

The Thing About Luck

By Cynthia Kadohata



After School Book Club
Teacher's Guide

Do you enjoy reading, hands on activities and field trips?

Use this 6 week guide to create your own Agricultural Book Club.

Start by reading The Thing About Luck by Cynthia Kadohata and learn the science behind growing, harvesting and consuming wheat. Each week you will discuss the book, read, and investigate another aspect of wheat production. You can also provide a wheat-based snack during the meetings. If possible, use your last session by going on a field trip to a local grain elevator. The children will get to see a combine harvester close up and personal! They will also get to spend more time with their friends, learn how to make bread, and see how reading gives new experiences and takes you places that are new and exciting!

Lesson Booklet for:

The Thing About Luck

By Cynthia Kadohata

About the Book

Twelve-year old Summer and her family are having a year of terrible luck. Just when family matters cannot seem to get any worse, her parents learn they must travel to Japan to care for elderly relatives, leaving Summer and her brother, Jaz, behind to spend the summer with their grandparents, Obaachan (grandmother) and Jiichan (grandfather). Money is tight and the mortgage has to be paid, so Summer and Jaz go with their grandparents on a traveling wheat harvest crew. Summer's grandparents are old-fashioned and demanding, but Summer understands that they are aging and need help meeting their job responsibilities. Summer has a full load assisting her grandmother as a cook and entertaining her brother, who has trouble making friends. Along the way, she meets a boy and faces an ethical dilemma when her dog causes trouble. When rain threatens, she recognizes her grandfather's physical limitations and sets out to save her family's summer job. Summer's experience is a heartwarming story of growth and challenges.

Lessons Prepared by:

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The Thing About Luck Kit Supply List

SUPPLIES: Based on 25 students plus 1 teacher

<u>ITEM</u>	<u>QTY</u>	<u>COST PER ITEM</u>	<u>VENDOR</u>
<u>The Thing About Luck</u>	26	\$ 7.99	Amazon Prime
Watch It Grow Plant Viewer	1	\$10.50	Oriental Trading
Disposable Bread Pans	26	\$0.38	Amazon Prime
Plastic Tub	1	\$10.00	Walmart
Lights of America 1147 150 W, Sunlight Desk Lamp	1	\$59.95	Amazon Prime
Seed Starter Soil	½ bag	\$5.00	Amazon Prime
Timer	1	\$10.00	Amazon Prime
Flour	1-10# bag	\$ 4.68	Walmart
Yeast	2-4 oz. jars	\$ 4.68	Walmart
Sugar	1-4 lb. bag	\$ 2.25	Walmart
Gallon Bags	13 bags	\$ 2.42	Walmart
Salt	1 box	\$ 2.00	Walmart
Non-stick spray	1 can	\$3.44	Walmart
Butter	1 lb.	\$3.00	Walmart
Measuring Cup sets	13	\$ 2.60	Amazon
Measuring spoon sets	13	\$ 2.00	Amazon
Stalks of straw	1 bundle	\$ 3.80	Curious Country Creations
Wheat seed	1/8 lb.	\$1.28	Carolina Scientific
Paper Plates	30	\$1.50	Walmart
Pepper Grinder	1	\$9.99	Amazon
Electric coffee grinder	1	\$30.00	Amazon

Approximately kit cost based on 25 students = \$450.00

Week 1

CCSS: CC.5.R.L.2; CC.5.R.L.3; CC.5.R.L.6

1. Book Club Introduction

- A. Will read some together, and some independently
- B. Come each week ready to discuss
- C. Will complete different wheat/farming activities each week
- D. Pre-reading discussion questions:
 - a. What do you know about luck?
 - b. Describe a time in which a family event upset your regular routine. How did you deal with the situation? Looking back, would you do anything different today?
 - c. Reflect on a time in which you felt used and/or demeaned by a peer. What did you do? If you didn't handle it well, how might you better handle the situation?

2. Read Aloud Chapter 1

- A. Stop pg. 3 – What has the author told us so far? (Characters, Japan, Kansas, Malaria, Bad Luck)
- B. Stop pg. 11 – What new information have we learned? (party) What are some character traits you have noticed?

3. Discussion

- A. What is Summer obsessed with?
- B. Why? Who is telling the story?

4. Read Chapter 2 Independently

- A. Stop at the bottom of page 14 – discuss custom harvesting; share model combine, grain cart, bins, semi.
- B. Make a prediction: How will Jaz's meeting-party go?

5. Assign Chapters 2, 3, & 4 to read by next week

- A. Keep a list of tricky words
- B. Write down any questions you have to guide our discussion next week.
- C. Use attached worksheet to record words and questions.

The Thing About Luck: Chapters 2, 3, & 4

Tricky Word List

Questions I Have For Next Week

Week 2

CCSS: CC.5.R.L.1; CC.5.R.L.3; CC.5.R.L.5; CC.5.R.L.2

1. Discussion of Chapters 2, 3, & 4

- A. What new characters did we meet? Share information about them. (Mel, Jenson, Parkers (p.42), Work Crew (p.46))
- B. What more did we learn about Jaz? Pg. 18, 20
- C. What motivated Summer to try to befriend Jenson? Ch.3
- D. Why did the author include Jiichan's story on page 29?
- E. What more have we learned about what it is like to work for custom harvesters?
- F. What more has Summer shared with us about harvest time? Pg. 36-40

2. Watch "Winter Wheat Crop Spotlight" Video

<https://www.youtube.com/watch?v=PvbMDD1vGpQ>

- A. Point out an auger, header

3. Math Bushel Activity

4. Read Aloud Chapter 5

- A. Stop at the top of pg. 59; What kind of 'trouble' has Summer made for Obaachan?
- B. What do you think this book is starting to be about?
- C. What are some of Mrs. Parker's character traits?

5. Assign Chapters 6 & 7 – Write a prediction about something you think will happen in the book. See attached worksheet.

The Thing About Luck: Chapters 6 & 7

My Prediction Of What Will Happen Next

First:

Next:

Finally:

Week 2: How much is a bushel?

The Thing About Luck Math Activity

CCSS: 5.MD.5; 5.NBT.5

What you need to know:

- 1 M & M represents 300 bushels of wheat
- A combine can go 5 miles per hour
- A combine can harvest 600 bushels of wheat in an hour

Summer and her family were out working on the wheat farm. She was driving the combine at the full speed of 5 miles per hour. They were out there for 16 hours! How many miles did they drive?

Summer and her family drove _____ miles on the farm.

Take out 1 M & M from your bag. How many bushels of wheat does this M & M represent?

It represents _____ bushels of wheat.

Summer and her family can harvest 600 bushels of wheat every hour. They were combining in the wheat field for 8 hours before they had lunch. How many bushels did they harvest before lunch?

Use your M & Ms to help you.

They collected _____ bushels of wheat in 8 hours.

Draw a picture to show how your M & Ms represents the amount of wheat harvested.



Week 3

CCSS Addressed: CC.5.R.L.1; CC.5.R.L.3; CC.5.R.L.5; CC.5.R.L.2

1. Discussion of Chapters 5, 6, & 7

- A. Turn and Talk to an elbow partner – share what you remember from the 3 chapters; what was interesting, confusing, exciting, hard words, etc.
- B. Have students share out to class.
- C. Topics to cover in discussion include:
 - 1. Pg. 60, “Your personality hasn’t settled in yet.” Meaning?
 - 2. Pg. 64-65 – importance of weather to farming
 - 3. Mrs. Parker’s character traits – detail oriented, controlling, opinionated
 - 4. Ch. 6 – finding a grocery store
 - 5. Pg. 79 – Why does Summer find it hard to believe her grandmother laid with her while she was dying?
 - 6. Pg. 86-87 – harvest information – any questions?
 - 7. Thoughts of Robbie/embarrassment
 - 8. Pg. 105-6 – being a normal person
- D. What is this book starting to be about? (Discrimination or finding oneself/personality)

2. Plant Wheat – See activity sheet (15 minutes)

3. Begin reading chapter 8 aloud

4. Assign chapters 8, 9, & 10

Wheat Planting Activity: Week 3

NGSS: 5-LS1-1, 5-ESS3-1

The Thing About Luck

1. Wheat can be planted in either the spring or the fall. In Illinois, most farmers plant winter wheat in September or October each year. This is referred to as “winter wheat”.
2. Explain the plant growth cycle: Wheat is a type of grass.
 - a. Germination: Seeds are sown about $\frac{1}{4}$ inch under the soil. It will take 3-7 days to germinate depending on moisture, temperature, and soil temperature.
 - b. Plant will grow until a hard freeze in late fall.
 - c. The plant will go dormant for the winter.
 - d. In spring the plant will begin to grow again.
 - e. Fully mature in late June or July.
 - f. Harvest will take place in mid-summer.
3. Wheat needs sun, water, warm temperatures, and nutrient rich soil to grow.
4. Winter wheat takes 147 days to produce a crop. This is approximately 2 months in the fall and 3 months in the spring/summer.
5. Winter wheat is planted in:
 - a. Kansas, Oklahoma, Texas, Illinois
 - b. Illinois plants soft red winter wheat used for cereal, cakes, cookies, pretzels
6. Spring wheat is planted in:
 - a. North and South Dakota. It is called hard red spring wheat which mostly used for bread. They also plant durum wheat which is used for making pasta.

Class Activity:

Fill a plant root viewer with potting soil. Place wheat seeds about 1 inch apart and $\frac{1}{4}$ deep into planter. Water the seeds so that the soil is moist, but not over watered. Place under grow light for 12 hours per day in a warm place. Observe the growth daily. Record the observations on the growth chart.

Variations:

Each student will plant wheat seeds in a clear disposable cup. Students can observe the wheat growth on growth chart. Teacher can assign various growing conditions (ie. Cold or warm temperatures, moisture, sunlight, etc.) Students will compare results.

Questions for Discussion:

What kind of wheat do you think Summer’s family is harvesting in the book?
When do you think the Parker’s planted their wheat crop? What growing factors might affect the amount of wheat that is harvested?

Materials Needed:

Plant root viewer: Oriental Trading

Wheat seed

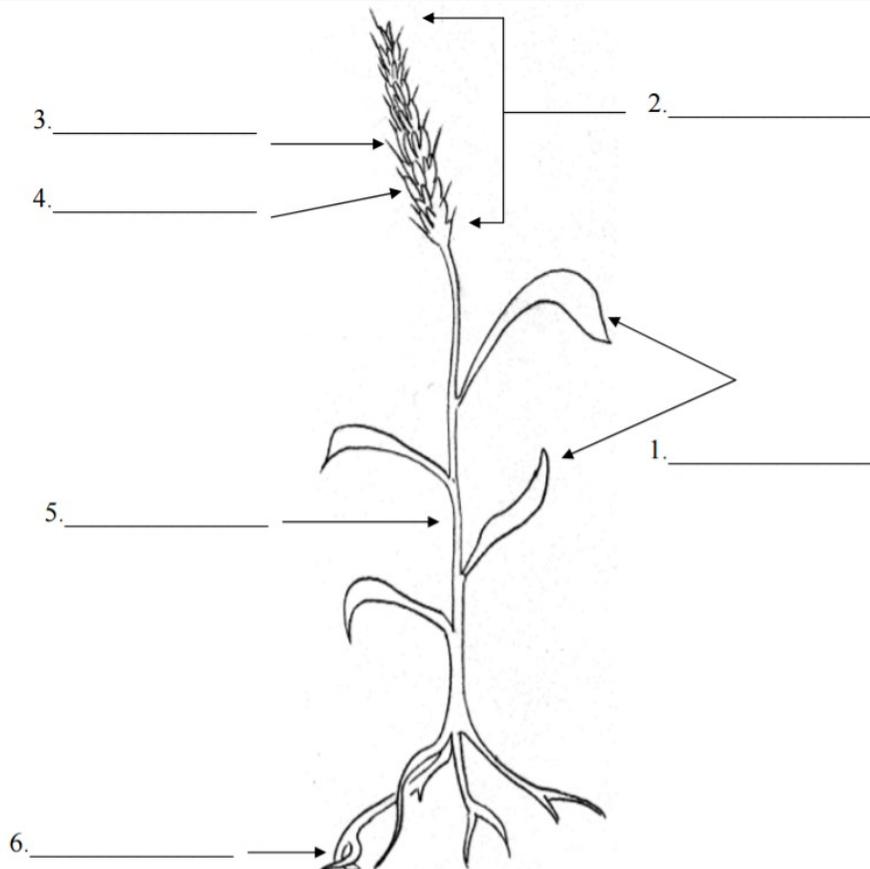
Potting soil

Grow light

Clear disposable cups

The Wheat Plant

Using the **boldfaced** words below, label the parts of the diagram of the wheat plant.
This annual grass plant grows to be two to three feet tall.



Roots- the part of the plant that gets nourishment from the soil and which anchors the wheat plant to the soil

Head- (termed spike until it matures)- the part of the plant that contains the kernels and the beard, located at the top of the plant stem

Leaves- the parts of the wheat plant that gather light energy for photosynthesis

Kernel- When planted in moist soil, this plant part provides the plant with food to grow. Each wheat head contains 50 to 75 of these, which are the only part of the wheat plant used for human food and livestock feed.

Beard- This part of the plant looks bristly and protects the kernels.

Stem- the part of the wheat plant that supports the head and becomes straw at harvest

Wheat Germination and Growth Chart

Date Planted: _____

Student Name: _____

Day 1 Observations	Day 2 Observations	Day 3 Observations	Day 4 Observations	Day 5 Observations
Day 6 Observations	Day 7 Observations	Day 8 Observations	Day 9 Observations	Day 10 Observations

Week 4

CCSS Addressed: CC.5.R.L.1; CC.5.R.L.3; CC.5.R.L.5; CC.5.R.L.2

1. Discussion of Chapters 8, 9, & 10

- A. Turn and Talk to an elbow partner – share what you remember from the 3 chapters; what was interesting, confusing, exciting, hard words, etc.
- B. Have students share out to class.
- C. Topics to cover in discussion include:
 - 1. Ch. 8 – sausages
 - 2. Date to the barn with Robbie – What did we learn about Robbie’s personality? (dishonest – wants to lie about the chickens)
 - 3. What do we learn about Summer when she tells Obaachan about the chickens? (she does the right thing)
 - 4. Why did the author include Summer’s 2 journal entries on pg. 148-9?
 - 5. What did Summer learn from reading *A Separate Peace*? Can you connect that lesson to other things Summer has said? (letting personality settle in) pg. 154
 - 6. Tell me about putting “love” into food while cooking.
 - 7. Why was Obaachan ashamed of Summer? Pg.159-60
 - 8. How is Summer feeling at the end of chapter 11? What has caused that feeling? (light hearted; she did the right thing and told Mr. Laskey about Thunder killing the chickens.

2. Thresh Wheat – See activity sheet (15 minutes)

3. Begin reading chapter 11 aloud

4. Assign chapters 11, 12, & 13

Wheat Threshing and Grinding Activity: Week 4

NGGS: 5-LS1-1, 5-LS2-1

The Thing About Luck

1. Show a wheat plant. Discuss parts of the plant.
 - a. Stem: Supports the head and becomes straw at harvest
 - b. Head: Contains the kernels and the beard, located at the top of the stem
 - c. Beard: Looks and feels bristly and protects the kernels
 - d. Kernel: Each head contains 50-70 of these. Kernels are harvested for human food and livestock feed. Kernels are also seeds for the next crop.
 - e. Roots: Part of the plant that gets nourishment and moisture from the soil and anchors the plant into the ground
2. Demonstrate hand threshing. Remove head from the stem and roll head back and forth between hands over a plate. Have students thresh and separate the kernels from the chaff. To extend the lesson, have students “dump their load” from their plates onto an opened bed sheet spread on the floor. After all students have deposited their wheat and chaff on the sheet, have about 8-10 students, plus the instructor, stand around the sheet. As a group, lift the bedsheet and allow for some slack. On the count of 3, the students will each snap the sheet back toward themselves to cause the wheat and chaff to “fly up” off the sheet. When it settles, the chaff will be on one area of the sheet and the wheat on another. This demonstrates how wheat and chaff were separated by the wind in the “old” days. It also helps students visualize how a combine separates the wheat and chaff.
3. Discuss how the wheat is harvested with a combine and wheat is transported by semi-truck and/or wagon.
4. Wheat is tested for moisture and test weight (quality).
5. Explain that the wheat is sold to food companies and livestock feed companies.
6. Flour manufacturer will grind the wheat into flour. Demonstrate how hard the seed coat is by having students try to break the seed coat with a mortar and pestle. Explain that grinding technology improved with hand grinders. Have students grind wheat by hand in a pepper grinder. Finally, demonstrate wheat grinding with a small coffee grinder and show how store bought whole wheat flour is very similar in texture to the wheat ground in the classroom. Explain that this is whole wheat flour.

Questions for discussion:

1. What factors affected the moisture of the wheat in the story?
2. What might happen to Summer's family if the wheat was too wet?
3. Where was the wheat tested for moisture in the story?
4. How did the Parker's transport their crops to the elevator?

Supplies needed:

Wheat stalks

Paper plates

Pepper grinder

Combine model (toy)

Coffee grinder

Mortar and pestle

Whole Wheat Flour sample

Flat Full Size Bed sheet

Week 5

CCSS Addressed: CC.5.R.L.1; CC.5.R.L.3; CC.5.R.L.5; CC.5.R.L.2

1. Begin bread making process – See activity sheet & recipe

- A. Mix ingredients and let sit to activate the yeast
- B. Discuss chapters 11, 12, & 13 with partners as mixing.

2. Discussion of Chapters 11, 12, & 13

- A. Splitting up of crew to go to Oklahoma – pg. 171
- B. What happened when Summer went to see Robbie? (kiss)
- C. What does Jaz worry about? How is that like Summer? (future – who they will be)
- D. What is the lesson from Jiichan's story on pg. 181?
- E. Why did the author include the part about "Opinions and Social Pressure," the article Jiichan gave Summer to read? Pg. 184
- F. What is going on with Jiichan? (sick) Through that, what do we learn about different characters? Mr. Parker? Mrs. Parker? Jiichan?
- G. What do we learn about Summer's character when she visits Robbie for a 2nd time? (can stand up for herself)
- H. What does Summer mean when she asks Mrs. Parker about being humiliated and proud at the same time? Pg. 199
- I. Mrs. Parker comes to check on Jiichan, what does that show us about her personality?
- J. Moving to Oklahoma – picture on pg. 200
- K. What kind of person is the Oklahoma farmer?
- L. What options is Jiichan weighing at the end of chapter 13?

3. Knead bread and place in baking pans

4. Assign chapters 14, 15, & 16.

5. Instructor will bake bread and return to students the following day.

Making Bread: Week 5

NGGS: 5-PS1-4

The Thing About Luck

1. Review the types of flour from the previous week; whole wheat and white flour.
2. Make Bread In A Bag (recipe attached)
3. Explain that the yeast (single cell live fungus) makes the bread rise through the creation of carbon dioxide. There are 260 different kinds of yeast.
4. When yeast comes in contact with warm water and sugar, it begins to “grow” or come alive and give off carbon dioxide.
5. Gluten is a protein in bread. Strong gluten bonds form as the bread is kneaded, thus making a well-structured loaf of bread.
6. Yeast dies as it is heated in the oven. The gluten solidifies giving the bread it’s structure.
7. For more information about the science of bread:

https://www.exploratorium.edu/cooking/bread/bread_science.html

Discussion Questions:

1. Is Carbon Dioxide a solid, liquid, or gas? (gas)
2. What is gluten? (a protein in wheat)
3. What does yeast need to make it come alive and grow? (warm water and sugar)

Materials Needed:

Bread Ingredients: Flour, sugar, dry yeast, salt, warm (not hot) water, butter

Gallon ziplock bag, 1 lb. bread pan, non-stick cooking spray

Lesson Extenders:

1. Yeast and Sugar Experiment in a bottle. Watch how yeast grows. Check website for details. <https://www.exploratorium.edu/cooking/bread/activity-yeast.html>
2. Invite the students to lunch at school the day after making bread. Bring sandwich toppings and enjoy a group lunch eating the bread the students made.

The Thing About Luck

Bread in a Bag

1 heaping tablespoon dry yeast

1 ½ c. flour

¼ c. sugar

1 tsp. salt

1 c. very warm water

¼ c. butter, softened

1 ½ c. additional flour (plus extra flour if the dough is still sticky)

1 gallon size zip style plastic bag

1 pound loaf pan

Put yeast, 1 ½ c. flour, sugar and salt into bag. Add butter and warm water. Press most of the air out of the bag and seal. Press and squeeze the bag with your hands until the dough becomes mixed. Open the bag and add the last 1 ½ c. flour. Reseal the bag and keep squeezing until the flour is worked into the dough. Add ¼ to ½ more flour if your dough is very sticky.

Unzip the bag and let the dough rest for 20 minutes. This will let the dough rise. Spray the bread pan with non-stick cooking spray. Punch the dough down. Take it out of the bag and knead it on the table for a few minutes. Divide the dough into three equal parts. Shape each into a loaf and place the dough into a 1 pound bread pan. Place the pan in a warm, but not hot place to rise until about doubled in size.

Preheat the oven to 350 degrees. Bake bread for 30 minutes. Remove from pan and cool.

Note: Makes three 1 pound loaves. If students are working in pairs, divide dough in half and use 1 ½ pound loaf pans to make 2 loaves.

Week 6

CCSS Addressed: CC.5.R.L.1; CC.5.R.L.3; CC.5.R.L.5; CC.5.R.L.2

1. During transport to the grain elevator, discuss chapters 14, 15, & 16

- A. Why does Summer sneak out at night and run the combine? Describe her feelings about this work. What reaction does Mick have and why?
- B. How does Summer's view of Mick change throughout the story?
- C. What do these chapters reveal about Jaz's character?
- D. On page 268-9, Jiichan tells a childhood story. Why does he share that story with his grandkids?
- E. What events illustrated Summer's strength of character?
- F. How has Summer grown by the end of the story? How has her relationship and understanding of her grandparents changed? What about their understanding of her? Use evidence from the text to support your answer.
- G. Why do you think the author titled this book, *The Thing About Luck*?
- H. What lesson does Summer learn by the end of the story? (You do what you can do.)

2. Complete tour of grain elevator – See activity sheet

3. Continue any final book discussion on the transport home.

Grain Elevator Fieldtrip: Week 6

The Thing About Luck

1. Upon completion of the book, students travel to a grain elevator for a tour.
2. The tour includes:
 - a. Explaining the size and capacity of the bin and storage area
 - b. Demonstrating a moisture tester
 - c. Showing the dumping area to see where trucks unload
 - d. Students have an opportunity to ask questions about how grain is handled and shipped.
 - e. Students learn why the facility is called an “elevator”.
 - f. Students watch a semi-truck unload.

Discussion Questions:

1. Did the elevator look like you thought it would while you were reading the book?
2. Why do elevators require the wheat to be dry in order to store it there?
3. How many bushels do you think a semi will haul into the elevator in one load?
 - A. A bushel of wheat weighs 60 pounds. There are about 1 million kernels of wheat in a bushel
 - B. A modern semi-truck will hold about 1000 bushels of wheat.

For more information about Kansas wheat:

<http://kswheat.com/news/2015/07/22/what-does-a-bushel-of-wheat-mean-to-me>

Lesson Extender:

1. Arrange for a local farmer to bring a combine to the elevator.
2. Allow students to see the mechanical operation of the combine and how it combines many different jobs into one machine.

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