not useful to study past climate conditions?

1.3. What governs the rate of tree growth at high altitudes?

Stop and Think

1.4 Why is one part of each tree ring light in color and the other part dark in color?
1.5 What factors did Dr. Davi consider in choosing a good tree to core at her location in the woods?

1.6 What instruments did you see in your tour of the Lamont Tree Ring Lab?

1.7 What kinds of specimens did you see in the core room? What were some of the locations the tree-ring core samples were collected from?

**Part 2 - The Life of a Tree-ring Scientist**

**Stop and Think**

2.1 What are the best parts of being a scientist as described by Dr. Cook and Dr. D'Arrigo?

2.2 What are some of the challenging aspects of being a scientist as described by Dr. Cook and Dr. D'Arrigo?
2.3 What drives Dr. D'Arrigo as a scientist?

2.4 What advice do Dr. D'Arrigo and Dr. Cook have for students who are thinking about a career in science?

Explore Research Sites

Stop and Think

2.5 Give a brief description of each of the four sites.

2.6 What types of trees are seen at each site? (e.g., hardwoods, firs, pines)?

2.7 What difficulties might you encounter at each site assuming you would need to spend two full weeks in the field?

Stop and Think

2.8 Briefly describe some of the major goals of the NSF research division that you selected.
2.9 Briefly describe the project described in the news article you selected.

Part 3 – Heading Up an Expedition

3.

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<th>Name of site</th>
<th>Investigator</th>
<th>Latitude</th>
<th>Longitude</th>
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4. List answers to science mission details here.

6. Place your summary of the paper you chose here.

Title:

Summary:
Stop and Think

3.1 How close is the nearest tree ring research site from where you live?

3.2 Describe one of the research projects you found near your community.

3.3. Why do you think it is important to do a search of the literature before you embark on a research effort?