
Common Core Math and Literacy

— In the Kitchen and Garden Classroom —

Opening

Welcome!

Housekeeping

Introductions

Six Word Poem

What do you hope for your students after spending time with you in the garden or kitchen?

Agenda

- Intro to Common Core Math
 - *Model Lesson*
 - Variations and Extensions
-
- Intro to Common Core Literacy
 - *Model Lesson*
 - Other Considerations
-
- Debrief and Application

Materials to Gather (optional)

- Newspaper
 - Ruler
 - Protractor
 - Scissors
 - Pencil
 - Seeds (ideally, a variety of seeds that prefer direct sown in spring)
-
- A fruit or vegetable to taste
 - Blank paper

Introduction to Common Core Math

Strands

- Counting and Cardinality (K only)
Numbers and Operations - Base Ten (K-5)
The Number System (6-8)
- Operations and **Algebraic Thinking** (K-5)
Expressions and Equations (6-8)
- Numbers and Operations - **Fractions** (3-5)
Ratios and Proportional Relationships (6-8)
- **Measurement and Data** (K-5)
Statistics and Probability (6-8)
- **Geometry** (K-8)

Practices

Standards for Student Mathematical Practice


1 Make sense of problems and persevere in solving them.



Keep on going!

2 Reason abstractly and quantitatively.

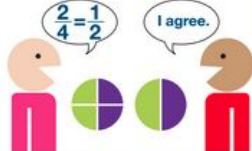
Write a story for the mathematical equation


$$\frac{1}{2} \times 4$$

DeJuan exercises $\frac{1}{2}$ hour a day for 4 days. How many total hours does he exercise?

Think what makes sense.

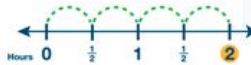
3 Construct viable arguments and critique the reasoning of others.



$\frac{2}{4} = \frac{1}{2}$ I agree.

Talk and explain.

4 Model with mathematics.



Hours 0 $\frac{1}{2}$ 1 $\frac{1}{2}$ 2

$$\frac{1}{2} \times 4 = 2 \quad \text{or} \quad 4 \times \frac{1}{2} = 2$$

Show your thinking.

5 Use appropriate tools strategically.



$3 \times 2 = 6$

Use the right tools.

6 Attend to precision.

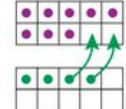
symbol: equals (the same as)

$$120 \text{ minutes} = 2 \text{ hours}$$

units of measure

Check your work.

7 Look for and make use of structure.

$$8 + 4 = 12$$


See the pattern or connection.

8 Look for and express regularity in repeated reasoning.



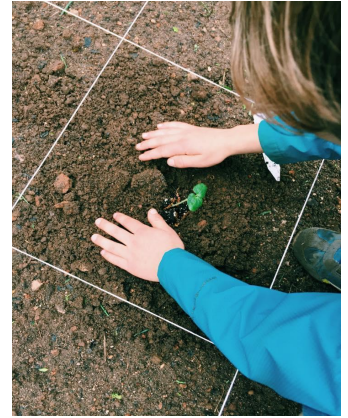
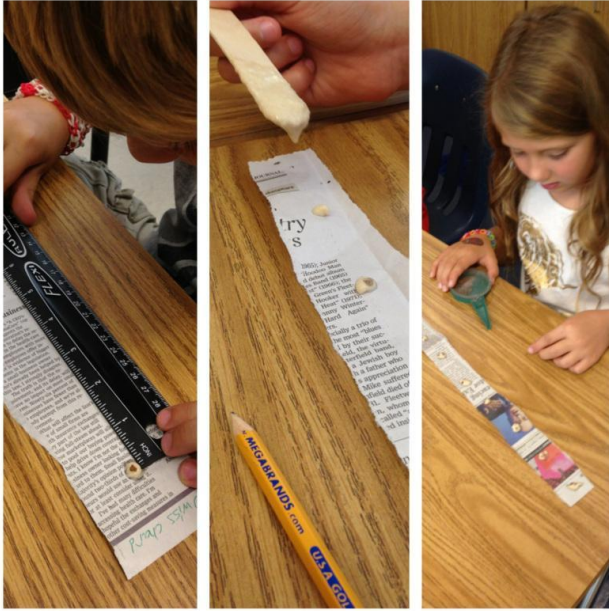
See the pattern or connection.

Model Lesson

Square Foot Gardening Examples

- 4 per square foot = lettuce, basil, marigolds
- 9 per square foot = bush beans, beets, spinach
- 16 per square foot = radishes, carrots, onions

Variations and Extensions



Breakout Rooms by Grade Level

Re-name yourself in Zoom to add the grade level you want to talk with other folks about.

Discuss:

- What types of math problems did you solve **in this example lesson**?
- What are **some other favorite** math lessons for your grade level?

Introduction to Common Core Literacy

Strands

- Speaking and Listening
- Language
- Writing
 - Opinion pieces
 - Informative texts
 - Narratives
- Reading
 - Foundational Skills
 - Literature
 - Informational Text

Practicing Language Skills with Food

Preparing Food

Connect to Language Arts (Sentence Structures)



1. Rinse the strawberry



in the colander



at the sink.



2. Slice the strawberry



with the knife



on the cutting board.



3. Discard the greens



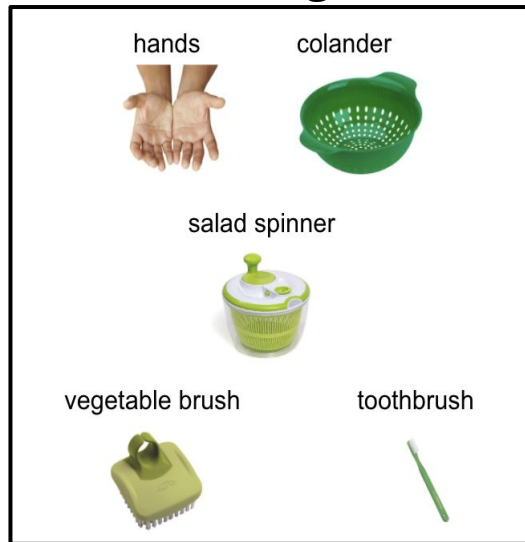
in the compost bag.

Preparing Food

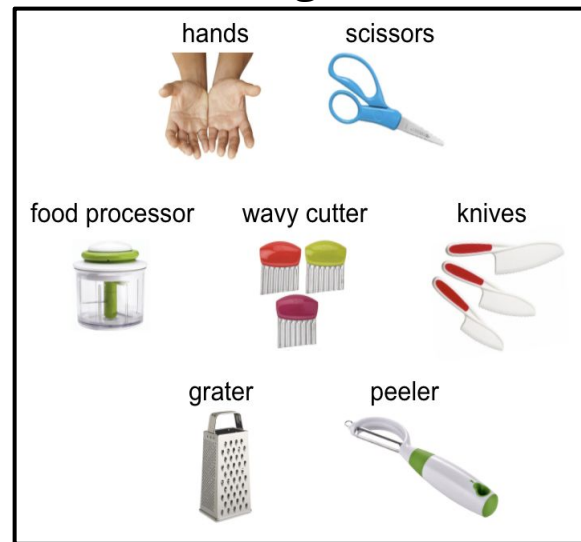
Connect to Language Arts (Vocabulary)

A word wall is a displayed collection of frequently-used words or vocabulary, sometimes organized in meaningful groups.

Washing Tools



Cutting Tools



Preparing to Taste

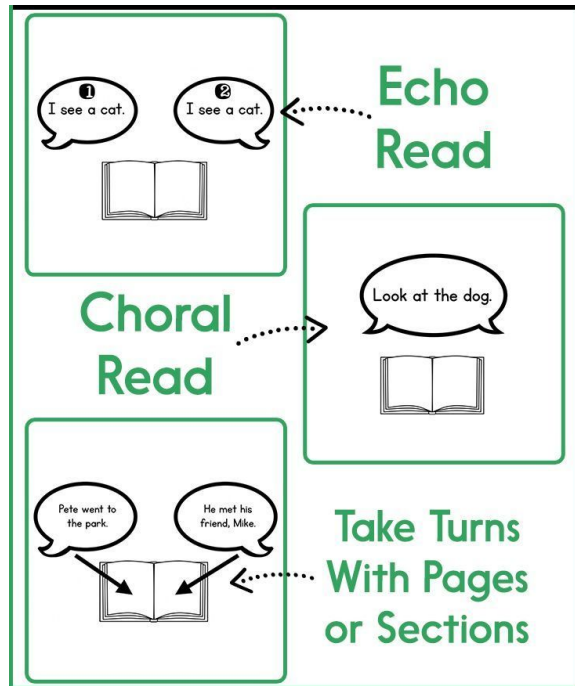
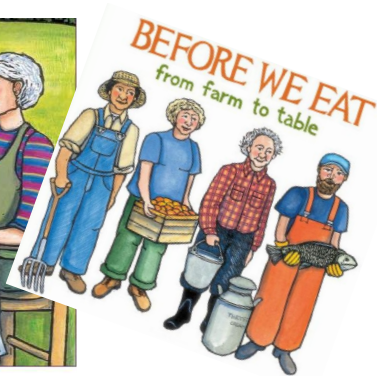
Connect to Language Arts (Fluency)

As we sit around this table,
Let's give thanks as we are able,
To all the farmers we'll someday meet,
That helped grow this food we eat.



As we sit around this table
let's give thanks as we are able

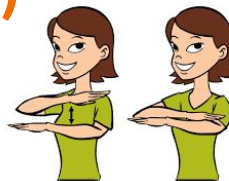
to all the folks we'll never meet
who helped provide this food we eat.



Preparing to Taste

Connect to Language Arts (Sign Language)

As we sit around this table,



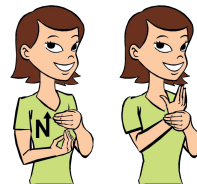
Let's give thanks as we are able,



To all the farmers we'll someday meet,



That helped grow this food we eat.



Taste!

Describing Food

Connect to Language Arts (Vocabulary, Parts of Speech)

A word wall is a displayed collection of frequently-used words or vocabulary, sometimes organized in meaningful groups, such as parts of speech.

Tasting Adjectives

Taste					Texture	
sweet	sour	salty	bitter	savory	dry	crunchy
hot	strong	tart	tangy	plain	moist	crumbly
buttery	mild	mellow	fresh	ripe	greasy	chewy
burnt	zesty	spicy	refreshing	fruity	crispy	juicy
flavorful	sharp	peppery	pickled	rich	gooey	creamy

Describing Food

Connect to Language Arts (Fact or Opinion)

I liked it!

I loved it!

It's delicious!

Delectable!

So appetizing!

I didn't care for it.

I don't like it yet.

It's not my favorite.

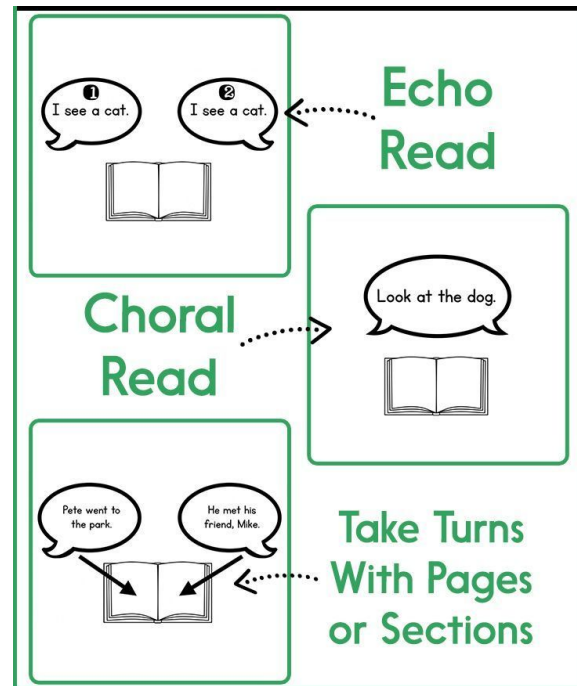
I'll try it again later.

I may like it prepared differently.

Clean-up

Connect to Language Arts (Fluency)

“Add it to the pot.
Let it all rot,
For compost stew!”



Writing about Food

Randomly Assigned Breakout Rooms

10 minutes, in groups of 3-4

Select a writing prompt on the slides to complete together as a group about one of the fruits or vegetables a group member tasted.

Assign one group member to be the recorder and remember your breakout room number. Groups will be randomly selected to share!

Adjectives to Acrostics

Connect to Language Arts (Parts of Speech)

Adjectives to Describe Taste	Adjectives to Describe Texture	Adverbs to Add In Front
<ul style="list-style-type: none">• Bitter• Burnt• Buttery• Delectable• Delicious• Flavorful• Fresh• Fruity• Hot• Irresistible• Mellow• Mild• Peppery• Pickle• Plain• Refreshing• Rich• Ripe• Salty• Savory• Sharp• Sour• Spicy• Strong• Sweet• Tangy• Tart• Zesty	<ul style="list-style-type: none">• Chewy• Creamy• Crispy• Crumbly• Crunchy• Dry• Goopy• Greasy• Juicy• Moist <p>Adjectives to Describe Look</p> <ul style="list-style-type: none">• Red• Orange• Yellow• Green• Blue• Purple• Black• Brown• Tiny• Small• Large• Huge• Round• Flat	<ul style="list-style-type: none">• Always• Exactly• Fortunately• Frequently• Generally• Hardly• Never• Normally• Occasionally• Often• Only• Just• Perfectly• Rarely• Seldom• Seriously• So• Sometimes• Unexpectedly• Usually• Very

Name: _____

S

T

R

A

W

B

E

R

R

Y

Hungry Haikus

Connect to Language Arts (Syllables)

Haiku - a type of short form poetry originally from Japan. Traditional Japanese haiku consist of a kigo, or seasonal reference.



_____ (title)

By: _____

_____ (5 syllables)

_____ (7 syllables)

_____ (5 syllables)

Step-by-Step Sentences

Connect to Language Arts (Sequencing)

- Garden how-tos
- Cycle hunts
- Recipes

Title: _____

By: _____

First, _____

Then, _____






Next, _____

Last, _____



Found Faces

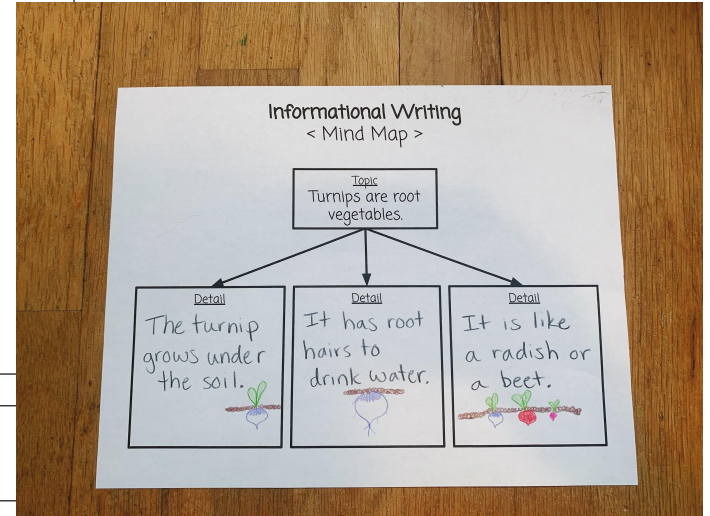
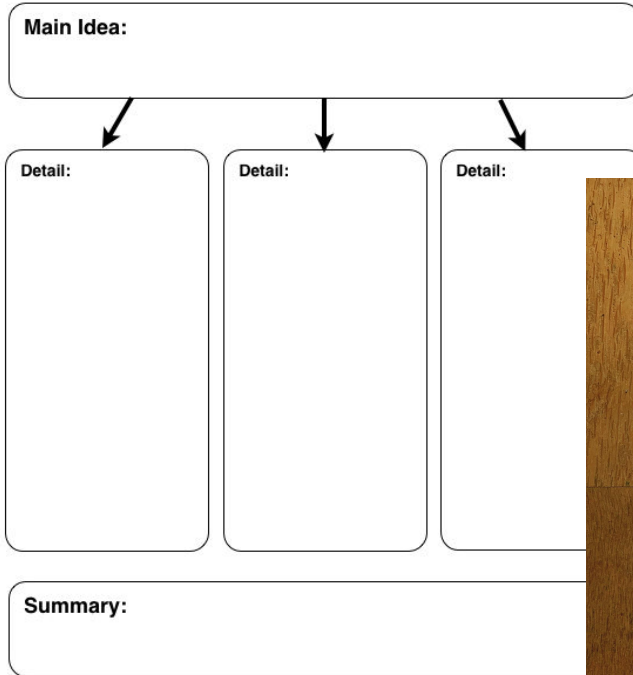
Connect to Language Arts (Narrative Writing)

Setting	Characters	
		
Beginning	Middle	End
		



Finding the Facts

Connect to Language Arts (Informational Writing)



Persuasive Paragraphs

Connect to Language Arts (Persuasive Writing)

Opinion Statement:

Reasons

Conclusion Statement:

© Conversation Literacy



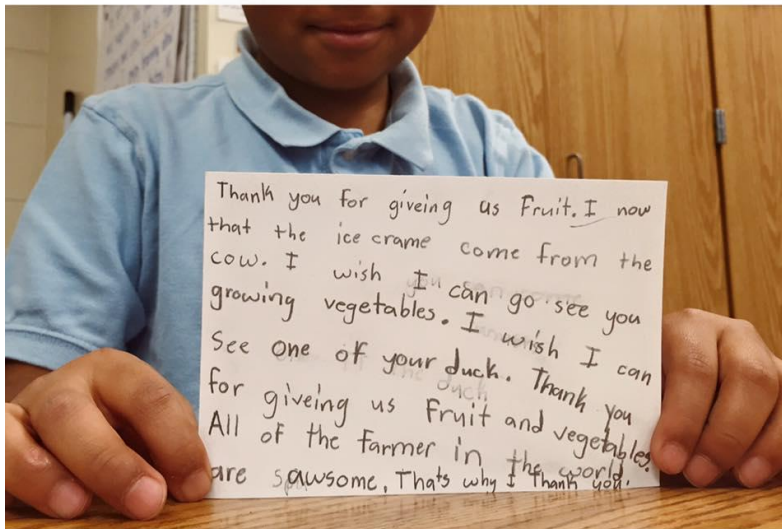
Thank a Farmer

Connect to Language Arts (Letter Writing)

Dear Farmer _____,

Thank you for _____

Signed,



Thank you for giveing us Fruit. I now
that the ice crame come from the
cow. I wish I can go see you
growing vegetables. I wish I can
see one of your duck. Thank you
for giveing us Fruit and vegetables.
All of the farmer in the world
are sawsome. Thats why I thank you.

Poetry / Simile, Metaphors, Analogy

Connect to Language Arts

Simile

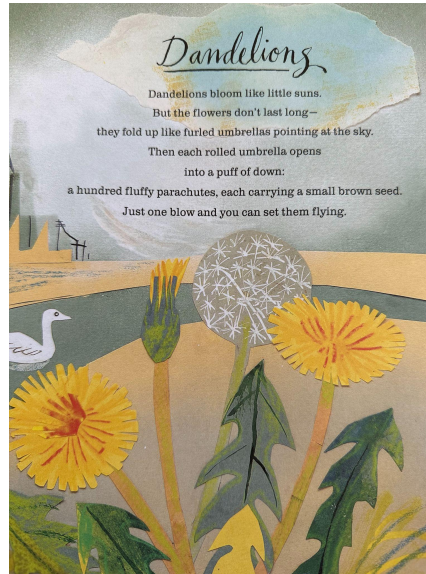
A simile is a rhetorical device used to compare two things using the words "like," "as," or "than."



as big as a mountain



like music to my ears



Name: _____

The strawberry is as _____

as a _____

and as _____

as a _____.

The strawberry is like a _____

_____.

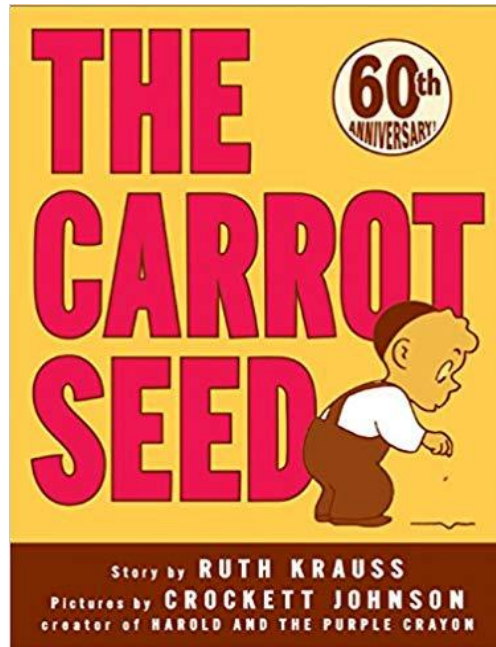
Reading about Food

Selecting Children's Literature



Selecting Children's Literature

What language(s) are the books written in?



Selecting Children's Literature

Who is represented in the books?

DIVERSITY IN CHILDREN'S BOOKS 2018

Percentage of books depicting characters from diverse backgrounds based on the 2018 publishing statistics compiled by the Cooperative Children's Book Center, School of Education, University of Wisconsin-Madison: ccbc.education.wisc.edu/books/pcstats.asp

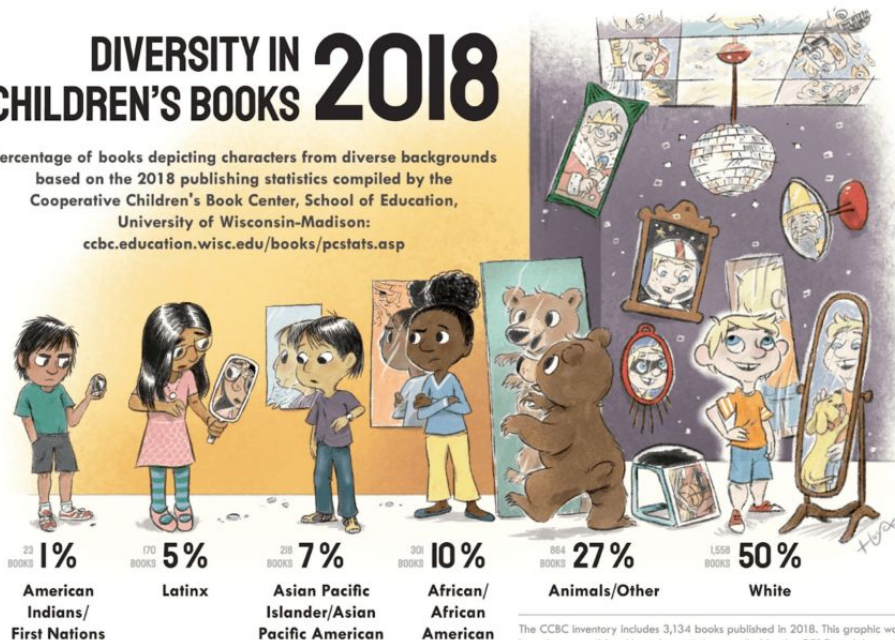
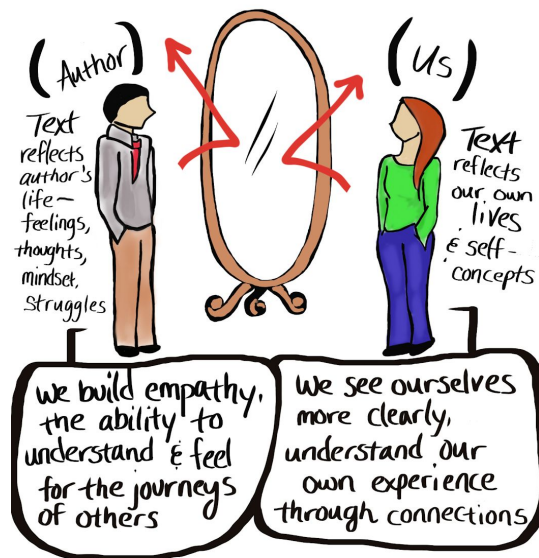
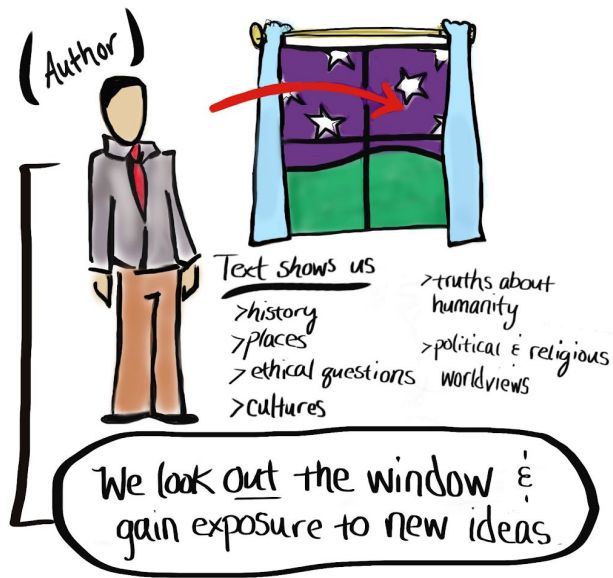


Illustration by David Huyck, in consultation with Sarah Park Dahlen
Released under a Creative Commons BY-SA license: <https://creativecommons.org/licenses/by-sa/4.0/>

The CCBC inventory includes 3,134 books published in 2018. This graphic would not have been possible without the statistics compiled by the CCBC, and the review and feedback we received from Edith Campbell, Molly Beth Griffin, K. T. Horning, Debbie Reese, Ebony Elizabeth Thomas, and Madeline Tyner. Many thanks.

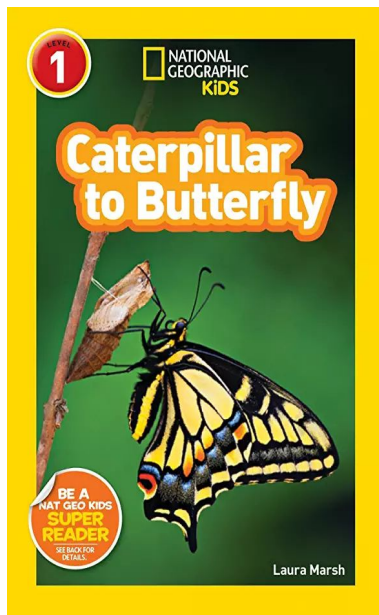
Selecting Children's Literature

Who is represented in the books?

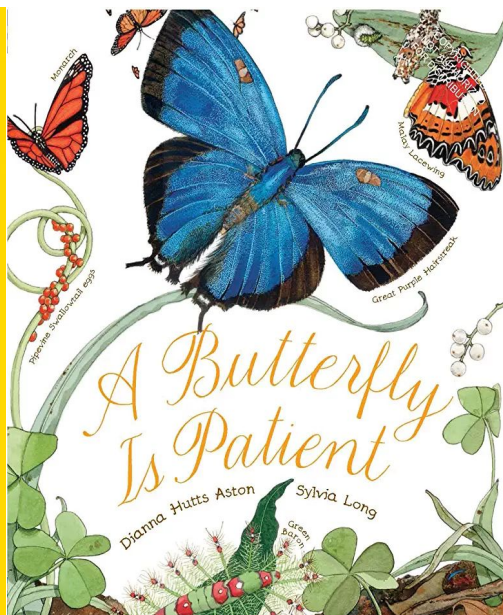


Selecting Children's Literature

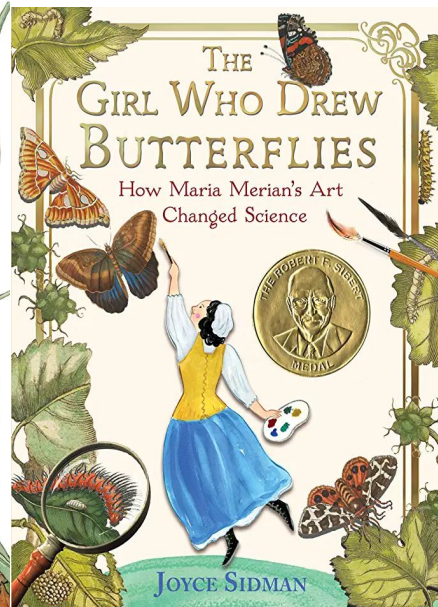
Can I offer a variety of text types?



informational



poetry



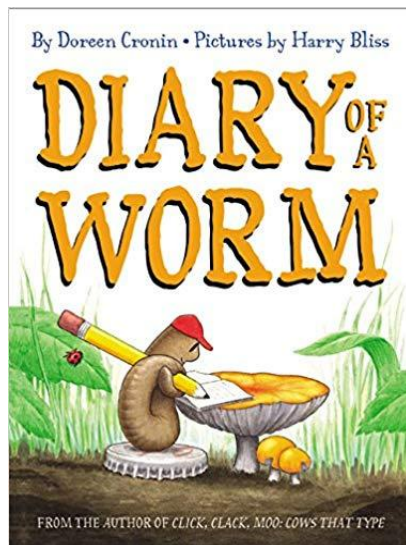
biography

Selecting Children's Literature

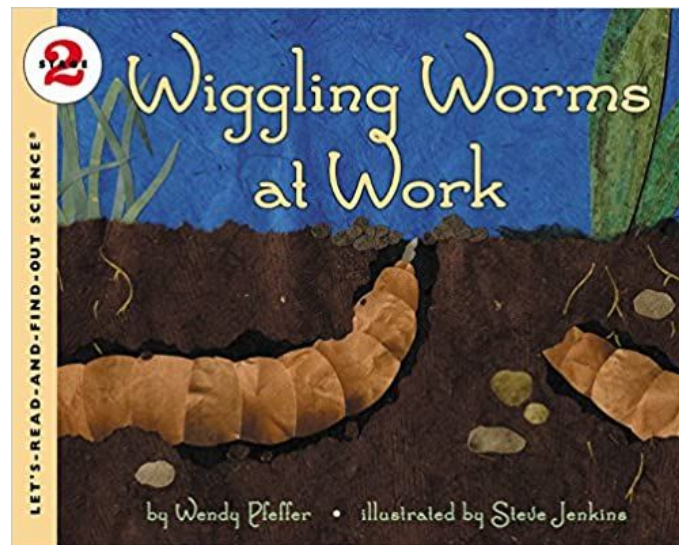
What is the reading level and length? How will it be read?

- Read the pictures
- Read the words
- Guided reading
- Read aloud

- One sitting
- Multiple sittings



In small groups, read pictures or read words

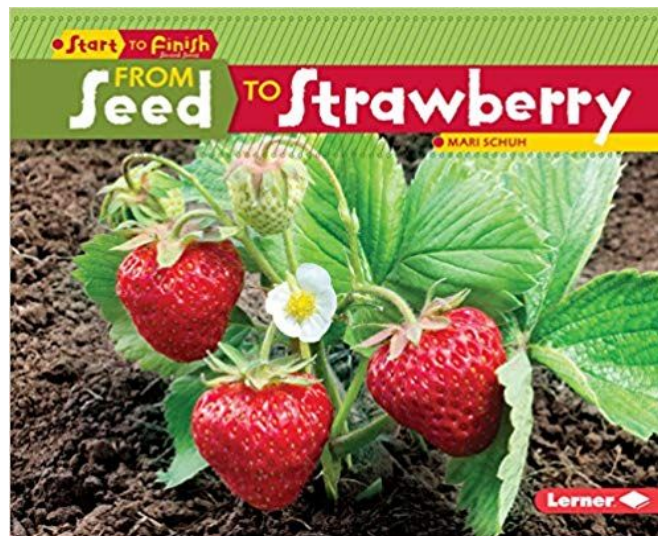
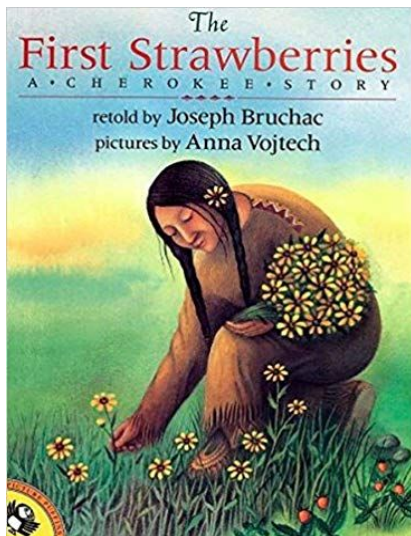


Read aloud, a few pages before each class

Selecting Children's Literature

Other Considerations

- You don't have to read the whole book
- You are allowed to change the words ;)



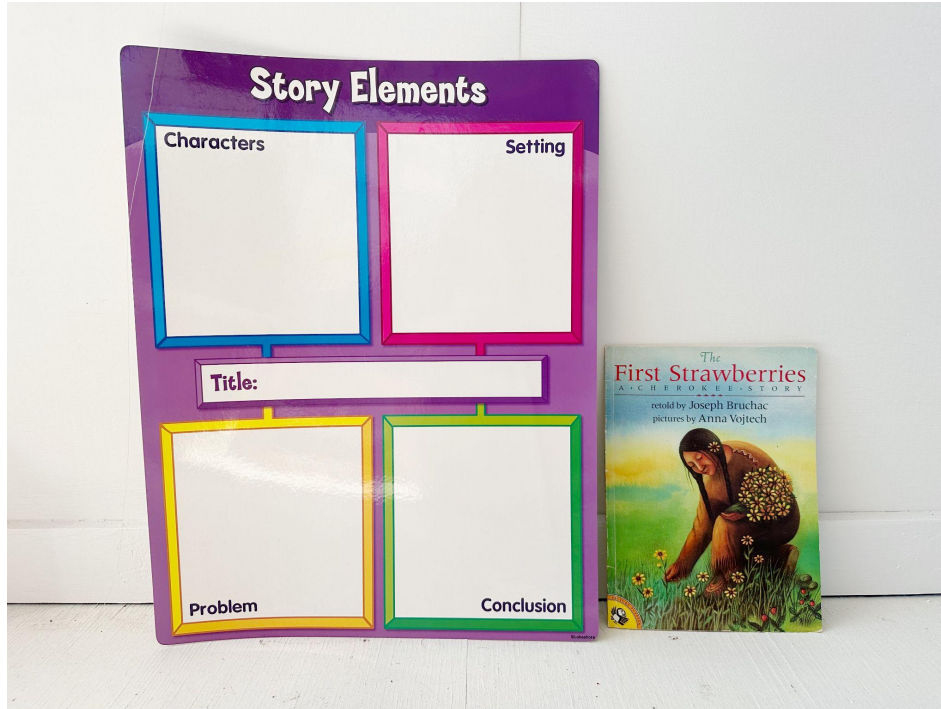
Reading about Food

Teaching Reading Skills



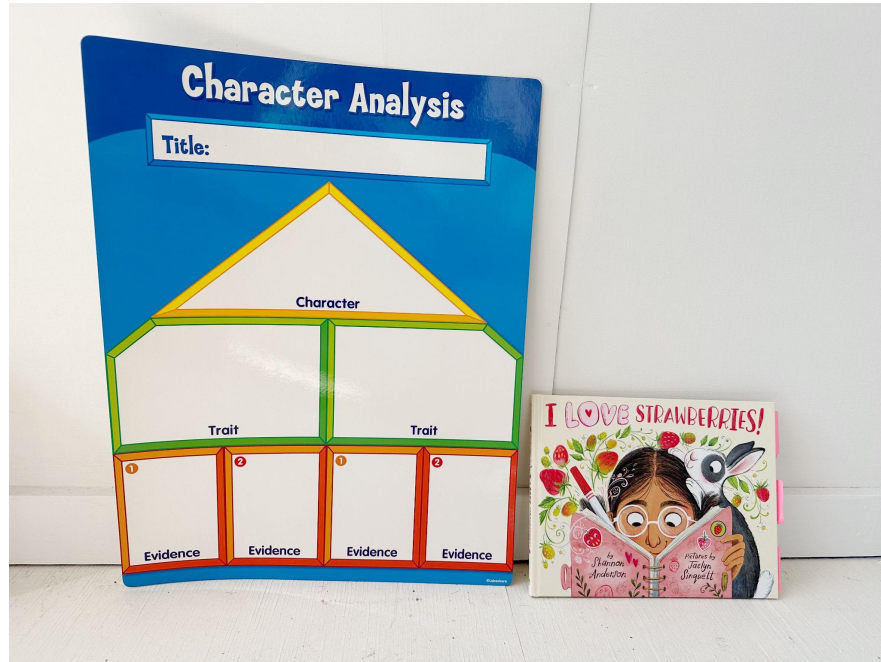
Reading Fiction/Narrative Stories

Connect to Language Arts (Story Elements)



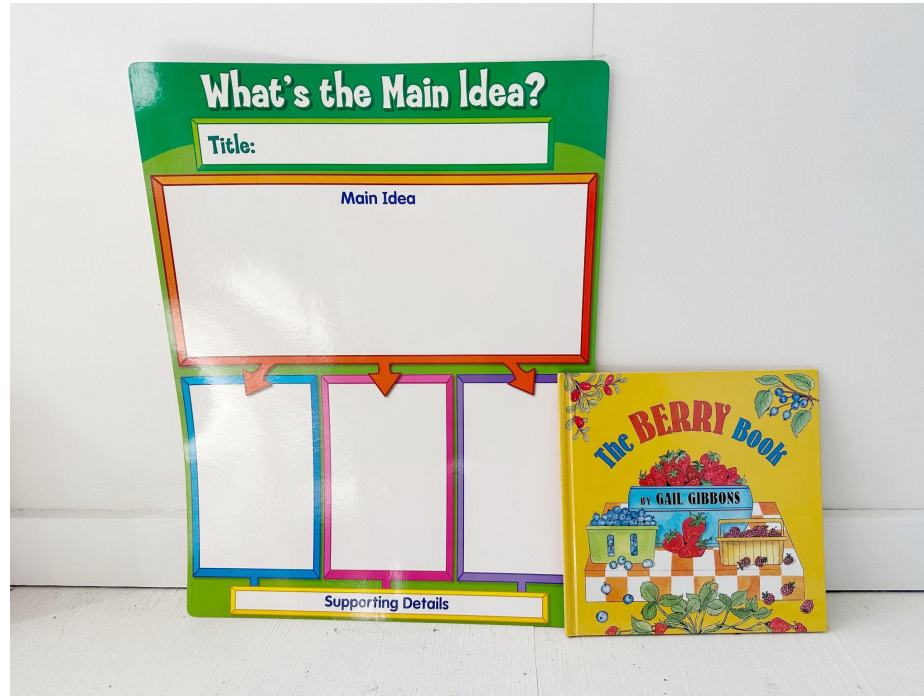
Reading Fiction/Narrative Stories

Connect to Language Arts (Character Analysis)



Reading Non-Fiction/Informational Texts

Connect to Language Arts (Main Idea and Details)



Reading Non-Fiction/Informational Texts

Connect to Language Arts (Sequencing)



Closing

Thank you!

Please complete the survey
(link in chat)

Stick around for Q&A
