

Teacher Guide for ASK

March 2011:Who Needs Wind?

Betty Lou Askin, a retired educator who lives in Toronto, Ontario, prepared this guide.

Pre-reading:

- Hold a discussion with the students based on the title of the magazine.
- Create a chart on experience chart paper. During the reading of the articles add to the chart.

The Importance of Wind

Who/What Needs Wind	Why

Scoops (pages 2-3)

Meet Mr. Blooby

- Who is Mr. Blooby?
- Describe this new species of fish.

Goey Gum Gone

- Why is this new gum good for the environment?

Narwhals at Work

- Why are narwhals "biological oceanographers"?

Is That a Dino in the Choir?

- Explain why a prehistoric creature's skull would be found in a 400 year old church.

Ask the students to look for more science "scoops" while they read the news paper and watch television news/shows. Create a bulletin board to post their information.

Nestor's Dock (pages 4-5)

- Why did Phil hear noises in the night?

A World Without Wind (pages 6-10)

Pre-reading:

Ask the students to imagine a world without wind. Discuss their ideas. This might be done in small groups. Have the students record their ideas and then share these with the entire class.

Use these ideas with this article:

- Do a **Read Aloud** with the information in this article. Stop after each paragraph and discuss the material.
- Information could be added to the chart that was started in the beginning pre-reading as you progress through the article.
- Tell what would be positive about not having any wind.
- Name 10 reasons why lack of wind would be negative for the environment.

- Explain how wind is created.
- **Writing Ideas:**
 1. Write a paragraph telling people why our history would have been different if there had been no wind in the past.
 2. Write 3-4 paragraphs explaining the negative aspects for the world if there was no wind.

Sailing the Breeze (pages 11-13)

- Why do some plants make attractive flowers?
- Some plants do not make pretty flowers. Why would that happen? What is the disadvantage of this feature?
- Describe how wind blown pollen is different from insect distributed pollen.

Hurricane Flight (pages 14-18)

Reading for information:

- Why are hurricanes called megastores?
- Who are the "hurricane hunters"?
- How are weather scientists able to predict hurricanes?
- What is a **dropsonde**?
- What does it measure?
- Describe how hurricanes develop.
- What is a storm surge?
- Why do satellites help with regards to hurricanes?
- What is the eye of a hurricane?

Admiral Beaufort Scales the Gale (page 19)

- Read aloud. Take turns reading up the scale.

The Boy Who Harnessed the Wind (pages 20-25)

- Ask the students to read the story quietly to themselves. Have them record the key information from this article in the story organizer. Then, have them work in pairs. They should use their notes to **retell** the story to their partner. Each partner should check to see that their mate has retold all the story elements.
- Alternately, the story could be read aloud and each student could complete the story organizer during or after the reading. The students could then work with a partner for the retelling segment. The story organizer is at the end of this guide.

Jersey Atlantic Wind Farm Always Turned On (pages 26-27)

Questions to consider:

- Why does the production of power vary from day to day?
- What is the difference between an electric fan and a wind turbine?
- A wind turbine has three main parts. What is the function of each part?
- Why are wind farms usually located in unpopulated areas?
- Why do you think that these energy mechanisms use the word "farm"?
- **Research:**
Use the library and/or the Internet to learn more about wind farms.

Jimmy the Bug (page 32)

- Why do insects communicate?
- Describe the mating habits of two different insects.
- Why do honeybees dance?
- How do ants communicate?

Marvin and Friends

How did the wind play a trick on the friends?

Don't Forget:

To meet new creatures and learn about the Census of Marine Life at www.coml.org
Design a kite as mentioned in the article, **My Kind of Kite**, on page 31. Create your kite and share it with classmates.

Story Organizer "The Boy Who Harnessed the Wind"

Somebody (character/characters):

Where:

When:

Wanted (problem/s):

But (events leading to the end):

- 1.
- 2.
- 3.

So: