

# Teacher Guide for ASK

April 2014: At the Top of the World

*This guide was prepared by Betty Lou Askin, an educator who lives in Toronto, Ontario.*

## Objectives:

- To develop an understanding of how life can and cannot be sustained on a mountain.
- To appreciate the lives of people who live on mountains.
- To learn about mountains on land and in the sea.

## Pre-reading:

- ✚ Let the students predict what they think might be included in this issue of ASK.
- ✚ Ask them what they think is happening on the cover.
- ✚ View the Content pages and discuss the illustrations and the article titles.
- ✚ Ask the students to prepare a **KWL Chart**, What I Know, What I Want to Know and What I Learned about mountains. Start by recording the students' responses for the first two columns of the chart. Add information to the chart after reading each article.

## Scoops:

### Hands Up

- Tell about the handprints.
- Why do scientists believe that most were made by women?

### Slow-Mo Vision

- What is the superpower of some creatures?
- How does slo-mo work?

### What Goes on Inside Your Head

- Describe the experiment performed by the scientists.
- Do dogs love their owners?

### Confused in Any Language

- Who are linguists?
- What is the most common word in the world?
- Why do you think that it is the most common word?
- Ask the students to look for more science **scoops** while they read media or watch television news or shows. Create a bulletin board to post their findings.

### Nestor's Dock

- What equipment do you think that Phil brought for the climb?
- Who else climbed a mountain in this cartoon?
- Explain why there were similarities between the two climbers.
- Why did Phil say, "Why did I bring so much stuff?"
- What did the author/illustrator do to show us Phil's situation?

### Weather Mountain

Questions to use with this article:

- Describe the terrain on Mount Washington as someone might see it as they climb.
- Explain why Rebecca had trouble sleeping when she first arrived.

- What is visibility like on Mount Washington?
- Describe the winter on Mount Washington.
- What work do the scientists perform each day?
- Describe how Scholand walks in gale weather.
- How does she check rainfall in the fog?
- Explain how the scientists remove ice from the equipment.
- Why is the weather information on Mount Washington important for the rest of the country?
- Explain why engineers visit Mount Washington.

### **Mountain Makeover**

- Use the Read-Aloud Method with this article. Let the students take turns reading the information. Discuss the material.

### **Jaguars in the Sky**

Material-Map of the United States

Questions to consider as oral discussion or follow-up seatwork:

- Use the Map of the United States to show the area in question.
- What makes the jaguar a killer cat?
- Explain why the name **jaguar** suits this cat.
- Why did the population of jaguars decline?
- Why are male jaguars mostly seen by people?
- Tell how the panther differs from the jaguar.
- Describe the Sky Islands.
- Explain why the mountain islands are a secret highway.
- Why do you think that jaguars and their cousins like living in this environment?
- What sorts of information about jaguars are the scientists seeking?
- Explain how the spots on a jaguar protect the animal.
- Describe how the scientists are getting their information about the jaguars.
- What threats do jaguars encounter?

Written Work:

1. Write a letter to a friend telling about your guided tour of the Sky Islands area. Begin by describing the various types of land and vegetation or lack of such. Include the types of creatures that you saw as you travelled from one area to another. Explain why you could not go in certain areas.
2. Exchange your letter with a reading buddy. Proofread each others letter and explain any changes or ideas. Rewrite the letter making any needed corrections.

### **Top of the World**

Material: A Map of the World. Use this map to locate Mount Everest.

Ideas to use with this article:

- Let the students work with a reading buddy. Ask them to read and then talk about the information. Hold a class discussion about the material.

Written Work:

1. Have them develop an interview with Tenzing Norgay or Edmund Hillary. They could use the information in the article to develop their questions and answers.

One of the buddies would be the interviewer and the other could be the explorer. They could also perform the interview for other members of the class.

2. Ask the students to create a diary. They would use the information in the article as well as their own ideas to write a few days of experiences on the mountain. This too could be shared with classmates.
3. The students might create a news bulletin or radio broadcast telling describing the ascent of the two men.

### **Life at the Top**

Use these questions as a follow-up activity:

- Describe the problem of living at a very high elevation.
- Why do you think that people choose to live high on a mountain?
- Why do you think that monasteries were built on mountains?
- Explain why mountainsides are good for farming.
- Tell why mountainside are used for grazing animals.
- Explain how mountains provide a living for people.
- Describe why mountains provide safety.
- Why are Sherpas famous?
- Describe how they have adapted to high altitudes.
- Explain why yaks are important to the Sherpas.

### **Mountains in the Sea**

Suggestions for use of this article:

- Why is Mauna Kea the tallest mountain in the world?
- What is the H.R.-E.S. chain?
- Explain why there is a similarity between Earth land and seabeds.
- What are seamounts?
- Explain how seamounts are a rich habitat.
- Explain how the Pacific Ocean plates cause changes to the land and sea.

Creative Work:

1. Develop an essay entitled "Save the Seamounts". Defend and provide reasons why seamounts should be protected. Use the information from this article as well as your own ideas. Remember to include an opening and a concluding sentence.
2. Working in pairs, create a newscast based on the previous suggestion and present your work to the rest of the class.

### **King of the Mountain**

- Follow the instructions and create your own creature. Share your ideas with your classmates. Create a bulletin board and display the work.

### **Jimmy the Bug**

- Explain what is needed for a planet to sustain life.

### **Marvin and Friends**

- Why do you think that Marvin asked Rats to be his partner?
- Why is the joke on Marvin?

- How did the illustrator show us that Rats was puzzled?
- How do we know that Rats was nervous?

**Culminating Activities:**

1. Complete the **KWL Chart** if it was used during the reading of this magazine. The final section of the chart could be completed now if not done after each article.
2. Choose 5 things from this magazine that you have learned about. Pretend that you are going to share this knowledge with someone who has not read this issue of the magazine. Write a paragraph about each of your chosen topics using information from the articles.

**Other Activities:**

1. The students might enjoy doing some further research about the topics in this magazine.
2. There are excellent illustrations in this magazine. The students might like to choose an article and create their own drawings. Or, they might want to make a cartoon about one of the topics including captions and verbal comments.