

Grade 6: Module 3B: Unit 1: Lesson 2 Introduction: The Ideas of Charles Darwin





GRADE 6: MODULE 3B: UNIT 1: LESSON 2

Introduction:

The Ideas of Charles Darwin

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can determine the main idea of an informational text based on details in the text. (RI.6.2) I can analyze how key individuals, events, or ideas are developed throughout a text. (RI.6.3)

I can use a variety of strategies to determine word meaning in informational texts. (RI.6.4)

Supporting Learning Targets	Ongoing Assessment
• I can find the gist of an excerpt of the Introduction of World without Fish.	• Structured notes for pages x-xii (from homework)
• I can use strategies to determine the meaning of words and phrases in this excerpt of the Introduction of <i>World without Fish</i> .	Text-Dependent Questions: Pages xii—xvii
• I can use evidence from the text to answer text-dependent questions.	
• I can analyze how Mark Kurlansky introduces the problem of fish depletion in World without Fish.	

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Introduction:

Agenda	Teaching Notes
 Opening A. Engaging the Reader: Excerpt 1 (6 minutes) B. Unpacking Learning Targets (2 minutes) Work Time A. Reading for Gist: Pages xii—xvii (14 minutes) B. Text-Dependent Questions: Pages xii—xvii (20 minutes) Closing and Assessment A. Link to Text Features (3 minutes) Homework A. Reread the excerpt of the Introduction you read today (pages xii—xvii). Use evidence flags to gather evidence as you read to answer this focus question on your structured notes. 	 In this lesson, students continue to discuss and analyze the Introduction of World without Fish. The priority this lesson is that students become familiar with the routine of reading for the gist, answering text-dependent questions, and analyzing the text to better understand Kurlansky's message about fish depletion. Students will follow this routine for Chapters 1–3, including the mid-unit assessment. This section of the book discusses Darwin's theory of evolution. Emphasize that these are the ideas of one man, Charles Darwin, that have been widely accepted by the scientific community. There are other people who disagree with his ideas about evolution. Help students understand that Darwin's theory is one point of view and that there are other opposing points of view. Because of the introduction of the theories of Charles Darwin, there is a lot of science content in this excerpt of the text. Consider working with a science teacher to pair this with science lessons that can provide more detail on the theories—such as the classification of living things—that are mentioned in this excerpt. Students follow the same system for homework begun in Lesson 1: Post or display the homework focus question at the conclusion of the lesson and ask students to copy it down. You may prefer to have students copy the question into a journal rather than use the structured notes handout. If students use the structured notes, they will need a new blank version for each lesson's homework. In advance: Review pages xii—xvii of the Introduction of World without Fish and Close Reading Guide: Pages xii—xvii (for teacher reference). Review Back-to-Back, Face-to-Face protocol (see Appendix). Use Tracing the Development of an Idea anchor chart (answers, for teacher reference) to create the Tracing the Development of an Idea anchor chart. Post: Learning targets.

The Ideas of Charles Darwin

Lesson Vocabulary	Materials
fish depletion, biologically (xv), various (xiii), variations (xv), evolved (xiv), evolution (xvi), interconnected (xvii), origin (xii), dominate (xiii), idly (xiii), thus (xiii), elaborate (xiv), voraciously (xiv), revolting (xv), adapt (xv), conflict (xvi), eliminated (xvi), abundant (xvi), minuscule (xvi), tendency (xvi), unforeseen (xvii)	 Tracing the Development of an Idea anchor chart (new; teacher-created; see Teaching Notes) Tracing the Development of an Idea anchor chart (answers, for teacher reference) World without Fish (book; distributed in Lesson 1; one per student) Sticky notes (eight per student) Dictionaries (at least one per triad) World without Fish word-catcher (students' own; from Lesson 1) Text-Dependent Questions: Pages xii—xvii (one per student, one for display) Close Reading Guide: Pages xii—xvii (for teacher reference)

Opening Meeting Students' Needs A. Engaging the Reader: Excerpt 1 (6 minutes) Reviewing homework holds all students accountable for reading the • Remind students that the Introduction is where an author helps the reader understand what this whole book is going to be text and completing their about and gives the reader a reason to keep reading. Consider explaining that the Introduction is like an outline of the homework. author's message and the key concepts he will use to argue his message. · Remind students of the of the homework focus question, "How does Mark Kurlansky introduce his ideas about fish depletion in the first few pages of World without Fish?" Back-to-Back, Face-to-Face protocol: Invite students to retrieve their structured notes from their homework and pair up with someone to sit back-to-back. - Ask students the homework focus question: "How does Mark Kurlansky introduce his ideas about fish depletion in the first few pages of World without Fish?" Give students time to refer to their structured notes. Invite students to turn face-to-face with their partner to share their ideas. Display the **Tracing the Development of an Idea anchor chart**. Remind students that the idea they are focusing on is fish depletion, which means fish dying out. Record this idea in the space provided at the top of the anchor chart.



Opening (continued)	Meeting Students' Needs
 Ask students to discuss in triads: "How does the author introduce the idea of fish depletion in the first part of the Introduction?" Cold call students to share their responses. Listen for and guide students to understand that this idea is introduced through the use of very dramatic and almost scary sentences and words like, "But this is the story of how the Earth could be destroyed" and "life on planet Earth could completely unravel" to get our attention. Record this on the Tracing the Development of an Idea anchor chart. See Tracing the Development of an Idea anchor chart (answers, for teacher reference) for a model. 	
 B. Unpacking Learning Targets (2 minutes) Invite students to follow along as you read the learning targets aloud. "I can find the gist of an excerpt of the Introduction of World without Fish." "I can use strategies to determine the meaning of words and phrases in this excerpt of the Introduction of World without Fish." "I can use evidence from the text to answer text-dependent questions." "I can analyze how Mark Kurlansky introduces the problem of fish depletion in World without Fish." Remind students that they were introduced to two of these learning targets in the previous lesson and that this lesson will be much like the previous one in that they will read an excerpt of the text for the gist and then answer text-dependent questions in order to dig deeper into the text. 	 Posting learning targets allows students to reference them throughout the lesson to check their understanding. The learning targets also provide a reminder to students and teachers about the intended learning behind a given lesson or activity. Discussing and clarifying the language of learning targets helps build academic vocabulary.

The Ideas of Charles Darwin

Work Time Meeting Students' Needs

A. Reading for Gist: Pages xii-xvii (14 minutes)

- Invite students to turn to page xii of the Introduction of *World without Fish*. Invite students to silently read along as you read aloud pages xii—xvii from "One of the great thinkers ..." to "... that are extremely difficult to change back."
- As this section of the book discusses Darwin's theory of evolution, it is important to emphasize that these are the ideas of one man, Charles Darwin, and that there are other people who disagree with his ideas about evolution. Help students understand that these theories are one point of view and that there are other opposing points of view.
- Read aloud the learning target:
 - * "I can find the gist of an excerpt of the Introduction of World without Fish."
- Distribute eight **sticky notes** to each student. Remind students that the goal is for them to understand what the text is mostly about and that this is a challenging text, so they need to be prepared to use their reading stamina and to persevere, breaking the text into pieces (e.g., paragraphs) and working out the gist one piece at a time. Remind students to discuss the gist in triads before recording anything on their sticky notes.
- Remind students of the strategies they have practiced for determining the meaning of unknown vocabulary: reading around the word, replacing the word with one that fits, identifying the root word, using the dictionary, etc. Distribute **dictionaries** to each triad. Explain that if students still aren't sure what the word means after using the strategies, they should leave the definition to be discussed with the whole group later. Remind them to record unfamiliar vocabulary on their **World** without Fish word-catchers.
- Ask students to begin at "One of the great thinkers ..." on page xii and to finish at "... that are extremely difficult to change back" at the end of page xvii.
- Circulate and support students as they read. For those who need more support, ask them to practice telling you the gist of a section before they write it on their sticky note.
- As students finish up, refocus whole group. Focus students on the word *biologically* on page xv. Tell students that the prefix "bio" means life and biology is the study of life.
- Focus students on the word "biological" within the word "biologically." Explain that the suffix "ical" means "related to or about," so biological means "related to or about biology."

- Hearing a complex text read slowly, fluently, and without interruption or explanation promotes fluency for students. They are hearing a strong reader read the text aloud with accuracy and expression and are simultaneously looking at and thinking about the words on the printed page. Be sure to set clear expectations that students read along silently in their heads as you read the text aloud.
- Allow students to grapple with a complex text before explicit teaching of vocabulary. After students have read for the gist, they can identify challenging vocabulary for themselves.
- Asking students to identify challenging vocabulary helps them monitor their understanding of a complex text. When students annotate the text by circling these words, it can also provide a formative assessment for the teacher.



Work Time (continued)	Meeting Students' Needs
Ask students to discuss in triads:	
* "So what do you think 'biologically' might mean in this context? When the author describes 'organisms that are biologically close to us,' what do you think he means?"	
• Select volunteers to share their responses. Listen for and guide students to understand that it means organisms that are related to/like us.	
• Focus students on the words <i>various</i> (page xiii) and <i>variations</i> (page xv). Point out that the root of both of these words is "vari." Ask students to discuss in triads:	
* "From what you already know about words with this root, what do you think this root means?"	
• Cold call students to share their responses. Listen for students to explain that it means different.	
Ask students to discuss in triads:	
* "So what do you think 'various' and 'variations' mean? What does he mean by 'nature puts out variations'?"	
 Select volunteers to share their responses. Listen for students to explain that various and variations both mean different kinds of something and the author means that nature creates lots of different kinds. 	
• Focus students on the words <i>evolved</i> (page xiv) and <i>evolution</i> (page xvi). Explain to students that the root of these words is "evolve." Ask students if they know what it means.	
 If none of the students knows what it means, explain that evolve means to change and develop over time. Ask students to discuss in triads: 	
* "So what do you think 'evolved' means? What does adding 'd' do to the word?"	
• Select volunteers to share their responses with the whole group. Listen for students to explain that adding the "d" makes the word past tense, so evolved means it developed over time.	
• Refocus students on the word "evolution." Explain that the suffix "-tion" at the end of the word means the action of or the process of. Ask students to discuss in triads:	
* "Put those two parts of the word together. What do you think 'evolution' means?"	
• Select students to share their responses. Listen for students to explain that it means the process of developing and changing over time.	



Work Time (continued)	Meeting Students' Needs
• Focus students on the word <i>interconnected</i> on page xvii. Point to the prefix "inter". Tell students that this means between or among. Ask students to discuss in triads:	
* "What do you think 'interconnected' might mean?"	
• Cold call students to share their responses. Listen for and guide students to understand that it means the way things are connected to each other.	
• Ask students to suggest other words with the prefix "inter." Listen for students to suggest words like: "interest," "international," and "interact."	
• Invite students to share any other unfamiliar vocabulary words they found, along with the definitions. If they were unable to work out the definition from the context or find it in a dictionary, encourage other students to assist them with the definition. To keep things moving, if no one else knows what the word means, define the word for the class.	
• Students may struggle with these words, so be sure to address them here: origin, dominate, idly, thus, elaborate, voraciously, revolting, adapt, conflict, eliminated, abundant, minuscule, tendency, and unforeseen.	
• If students are unable to work out the definition from the context or find it in a dictionary, encourage other students to assist them with the definition. To keep things moving, if no one else knows what the word means, define the word for the class.	
Ensure students record all new words on their word-catchers.	



Work Time (continued)	Meeting Students' Needs
 B. Text-Dependent Questions: Pages xii—xvii (20 minutes) Distribute Text-Dependent Questions: Pages xii—xvii and guide students using the Close Reading Guide: Pages xii—xvii (for teacher reference). 	Asking students to discuss challenging questions before recording them helps to ensure that all students have an idea about what to write and can give students confidence in their responses.
	 Some students may benefit from having access to "hint cards": small slips of paper or index cards that they turn over for hints about how/where to find the answers to text-dependent questions. For example, a hint card might say, "Look in the third paragraph."
	 Some students may benefit from having key sections pre-highlighted in their texts. This will help them focus on small sections rather than scanning the whole text for answers.



Closing and Assessment	Meeting Students' Needs
A. Link to Text Features (3 minutes)	
• Invite students to return to the page that opens the Introduction, the page that says, "Being a Brief Outline of the Problem."	
Ask students to discuss in triads:	
* "After reading about the ideas of Charles Darwin today, what do you notice about this page?"	
• Cold call students to share their responses. Listen for students to explain that there is a quote from Charles Darwin's book <i>On the Origin of Species</i> at the bottom of the page.	
• Invite students to flip through the text and look at the introductory page of each chapter. Point out that that there is a quote from Darwin's book on each of the introductory pages and that this is a common text feature.	
Homework	Meeting Students' Needs
• Reread the excerpt of the Introduction you read in class today (pages xii—xvii), beginning with "One of the great thinkers," and stopping at the end of page xvii. Use evidence flags to gather evidence as you read to answer this focus question on your structured notes in your journal:	
- "How does Mark Kurlansky continue to introduce his ideas about fish depletion in the Introduction of World without Fish?"	



Grade 6: Module 3B: Unit 1: Lesson 2 Supporting Materials





Tracing the Development of an Idea Anchor Chart

dea:		
Chapter	How is the idea introduced, illustrated, or elaborated on in this chapter?	



Tracing the Development of an Idea Anchor Chart

Answers for Teacher Reference

Idea: Fish depletion

Chapter	How is the idea introduced, illustrated, or elaborated on in this chapter?
Introduction	The idea is introduced with the use of very dramatic and almost scary sentences and words like, "But this is the story of how the Earth could be destroyed" and "life on planet Earth could completely unravel" to get our attention.



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	Text Dependent Questions: Pages xii–xvii
	Name:
	Date:
earning Target:	

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"I can use evidence from the text to answer text-dependent questions."

Questions	Answers (supported with evidence from the text)
1. What is the full name of the famous book by Charles Darwin?	
2. In your own words and in no more than a couple of sentences, describe what Darwin explained in his book.	
3. What are the seven major levels or categories that plants and animals are organized into?	
4. What class and order are humans in?	
5. What are some other mammals in that order?	



Text Dependent Questions: Pages xii-xvii

Questions		Answers (supported with evidence from the text)
6.	What family, genus, and species are we in?	
7.	According to Mark Kurlansky, what was Charles Darwin's greatest contribution? Write your answer in your own words in no more than two sentences.	
8.	Describe the process known as evolution in your own words.	
9.	Why were Charles Darwin's ideas seen as controversial, and why do they still cause conflict now? Write your answer in your own words in no more than two sentences.	
10	. According to page xvii, how is life interconnected?	



Close Reading Guide: Pages xii-xvii

For Teacher Reference

Time: 20 minutes

Questions	Close Reading Guide
1. What is the full name of the famous book by Charles Darwin?	• Invite students to reread the first paragraph beginning with "One of the great thinkers" and ending with " by its shortened title: On the Origin of Species."
	• Invite triads to discuss Question 1 and then record their answers in the Answer column of their text-dependent questions. Remind students to use evidence from the text in their answers.
	• Select volunteers to share their answers. Listen for them to explain that the book is titled <i>On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in Struggle for Life.</i>
2. In your own words in no more than a couple of sentences, describe what Darwin explained in his	 Invite students to reread the next paragraph beginning with "In his book" and ending with " and are thus constantly destroying life." Ask students to discuss in triads:
book.	* "How would you paraphrase that paragraph? How would you put it into your own words in no more than a couple of sentences?"
	• Select students to share their paraphrasing with the whole group. Listen for them to explain that Darwin saw nature as cruel because each species is constantly destroying life in what they eat.
	• Invite students to record their paraphrasing on their text-dependent questions.
3. What are the seven major levels or categories that plants and animals are	 Invite students to read the next short paragraph, ending on the word "species." Invite triads to discuss Question 3 and then record their answers in the Answer column of their text-dependent questions. Remind
categories that plants	• Invite triads to discuss Question 3 and then record their a



Close Reading Guide: Pages xii–xvii
For Teacher Reference

Questions	Close Reading Guide
	Select volunteers to share their answers. Listen for them to explain that the seven levels are kingdom, phylum, class, order, family, genus (plural genera), and species.
4. What class and order are humans in?	• Invite students to read the next paragraph beginning with "A codfish" and ending with "greatly favored by Homo sapiens," including the table underneath the paragraph.
5. What are some other mammals in that order?	• Invite triads to discuss Questions 4–6 and then record their answers in the Answer column of their text-dependent questions. Remind students to use evidence from the text in their answers.
6. What family, genus, and species are we in?	• Select volunteers to share their answers. Listen for them to explain that humans are in the class known as mammals and the order known as primates. Other mammals in that order include monkeys and lemurs. We are in the family hominidae, the genus Homo, and the species Homo sapiens.
7. According to Mark Kurlansky, what was Charles Darwin's greatest contribution? Write your answer in your own words in no more than two sentences.	 Invite students to read from "Darwin's great contribution" to " genera became extinct." Ask students to discuss in triads: * "How would you paraphrase that paragraph? How would you put it into your own words in no more than a couple of sentences?" Select students to share their paraphrasing with the whole group. Listen for them to explain that Darwin understood that there are many variations in nature and those with successful adaptations survive whereas the others become extinct.
	 Invite students to record their paraphrasing on their text-dependent questions.



Close Reading Guide: Pages xii–xvii

For Teacher Reference

Questions	Close Reading Guide
8. Describe the process known as evolution in	Invite students to reread page xvi up to " developed into human beings."
your own words.	Ask students to discuss in triads: * "According to Kurlansky, how were circumstances constantly changing?"
	• Cold call students to share their responses. Listen for students to explain that species moved into and out of areas and there were changes in the weather.
	Ask students to discuss in triads: * "According to Kurlansky, how did this change the order of nature?"
	• Select students to share their responses with the whole group. Listen for students to explain that changes in circumstances made some species die out and some thrive.
	 Ask students to discuss in triads: * "Why do you think these changes in circumstances made some species die out and some thrive?"
	• Cold call students to share their responses. Listen for and guide students to understand that when circumstances change—for example if the weather gets colder—some species with successful adaptations will survive, but some won't.
	 Ask students to discuss in triads: * "How would you paraphrase that page? How would you describe evolution in your own words?"
	• Select students to share with the whole group. Listen for them to explain that evolution is the way some species fail and some succeed because of the adaptations they have that help them to survive in changing circumstances.
	Invite students to record their paraphrasing on their text-dependent questions.



Close Reading Guide: Pages xii–xvii

For Teacher Reference

Questions	Close Reading Guide
9. Why were Charles Darwin's ideas seen as controversial, and why do they still cause conflict now? Write your answer in your own words in no more than two sentences.	 Invite students to reread the text box on the top left of page xvi. Ask students to discuss in triads: "How would you paraphrase that text box? How would you put it into your own words in no more than a couple of sentences?" Select students to share their paraphrasing with the whole group. Listen for them to explain that the ideas were seen as controversial because people didn't like the way Darwin said nature was cruel, and many also feel that it goes against what the Bible says about creation.
	• It is important to discuss this sensitively, making sure students understand that there are differing points of view on this issue—there are some who believe Darwin is correct and some who don't. Make it clear that students are not to take any of this as fact. They are to remember that this is a point of view and there are other points of view on this subject. Invite students to record their paraphrasing on their text-dependent questions.
10. According to page xvii, how is life interconnected?	 Invite students to reread from "In understanding what is happening" at the bottom of page xvi to the end of page xvii. Invite triads to discuss Question 10 and then record their answers in the Answer column of their text-dependent questions. Remind students to use evidence from the text in their answers. Select volunteers to share their answers. Listen for students to explain that what happens in the ocean affects life on earth and vice versa, and what plants and animals do alters human life and vice versa.