

It's Time for a Bug Debate

A Common Core States Standard and Next
Generation Science Aligned Activity for

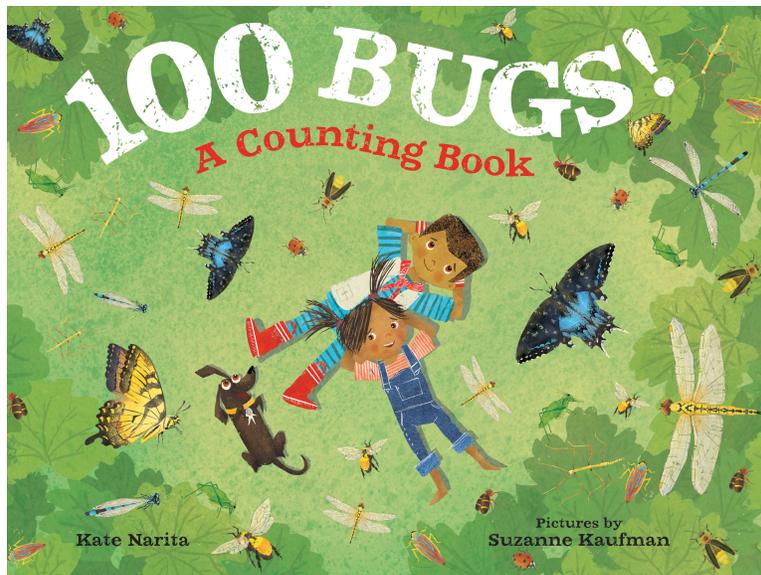
100 BUGS! A Counting Book

FARRAR STRAUS GIROUX
New York

Written by Kate Narita

Illustrated by Suzanne Kaufman

ISBN: 978-0374306311



“Packed with great extension possibilities, visually engaging illustrations, and quick rhymes, this read-aloud would be a great addition to any

STEM shelf.” —Kirkus Review 

Meet the Team

Kate Palaces Narita is the author of *100 Bugs! A Counting Book*. When she's not out and about driving, teaching fourth grade or cheering on her two teenage sons, Kate lives, writes, and hikes on a small mountain in central Massachusetts. There's a magical part of Mt. Wachusett in every one of her stories. Be it small wonders like darting dragonflies and gorgeous garden phlox, or large wonders like munching moose and beautiful balsam firs, she celebrates nature's bounty each and every day. Visit her at www.katenarita.com.



Suzanne Kaufman is an author, illustrator, animator and lover of school potlucks. She is the author-illustrator of *Confiscated* and *I Love Monkey*. Her previously illustrated work includes books: *All Are Welcome*, *100 Bugs*, *Naughty Claudine Christmas*, and *Samanthasaurus Rex*. Over the years, she's done everything from animating special effects for Universal Television and Discovery Channel, to animating award-winning video games for children. When not tramping through the wilds of the Pacific Northwest, you will find her teaching animation or working in her studio. She lives in Seattle with her husband and two creative daughters of her own. Visit her at www.suzannekaufman.com.



Lisandra Flynn is an editor turned elementary school teacher who works with Kate. She has a flair for design and enjoys creating learning resources for her students and fellow teachers. When she's not teaching or tediously reorganizing her classroom, Lisandra enjoys hiking, crafting, and decorating her home in central Massachusetts, which she shares with her husband, baby boy, and two feisty cats.



It's Time for a Bug Debate

Pesticides harm insects. The following information is directly quoted from The Environmental Protection Agency's 2017 report which focuses on pesticide usage throughout the world from 2008-2012.

“U.S. pesticide usage totalled over 1.1 billion pounds annually in both 2011 and 2012, with herbicides accounting for nearly 50% of total U.S. pesticide usage in 2011 and nearly 60% of usage in 2012 (see Table 3.1). On average across all reported years (2008-2012), U.S. pesticide use accounted for approximately 23% of total pounds of pesticides applied, 25% of total pounds of herbicides applied, 43% of total pounds of fumigants applied, 12% of fungicides applied, and 6% of insecticides applied worldwide.”

Ask your students whether or not they think the farm featured in *100 Bugs!* uses pesticides, why or why not. Should farmers use pesticides, why or why not? Randomly divide up the class into two sides and have one side argue for the use of pesticides and the other side argue against the use of pesticides. Then, have them switch sides. After the debate, students can write a persuasive essay about why or why not farmers should use pesticides. I've included the persuasive essay planners I use in my classroom below. If you're looking to further explore the pesticide issue with your students, Melissa Stewart's *A Place for Butterflies* (www.melissastewart.com) and the other *A Place for* companion books are excellent resources. I use them each year in my classroom to teach cause and effect as well as problem and solution nonfiction text structures.



Name: _____

Persuasive Outline

Thesis:

(your specific topic)

(your point of view)

because

(first topic sentence)

(second topic sentence)

(third topic sentence)

Body Paragraph Topic Sentences

First Paragraph Topic Sentence:

Second Paragraph Topic Sentence:

Third Paragraph Topic Sentence:

Name: _____

Persuasive Essay Conclusion Paragraph

In conclusion, _____
(copy thesis statement from introductory paragraph)

Opinion sentence:

Bug Debate Common Core Alignment

Biological Evolution: Unity and Diversity (Next Generation Science Standard)

3-LS4-4: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

(Grades 3-5)

Speaking and Listening: Comprehension and Collaboration

CCSS.ELA-LITERACY.SL.2.1: Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups.

CCSS.ELA-LITERACY.SL.2.1.A: Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).

CCSS.ELA-LITERACY.SL.2.1.B: Build on others' talk in conversations by linking their comments to the remarks of others.

CCSS.ELA-LITERACY.SL.2.1.C: Ask for clarification and further explanation as needed about the topics and texts under discussion.

CCSS.ELA-LITERACY.SL.2.2: Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

CCSS.ELA-LITERACY.SL.2.3: Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

CCSS.ELA-LITERACY.SL.3.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 3 topics and texts*, building on others' ideas and expressing their own clearly.

Bug Debate Common Core Alignment

Speaking and Listening: Comprehension and Collaboration (continued)

CCSS.ELA-LITERACY.SL.3.1.A: Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

CCSS.ELA-LITERACY.SL.3.1.B: Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).

CCSS.ELA-LITERACY.SL.3.1.C: Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.

CCSS.ELA-LITERACY.SL.3.1.D: Explain their own ideas and understanding in light of the discussion.

CCSS.ELA-LITERACY.SL.3.2: Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-LITERACY.SL.3.3: Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

CCSS.ELA-LITERACY.SL.4.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts*, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.4.1.A: Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

Bug Debate Common Core Alignment

Speaking and Listening: Comprehension and Collaboration (continued)

CCSS.ELA-LITERACY.SL.4.1.B: Follow agreed-upon rules for discussions and carry out assigned roles.

CCSS.ELA-LITERACY.SL.4.1.C: Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

CCSS.ELA-LITERACY.SL.4.1.D: Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

CCSS.ELA-LITERACY.SL.4.3: Identify the reasons and evidence a speaker provides to support particular points.

CCSS.ELA-LITERACY.SL.5.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 topics and texts*, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.5.1.A: Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

CCSS.ELA-LITERACY.SL.5.1.B: Follow agreed-upon rules for discussions and carry out assigned roles.

CCSS.ELA-LITERACY.SL.5.1.C: Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

CCSS.ELA-LITERACY.SL.5.1.D: Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

Bug Debate Common Core Alignment

Speaking and Listening: Comprehension and Collaboration (continued)

CCSS.ELA-LITERACY.SL.5.2: Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-LITERACY.SL.5.3: Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.

Speaking and Listening: Presentation of Knowledge and Ideas

CCSS.ELA-LITERACY.SL.2.4: Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.

CCSS.ELA-LITERACY.SL.2.6: Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

CCSS.ELA-LITERACY.SL.3.4: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.

CCSS.ELA-LITERACY.SL.3.6: Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

CCSS.ELA-LITERACY.SL.4.4: Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

CCSS.ELA-LITERACY.SL.5.4: Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

CCSS.ELA-LITERACY.SL.5.6: Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.

Bug Debate Common Core Alignment

Writing: Text Types and Purposes

CCSS.ELA-LITERACY.W.3.1: Write opinion pieces on topics or texts, supporting a point of view with reasons.

CCSS.ELA-LITERACY.W.3.1.A: Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.

CCSS.ELA-LITERACY.W.3.1.B: Provide reasons that support the opinion.

CCSS.ELA-LITERACY.W.3.1.C: Use linking words and phrases (e.g., *because, therefore, since, for example*) to connect opinion and reasons.

CCSS.ELA-LITERACY.W.3.1.D: Provide a concluding statement or section.

CCSS.ELA-LITERACY.W.4.1: Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

CCSS.ELA-LITERACY.W.4.1.A: Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.

CCSS.ELA-LITERACY.W.4.1.B: Provide reasons that are supported by facts and details.

CCSS.ELA-LITERACY.W.4.1.C: Link opinion and reasons using words and phrases (e.g., *for instance, in order to, in addition*).

CCSS.ELA-LITERACY.W.4.1.D: Provide a concluding statement or section related to the opinion presented.

CCSS.ELA-LITERACY.W.5.1: Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

Bug Debate Common Core Alignment

Writing: Text Types and Purposes (continued)

CCSS.ELA-LITERACY.W.5.1.A: Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.

CCSS.ELA-LITERACY.W.5.1.B: Provide logically ordered reasons that are supported by facts and details.

CCSS.ELA-LITERACY.W.5.1.C: Link opinion and reasons using words, phrases, and clauses (e.g., *consequently*, *specifically*).

CCSS.ELA-LITERACY.W.5.1.D: Provide a concluding statement or section related to the opinion presented.