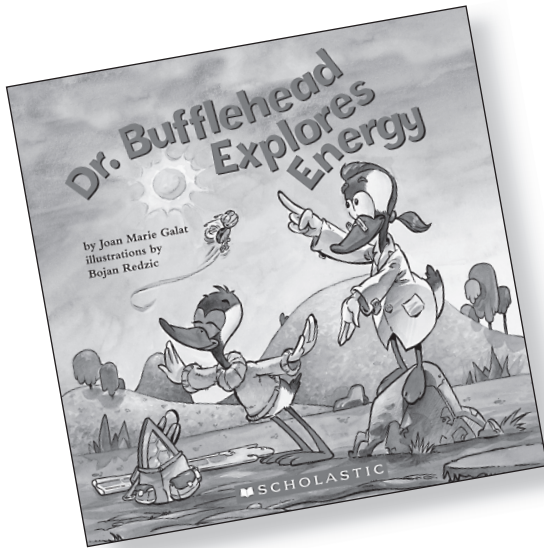


Dr. Bufflehead Explores Energy



Written by Joan Marie Galat

Illustrated by Bojan Redzic

Text Type: Info-fiction: Narrative — Fantasy Story

Guided Reading Level: L

Summary: In this book, Dr. Bufflehead builds a pair of mechanical wings to make migration easier. He needs a source of energy to power the wings. He explores different sources of energy, but each time encounters a difficulty.

Text Features

- ▶ glossary

Text Supports

- ▶ illustrations support text

Possible Text Challenges

- ▶ some difficult vocabulary
- ▶ dialogue with question marks

Reading Strategies

Comprehension

- ▶ analyzing
- ▶ synthesizing

Working with Words

- ▶ using a range of word-solving strategies to read unfamiliar words
- ▶ using the glossary to find the meaning of unfamiliar words

Assessment Opportunities

Note each student's ability to:

- ▶ analyze: find facts
- ▶ synthesize: integrate information with prior knowledge to create new understanding
- ▶ use a range of word-solving strategies to solve unfamiliar words

Oral Language Opportunities

- ▶ discussing with a group and with a partner
- ▶ presenting orally
- ▶ listening to others

Teaching Tip: Collect books or photographs showing various examples of energy, such as wind turbines, Niagara Falls, a solar blanket on a pool, and hot springs in Canada.



BEFORE READING

Making connections: text to self

Activating and Building Prior Knowledge

Discuss with students their ideas about what energy is. Ask, *How do we get energy for our lights? Where does the energy come from to power a flashlight?* Show students pictures or photographs of different energy sources.

Text features

Overcoming Text Challenges

Show students the front cover of the book. Read the title, and the author's and illustrator's names. Introduce the characters in the story by pointing them out to students.

Print concepts

Hand out copies of the books and have students look at page 2. Ask, *What are the characters saying? How do you know?* If they have difficulties, point out the quotation marks and remind them that any words inside those marks are the exact words a character is saying.

Word solving and building

Point out some unfamiliar words about energy sources. Model how to read these words using multiple strategies (i.e., recognizing word parts, chunking words into syllables and interpreting context cues). For example, have students turn to pages 4–5 and invite them to try to read the words *migrate* and *mechanical*. Say, *Are there any parts of these words you recognize?* Encourage students to sound out each syllable. Continue for other words relating to different types of energy, such as solar, turbine, and electrical.

Analyzing

Setting a Purpose

Say, *As you read the book, I want you to find the sources of energy Dr. Bufflehead explored for his mechanical wings.* Provide students with five sticky notes to place where references to energy sources are found in the text. After the reading, all energy sources will be written on a chart.



DURING READING

Ask students to read the text independently, thinking about the purpose for their reading.

Observe and listen to students as they read, assisting them with word-solving strategies, vocabulary, punctuation, and comprehension queries. Offer prompts, such as, *What was the first source of energy you found? What words provided clues to the sun being an energy source? Can you show me where it says moving water is a source of energy?*

Note students' successful use of reading strategies and any difficulties they encounter.

If students finish before others have completed the reading, ask them to go back and reread, then share the energy sources they found with a partner.

ESL Note: Create a chart with students that lists words or phrases students can use when showing evidence. This would be especially helpful for ESL students, primarily to build the confidence needed to share orally, as well as to ensure comprehension around the concept of energy.



AFTER READING

Analyzing When all students have finished reading the text, make a list of the types of energy Dr. Bufflehead explored. Revisit the specific pages of the text to locate facts.

Predicting Have students look at their lists of energy sources and compare them to their original predictions. Confirm those predictions that were correct.

Evaluating Say, *What was the best kind of energy for Dr. Bufflehead's purpose?* Encourage students to locate specific sections of dialogue that support their thinking.

Word solving and building

Ask students about any unfamiliar words they found in their reading and have them explain how they figured out the words. Point out positive reading strategies. For example, *I noticed that when Allie read turbines, she broke the word into parts ...tur-bines. Then she put the parts back together and read turbines. Then she checked the glossary. She found out that a wind turbine uses moving air to make electricity. That's what good readers do!*

Rereadings

Provide opportunities for each student to reread the book independently or with a partner.

Focused Follow-up

The following activities are optional. Choose those that best meet the needs of your students.

Synthesizing

Conserving Energy

Refer to Dr. Bufflehead's quest to help the ducks save energy. Talk about the importance of saving energy to help the environment, such as turning off lights when leaving a room, and turning off a tap when it's not in use. Make a list of students' suggestions.

Other Energy Sources

Invite students to create a four-page booklet describing other sources of energy and their uses, such as a solar blanket on a pool, a wind turbine near their community, or radiators in their homes. They can look at the collected set of books you gathered, visit a library, or check the Internet. Students can either prepare a brief oral report about their findings or make an oral presentation to a small group.

Analyzing

Dr. Bufflehead's Search

Provide copies of the BLM and ask students to record the five sources of energy explored by Dr. Bufflehead. Beside each energy source, direct students to record the problem Dr. Bufflehead encountered in the story.

Dr. Bufflehead's Search

Name: _____

Sources of Energy	Problem
1.	
2.	
3.	
4.	
5.	