

RESOURCE LIBRARY LESSON

Summits with a View

Students develop an understanding of the term peakbaggers and map the peaks of the Seven Summits. They then consider three different reasons for mountaineering: exploration, recreation, or vocation. This lesson is part of the <u>Mount Everest: What Goes Up Should Come</u> <u>Down</u> unit.

GRADES

6 - 8

SUBJECTS

Conservation, English Language Arts, Geography, Physical Geography, Social Studies, Economics

CONTENTS

2 Activities

In collaboration with

edu**curious**

ACTIVITY 1: DANGER VERSUS DESIRE: THE INSPIRATIONAL POWER OF THE PEAKS I 45 MINS

DIRECTIONS

<u>Mount Everest: What Goes Up Should Come Down</u> Unit Driving Question: How can we enjoy and explore unique natural areas while still protecting our environment?

Summits with a View Lesson Driving Question: Why do people want to climb Mount Everest?

1. Engage students by watching a <u>video</u> that captures the emotions of reaching Kilimanjaro's summit.

- Begin with the still shot at the start of the video, <u>Kilimanjaro The Summit</u>. Have students look for clues in the image to determine where the video takes place and confirm the correct answer (Tanzania, Africa). Have students find Tanzania, Africa, on a world map.
- Then have students watch the <u>video</u> from the 2:36 minute mark until the end.
- Ask students: What is happening in this video? What details do you notice? What seems both challenging or enjoyable about the experiences these people are having?

2. Using an image of the Seven Summits, discuss what inspires people to climb these mountains.

- Show students this image of the <u>Seven Summits</u> and explain why there are eight images in the collection. Explain that one of the peaks known as Puncak Jaya, also known as Carstensz Pyramid, was not originally one of the Seven Summits because it is politically part of Indonesia, which is part of the Asian continent. Therefore, it would not be the highest peak in Asia because Mount Everest is much taller. However, being in New Guinea, it is also considered part of Oceania, so peakbaggers now traditionally identify Puncak Jaya to be the highest point in Oceania, and Mount Kosciuszko to be the highest peak in Australia.
- Ask students: Why would someone want to risk their lives in order to reach the top of these mountains?
- Consider showing images from the summits, in addition to the summits themselves, to inspire more responses. Possible images include:
 - <u>Cerro Aconcagua</u>
 - <u>Denali</u>
 - <u>Puncak Jaya</u>
- As a class, discuss student's responses and document big ideas on a surface that can remain visible throughout the activity, such as chart paper or a whiteboard.

3. Students learn about two mountaineers, Patrick Morrow and Kit DesLauriers, and learn what the term peakbagger means in terms of mountaineering.

- As a class, read the article May 7, 1986 CE: Mountaineer Reaches All 'Seven Summits.'
- Explain the term peakbagger to students:

<u>Peakbagger</u> (n): A mountain climber whose principal goal is the attainment of a summit, or a specific set of summits.

- Emphasize that Patrick Morrow would be an example of a peakbagger because he attained all eight of the highest peaks on each continent, which is a specific set of summits.
- Next, have students watch the video <u>Surviving the Seven Summits</u> about Kit DesLauriers and her preparations to climb and ski the Seven Summits.
- As a class, add new reasons to the collective list of what inspires a person to keep trying to reach dangerous summits even after repeated failures.

4. In groups, students research one of the eight summits to begin the jigsaw portion of this activity.

- With students in groups, distribute the materials needed to have each group create their tabletop <u>map of the world</u>, a copy of the <u>Peakbagging Cards</u>, and the appropriate peak article to each student. For example, one group should read about Kilimanjaro, which means that each student in that group receives the Kilimanjaro article.
- Have students closely read the article about their peak and complete the information card for their summit. Have students cut out their peak card and glue it to the map with the edge of their card on the site of their summit.
 - <u>Kilimanjaro</u>
 - <u>Denali</u>
 - <u>Cerro Aconcagua</u>
 - <u>El'brus</u>
 - <u>Puncak Jaya</u>
 - <u>Mount Vinson</u>
 - <u>Mount Everest</u>
 - <u>Mount Kosciuszko</u>
- Remind students that they should be prepared to share their information with other peak experts for the next activity in this unit, <u>Mountaineering as Exploration, Recreation, and</u> <u>Vocation</u>.

Modification

Step 2: Challenge students to research independently to discover how there could be different interpretations of concrete, measurable data, such as the highest mountain peak on a continent.

Modification

Step 4: Challenge students to research the answers to the questions on the mapping activity themselves, rather than providing the articles, citing the sources they have used.

Modification

Step 4: Divide students into four groups, rather than eight, and have each group become experts on two summits.

Tip

Step 4: Wrap up the class with a final discussion. Ask students if they have any new ideas to add to the question: Why would someone want to risk their lives in order to reach the top of these mountains?

Tip

Step 4: Pre-determine heterogeneous groups for the jigsaw activity to maximize productivity. Wrap up the class with a final discussion. Ask students if they have any new ideas to add to the question: What might inspire someone to risk their lives to reach the top of these peaks?

Informal Assessment

Prior to the next activity, <u>Mountaineering as Exploration, Recreation, and Vocation</u>, review students' expert peak information on the peakbagging card that they completed to assess whether the information was mapped appropriately and if this information is accurate based on the articles that were provided.

Extending the Learning

ELA Extension: Expository/Informational Writing—Have students choose one of the Seven Summits and complete additional research about the summit in order to present an informational presentation, including written information and a visual element. Have students practice evaluating sources for credibility and cite text evidence within their essays.

Math Extension: Have students use researched information about the Seven Summits in order to create a graph that compares the number of people who reached each summit and the elevation of the peaks to see if there is a correlation.

OBJECTIVES

Subjects & Disciplines

- English Language Arts
 Geography
 - <u>Physical Geography</u>
 - **Social Studies**

Learning Objectives

Students will:

• Understand that peakbaggers are individuals who are drawn to mountaineering for the purpose of summiting many difficult mountains as a collection of accomplishments.

Teaching Approach

• Project-based learning

Teaching Methods

- Discussions
- Jigsaw
- Multimedia instruction

Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
 - Information, Media, and Technology Skills
 - Information Literacy
- 21st Century Themes
 - Global Awareness
- Geographic Skills
 - Acquiring Geographic Information

National Standards, Principles, and Practices

COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

• <u>CCSS.ELA-LITERACY.RI.6.7</u>:

Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

• Writing Standards 6-8:

Text Types and Purposes, WHST.6-8.1B.

THE COLLEGE, CAREER & CIVIC LIFE (C3) FRAMEWORK FOR SOCIAL STUDIES STATE STANDARDS

• <u>D2.Geo.2.6-8</u>:

Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions, and changes in their environmental characteristics.

Preparation

BACKGROUND & VOCABULARY

Background Information

There are several definitions of the Seven Summits that include different summits based on definitions of continental boundaries and whether Oceania/Australia is one continent versus two. The two most common lists were developed by mountaineers Dick Bass and Reinhold Messner. Bass' list included Australia's Mount Kosciuszko and was based on continental outlines. Messner's definition replaces Mount Kosciuszko with Puncak Jaya, the highest peak in Indonesia as the highest peak in the combined continent of Australia/Oceania. While Reinhold Messner developed this list, Patrick Morrow was the first to successfully summit all of the mountains in 1986.

Prior Knowledge

Recommended Prior Activities

• None

Vocabulary

Term	Part o	of Definition			
	Speec				
altitude	noun	the distance above sea level.			
continent	noun	one of the seven main land masses on Earth.			
elevation	noun	height above or below sea level.			
mapping	noun	making and using maps.			
mountaineer noun		someone who climbs mountains.			
Mount Everest	noun	highest spot on Earth, approximately 8,850 meters (29,035 feet). Mount			
		Everest is part of the Himalaya and straddles the border of Nepal and			
		China.			
Oceania	noun	region including island groups in the South Pacific.			
peak	noun	the very top.			
peakbagge	r noun	mountain climber whose principal goal is the attainment of a summit, or			
p		specific set of summits that meet certain criteria of altitude of prominence.			
summit	verb	to reach the highest point of a mountain.			
summit	noun	highest point of a mountain.			
ACTIVITY 2: MOUNTAINEERING AS					
EXPLORATION, RECREATION, AND VOCATION					
I 1 HR 40 MINS					

DIRECTIONS

<u>Mount Everest: What Goes Up Should Come Down</u> Unit Driving Question: How can we enjoy and explore unique natural areas while still protecting our environment?

<u>Summits with a View Lesson Driving Question: Why do people want to climb Mount Everest?</u>

1. Have students learn about each of the Seven Summits through a jigsaw and mapping.

- Redistribute the students' world maps that were started in <u>Danger Versus Desire: The</u> <u>Inspirational Power of the Peaks</u> activity and have students complete the Seven (Eight) Summits World Map Jigsaw.
- Group students so that there is at least one peak expert from each of the eight peaks. Have students share what they learned about their summit with the rest of the group, one at a time, helping one another complete the other seven of the <u>Peakbagging Cards</u>.
- Once all students have collected the information for all eight peaks from their group members, have students attach their peak cards to the tabletop <u>world map</u> with the corner of the card pointing to the correct location of the peak. Once students have attached each of the eight peaks, they have successfully "bagged" all the peaks.

2. Support students' use of a graphic organizer to research how <u>exploration</u>, recreation, and vocation inspire mountaineers to climb.

- Distribute one copy of the <u>Mountaineering as Exploration, Recreation, and Vocation</u> worksheet to each student, explaining that it will be used to collect evidence from textbased and video resources that explain how mountaineering can have goals related to exploration, recreation, and vocation.
- Model for students how to use resources to complete Mountaineering as Exploration, Recreation, and Vocation.
- As a class, watch the <u>Everest Getting to the Top</u> video (3:21) as an example of mountaineering one of the Seven Summits as exploration. (Warning: this video shows dead climbers along the route.)
- Demonstrate how to organize information by using evidence from the video to complete the *Mountaineering as Exploration, Recreation, and Vocation* worksheet, especially focusing on exploration. The first row of the worksheet has been completed as an example.

3. Students read articles considering the varying goals of mountaineering and complete the *Mountaineering as Exploration, Recreation, and Vocation* worksheet.

- Have students read the following seven articles. As students read, have them record what they learn on their copy of *Mountaineering as Exploration, Recreation, and Vocation*.
 - Vocation Article: <u>A Year After Everest Disaster, This Sherpa isn't Going Back</u>
 - Recreation and Vocation Article: <u>Wilderness Wars</u>
 - Vocation Article: <u>Meet the Sherpa Bringing Wi-Fi to Everest</u>
 - Vocation Article: Sherpas Take Steep Risks for Life-Changing Pay
 - Vocation Article: <u>Inside the Everest Expedition that built the World's Highest</u> <u>Weather Station</u>
 - Recreation and Vocation Article: <u>Why People Risk Their Lives Mountain Climbing</u>
 - Exploration Article: <u>American Explorers Recognized by Guinness World Records for</u> <u>Completing the First Ever Ascent of Meru Peak Shark's Fin</u>
- Once students have completed their reading and assignment, discuss as a class: How do each of these goals inspire the climb? In what ways do people rely on these mountains? (Possible response: The Nepalese government and Sherpas depend on income from providing expedition support to mountaineering tourists.)

4. Lead students in a whole-class discussion on their findings.

- Suggested questions to prompt discussion are:
 - What is the greatest difference between those who climb for exploration and those who climb for recreation?
 - How have the goals changed for Sherpas who initially climbed <u>Mount Everest</u> with Tenzing Norgay and Edmund Hillary compared to those who climb with tourist and expedition groups today?
 - Besides Sherpas, what other types of vocations may involve climbing?
 - Why don't Sherpas work in much less dangerous fields?
 - How do the costs of mountain climbing contrast with payoff in each of these goals (exploration, recreation, vocation)?
 - Describe how mountains like Mount Everest or the Seven Summits have been a common destination for explorers, recreationists and career-based expeditioners.
 - Has mountaineering and trekking <u>tourism</u> changed the area near Mount Everest where the Sherpas live?
 - Are Sherpas the only ethnic group of people residing in Nepal that assist with mountaineering and trekking-based tourism?

- Are there any non-Sherpa guides?
- By your observations, is mountaineering on Mount Everest sustainable?

5. Using the <u>Mount Everest: Know and Need to Know Chart,</u> have students list what they know and want to know about Mount Everest.

- Distribute the Mount Everest: Know and Need to Know Chart to each student.
- Have students complete the What I Know column with what they know or have learned about Mount Everest up to this point.
- Have students brainstorm additional questions they have on why Everest is such an important landform for all who rely on it and who want to conquer it and add these questions to their Need to Know column.

6. Introduce the unit project.

- To connect students to the culminating project, explain that in this unit, they will be learning more about the impacts of mountaineering and tourism on unique natural areas like Everest.
- Explain that students will create a Mount Everest Bill of Rights. Then they will write an analysis that explains how both local governments and individuals can protect one of those rights. Finally, they will create an infographic that applies what they have learned to our local natural environments.

Tip

Step 1: To facilitate the discussion, have peak experts share in alphabetical order: Cerro Aconcagua, Denali, El'brus, Kilimanjaro, Mount Everest, Mount Kosciuszko, Mount Vinson, and Puncak Jaya.

Tip

Step 2: Review the vocabulary with students to ensure they understand the difference between exploration, recreation, and vocation.

Tip

Step 3: Encourage students who are reading different articles to share their examples of exploration, recreation, and vocation with one another, and for others to record new ideas they hear from their group mates on their own graphic organizer.

Tip

Step 4: Provide a timer for silent reading (10-20 minutes), encouraging students to take notes on the graphic organizer as they find relevant information.

Modification

Step 5: Students may need/want additional reading time to gather more evidence. They could be encouraged to continue working on reading and gathering evidence as homework.

Modification

Step 6: Have students complete the <u>Name that Destination</u> activity to guess which summits are being described.

Informal Assessment

Collect the *Mountaineering as Exploration, Recreation, and Vocation* worksheet from each student and look for examples in each row that address discovering previously undiscovered areas or passageways (exploration), mountaineering as a sport or hobby (recreation), and Sherpas, mountain guides, and others who climb mountains regularly as a part of their career (vocation). If students have other examples, scan for accuracy or make notes if students have missed key points.

Extending the Learning

Biographical Research Extension: Have students research a known Everest explorer, Sherpa, or recreational mountaineers such as Edmund Hillary, George Mallory, Patrick Morrow, Kami Rita Sherpa, Tenzing Norgay, or Junko Tabei, and present a short slideshow providing basic biographic information, as well as images related to the types of equipment the mountaineers used during their time.

Career Research Extension: Have students choose a profession related to mountaineering, whether it be climbing guides, equipment development, technology-based engineering, and create a short presentation about what responsibilities the career entails, the estimated pay, and the education necessary to be able to obtain such a career.

OBJECTIVES

Subjects & Disciplines

- Conservation
- English Language Arts
 Geography
 Social Studies
 - Economics

Learning Objectives

Students will:

- Know that mountaineers climb for different reasons, including exploration (to discover unknown routes), various types of recreation, and vocation (such as climbing guides and Sherpas).
- Read multiple texts to organize and summarize information, using text evidence and citing sources used.
- Be able to map the location, elevation, and other facts about the eight peaks of the Seven Summits on a world map.

Teaching Approach

• Project-based learning

Teaching Methods

- Guided listening
- Jigsaw
- Multimedia instruction

Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
 - Information, Media, and Technology Skills
 - Information, Communications, and Technology Literacy
- Critical Thinking Skills
 - Analyzing
- Geographic Skills
 - Acquiring Geographic Information
 - Organizing Geographic Information

National Standards, Principles, and Practices

COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

• CCSS.ELA-LITERACY.RH.6-8.2:

Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.

• CCSS.ELA-LITERACY.RH.6-8.7:

Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

• CCSS.ELA-LITERACY.WHST.6-8.1.B:

Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.

THE COLLEGE, CAREER & CIVIC LIFE (C3) FRAMEWORK FOR SOCIAL STUDIES STATE STANDARDS

• <u>D2.Geo.4.6-8</u>:

Explain how cultural patterns and economic decisions influence environments and the daily lives of people in both nearby and distant places.

• <u>D2.His.12.6-8</u>:

Use questions generated about multiple historical sources to identify further areas of inquiry and additional sources.

• <u>D2.His.4.6-8</u>:

Analyze multiple factors that influenced the perspectives of people during different historical eras.

Preparation

BACKGROUND & VOCABULARY

Background Information

There are several reasons a person may choose to be a mountaineer. They may be explorers looking for new pathways or never before seen natural areas untouched by human development. They may be recreationists who enjoy mountaineering for the scenery, tourism, challenge, athletic, and even spiritual experiences that summiting a mountain can offer. Or, mountaineering may be a part of their vocation, or career, where they have chosen to make a living off of climbing mountains, whether it be as a mountain guide, a research scientist or geologist, a professional athlete, or another career that requires one to climb regularly.

Prior Knowledge

["Mount Everest is one of the Seven Summits and the highest peak in the world."]

Recommended Prior Activities

Danger Versus Desire: The Inspirational Power of the Peaks

Vocabulary

Term	Part of Speech	Definition
exploration noun		study and investigation of unknown places, concepts, or issues.
Mount Everest	noun	highest spot on Earth, approximately 8,850 meters (29,035 feet). Mount
		Everest is part of the Himalaya and straddles the border of Nepal and
		China.

recreationaladjective having to do with activities done for enjoyment.

Term	Part of Speech	Definition		
Sherpa	noun	people and culture native to the Himalayan region of Nepal and China.		
		Sherpa often serve as mountaineer guides and porters on mountain-		
		climbing expeditions.		
tourism	noun	the industry (including food, hotels, and entertainment) of traveling for		
		pleasure.		
vocational adjectivehaving to do with instruction or guidance in an occupation or career.				
		ΝΑΤΙΟΝΙΑΙ		



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