

# Everest Fall 2009

As a group of people interested in climbing Everest, develop an educational program focused on cultural awareness and the physiological risks involved.

Science Labs: Gas Laws  
Acid/Base/Buffers  
Blood Chemistry  
Oximeter  
Boiling @ Altitude

Develop a multimedia presentation where you take the audience along with you up Everest physiologically and culturally and present to prospective clients on September 10.

Write a letter in response to the Sherpa orphan's letter (pg. 371-2, *Into Thin Air*) answering to the part you will be playing in the commercialization of Sagarmatha.

Literature: *Into Thin Air* by Jon Krakauer  
*Sky Burial* by Xinran Xue  
*The Climb* by Anatoli Boukreev  
& Weston DeWalt  
National Geographic Articles on  
Hillary & Messner

## Language Arts

Reading  
Writing  
Speaking and Listening

## Science

Physiology at altitude 1  
Blood chemistry 1  
pH, hemoglobin, oxygen  
levels, hypothermia,  
acclimatization 3  
Protein 1  
Metabolism 1  
Labs 2

## Social Studies

Sherpa culture  
Geography  
China, Nepal, Tibet  
Impact of commercialism on  
the third world

## Everest Standards 2009-2010

### Social Studies

#### Culture/Cultural Diversity (2)

How various cultures influences impact society

#### People, Places, Environment (5)

Analyze physical characteristics of earth & how humans interact

### Science

#### Concepts and Processes (1)

The Cell

Chemical Reactions

Acids & Bases

Structure & Properties of Matter

Gas Laws

Periodic Table

#### Inquiry (2)

Research

Communicate

Investigate relationships

Using scientific equipment

Science and technology

### Language Arts

#### Reading (1)

Understanding of literary text

Man vs. nature

Predictions

Variety of sources

Understanding of information

#### Writing (2)

Writing with audience in mind

Voice

Organization/Focus

#### Speaking and Listening (3)

Presentation

Use of details to support ideas

Group discussion

Consideration of other's ideas

Constructive criticism

Lead, participate, moderate

How do buffers in the blood effect pH?

How does the body try to sustain homeostasis in the blood?

How does atmospheric pressure effect the body?

What is the historical context of the opening of Nepal?

What has been the impact on the economy and culture of that region?