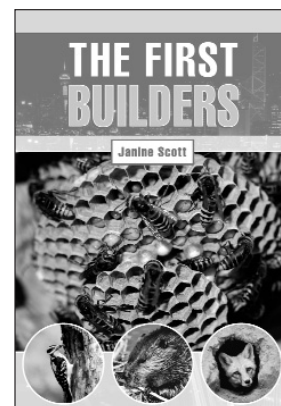


The First Builders

by Janine Scott



Book Summary

Animals were the first builders. They built nests, tunnels, dams, and towers long before the first people were around. This book explores how and why animals build different structures and what people have learned about building from animals.

Features of the Book

- Compares the structures built by animals with those built by people
- Explanations
- Compound words – *honeybees, hilltops, underground, earthworms*
- Specialized vocabulary – *shelters, lodges, foundations*

Purpose

The First Builders can be used to introduce and reinforce the following skills and understandings:

- S** asking questions of the text;
- S** synthesizing information from two or more sources;
- S** using knowledge of the words in compound words to predict meaning;
- S** using the text as a springboard for further research;
- S** writing a narrative procedure;
- S** identifying the similarities between the structures built by animals and those built by people.

Investigation Tools

- What's the Background? – Finding Shelter, page 4
- Making Connections – Safety in Numbers, page 8
- Looking Closer – Prairie Dog Burrows, page 17
- Step-by-step – Building a Beaver Dam, page 20
- Weighing Both Sides – Dams and the Environment, page 22
- Digging Deeper – Adobe Bricks, page 29

The Guided Reading Lesson

S Asking questions of the text

S Synthesizing information from two or more sources

You may need to spend extra time familiarizing your students with the concepts and specialized vocabulary in this book. This lesson could be taken over two or more days.

Introducing the text

Write “bee,” “beaver,” “termite,” “earthworm,” and “woodpecker” on the board.

- *What kind of homes do these animals live in?* (hives, nests, lodges, towers, tunnels)
- *How do they build them?*
- *Why do these make good homes?*

Discuss how other animals build their homes and the materials they use.

- *Some birds build nests in trees to keep safe from predators. How do other animals' homes keep them safe?*
- *How are animal homes similar to the structures people build?*
- *What towers, tunnels, or dams have been built by people?*

Together, read the book's title, the blurb on the back cover, and the contents page. Ask the students what they would like to learn about animal homes, or the structures built by people. The students can look at the pictures and diagrams in the book to help them think of questions. Encourage them to ask how or why questions as these elicit more information. Write their questions on chart paper.

Reading and discussing the text

Ask the students to look for answers to their questions as they read chapters 1 and 2. When they have finished reading, write any answers that they have found next to the appropriate question on the chart.

- *Why do animals build shelters?*
- *How is a beehive similar to a house?*
- *What does your house protect you from?*

Write any new questions on the chart.

Read chapter 3 together, including the text, captions, and diagram.

- *How does the diagram on page 13 help us to understand the text?*
- *What new information do we learn from reading the caption on page 13?*
- *Which gives the best information – the main text, the diagram, or the caption? Why?*
- *How do the text, diagram, and caption work together to make the ideas easier to understand?*
- *In what ways are a termites' nest and high-rise building similar? How are they different?*

Remind the students that they should use all of a book's features including the text, illustrations, photographs, diagrams, and other graphic features, to help them understand the text.

The students can now read the rest of the book independently. Ask them to pause at the end of each chapter to add answers or new questions to the chart. Write the following questions on the chart as models:

- *Do you think people should build dams? Why?/Why not?*
- *What have people learned about building things from animals?*

When the students have finished reading, discuss their answers.

Revisiting the Text

The activities below can be used immediately after the guided reading lesson, during later reading sessions as mini-lessons, or as independent activities.

S Using knowledge of the words in compound words to predict meaning

Write "honeybees," "hilltops," "underground," and "earthworms" on separate index cards. Have the students cut each card between the two smaller words. Lay the cards face up in front of the group. The students can take turns matching the cards correctly.

- *What does each of the smaller words mean?*
- *What does the compound word mean?*
- *What new compound word could you make using one of these smaller words? (honeycomb, hillside, treetops)*

S Using the text as a springboard for further research

Select an unanswered question from the chart. Discuss ways the students could find the answer, for example, calling the zoo or animal park, looking in an encyclopedia, looking on a CD-ROM, or inviting an engineer to talk to the class. Help the students to choose the best source and to begin their research.

S Identifying the similarities between the structures built by animals and those built by people


Draw the following chart on the board:

Structure	Animal use	Human use
Dam		
Tunnel		
Tower		

Look at page 20 together.

- *How do beavers build dams?*
- *Why do they build them?*
- *Why do people build dams?*

Write the students' answers on the chart. Discuss tunnels and towers, then write the appropriate information in each box on the chart.

 The students can complete the blackline master on page 70 to describe and draw a structure that an animal builds.