AUTHOR

Trudy Harris

Explore the visual and sound patterns of seven garden bugs that float, crawl, buzz, nibble, chirp, twinkle, and move up, down, and around.

Ages: 3 to 6 years

Interest Level: Preschool to 1st Grade
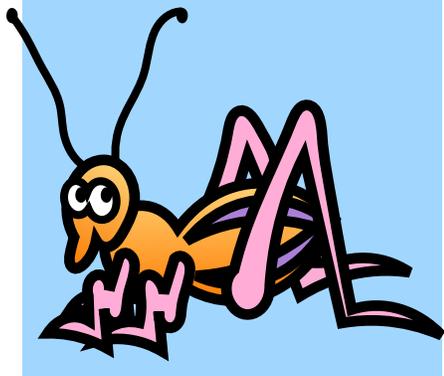
ATOS Reading Level: 2.4

Lexile: 500L

ISBN: 9780761321071

Copyright: 2001

Genre: Fiction

Classification: Picture Story Book

Early Math Project

Pattern Bugs

"Good night." "Good night." Who turned on the light?

Topics: patterns, pattern recognition

Math Connections: Patterns are everywhere. When reading the book *Pattern Bugs* with your child talk about the different types of patterns that are found throughout the book. For example, on the first pages of the book talk about how the butterfly moves. "Flutter-float, flutter-float, flutter-float" is a very simple pattern that is made up of just two parts. This type of pattern is called an AB pattern because it has only two parts that repeat over and over. "Flutter" is the A in the pattern; "Float" is the B. Look for all of the images on these first pages that are also AB patterns. For example, the alternating orange and yellow squares; the small cloud and big cloud pattern; and the orange circle and small yellow circle pattern on the butterflies wings. Ask your child what other AB patterns they see on these pages.

As you read the story, encourage your child to look for all the different types of patterns that are shown throughout the book. They are everywhere. The final pages of the book explain ABB Patterns, ABC Patterns, and ABCD Patterns. Talk with your child about how these names describe what is happening with the pattern. Ask your child to create a pattern of their own for each type.

After reading the book try one of these activities: 1.) Make a collage with different types of patterns; 2.) Design a bug that has a pattern; 3.) Go on a pattern scavenger hunt looking for AB, ABB, ABC, and ABCD patterns; 4.) Look at a basket of laundry and identify different patterns that you find on the clothing. How many patterns of each type were you able to find on the clothes?

Extension Questions:

1. What bug would you add to the story? What would be the bug's pattern? Would the bug have a pattern as part of the way it looks, what it does, or the sound it makes?

2. Flutter-float, flutter-float is a simple AB pattern. Hop-kick, hop-kick is another simple AB pattern. What AB pattern can you create? Why do you think it's an AB pattern?

3. Look at the borders on the pages of this book. What do you notice?

4. The caterpillar goes nibble-nibble-bite-chew. What patterns can you find on the story pages with the caterpillar. How are the patterns like nibble-nibble-bite-chew?

Vocabulary for Building Math Concepts	AAB pattern, AB pattern, ABC pattern, ABCD pattern, along, around, down, first, four, in, inside, late, near, out, part, pattern, shapes, six, too, two, up
Vocabulary for Extending Math Concepts	AB pattern, AAB pattern, ABB pattern, ABC pattern, repeat, repetition
Vocabulary for Reading Comprehension	border, flutters, graceful, lamppost, petals, silky, thicket

Early Math Project Resources:

Bug Patterns: https://bit.ly/3jDasdw (English)

Bug Patterns (Spanish)

Bug Cards: https://bit.ly/37SQ71T

Spinner Instructions: https://bit.ly/3e2ONdw (English)

Spinner Instructions (Spanish)

Colorful Insects: https://bit.ly/35AfTFe (English)

Colorful Insects (Spanish)

Online Resources:

Developing Pattern Awareness with Young Children: https://bit.ly/3e3LRh5

Patterns are Sequences Governed by a Rule - Big Ideas from Erikson Institute: https://bit.ly/3mrwEt1

Five Books for Exploring Growing Patterns Recommended by Erikson Institute: https://bit.ly/3kF0olG

Spanish Title: Not available

Related Books: *Pattern Fish* by Trudy Harris, *The Napping House* by Audrey Wood and Don Wood, *Beep Beep, Vroom Vroom!* by Stuart J. Murphy

Find this book at your local library: https://www.worldcat.org/title/pattern-bugs/oclc/45418921?

Early Math Project
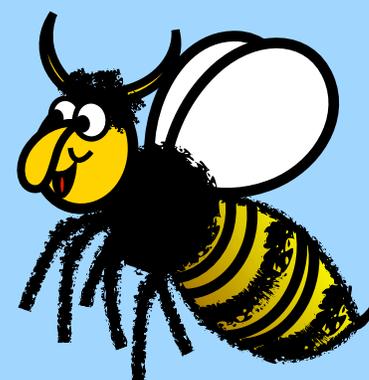
PATTERN

Age/Grade Level	Related Preschool Foundations and CA State Standards
Infant/ Toddler	**Infant/Toddler Learning Foundations** https://bit.ly/3ozQios
Infant/ Toddler	**Spatial Relationships** The developing understanding of how things move and fit in space. **Imitation** The developing ability to mirror, repeat, and practice the actions of others, either immediately or later. **Classification** The developing ability to group, sort, categorize, connect, and have expectations of objects and people according to their attributes.
Preschool/ TK	**Preschool Learning Foundations** https://bit.ly/34vEeN3
Preschool/ TK	**Algebra and Functions 2.0** Children begin to recognize simple, repeating patterns. **2.1** Begin to identify or recognize a simple repeating pattern. **2.2** Begin to create a simple repeating pattern or participate in making one.

Early Math Project