

EVEREST PAST AND PRESENT

GUIDING QUESTION

How have advances in technology changed the experience of climbing Mount Everest?

Students compare and contrast technology and equipment available to climbers in 1924 and present day.



Handout

- *Technology and Everest: Then and Now*

Film Clips

- *Letter to Ruth*
- *Monsoon Sets In*
- *Replicating 20s Gear*

VOCABULARY

- acclimate
- Global Positioning System (GPS)
- hobnail boots
- topographic map

DIRECTIONS

1. Brainstorm differences in the Everest experience in the 1920s and today.

Before viewing the film, have students brainstorm as a class or in small groups their ideas for differences in the experience on Everest today compared with the 1920s when Mallory and others first climbed there. Guide students to combine their brainstorming ideas into categories, such as equipment, clothing, communications, navigation tools, weather information, and transportation. Let students know that they will use the film and other resources to analyze the Everest experience, past and present.

2. Prepare a chart to organize findings.

Students can create charts based on the categories brainstormed to organize their findings, or use **Handout 1: Technology and Everest: Then and Now**. Have them view the **Photo Gallery: The Wildest Dream** to begin looking for differences in the Everest experience past and present, adding ideas to their charts.

3. Use film clips to analyze past and present.

Have students compare the technology in these two clips before seeing the film, also adding their ideas to the chart: "Letter to Ruth" and "Monsoon Sets In." Discuss: *How was Mallory's communication with his wife, Ruth, different than Anker's communication with his wife, Jennifer?* (answers will vary, but may include the following: Mallory's letters were hand written on paper, had to be carried and delivered from Asia to Europe, with a likely delay of weeks or months. Anker could use a special satellite phone for instant communication with his wife. Jennifer could access live weather information online to know what conditions her husband was facing, even giving him advice.)

4. Cite examples of mountaineering technologies past and present in the film.

Assign categories from the chart to groups of students to analyze during the film. Have students note during or immediately after the film their observations of the differences past and present. Then have them organize their ideas in the chart.



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“5th June. It will be a great triumph if my impromptu apparatus gets us to the top. It has been very trying for everyone with terribly strong reflection off the snow. Have prepared 2 oxygen apparatus for our start tomorrow morning.”

– last words written by Sandy Irvine



5. Discuss filmmakers' approaches in "The Wildest Dream."

Back in class after seeing the film, discuss the style of cinematography that the filmmakers used with "The Wildest Dream." A key device is a shifting back and forth from footage of Mallory's climbs in the 1920s to footage from Conrad Anker's climbs in the 1990s and 2000s. Ask: *How else do the filmmakers create this sense of past and present?* Students may have recognized a replication of past circumstances, where Anker and Leo Houlding attempt to climb to the summit of Everest in clothing and using equipment mirroring that of Mallory and Irvine in 1924.

6. Discuss the findings.

Have each group present their past and present findings based on the film, and allow others to contribute ideas to each category.

Examples of Chart Content for Technology and Everest: Then and Now

Students should generate their own ideas for each of the categories below. The following are examples:

	1920s	2000s
Communication	Letters and porters	Satellite phones, walkie talkies, and internet access
Navigation tools	Maps from early surveys that didn't reach the areas where Mallory's team climbed, compass, altimeter	Detailed maps, satellite imagery, Global Positioning Systems (GPS),
Weather forecasting	Knowledge from very few previous expeditions	Yearly climate data and forecasting, including arrival of the monsoon
Clothing	Leather hob-nail boots, wool/gabardine coats, slow-drying fabrics	Hi-tech, insulated boots, synthetic clothing that's windproof, waterproof, well-insulated, and fast-drying
Equipment	Heavy oxygen tanks fixed by Irvine before attempting the summit, canvas tents, goggles to protect eyes, ropes tied between climbers	Lighter oxygen tank technology developed over decades, tents designed to block wind and moisture, ladders, fixed ropes placed on the routes at select locations
Transportation	Oceanliner and rail travel, limited short flights, ground transport by yak or foot	Commercial international flights, jeep overland transport, helicopters as emergency support

After students have presented their ideas and compiled the chart, have them synthesize their ideas. Discuss:

- *Do you think the experience climbing Mount Everest is different today than in the 1920s?*
- *What aspects of the climb have not changed? (base camps, acclimating to the changes in oxygen with altitude, the need for fuel, the need to melt snow and ice for water, unpredictable weather, the religious ceremony called the "Puja," at the start of the expedition.)*

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ACTIVITY 4H

GRADE LEVELS: 9-12

- *What were the motivations in the past, and what do you think motivates people to climb Everest today?*

7. Have students envision the future of climbing Everest.

Discuss: *What equipment did Mallory's team use that at the time seemed like modern technology?* Mallory's team may have believed they were on the cutting edge, with the most advanced technology. Today's gear enables many to reach the summit today. Let students brainstorm what the future of mountaineering equipment and Everest exploration might look like. Have each group present one idea that might enhance or improve Everest climbs of the future.

EXTENDING THE LESSON

Have students write a persuasive essay on whether changes in technology and the increasing number of climbers on Mount Everest have had positive or negative effects on the culture and environment of the Himalaya. Students will find in research that there is extensive litter of oxygen tanks and other climbing gear in the death zone and other areas of the routes to Everest. Students can also explore whether the increasing number of climbers today seems beneficial or detrimental to the local Sherpa population. See articles below.

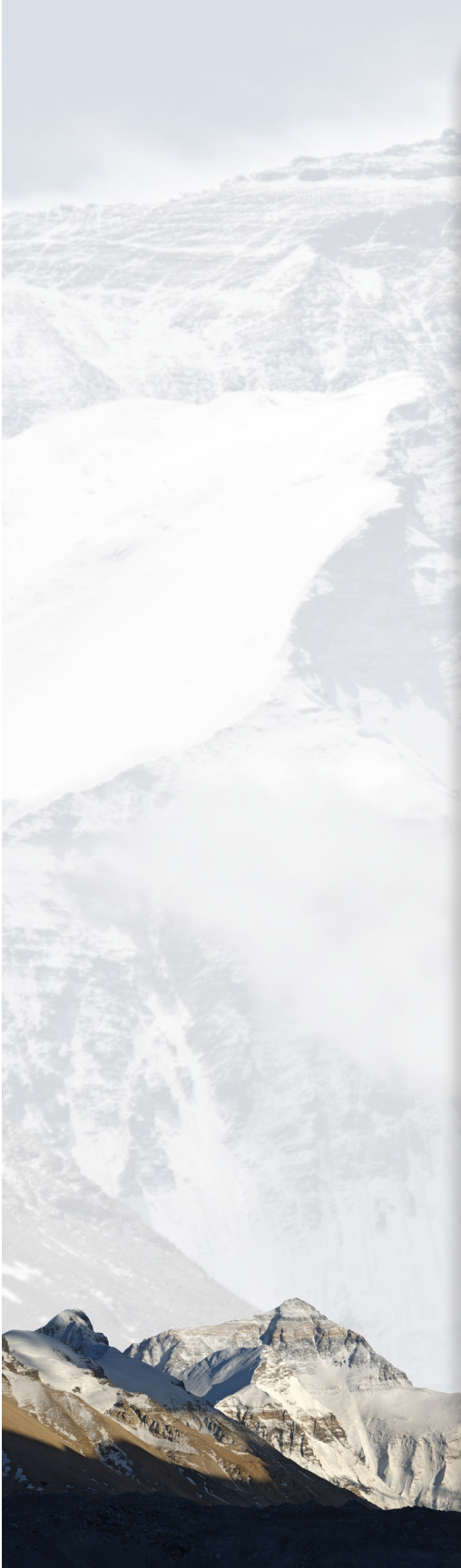
SUGGESTED RESOURCES

Handwerk, Brian, "The Sherpas of Mount Everest," National Geographic News: http://news.nationalgeographic.com/news/2002/05/0507_020507_sherpas.html

Photo Gallery: The Wildest Dream
http://movies.nationalgeographic.com/movies/the-wildest-dream/photos#01-wildest-dream-climb-mallory-irvine_19160_600x450.jpg

Salkever, Alex, "Everest: Just Another Tourist Trap?" National Geographic News: http://news.nationalgeographic.com/news/2003/04/0408_030408_everestcrowds.html

T.R. Reid, "The Sherpas," *National Geographic Magazine*:
<http://ngm.nationalgeographic.com/ngm/0305/feature2/>



Name _____

Date _____

TECHNOLOGY AND EVEREST: THEN AND NOW

HANDOUT 1

Add information comparing technology and other equipment for an Everest climb in the 1920s and the 2000s.

	1920s	2000s
Communication		
Navigation tools		
Weather forecasting		
Clothing		
Equipment		
Transportation		