



Grade 11
English Language Arts/Literacy
End of Year Paired Text Set

2017 Released Items

2017 Released Items: Grade 11 End of Year Paired Text Set

The paired text set requires students to read two texts that are purposely paired. Students read the texts and answer questions about each text and about the texts as a pair.

The 2017 blueprint for the grade 11 paired text set includes Evidence-Based Selected Response/Technology-Enhanced Constructed Response items.

Included in this document:

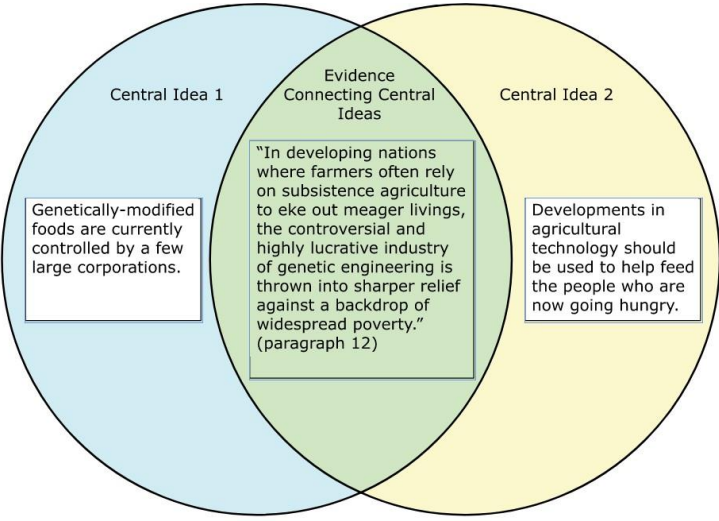
- Answer key and standards alignment
- PDFs of each item with the associated text(s)

Additional related materials not included in this document:

- Guide to English Language Arts/Literacy Released Items: Understanding Scoring
- PARCC English Language Arts/Literacy Assessment: General Scoring Rules for the 2015 Summative Assessment

PARCC Release Items Answer and Alignment Document
ELA/Literacy: Grade 11

Text Type: Paired Info		
Passage(s): "Carrots with Character" / from "Biopiracy in India: The Case of the Aubergine"		
Item Code	Answer(s)	Standards/Evidence Alignment Statement
J5045	Item Type: EBSR Part A: C Part B: C, E	RST 11.1.4 RI 11.4.1 L 11.4.1
J5046	Item Type: EBSR Part A: A, C Part B: B, D	RST 11.1.4 RI 11.2.1 RST 11.2.5 RI 11.6.1
J5049	Item Type: EBSR Part A: B Part B: A	RST 11.1.4 RST 11.2.5 RI 11.5.1 RST 11.6.3
J5050	Item Type: EBSR Part A: D Part B: D	RST 11.1.4 RI 11.4.1 L 11.4.1
J5052	Item Type: EBSR Part A: A Part B: C	RST 11.1.4 RST 11.2.5 RI 11.3.1 RI 11.5.1
J5125_A	Item Type: TECR Part A: <div style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;"> <p style="text-align: center;">"Carrots with Character" Focus</p> <p style="text-align: center; border: 1px solid #0070c0; padding: 5px;">a beneficial novelty for people's health</p> </div> <div style="border: 1px solid #ccc; padding: 10px;"> <p style="text-align: center;">"Biopiracy in India: The Case of the Aubergine" Focus</p> <p style="text-align: center; border: 1px solid #0070c0; padding: 5px;">a topic with serious moral and political consequences</p> </div>	RST 11.1.4 RST 11.2.5 RI 11.6.1

	<p>Part B:</p> <p>“Carrots with Character” Supporting Evidence</p> <p>“Thanks largely to this ARS work, today’s carrots provide consumers with 75 percent more beta-carotene than those available 25 years ago.” (paragraph 2)</p> <p>“Biopiracy in India: The Case of the Aubergine” Supporting Evidence</p> <p>“This raises serious questions about the political will and the institutional capacity of the Federal Government of India to protect its treasure trove of biodiversity and its agricultural sector—arguably the backbone of a country in which around 70 percent of 1.2 billion people depend on agriculture for their livelihoods.” (paragraph 10)</p>	
<p>J5051</p>	<p>Item Type: TECR (additional item)</p> 	<p>RST 11.1.4 RI 11.2.1 RST 11.2.5</p>

Today you will read the article “Carrots with Character” and a passage from “Biopiracy in India: The Case of the Aubergine.” These texts discuss different strains of carrots and a controversy about genetically modified eggplants.

Read the article “Carrots with Character.” Then answer the questions.

Carrots with Character

by Erin K. Peabody



- 1** Shredded in salads and slaws, steamed, or just peeled and dunked in an herb-speckled dip, carrots are versatile veggies that add colorful zest to our dinner plates. These crunchy orange roots are also a well-known source of vitamin A. Just a single, full-size carrot more than fulfills an adult’s daily quotient of the essential vitamin.
- 2** But the carrot hasn’t always been the vitamin A powerhouse that it is today. Over two decades ago, scientists in the ARS Vegetable Crops Research Unit at Madison, Wisconsin, began a quest to breed carrots packed with beta-carotene—an orange pigment used by the body to create vitamin A. Thanks largely to this ARS work, today’s carrots provide consumers with 75 percent more beta-carotene than those available 25 years ago.

- 3 The researchers, led by plant geneticist Philipp Simon, haven't limited themselves to the color orange. They've selectively bred a rainbow of carrots—purple, red, yellow, even white. Scientists are learning that these plant pigments perform a range of protective duties in the human body—which is not surprising, says Simon, since many of the pigments serve to shield plant cells during photosynthesis.
- 4 Red carrots derive their color mainly from lycopene, a type of carotene believed to guard against heart disease and some cancers. Yellow carrots accumulate xanthophylls, pigments similar to beta-carotene that support good eye health. Purple carrots possess an entirely different class of pigments—anthocyanins—which act as powerful antioxidants.
- 5 While colored carrots are unusual, they're not exactly new. "Purple and yellow carrots were eaten more than 1,000 years ago in Afghanistan and 700 years ago in western Europe," says Simon. "But the carrot-breeding process has gone on intensively for just 50 years."
- 6 Simon and his team of ARS researchers and colleagues at the University of Wisconsin-Madison (UW) have recently shown that their highly pigmented carrots are a ready source of some sought-after nutrients.

The Eyes Have It

- 7 Lutein is one of the hydroxy carotenoids that make up the macular pigment of human retinas. Consuming foods high in lutein may increase the density of this pigment and decrease the risk for developing macular degeneration, an age-related disease.
- 8 "Up to now," says Simon, "we didn't know whether lutein was biologically available from carrots, because they're considered a complex food."
- 9 In a study to determine humans' lutein uptake from lutein-rich yellow carrots, Simon, along with UW's Sherry Tanumihardjo, recruited nine 23- to 28-year-old volunteers to eat the carrots and take a lutein supplement. By reading the participants' blood serum levels, the researchers found that lutein from the carrots was 65 percent as bioavailable as it was from the supplement.

- 10** Tanumihardjo, an assistant professor in UW’s Department of Nutritional Sciences, says, “While other foods might contain higher levels of lutein—like spinach for instance—lutein is absorbed very well from lutein-rich carrots.”
- 11** In another study, Simon and Tanumihardjo found that lycopene from red-pigmented carrots is 40 percent as bioavailable as it is from tomato paste. “Not everyone eats or likes tomatoes,” she says, “so finding another source of lycopene that also provides beta-carotene is very positive.”
- 12** Their lycopene study appeared in the May 2004 issue of the *European Journal of Clinical Nutrition*. The lutein study appeared in the July 2004 issue of the *American Journal of Clinical Nutrition*.

Behind the Colors

- 13** In nature, different strains of carrots contain varying types and amounts of carotenoids—the pigments responsible for orange, yellow, and red colors. To assist seed companies and growers who wish to produce nutrient-rich carrots, Simon and his lab are working to map all the genes that play a part in synthesizing carotenoids in major carrot lines. Simon now knows of 20 genes that are involved. But determining a particular gene’s role in generating carotenoids is not that straightforward.
- 14** “There are complexities in reading these genes,” he says, “since their functions often change with the plant as it progresses through its life cycle.” From Simon’s work, it appears that two or three major genes account for differences in white and orange carrots and that another couple of genes separate yellow carrots from red.

Why Be Conventional?

- 15** What would you say to a glass of purple carrot juice? Some aren’t so sure.
- 16** Aside from enhancing the nutritional value of carrots—as well as onions, garlic, and cucumbers—researchers at Simon’s laboratory also work to improve the veggies’ culinary quality and appeal.

- 17** “It’s hard to know what to aim for when selecting for a purple carrot,” Simon says, “since we’ve no defined type to go by.” So he’s subjecting the new varieties to consumer taste tests, hoping to find carrots with a sweet and mild flavor.
- 18** “People who are asked to taste the colorful carrots are concerned about their flavor,” says Simon. “We’ve become married to the colors we associate with particular foods. We eat with our eyes, to some extent.”
- 19** Tanumihardjo agrees. “I did a study to find out whether carrot color prompted perception of taste at all,” she says. “When people were able to see the color of the carrot—whether it was purple or red—they responded more favorably to it.”
- 20** With the help of Tanumihardjo, Simon is tapping taste preferences through an unexpected group of eaters: children in Wisconsin’s inner cities and American Indian reservations. Children from lower income groups are at greater risk for developing a nutritional deficiency, like low vitamin A status. “Some of these kids have never even had a carrot before,” says Simon. But their comments so far have been positive, according to Tanumihardjo.
- 21** With their compelling health benefits and a thumbs-up from taste testers, Simon’s colorful carrots will be a great addition to supermarket produce aisles once consumers create a demand for them.

“Carrots with Character” by Erin K. Peabody—Public Domain/U.S. Department of Agriculture

1. Part A

In paragraphs 9 and 11 of “Carrots with Character,” what is the meaning of **bioavailable**?

- A. easily isolated
- B. indestructibly strong
- C. usable by the body
- D. common in nature

Part B

Which **two** phrases from “Carrots with Character” provide clues to the meaning of **bioavailable**?

- A. “. . . provide consumers with 75 percent more beta-carotene than those available 25 years ago.” (paragraph 2)
- B. “Lutein is one of the hydroxy carotenoids that make up the macular pigment of human retinas.” (paragraph 7)
- C. “In a study to determine humans’ lutein uptake from lutein-rich yellow carrots . . .” (paragraph 9)
- D. “. . . to eat the carrots and take a lutein supplement.” (paragraph 9)
- E. “. . . lutein is absorbed very well from lutein-rich carrots.” (paragraph 10)
- F. “. . . another source of lycopene that also provides beta-carotene . . .” (paragraph 11)

2. Part A

Which **two** ideas about genetic modification are developed by the author in “Carrots with Character”?

- A. Genetic modification can increase the nutritional value of carrots.
- B. Changing the color of carrots has increased their popularity with consumers.
- C. People can increase the amount of nutrients in their diets with carrots that have been genetically modified.
- D. Breeding different colors of carrots is an old process, but only now can people also modify their nutritional value.
- E. Eye health is a major reason to support the genetic modification of carrots.
- F. Genetic modification of carrots has proven how specific genes lead to changes in carrot color and nutritional value.

Part B

Which **two** quotations from the article provide evidence for the answers to Part A?

- A. “Purple and yellow carrots were eaten more than 1,000 years ago in Afghanistan and 700 years ago in western Europe,” says Simon.” (paragraph 5)
- B. “Simon and his team of ARS researchers and colleagues at the University of Wisconsin-Madison (UW) have recently shown that their highly pigmented carrots are a ready source of some sought-after nutrients.” (paragraph 6)
- C. “Consuming foods high in lutein may increase the density of this pigment and decrease the risk for developing macular degeneration, an age-related disease.” (paragraph 7)
- D. “By reading the participants’ blood serum levels, the researchers found that lutein from the carrots was 65 percent as bioavailable as it was from the supplement.” (paragraph 9)
- E. “People who are asked to taste the colorful carrots are concerned about their flavor,” says Simon. “We’ve become married to the colors we associate with particular foods. We eat with our eyes, to some extent.” (paragraph 18)
- F. “With the help of Tanumihardjo, Simon is tapping taste preferences through an unexpected group of eaters: children in Wisconsin’s inner cities and American Indian reservations.” (paragraph 20)

3. Part A

What concept about different carrot pigments is explored in paragraphs 4–7 of “Carrots with Character”?

- A. The breeding of differently pigmented carrots for nutritional value has been studied for many centuries.
- B. The pigments of carrots indicate the ways in which they can positively affect the health of consumers.
- C. The connection between carrot pigments and nutritional content is still unclear.
- D. Different pigments in carrots indicate unique benefits for humans, but are not beneficial to the carrots in any way.

Part B

Which central idea of the article is supported by the information in the answer to Part A?

- A. Genetically modified carrots have health benefits that do not exist in unmodified carrots.
- B. Color plays a significant role in taste, which accounts for a carrot’s popularity.
- C. The genetic makeup of a carrot has a significant effect on its taste and color.
- D. Genetically modified carrots can be used to create supplements to aid consumers’ health.

Read the passage from “Biopiracy in India: The Case of the Aubergine.”
Then answer the questions.

from “Biopiracy in India: The Case of the Aubergine”

by Rajeshree Sisodia

- 1 It’s hard to imagine that the humble brinjal (also known as eggplant or aubergine) could kick up such a storm. But it has.
- 2 This is a story of one of the world’s largest agricultural biotechnology companies—the United States-based Monsanto—and its run in with farmers in south India, following murky allegations of its attempts to “steal” nine indigenous brinjal varieties and genetically modify them.
- 3 Monsanto claims that its main priorities are farmers and integrity. Its website says: “Integrity is the foundation for all that we do. Integrity includes honesty, decency, consistency and courage.” And this, Monsanto pledges, includes engaging in dialogue with “diverse points of view.”
- 4 That may well be. But in India, this corporate foresight has gone awry, for the seed giant may have forgotten to enter into dialogue with farmers in the Indian states of Karnataka and Tamil Nadu and, indeed, the federal government of India. The allegation being leveled against Monsanto is that between 2005 and 2006, the company, through its Indian subsidiary Mahyco and several agricultural universities in India, inserted a bacterial gene into the indigenous brinjal genome to create a genetically modified version named BT brinjal. These seeds were then sown in limited field trials in India. But when it embarked on its programme to genetically modify the brinjal, it did so without first asking India’s National Biodiversity Authority for consent.

Research without consent

- 5 In response, the national biodiversity authority has announced its plans to prosecute Monsanto for carrying out this research without seeking its permission and the consent of hundreds of thousands of farmers who have cultivated these varieties for generations. Officials at the authority say that, by failing to consult with farmers and the national biodiversity

authority, the multinational firm has run foul of India’s Biological Diversity Act 2002. The law states that, if companies want to genetically modify indigenous varieties of seeds and plants—for research or commercialization purposes—they must obtain prior consent of the authority. That never happened, the national biodiversity authority says, so now Monsanto and Mahyco look set to face charges of biopiracy—a fancy word for theft. It will be the first criminal prosecution under the act if it goes ahead. Though brinjal is a vegetable that is now widely eaten and grown around the world, it is native to south Asia with more than 2,500 varieties.

- 6** Monsanto denies the accusations, claiming that it has not worked in partnership with Mahyco to develop BT brinjal. The US company says the genetically modified variety of the vegetable was developed by Mahyco with a gene previously accessed from Monsanto.
- 7** To no avail. Environmental and farmers groups in India are livid. “Why were we not consulted when Monsanto and Mahyco muscled in?” they ask. “If these trials had led to the commercialization and the sale of GM varieties of brinjal, would we have been compensated?”
- 8** Farmers should be consulted and remunerated when companies use indigenous crop and seed varieties that local farming populations have cultivated and protected for generations. This is their right, a right that the United Nations-led global Convention on Biological Diversity recognized almost two decades ago.
- 9** Embarrassingly for the federal Indian government, officials at the Karnataka Biodiversity Board say that a separate arm of the federal government in New Delhi—the Department of Biotechnology, at the Ministry of Science and Technology—gave the green light for the research into BT brinjal in 2005, even though the Biological Diversity Act and the National Biodiversity Authority were not consulted.
- 10** This raises serious questions about the political will and the institutional capacity of the Federal Government of India to protect its treasure trove of biodiversity and its agricultural sector—arguably the backbone of a

country in which around 70 percent of 1.2 billion people depend on agriculture for their livelihoods.

To file or not to file charges

- 11** Whether Monsanto and Mahyco are brought before India's courts is yet to be seen. The Indian government placed a moratorium on BT brinjal last year. Officials at the national biodiversity authority are currently investigating, and a decision on whether to file criminal charges against Monsanto and Mahyco is expected in the next few months. But the echoes of what happens in India will reverberate globally, for underlying this is the larger issue of who controls the global supply, production and price of food.
- 12** More than half (53 percent) of all genetically modified and organic seeds traded worldwide are owned by three multinational companies, according to the environmental group Greenpeace. Monsanto is on that list, as well as Dupont and Syngenta. The world's top ten agro-chemical companies own almost 75 percent of all seeds sold globally. This means that they control the price at which seeds are sold to farmers, the kinds of seeds that are sold, and ultimately what types of food are produced, in an industry that brings in multi-billion dollar profits. In developing nations where farmers often rely on subsistence agriculture to eke out meagre livings, the controversial and highly lucrative industry of genetic engineering is thrown into sharper relief against a backdrop of widespread poverty. This is all the more poignant in India, where thousands of debt-ridden farmers have in recent years resorted to taking their own lives to escape the misery of crop failure and financial ruin.
- 13** The core of this debate centers on whether this kind of agricultural "development" can be inclusive. It is an argument that has divided experts. Advances in science and technology can help to produce more food, so hardier seed varieties and larger yields are welcome—not least to help feed the millions of people worldwide who go to bed hungry each night. But the issue of how this goal should be met and whether genetically modified (GM) food production is one way of meeting it continues to create division. More than 80 percent of all GM foods are

grown in the United States, Canada, Brazil and Argentina. Europe has preferred to remain almost GM-free, while the only GM crop India and China currently grow is cotton. Beijing last month [September] also placed a moratorium on the commercialization of GM rice.

From "Biopiracy in India: The Case of the Aubergine" by Rajeshree Sisodia from AL JAZEERA, 10/31/2011, © 2011.

4. Part A

In “Biopiracy in India: The Case of the Aubergine,” what does the phrase **reverberate globally** in paragraph 11 suggest?

- A. Monsanto was not always committed to increasing the world food supply.
- B. The decision made about the brinjal will affect global population growth.
- C. Monsanto has previously helped small farmers in India.
- D. The controversy over the brinjal will have wide-reaching consequences.

Part B

Which of these quotations provides further evidence for the answer to Part A?

- A. “Monsanto denies the accusations, claiming that it has not worked in partnership with Mahyco to develop BT brinjal.” (paragraph 6)
- B. “Farmers should be consulted and remunerated when companies use indigenous crop and seed varieties that local farming populations have cultivated and protected for generations.” (paragraph 8)
- C. “The core of this debate centers on whether this kind of agricultural ‘development’ can be inclusive.” (paragraph 13)
- D. “Advances in science and technology can help to produce more food, so hardier seed varieties and larger yields are welcome—not least to help feed the millions of people worldwide who go to bed hungry each night.” (paragraph 13)

5. Part A

How does the structure of paragraphs 1–11 and paragraphs 12–13 in “Biopiracy in India: The Case of the Aubergine” contribute to the effectiveness of the author’s discussion?

- A. The description of the case in India is followed by the description of the worldwide reach of GMO corporations, stressing the global importance of the issue.
- B. The description of the Monsanto Corporation is followed by the description of Indian government offices, emphasizing the inability of the Indian government to solve the problem.
- C. The discussion of Indian farmers is followed at the end by discussion of Brazilian and American GMO corporations, revealing the likely culprits in the theft of the brinjal’s genetic content.
- D. The description of Monsanto’s pledge of integrity is followed by quotations from environmental groups later on in the passage, showing that both sides have a valid point to make in the argument.

Part B

Which quotation from the passage provides evidence for the effectiveness identified in Part A?

- A. “Environmental and farmers groups in India are livid. ‘Why were we not consulted when Monsanto and Mahyco muscled in?’ they ask. ‘If these trials had led to the commercialization and the sale of GM varieties of brinjal, would we have been compensated?’” (paragraph 7)
- B. “Embarrassingly for the federal Indian government, officials at the Karnataka Biodiversity Board say that a separate arm of the federal government in New Delhi—the Department of Biotechnology, at the Ministry of Science and Technology—gave the green light for the research into BT brinjal in 2005. . . .” (paragraph 9)
- C. “The world’s top ten agro-chemical companies own almost 75 percent of all seeds sold globally. This means that they control the price at which seeds are sold to farmers, the kinds of seeds that are sold, and ultimately what types of food are produced, in an industry that brings in multi-billion dollar profits.” (paragraph 12)
- D. “Europe has preferred to remain almost GM-free, while the only GM crop India and China currently grow is cotton.” (paragraph 13)

6. Part A

For each of the sources that you have read, choose **one** phrase that summarizes the author’s perspective on the impact of genetic modification. Drag each phrase you choose into the boxes labeled either “Carrots with Character” Focus or “Biopiracy in India: The Case of the Aubergine” Focus.

a beneficial novelty for people’s health

a random discovery that should be shared with the world

a positive development for poor farmers

a topic with serious moral and political consequences

“Carrots with Character” Focus

“Biopiracy in India: The Case of the Aubergine” Focus

(continues on next page)

Part B

Choose **one** piece of evidence from each source that supports the author’s focus. Drag your answers into the appropriate box.

“Thanks largely to this ARS work, today’s carrots provide consumers with 75 percent more beta-carotene than those available 25 years ago.” (paragraph 2)

“Lutein is one of the hydroxy carotenoids that make up the macular pigment of human retinas.” (paragraph 7)

“‘People who are asked to taste the colorful carrots are concerned about their flavor,’ says Simon. ‘We’ve become married to the colors we associate with particular foods. We eat with our eyes, to some extent.’” (paragraph 18)

“The US company says the genetically modified variety of the vegetable was developed by Mahyco with a gene previously accessed from Monsanto.” (paragraph 6)

“This raises serious questions about the political will and the institutional capacity of the Federal Government of India to protect its treasure trove of biodiversity and its agricultural sector—arguably the backbone of a country in which around 70 percent of 1.2 billion people depend on agriculture for their livelihoods.” (paragraph 10)

“Advances in science and technology can help to produce more food, so hardier seed varieties and larger yields are welcome—not least to help feed the millions of people worldwide who go to bed hungry each night. But the issue of how this goal should be met and whether genetically modified (GM) food production is one way of meeting it continues to create division.” (paragraph 13)

“Carrots with Character” Supporting Evidence

“Biopiracy in India: The Case of the Aubergine” Supporting Evidence

7. Choose **two** central ideas that are developed in the passage from “Biopiracy in India: The Case of the Aubergine.” Drag each idea into one of the sections of the Venn diagram labeled Central Idea. Then, drag the quotation that illustrates the relationship between the two central ideas to the central section of the Venn diagram.

The government of India may be too disorganized to stand up to corporations like Monsanto.	Genetically-modified foods are currently controlled by a few large corporations.	Farmers in India have not been paid for the seeds and crops they have cultivated for generations.	Monsanto has not lived up to the pledges it has made in public statements.	Developments in agricultural technology should be used to help feed the people who are now going hungry.
“In response, the national biodiversity authority has announced its plans to prosecute Monsanto for carrying out this research without seeking its permission and the consent of hundreds of thousands of farmers who have cultivated these varieties for generations.” (paragraph 5)	“More than half (53 per cent) of all genetically modified and organic seeds traded worldwide are owned by three multinational companies, according to the environmental group Greenpeace.” (paragraph 12)	“The world’s top ten agro-chemical companies own almost 75 per cent of all seeds globally.” (paragraph 12)	“In developing nations where farmers often rely on subsistence agriculture to eke out meager livings, the controversial and highly lucrative industry of genetic engineering is thrown into sharper relief against a backdrop of widespread poverty.” (paragraph 12)	
	“This is all the more poignant in India, where thousands of debt-ridden farmers have in recent years resorted to taking their own lives to escape the misery of crop failure and financial ruin.” (paragraph 12)			

