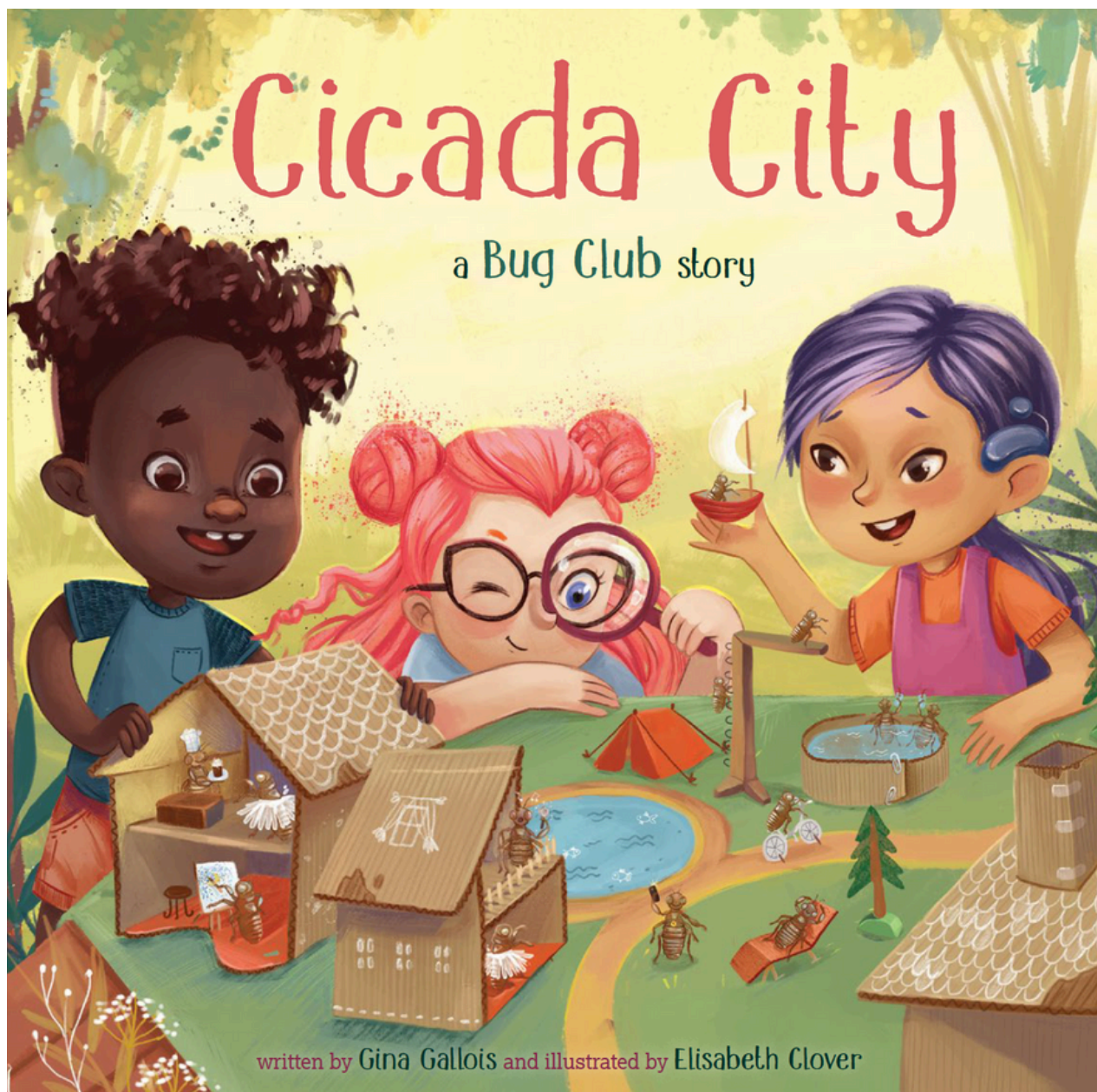


Lesson Plans: 4-5

Cicada City



Cicada City 4-5 Lesson Guide

Objective:

Students will be able to analyze text features in "Cicada City" by Gina Gallois and describe the life cycle and adaptations of periodical cicadas using academic vocabulary.

Standards Addressed:

4th Grade:

1. CCSS.ELA-LITERACY.RI.4.7: Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
2. CCSS.ELA-LITERACY.RF.4.3.A Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
3. CCSS.ELA-LITERACY.L.4.4.B Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).
4. NGSS 4-LS1-1: Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

5th Grade:

1. CCSS.ELA-LITERACY.RI.5.4: Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
2. CCSS.ELA-LITERACY.L.5.4.B Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis).
3. CCSS.ELA-LITERACY.RI.5.7: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
4. CCSS.ELA-LITERACY.RI.5.9: Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

5. NGSS 5-LS2-1: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
6. NGSS 5-ESS3-1: Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Key Points:

- Periodical cicadas have a unique life cycle that includes stages such as nymph, molting, and adult.
- Cicadas have specific adaptations like exoskeletons and tymbals that help them survive.
- Authors use text features like call-outs to provide additional information in non-fiction texts.
- Academic vocabulary such as xylem, exuviae, subterranean, and exoskeleton are important for understanding cicada biology.
- The life span of periodical cicadas is exceptionally long compared to many other insects.

Vocabulary:

Cicada Academic Vocabulary: periodical and annual cicada, nymph, exuviae, molting, exoskeleton, tymbals, subterranean, life span

Other words of note: critter keeper, generation, brood, burrow, unfurl, annual, emerge, predators, civilization, stragglers, abuzz

4th-5th Activities to analyze words: These activities will not only help students understand the cicada-related vocabulary better but also give them tools to decode and understand unfamiliar words in other contexts.

1. Examine the prefix "sub-" in "subterranean," discussing how it means "under" and relates to the cicadas' underground life stage. Have students brainstorm other words with this prefix.
2. Look at the suffix "-ae" in "exuviae," explaining that it's often used in scientific names and classifications.
3. Discuss the root "exo-" in "exoskeleton," meaning "outside," and how it describes the cicadas' external skeleton. Have students brainstorm other words with this root.

Sample Lesson Structure using *Cicada City*:

Opening:

- Begin by playing a recording of cicada sounds and ask students if they can identify the insect.
- Show students a molted cicada exoskeleton (or a picture of one) and ask them to hypothesize what it might be and why an insect would leave it behind.
- Introduce the book "Cicada City" and explain that today's lesson will explore both the story and the scientific facts about cicadas.
- Pre-teach select vocabulary words prior to the read aloud.

Introduction to New Material:

- Read "Cicada City" aloud to the class, pausing to discuss the call-out boxes and how they provide additional information.
- Explain the concept of text features, focusing on how the call-outs in the book offer factual information alongside the story.
- Introduce key vocabulary words as they appear in the text, providing student-friendly definitions and examples.
- Use a visual aid (poster or digital presentation) to show the life cycle of periodical cicadas, emphasizing the long underground nymph stage.
- Discuss cicada adaptations, such as their exoskeleton and tymbals for producing sound.
- Display a U.S. map and have students predict where cicadas may live, then refer to the map during reading once the book describes the states where cicadas are found.
- Common misconception to address: Many students might think that cicadas are a type of grasshopper or locust. Clarify the differences between these insects.

Guided Practice:

- Divide students into small groups and provide each group with a set of vocabulary cards. Have groups match the vocabulary words to their definitions, then share their matches with the class for discussion and correction if needed. For fifth grade, expand the vocabulary activity to include more complex academic and domain-specific words.
- Discuss theories as to how cicadas' unique adaptations (like their long life cycle and loud sounds) help them survive in their environment.
- Create a simple food web or ecosystem model that includes cicadas, showing how they interact with other organisms (including plants and animals).
- Discuss how understanding cicada life cycles and behavior can help communities protect local ecosystems.
- Compare cicadas to other insects that students might be more familiar with, discussing similarities and differences in structure and behavior.
- As a class, create a simple flow chart of the cicada life cycle on the board, with students suggesting each stage and its description.
- Guide students in identifying and discussing other text features in the book, such as illustrations, speech bubbles, and diagrams.

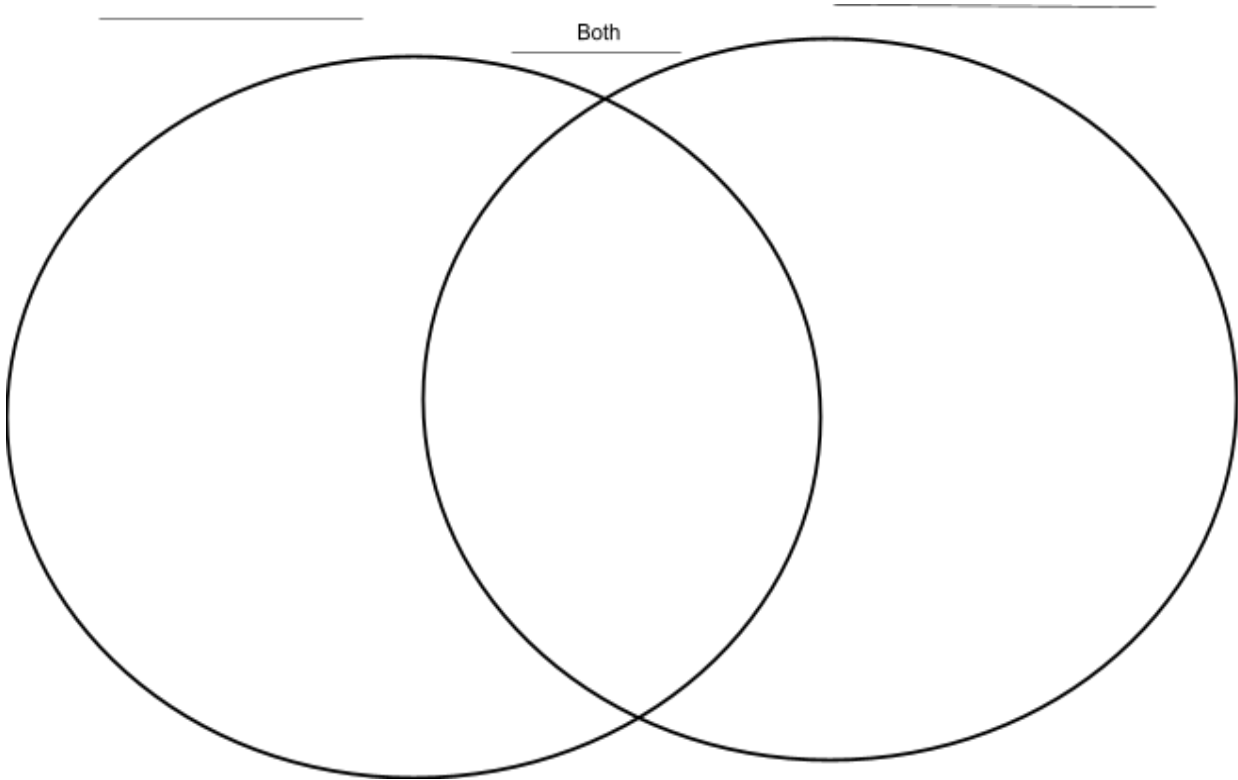
Independent Practice:

- Students write a short paragraph explaining how the author's use of call-outs in "Cicada City" helped them better understand cicadas.
- Students extend the life cycle diagram from guided practice into a more comprehensive model that shows how cicadas interact with their environment (e.g., what they eat, what eats them, how they affect plants). Have students share their life cycle diagrams with a partner and explain their work.
- Add a research component where students use multiple sources (both print and digital) to find additional information about cicadas or their impact on the environment.
- Include a comparative element where students read another text about cicadas or insect life cycles and integrate information from both sources.
- Challenge advanced students to research and compare the life cycles of annual cicadas and periodical cicadas, creating a Venn diagram to show similarities and differences.

Closing:

- Conduct a "Cicada Quiz Show" where students form teams and create quiz questions about cicadas and text features based on what they've learned. The game can be played the next day as a review activity.
- Students can complete the following created resources: My Cicada City (draw your own cicada social media posts), Cicada City word search, Draw your own Cicada page.

Venn Diagram





Cicada City

written by Gina Gallois

illustrated by Elisabeth Clover



Draw your own Cicada!

What are the three most interesting things you learned about cicadas?

1 _____


2 _____


3 _____

Which creepy crawly creature would YOU like to learn about next?

What makes you want to know more?



 @artemisopossum

 @LivingImperfection

This reading activity is brought to you by Moonflower Press
with art from Cicada City, by Gina Gallois



Cicada City

written by Gina Gallois

illustrated by Elisabeth Clover



Cicada City Word Search – can you find all the words?

bestfriends

subterranean

magnifyingglass

butterflynet

fundraiser

periodical

exoskeleton

underground

journal

exuviae

neighbors

hyacinth

rootsap

nature

bugclub

sakura

jaylen

insect

cicada

broodx

city


molt

nymph

shell

X X Y N S T E B Y F S F B L J O B U T T E R F L Y N E T T F
 K U N K F L Q F A M K P O A A G J N E I G H B O R S D V K O
 L O X H K J W X C K B C W V T E N B C G O J J Y U L M W E G
 V G J R Z S R S K P V R G K R Q Z Z W B X O K V B A J L K H
 M I N M X I B O E I R S O F R V B M E H O F E C U C J Z N Y
 V X P P A O C A H S Z Q G O Q D Y G X K Z L C O G W O W H K
 S D J U O G S S Q U L C R L D W T N O F M R A J C X U X R O
 T O V T G V N F M U A D N K U X E L S P U J J Q L X R Z J Z
 W H S N R D D I H Y A C I N T H K A K W I N P S U Q N P X W
 C B G R J B E K F N A V Y K B O C J E B S M F S B P A K D L
 Q O S G U I W F T Y A Y Y F X W H N L Y S Y X D R V L S K W
 T P M H W E O N S V I T R J W T X S E S T H J V O H R J U F
 X N X H E V E Q D T N N U I N S E C T H O H M N J A Y L E N
 X U H T K L O W Z H D Z G R J E E D O Z S R I C I T Y O K R
 R W Z A E Q L O J V A R N G E S X K N O R G S G U F U U Q O
 P I G O S D F A N G E R Z W L V A D Z U N D E R G R O U N D
 Q M U P X V O J N K W O F A O A C P A Q C Z U N R Y J G Z B
 L P E X M P Q M D H R O M M J D S I P X C C H O O C X W K I
 L A I X V M A C V A Y T M U F C C S V V U S U Z P O T W Q M
 P B I H U B X E L R T S B E E D L H C U X F F D J O H B F N
 R Y W K G V A Z Q Y T A X M N P U F U N D R A I S E R H M E
 Y O X N G S I W O U S P Z E J S Y P U B L T A F C H O Z N N
 F V K S S M R A X J P E R I O D I C A L A B L K P Z X X Z M
 R W M Z N F W F E O F G B A S T V M R I H L C N B S W N Z O
 U N Y E R V Y A Q W U Y Z X F T L T F K U L Q U P R X X I L
 P W Y U Y O C P Q B U C Y F E X Z B E S T F R I E N D S U T
 K O N J E X S U B T E R R A N E A N Y M T J S N Y M P H B V
 G G M M J U P V L L E Y G U A V V S I T V N W B T J R A E F
 O E L C E O N Q V C V O R U W B W Q E U S Z K S A K U R A S
 B X I F C Y J X A G G U M V F C I C G T C C I C A D A P T H



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Cicada City

written by Gina Gallois illustrated by Elisabeth Clover

Draw your own cicadas enjoying their favorite hobbies.

