

## *Bugs*

by Erin Kelly

From the Be an Expert!™ series

**There are many different types of bugs in the world. Some fly, some jump, and some can even make you itch! Become an expert about bugs while you learn exciting facts and look at real photos.**

### **Create Successful Reading Habits**

Research from What Works Clearinghouse suggests that to become proficient readers, children need to develop an awareness of the segments of sound in speech and how they connect to letters to make words. One way teachers can support developing this awareness is by teaching students how to recognize and manipulate the segments of sound in words. When students learn how to recognize that words are made up of individual sounds that are connected to letters to make words, they are better prepared to read and comprehend text.

\* U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, What Works Clearinghouse. (n.d.). Practice Guides. <https://ies.ed.gov/ncee/wwc/PracticeGuides>

## SCIENCE OF READING – ASSESSMENTS

Assessments measure what children have learned or are able to do. Assessments can be divided into two broad categories: **formal** and **informal** assessments.

**Formal assessments** are usually standardized; that is, they have been administered to a large sample of different students in a uniform, consistent manner.

- Norm-referenced tests compare students to their peers—how do they compare to other students their age or in the same grade?
- Criterion-referenced tests indicate if students have accomplished certain formalized academic objectives or benchmarks, such as state standards—which learning goals have they met?

Formal assessments are often used for **screening**, **diagnostic**, or **outcome/summative assessment** purposes.

**Informal assessments** are not standardized but can be used by teachers to make instructional decisions.

Some examples of informal assessments include:

- running records
- timed readings
- teacher anecdotal records
- book logs
- informal reading inventories
- phonics surveys
- Informal assessments can be used for **progress monitoring** or **formative purposes**. Teachers use these to decide the next steps for instruction. Teacher-created assessments are also often used as **outcome measures** to determine if students have learned instructional objectives.

# WORD WORK – DECODING AND ENCODING CVC

## WORDS WITH SHORT U/A VOWELS

Elkonin Boxes, also known as sound boxes, are an instructional method used to support children in segmenting and blending the sounds in a word. In this learning activity, students will use Elkonin Boxes to practice decoding (reading) and encoding (spelling) CVC words with the short *u* and short *a* vowels.

**Word list:** bug, but, cut, sat, sag, sug, mug, mud, mad

**ELA.1.F.1.3: Use knowledge of grade-appropriate phonics and word-analysis skills to decode words accurately.**

**c. Decode and encode regularly spelled one-syllable words.**

**ELA.1.F.1.2: Demonstrate phonological awareness.**

**a. Segment spoken words into initial, medial, and final phonemes, including words with digraphs, blends, and trigraphs.**

**ELL and SWD suggestion:**

Use magnetic letters or manipulative letter tiles to help students understand that there is a systematic relationship between letters and sounds. Use only the letters you need for the spelling pattern you are practicing. For this activity, you will need letter tiles for *u*, *a*, *b*, *g*, *c*, *t*, *s*, *m*, and *d*.

- Use whiteboards, or plain paper to complete this activity with students. As you work, provide student-friendly definitions for unfamiliar words (*sag*) and point out nonsense words (*sug*).
- Say, "Today we are going to use Elkonin Boxes to read and spell words that have the short vowel *u* sound, /ŭ/, and the short vowel *a* sound, /ă/. I'm going to show you first."
- Explicitly model how to sound out a CVC word, and draw an Elkonin Box.
  - "The first word I'm going to sound out is *bug*. The word *bug* is in the book we are reading. I'm going to say each sound in the word, and hold up a finger each time I say a sound." Hold up one finger for each sound in /b/ /ŭ/ /g/.
  - "I am holding up three fingers, so I am going to draw three boxes." Make the sounds in the word as you draw each box.



- "I am going to put my finger under the boxes as I say each sound in the word *bug*." Put a finger under each box as you say each sound in /b/ /ŭ/ /g/.
- As you say each sound, write the letters for each sound in the boxes. (*b*, *u*, *g*)
- Say, "Now I'm going to write the word underneath so that it looks like a real word." Write *bug* underneath the boxes.
- Say, "I will blend the sounds together to read the whole word, *bug*."
- Repeat the activity with the remaining CVC words using a gradual release of responsibility.

## TALK ABOUT NEW AND INTERESTING WORDS

Tier 2 vocabulary words can be used for explicit vocabulary instruction. When teaching vocabulary, it is important to create and share student-friendly definitions that are appropriate for the level of your students. Help students make connections to the word by providing contextual information that relates to the text being read and builds upon their background knowledge. Here are some examples of Tier 2 vocabulary words from the book:

**ELA.K.V.1.1: Use grade-level academic vocabulary appropriately in speaking and writing.**

**expert** (title): An **expert** is someone who knows a lot of information about a particular subject. A bug **expert** is someone who knows a lot of information about bugs.

**storing** (p. 11): When you **store** something, you keep it somewhere until you need it. Ants **store** food underground to keep it there until the colony eats it.

**underground** (p. 10): When something is **underground**, it is below the surface of the Earth. Some ants live in nests that they build **underground**.

**study** (p. 22): When you **study** something, you spend time learning about it. A person who **studies** bugs is called an entomologist.

**ELL and SWD suggestion:**

Reinforce students' understanding of vocabulary by asking them to generate synonyms for the new words they are learning. This allows them to interact with new vocabulary in a meaningful way. Assist ELL students in recognizing cognates in their native language that correspond to the meaning of the word in English.

**Extension Activity:** Create a vocabulary notebook with students to keep track of all the new vocabulary words they are learning. Students will use the notebook to record each word and draw a picture that represents the word. Teachers can also use the notebook to have students draw synonyms, antonyms, or other important vocabulary features. If you are able, provide a small incentive like a sticker or a classroom shout-out to encourage students to use the word in the correct context in their everyday language.

# READ FOR MEANING – SIMILARITIES AND DIFFERENCES BETWEEN WORDS AND VISUALS

## ELA.1.R.2.3: Explain similarities and differences between information provided in visuals and words in an informational text.

- Clarification 1: When explaining similarities and differences, students will also explain how the visuals and words help the reader make sense of the topic.
- Clarification 2: During instruction, give students opportunities to see visual representations of similarities and differences using tools, such as Venn diagrams or T-charts.

## ELA.1.R.2.1: Use text features including titles, headings, captions, graphs, maps, glossaries, and/or illustrations to demonstrate understanding of texts.

### Before: Activate Background Knowledge

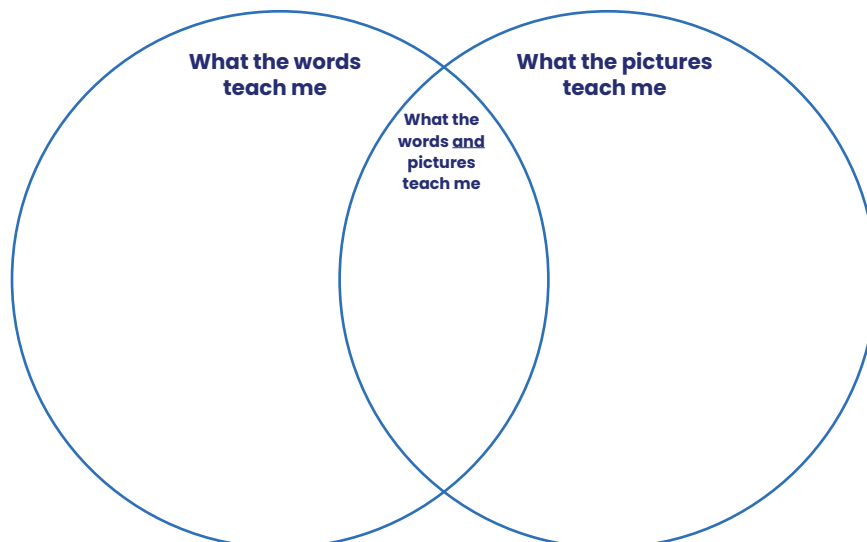
The Florida B.E.S.T. ELA standards state that reading comprehension depends more on relevant background knowledge than on mastery of reading strategies. Give students an opportunity to activate and use their schema to help them tie what they already know to what they will learn from the text.

- On a whiteboard or chart paper, write the title of the book, *Bugs*, for students to view.
- Use a Think/Pair/Share with students to prompt them to think about what they already know about bugs. Record responses on the whiteboard or chart paper. Guiding questions could include:
  - What words or phrases do you think of when you hear the title of our book, *Bugs*?
  - What bugs do you already know?
  - What bugs have you seen outside your home or school?
  - What feelings do you have when you hear the title, *Bugs*?

### During:

- Say, “The book we are reading, *Bugs*, is a nonfiction book, which means that it tells us real information and facts about bugs. When you read a nonfiction book, you can learn a lot of information from the words that the author writes. Sometimes the pictures will tell us different information from what is written in the words, and you can learn even *more* information. That’s why it’s really important to look at **all** the information you see on the page.”
- Introduce a Venn diagram with the left side labeled, *What the words teach me*, the right side labeled, *What the pictures teach me*, and the center labeled, *What the words and pictures teach me*.
- Say, “Today, as we read *Bugs*, we are going to look closely at the words *and* pictures. We are going to write down the different information the words and pictures tell us as well as how the words and pictures work together to give us the same or similar information.”
- Use explicit instruction and the Gradual Release of Responsibility framework to model this skill, provide guided practice, and give students an opportunity to apply learning either independently or in small groups.

Topic: \_\_\_\_\_  
\_\_\_\_\_



# READ FOR MEANING – SIMILARITIES AND DIFFERENCES BETWEEN WORDS AND VISUALS

## Model (I do) – Bees (p. 4 - 5)

- Say, “The first thing I am going to do is write the topic of what I am learning about at the top of my Venn diagram. The topic is what the section of the book is about. The **heading** at the top of the page will usually tell me the topic. Most of the time, it is larger than the other text and bold to stand out.”
  - “What is the heading at the top of page 4?” (Bees) Write the topic at the top of the Venn diagram.
- Read page 4 out loud. Say, “I’m going to look at the words and pictures on this page to see what I can learn about bees.”
- Say, “The first sentence is, ‘*They buzz!*’ I need to decide where to put this information on my Venn diagram. The words tell me that bees buzz, but the pictures do not tell me that. I am going to write this information in the left side of the diagram labeled, ‘*What the words teach me.*’”
- Say, “The next sentence says, ‘*Some make honey too.*’ When I look at the pictures, I see a jar of honey! Both the words **and** the pictures tell me the same information that bees make honey. I’m going to write this fact in the center of my diagram because the words and pictures are similar. They are working together to give me information about bees.”
- Say, “There is more information on page 5. I see a text feature called a diagram. The diagram shows me photos of the body parts of a bee, and the labeled words tell me what the body parts are called.”
  - “The words and pictures are similar. They are working together to give me information about bees. Where should I write this information on my Venn diagram?” (center)
- Say, “Remember what we said before. The pictures can give us different information about bees that the words don’t tell us. I’m going to look at both pages and see what I notice.” Write down what you notice in the right side of the Venn diagram. (Bees fly. They like flowers. They live in a hive.)
- Say, “Just by looking at these two pages, I learn a lot about bees! Some of it comes from the words, some of it comes from the pictures, and some of it comes from both the words and pictures working together!”
- “What would happen if I only read the words on the page and didn’t look at the pictures? What would happen if I only looked at the pictures and didn’t read the words?”

## Guided Practice (We do) – Butterflies (p. 6 - 7) and Flies (p. 8 - 9)

- Complete a Venn diagram with students to guide them in determining what is different (what the words teach them, what the pictures teach them), and what is similar (how the words and pictures work together to teach information).
- Ask guiding questions such as:
  - What do the words teach us about the topic?
  - Are the pictures similar to what the words are saying on the page?
  - What else do you notice about the pictures? What different information do the pictures tell us about the topic that the words do not?
  - What information do the text features teach us? (diagrams, labels, headings)
  - Why is it important to look at both the words and the pictures on the page? How do they help us learn information about a topic?

## After:

### Small group practice (You do)

- Put students in groups of two to three, and provide them with a blank Venn diagram.
- Assign each group a bug that hasn’t been discussed (ants, mosquitoes, ladybugs, beetles, or fireflies).
- Students will read the pages together and label the Venn diagram with their topic. They will work collaboratively to write down what information the words teach them about their topic, what information the pictures teach them, and what information they receive from both the words and pictures working together. Encourage them to use the words *similar* and *different* when describing the information they record in their Venn diagram.

### ELL and SWD suggestion:

To support learning, provide students with sentences that they will cut and paste or copy onto their Venn diagram. After reading the selected pages in the book, students will read the sentences provided. Students will then decide if the sentence describes what just the words teach them, what just the pictures teach them, or what the words and pictures work together to teach them.

For example the sentences for the section about bees might be:

- Bees buzz. (words only)
- Some bees make honey. (words and pictures)
- Bees live in hives. (pictures only)
- Bees have wings. (words and pictures)