

Training Manual

**Grades
4 & 5**



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READING PI

Nonfiction Comprehension Program

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Samuel A. Patton, Meagan E. Walsh, Lynn S. Fuchs**

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Tutor Guide

Program Components Overview

Preview Vocabulary

The goal of this strategy is for students to independently identify and define vocabulary words before reading an informational text.

Why is this strategy important for reading comprehension?

Informational text often contains more rare and abstract vocabulary words than narrative texts. The presence of these challenging words increases the difficulty of understanding non-fiction passages.

Preview Text Features

The goal of this strategy is for students to independently identify and preview text features and text structure before reading an informational text.

Why is this strategy important for reading comprehension?

Informational text often contains text features that signal the most important ideas in the passage. Informational text is organized into a variety of text structures (e.g. Problem-Solution or Compare & Contrast). Familiarity with the importance of text features and text structure supports comprehension of the text. Specifically, the author's choice of text structure is related to the Main Idea of the whole passage, the Big Idea. For example, in a passage with a Problem-Solution structure, the Big Idea, or most important idea in the entire passage will usually be about the problem as well as the possible solutions discussed in the passage.

Preview Background Knowledge

The goal of this strategy is for students to independently check their own background knowledge before reading an informational text. Students should recognize that each time they read an informational passage or watch media, they strengthen their background knowledge about that topic and can use the information later.

Why is this strategy important for reading comprehension?

Comprehension of informational texts is supported by relevant background knowledge. Having and activating relevant background knowledge about a topic makes it easier to understand informational text and integrate new information. Inference making is also supported by the presence of relevant background knowledge. This link is explicitly highlighted in the tutoring program. The use of media to build background knowledge also supports comprehension and engagement, especially in scenarios where students do not have very much background knowledge about a particular topic. When you show students a video to build their background knowledge, they acquire a shared knowledge base which they can draw upon to make connections and answer inference questions.

Clarify & Connect

The first goal of this strategy is for students to independently and spontaneously identify, then clarify confusing words or ideas while reading. The second goal is for students to independently and spontaneously make connections between what they read and their background knowledge while reading.

Why is this strategy important for reading comprehension?

Some students who have adequate word reading skills but struggle with reading comprehension read straight through a passage without stopping when something doesn't make sense. The Clarify strategy teaches students to stop when something doesn't make sense and select a method to clarify the confusing idea. Making connections during reading is one type of inference making. Encouraging students to think about how the content they read is related to other passages, or their background knowledge, strengthens students' memory and comprehension of the

passage.

Main Idea & Big Idea Strategy

The purpose of this strategy is for students to independently generate main idea statements after reading each paragraph. Students independently identify the main idea of an entire passage.

Why is this strategy important for reading comprehension?

Informational text is usually organized into paragraphs that contain one main idea and several supporting details. Finding the main idea of each paragraph and the entire passage is a critical strategy that supports comprehension of informational text. Learning to separate the main idea from details ensures that students are focused on remembering only the most important information in each paragraph, instead of less important details.

In or Out

The goal of this strategy is for students to independently identify the question type (factual, or inference), to be able to independently find evidence in the passage (factual questions) and sometimes combine that evidence with background knowledge (inferential questions) to answer comprehension questions.

Why is this strategy important for reading comprehension?

Informational text is used to inform, or teach, the reader about a topic. Science and social studies passages are types of informational text. In the intermediate grades, students are expected to learn information from what they read. Comprehension questions commonly fall into two categories, factual and inferential. Students learn how to answer both types of questions by finding evidence in the text and combining making connections to their background knowledge.

Manual Instructions

Strategy Posters Icons Key

 Preview Text Features - Title - Headings - Pictures & Captions - Tables - Diagrams - Maps	 Preview Vocabulary 1. Check for vocabulary words. 2. Check your brain. Do you know the meaning? 3. Check the glossary. What does it say?	 Comprehension Strategies Before Reading / During Reading / After Reading Preview / Clarify / Connect	 Coach Correction Card 1. If the Reader says the wrong idea, what is the correct idea? 2. If the Reader says the wrong thing, what is the correct thing? 3. If the Reader's idea is too broad, what is the correct idea?	Preview Vocabulary Comprehension Strategies Coach Correction
 Preview Text Features - Title - Headings - Pictures & Captions - Tables - Diagrams - Maps	 Preview Background Knowledge What do you already know about this topic?	 Preview Background Knowledge What do you already know about this topic?	 Main Idea Strategy 1. Find the most important thing. 2. Tell the most important thing. 3. Say the Main Idea.	Preview Text Features Preview Background Knowledge Main Idea
 Preview Text Structure Describe the structure.	 Clarify & Connect 1. Find the key words in the question. 2. Find the key words in the text. 3. Read around. 4. Answer the question and give it with evidence.	 Clarify & Connect 1. Find the key words in the question. 2. Find the key words in the text. 3. Read around. 4. Answer the question and give it with evidence.	 Tree Correction	Preview Text Structure Clarify & Connect Tree Correction
 Descriptive & Sequence Text Structures Describe the structure.	 In or Out Strategy 1. Find the key words in the question. 2. Find the key words in the text. 3. Read around. 4. Answer the question and give it with evidence.	 In or Out Strategy 1. Find the key words in the question. 2. Find the key words in the text. 3. Read around. 4. Answer the question and give it with evidence.	 In or Out Strategy 1. Find the key words in the question. 2. Find the key words in the text. 3. Read around. 4. Answer the question and give it with evidence.	Descriptive & Sequence Text Structures In or Out #1 In or Out #2
 Four Text Structures Describe the structure.				Four Text Structures

How to Read the Manual

Carefully review each unit and lesson before administering it to your students. Preparing ahead of time allows you to familiarize yourself with opportunities to connect the material to your students' lives and to anticipate areas where students will need more support.

Bold print text indicates script that the tutor should say. You don't need to, and in fact should not, read the script verbatim to your students. You should familiarize yourself with the script and its general points, then use a combination of the scripted language and your own words when completing a lesson. You should stick close to the script, but read it in a way that feels natural to you. You will sometimes see bracketed bold text (e.g. [**Student A**] or [**state the sentence**]), which indicates you are to fill in the information. In the examples given, you would say the student's name instead of "Student A," or read the specified sentence aloud, instead of literally saying "state the sentence."

Bracketed, regular text is a suggested student response. If students give you a response close to the bracketed text, scaffold as needed and move on. Students do not need to provide the word-for-word response as printed in the manual to be considered correct, as long as it is relatively close.

Regular text usually represents directions or notes to the tutor. For example, you might be told to point to something in the script, check student responses, or summarize a portion of script, if appropriate.

Responsive Instruction Detective Icon

One of the strengths of this program is that it is a highly adaptable version of a scripted intervention. The complex and multi-dimensional nature of reading comprehension makes a completely scripted intervention untenable and inflexible. The students you work with might have extremely variable levels of vocabulary and background knowledge. You may have to provide background knowledge for some topics, while your students might have more background knowledge than you do on another topic! Students will have different interests and make different connections to their own lives. You should try your best to link the concepts and topics of this program to your students' lives in meaningful ways.

For example, one of your students may have never seen the ocean, so the concept of sailing across the open ocean (Lessons 6 & 7) is totally unfamiliar. This lack of background knowledge could be partially addressed by watching media during the lesson. However, the same student might have been to a river to go boating or fishing. They have some background knowledge that could help them read for understanding. This students' firsthand experience in a boat or fishing might be more useful and memorable than watching a clip of someone else sailing.

In order to help students get the most benefit out of this program, it's important for students to be able to connect the concepts to their own lives. Sometimes students will be able to make these connections themselves. Other times, you may have to help your students think critically about their experiences to draw these connections. Taking the time and making the effort to connect the program to your students' lives in a meaningful way will increase student interest, engagement and motivation to complete the program.

You will occasionally see the Responsive Instruction Detective Icon in the sidebar. The presence of the icon next to a particular section indicates that you may modify or adapt this section somewhat to meet your students' individual needs. For example, some sections of the script (such as reminding students of their roles) are repeated in every lesson or before each paragraph. If your students already know what you expect of them, you should summarize these sections or turn them into prompts by asking the students to tell you the roles instead. Other options for using the program flexibly and using the Responsive Instruction Detective Icon are detailed below:

Checking understanding more often

- Checking more main ideas than indicated in the script after abbreviation.
- Using the vocabulary follow up questions even if students indicate they know the meaning of the word.
- Checking student background knowledge connections after the move to independence in later units.

Using the Sidebar

Poster Action Key	
Set Out	Set the indicated poster out for the students to reference during the activity.
Show	Hold up the indicated poster to draw students' attention to referencing the poster during an activity.
Use	Use the poster as part of the activity. This often involves pointing to a feature on the poster, or walking students through the steps of a strategy on a poster.
Support	Support students when they need scaffolding for content on poster.

Poster Icon
indicates need to set out, show, use, or support the poster needed for the section of the lesson.

Comprehension Strategies		
Before Reading	During Reading	After Reading
Preview ☐ Vocabulary ☐ Text Features ☐ Background Knowledge	Clarify Connect 	Find the Main Idea  Find the Big Idea Answer questions with In or Out 
		



Timer Icon

indicates timer needed for activity, set the timer for the designated amount of time.



I. Review

A. Review Rules

Review routines as needed.

What are the rules for every session?

1. Be Respectful
2. Work Hard
3. Be a Good Team Member

What is one rule you would like to work especially hard on today? Accept response from both students.

B. Review Strategies

Last time, you practiced using the Coach Correction Poster to help your partner find the main idea. You also practiced doing the Before Reading strategies on your own.

Who remembers what you say if your partner makes a mistake at on step one ["Check it."]. **What about at on step 2?** ["Let me give you a hint..." and give them a hint about the most important thing about the who/what]. **What if the Reader makes a mistake at on step 3 and the main idea statement is too long?** ["Shrink it."]

Great job remembering! Today you will continue practicing using the Coach Correction Poster.

C. Agenda

Today we're going to do a Reading Challenge. Then we'll practice using the comprehension strategies with one of the passages in our workbook!



II. Reading Challenge

Reading Challenge Steps	Tutor Script and Directions
Review the purpose of Reading Challenges.	Why is it important to practice using these strategies without me? Accept response. You've been working hard in our lessons and I want to give you more practice transferring with another Reading Challenge today because I won't always be here to help you use your strategies while you read!
Talk about what's the same and/or different in this Reading Challenge.	How is this challenge similar to what we've done in our lessons? [Examples: It's nonfiction; We have read something about the brain before; The questions have MFI] This challenge still looks a lot like the things we have been reading. It's still nonfiction, so you will be able to use all your strategies. But this challenge is also a little different. How is this challenge different? [Questions #3 and #4 look different] Do you think you could still use the In/Out strategy on questions that look really different? Accept response. You absolutely can! You can still look for key words. You can still look for the answer inside the passage. And if you can't find the answer inside you can go outside and use your background knowledge!

Lesson 19

Worksheet Icon

shows the worksheet needed for the section of the lesson; all student worksheets found in Supplemental Materials.

Mission 18.0 🐾

Reading Challenge 4: Protect Your Brain!

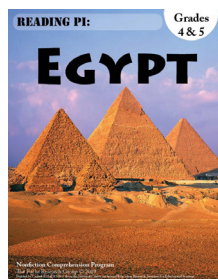
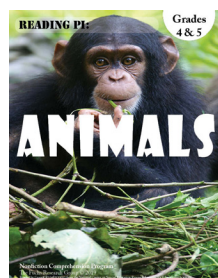
Your brain can get hurt. It is soft and squishy. Your skull protects your brain. It is made of bone. But bones can break. Your skull can't strong enough to protect your brain from everything. Your brain can get hurt if it is hit very hard. And when your brain gets hurt, it does not always heal and become normal again. Brain damage can be permanent.

It's important that you protect your brain. Especially when you are young. When you are young, your brain is still developing. One bad hit could do real damage! Football players, soccer players, and other athletes who get hit in the head can suffer damage to their brains. If you fall off your bike or you are in a car accident, you could hurt your brain too. It's important to be careful. When a helmet when you ride your bike. When your head is in the car. Be careful when playing sports like football.



Imagine what could have happened if this person hadn't been wearing a helmet!

Magnifying Glass Icon
indicates tutor should use the back of the poster for additional scripting and feedback for student responses.



Student Workbooks
are separated by their units in printed workbooks or PDF form.

Give

Mission 19.0
Reading Challenge & Self-Evaluation Chart

Use discretion when sharing scores

Show
Reading Challenge Discussion

Show
Comprehension Strategies

Give
Preview Vocabulary

Check understanding using follow up questions

Reading Challenge Steps	Tutor Script and Directions
Set students up to do Reading Challenge.	I'm going to let you work together for this challenge. Here is the list of strategies, you two should use this worksheet as you read to help you remember what to do next. Remember to put a check in the "yes" column every time you do one of the things on the list. Go ahead. Start the 10 minute timer.
Check and observe during Reading Challenge.	Answer Key: 1. (D) (Main Idea, Paragraph 1) 2. (B) (Big Idea) 3. (Riding a bike; Riding in a car without a seatbelt; playing football) (Factual, Paragraph 2) 4. (D) (Inference, Background Knowledge)
Start Reading Challenge discussion.	I've looked at your answers. Right now, I'm more interested in how you used your strategies than if you answered all the questions correctly because using your strategies makes you a better reader and that is our goal.

III. Before Reading Preview

Today, we're going to read a text that tells us important facts about the natural world. What do we call that kind of passage? [science text.]

Remember, you two are going to be in charge of the Before Reading strategies. I'll help you if you need it, but I'd like you to work as a team. You'll need to work hard and be good partners to each other.

Let's begin. Using the Table of Contents, help students turn to "Gombe Stream National Park" in their book.

A. Preview Vocabulary

What is the first Before Reading Strategy you need to do? [Preview Vocabulary]
Very good! Work together to follow the steps on the Preview Vocabulary poster.
Provide assistance as needed and make sure students switch roles after each word.

Term	Definition	Follow-up
National Park	[Land that is protected by the government because of its beauty or importance.]	Great Smoky Mountain National Park and Mammoth Caves are 2 examples of national parks near us. Have you ever visited one of those parks? Did you see any beautiful or unique things? (Reference student workbook p. 13 if students have never visited a national park)
Continent	[One of the large areas of land on Earth; Usually divided into several countries.]	This text is about a park on the continent of Africa. Africa is a continent, and Tanzania, as the map shows, is a country within the continent of Africa. What continent do we live on? [North America] Besides the United States, what other countries are on the continent of North America? [Mexico and Canada]

Lesson 19



Detective Icon
is always accompanied by directions and is an indicator of a section that needs responsive instruction.

Training Unit Overview



Lesson Outline	Page #
Lesson 1: Training Main Idea Part 1	29
Lesson 2: Training Main Idea Part 2	41
Lesson 3: Training Main Idea Part 3	51
Lesson 4: Training Before Reading Strategies	63
Lesson 5: Training Before Reading Strategies	77

Training Unit Materials List:

- Strategy Flash Cards
- Training Unit Flash Cards

In this first unit, you'll lay the foundations for later success with one of the core strategies in this program: the Main Idea Strategy. The first three lessons are all focused on teaching and practicing the 3 step Main Idea Strategy.

You'll start in Lesson 1 by teaching Step 1, which tends to be easier for students to grasp. Lessons 2 and 3 are targeted at completing Step 2 of the Main Idea Strategy, which is often the most difficult step of this strategy.

In Lesson 2, instruction on Step 2 begins with a concrete example using sentence strips. This activity is followed by an example utilizing explicit instruction techniques on a short, simple paragraph. In this paragraph, one of the sentences is the main idea. The last activity in Lesson 2 is an example of a different type of informational text where there is no single sentence that works as a good main idea. Students should learn that sometimes they must create their own main idea statement instead of selecting a sentence from the passage as the main idea.

In Lesson 3, students work to complete all three steps of the Main Idea Strategy on longer paragraphs. Details Discussion sections are mandatory in this unit to reinforce student understanding of the distinction between details and important information.

In Lesson 4, students learn about the Before Reading Strategies, Preview Vocabulary, Preview Text Features, and Preview Background Knowledge. These are taught using a passage about the human brain. In Lesson 5, students practice the Main Idea Strategy on the same passage from Lesson 4.

Training Scope and Sequence

Strategies	Script Structure and Format	Tutor Role	Student Roles
Preview Vocabulary	The Preview Vocabulary Strategy is introduced in Lesson 4 with full scripting.	Displays the Preview Vocabulary Poster. Introduces the Preview Vocabulary Strategy. Models the Preview Vocabulary Strategy. Leads guided practice and ensures students follow the strategy steps and switch roles after each word. Asks follow up questions to check student understanding. Reminds students to make a checkmark in their workbooks next to each vocabulary word after completing the strategy for it.	Identify vocabulary words as a group Take turns working as Coach and Reader to complete the strategy steps for each word. Answer the follow up questions asked by the tutor. Make a checkmark next to each vocabulary word after completing the strategy for it.
Preview Text Features	The Preview Text Feature Strategy and Descriptive text structure are introduced in Lesson 4 with full scripting.	Displays the Preview Text Features Poster. Introduces the Preview Text Features Strategy. Explains the importance of text features and text structure. Guides discussion of each text feature. Introduces Descriptive text structure. Reminds students to make a checkmark next to each text feature after previewing it.	Identify text features when prompted by tutor. Participate in discussion of text features. Preview and identify text structure with guidance from tutor. Make a checkmark next to each text feature after previewing it.
Preview Background Knowledge	The Preview Background Knowledge Strategy is introduced in Lesson 4.	Displays the Preview Background Knowledge Poster. Introduces the Preview Background Knowledge strategy. Models previewing background knowledge. Prompts students to ask each other the question. Introduces reading informational passages as two ways to build background knowledge. Reminds students to make a checkmark at the top of their passage after previewing their background knowledge.	Ask each other the question. Make a checkmark at the top of their passage after previewing their background knowledge.

Training Scope and Sequence

Strategies	Script Structure and Format	Tutor Role	Student Roles
Clarify & Connect	Not introduced until the Animals Unit.		
Main Idea	• Main Idea Strategy was already introduced in the Training Unit. • Details discussion is mandatory after each paragraph. • If the Tree Correction was completed, you will have discussed the details during that procedure, so you can skip the scripted details discussion. • Script provides feedback tables for each Main Idea question answer choice. • Script provides a table that explains the details for the Tree Correction.	• Reminds students of Coach and Reader roles • Prompts students to begin the strategy steps after each paragraph. • Displays the Main Idea and Tree Correction Posters. • Prompts students to think about where each sentence belongs on the Tree Correction Poster. • Leads discussion of how details are related to Main Idea after each paragraph • Models or leads guided practice for Big Idea • Reminds students about the relationship between text structure and big idea.	• Take turns acting as Coach and Reader to read the paragraphs and complete the strategy steps. • Coach circles the most important who or what. • Think about the Main Idea tree when prompted by tutor. • Work as partners to answer a multiple-choice question about the Main Idea of each paragraph. • Participate in detail discussions. • Answer Big Idea questions
In or Out	Not introduced until the Animals Unit.		

Explorers Unit Overview



Lesson Outline	Page #
Lesson 6: Jessica Watson Part 1	93
Lesson 7: Jessica Watson Part 2	103
Lesson 8: Guy Bluford Part 1	115
Lesson 9: Guy Bluford Part 2	125
Lesson 10: Reading Challenge Training Mini Lesson	137
Lesson 11: Amelia Earhart Part 1	141
Lesson 12: Amelia Earhart Part 2	155
Lesson 13: Tenzing Norgay Part 1	167
Lesson 14: Tenzing Norgay Part 2	179
Lesson 15: Exploring the Deep Sea Part 1	193
Lesson 16: Exploring the Deep Sea Part 2	207

Explorers Unit Materials List:

- Explorers Unit Board Game
- Explorers Unit Flash Cards

In the Explorers Unit, students learn the In or Out (Lesson 7) and Clarify & Connect Strategies (Lesson 8) and continue to practice the other comprehension strategies on passages about explorers and exploration. The majority of passages in this unit are biographies, and in Lesson 6 the Sequence structure is introduced.

The Reading Challenge Activity is introduced as an independent short lesson (Lesson 10). You should take care to highlight that the Reading Challenge is not a test. The primary purpose of Reading Challenges is to provide opportunities for students to apply their strategies (“transfer”) to new texts without help from the tutor. Students complete an additional two Reading Challenges in this unit after the introduction lesson.

Before Reading Sections:

Remind



In this unit it means that you should remind the students to make the checkmark next to each vocabulary word, text feature, the first sentence of each paragraph and at the top of the page after they have previewed vocabulary, text features and text structure, and their background knowledge.

Tutors should use the follow up question after each vocabulary word to ensure students understand it. If students already know the meaning of the word (assessed in step 1 of the vocabulary strategy – check your brain), the tutor can skip straight to the follow up question instead of looking for the definition in the glossary.

During Reading Sections:

Remind



In this unit, students learn and practice the During Reading Strategies: Clarify and Connect. When you see this icon, you should remind students to draw a thought bubble next to the paragraph for which they have just clarified and connected. Students tend to have a more difficult time completing the Clarify Strategy than the Connect Strategy. Therefore, the script is designed to provide more support for the Clarify Strategy for a longer time. Students can usually be released to independently make connections sooner than for clarifying confusing ideas.

After Reading Sections:

You should continue to work one question at a time with your students on the In or Out questions. Make sure they follow the steps of the In or Out strategy and prove their answers by pointing to evidence.

Explorers Scope and Sequence

Strategies	Script Structure and Format	Tutor Role	Student Roles
Preview Vocabulary	- The Preview Vocabulary Strategy was already introduced in the Training Unit. - In this unit, the information is presented in chart form.	Prompts students to name the first Before Reading Strategy Displays the Preview Vocabulary Poster Ensures students follow the strategy steps and switch roles after each word. Asks follow up questions to check student understanding. Reminds students to make a checkmark in their workbooks next to each vocabulary word after completing the strategy for it.	Identify the first Before Reading Strategy Identify vocabulary words as partners Take turns working as Coach and Reader to complete the strategy steps for each word. Answer the follow up questions asked by the tutor. Make a checkmark next to each vocabulary word after completing the strategy for it.
Preview Text Features	- The Preview Text Features Strategy was already introduced in the Training Unit. - In Lesson 6 Sequence text structure is introduced.	Prompts students to name the next Before Reading Strategy Displays the Preview Text Features Poster Reminds students how text features help them understand the most important ideas in a passage. Guides discussion of each text feature. Reviews & Introduces Descriptive and Sequence text structures. Reminds students to make a checkmark next to each text feature after previewing it.	Identify the next Before Reading Strategy Identify text features when prompted by tutor. Participate in discussion of text features Preview and identify text structure with guidance from tutor. Make a checkmark next to each text feature after previewing it.

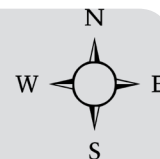
Explorers Scope and Sequence

Strategies	Script Structure and Format	Tutor Role	Student Roles
Preview Background Knowledge	- The Preview Background Knowledge Strategy was already introduced in the Training Unit. - The use of media to build background knowledge is introduced in Lesson 6.	Prompts students to name the next Before Reading Strategy Displays the Preview Background Knowledge Poster Reminds students to use information they gathered from Previewing Vocabulary and Text Features to figure out what topic they should check their background knowledge for. Prompts students to ask each other the question. Introduces Media as one way to build background knowledge. Reminds students to make a checkmark at the top of their passage after previewing their background knowledge.	Identify the next Before Reading Strategy Ask each other the question. Watch a videos to build background knowledge Participate in discussion of the video. Make a checkmark at the top of their passage after previewing their background knowledge.
Clarify & Connect	- The Clarify & Connect Strategies are introduced in Lesson 8. - Tutor models the strategy for two paragraphs and then leads guided practice. - Clarify information is presented in table format at the end of Lesson 11. - Connect information is presented in table format at the end of Lesson 12.	Prompts students to clarify and connect after each paragraph. Displays the Clarify & Connect Poster Supports students as needed to identify confusing ideas and select a method to use when clarifying. Supports students as needed to make connections. Reminds students to draw a thought bubble after clarifying & connecting in each paragraph.	With support, identify confusing ideas to clarify With support, make connections Draw a thought bubble after clarifying & connecting after each paragraph.

Explorers Scope and Sequence

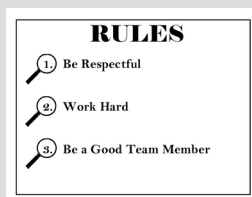
Strategies	Script Structure and Format	Tutor Role	Student Roles
Main Idea	• Main Idea Strategy was already introduced in the Training Unit. • Script provides feedback tables for each Main Idea question answer choice. • Details discussion occurs when the correct answer is selected for a main idea question. • If an incorrect answer is selected, you will complete the Tree Correction, which involves discussing how the details are related to the main idea. • Script provides a table that explains the details for the Tree Correction.	• Reminds students of Coach and Reader roles. • Prompts students to begin the strategy steps after each paragraph. • Displays the Main Idea Strategy and Tree Correction Posters. • Prompts students to think about where each sentence belongs on the Tree Correction Poster. • Leads discussion of how details are related to main idea after each paragraph. • Models or leads guided practice for big idea. • Reminds students about the relationship between text structure and big idea.	• Take turns acting as Coach and Reader to read the paragraphs and complete the strategy steps. • Coach circles the most important who or what. • Think about the Main Idea Tree when prompted by tutor. • Work as partners to answer a multiple-choice question about the main idea of each paragraph. • Participate in detail discussions. • Answer big idea questions.
In or Out	• The In or Out strategy is introduced in Lesson 7. • Only the first 4 steps of the strategy are introduced (factual questions) • Key Words are already underlined for students in the questions. • In lesson 9 the answer is not in the same sentence as the Key Words. • In Lesson 11 “not” questions are introduced.	• Models the In or Out Strategy to answer factual questions. • Guides students through questions one at a time. • Reminds students to prove their answer by pointing to the evidence in the passage and noting the paragraph number where they found the answer.	• Work as partners to find Key Words in the passage & answer questions. • Students write the paragraph number on the worksheet next to the question in which they found their answer.

Lesson 15: Exploring the Deep Sea, Part 1



Outline	Activities	Materials
I. Review	A. Review Rules B. Review Strategies C. Agenda	• Rules Poster • Comprehension Strategies Poster • Point Sheets • Strategy Flash Cards • Timer
II. Before Reading Preview	A. Preview Vocabulary B. Preview Text Features C. Preview Background Knowledge	• Explorers Workbooks • Laptop • Media • Preview Vocabulary Poster • Preview Text Features Poster • Descriptive & Sequence Text Structure Poster • Preview Background Knowledge Poster
III. During Reading Practice	A. Paragraph 1 B. Paragraph 2 C. Paragraph 3	• Clarify & Connect Poster • Main Idea Poster • Mission 13.0 Worksheets • Tree Correction Poster
IV. Wrap Up	A. Review Lesson & Behavior	• Rules Poster • Point Sheets • Explorer Unit Flash Cards • Explorer Unit Game Board • Laptop • Media

Show



Set out



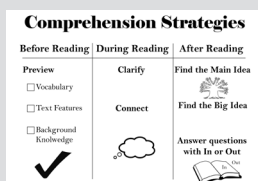
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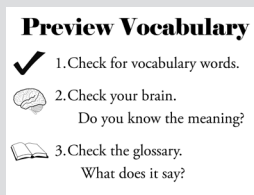
Show



Give



Give to Coach



I. Review

A. Review Rules

Review routines as needed.

What are the rules for every session?

1. Be Respectful
2. Work Hard
3. Be a Good Team Member

What is one rule you would like to work especially hard on today? Accept response from both students.

B. Review Strategies

Today we're going to review our strategies by playing Headbands. Remember, you'll take turns picking a card from the stack and hold it against your forehead with the strategy name facing your partner. Your partner will give you clues to help you guess the strategy.

If you are the partner, you can't say the name of the strategy, but what type of clues could you give? [when you use the strategy, what you do during the strategy, how it helps you, etc.] **Remember, I want to see you two working together. [Student B], you'll go first, and then we will switch.** Put the stack of cards on the table in front of the students.

You have 1 minute to guess as many strategies as you can. Ready?....Go! Allow students 1 minute to play. Afterward, review the strategies, paying particular attention to any that they struggled to guess.

C. Agenda

Today we'll practice our reading comprehension strategies with a passage called: "Exploring the Deep Sea." "Exploring the Deep Sea" is not a biography. It's an informational text that tells us important facts about the natural world. We'll call this kind of passage a science text. What kind of informational text are we reading today? [Science text] **Good.**

II. Before Reading Preview

Let's begin.

Using the Table of Contents, help students turn to "Exploring the Deep Sea".

A. Preview Vocabulary

Tell me the first Before Reading Strategy. [Preview Vocabulary] **Very good! How do you know which words are the vocabulary words?** [They're in bold print.] **That's right! Take turns finding today's vocabulary words.** [Pressure, robots, submarine, traits]

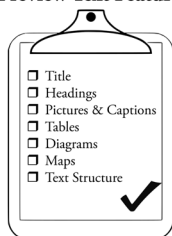
[Student A], I want you to be the Coach and help [Student B] remember the steps in the Preview Vocabulary Strategy. Do you think you can do that? Provide assistance as needed and make sure students switch roles after each word.

Remind



Show

Preview Text Features



Remind



Term	Definition	Follow-up
Pressure	[The force of water or air pressing against something.]	Have you ever dove down to the bottom of a pool and felt your ears pop? Accept response. When you go deeper in the water there is more water pushing on you and it can make it feel like your ears are popping because of the change in pressure. Based on the diagram in the glossary, what happens to a water bottle when it goes deeper into the ocean? [All that pressure crushes the bottle!]
Robots (Robot)	[A machine controlled by a computer that does work for people.]	Why do you think we need robots to explore the deep sea? Accept responses.
Submarine	[A special ship built to go underwater]	Would you rather explore in a submarine, a sail boat, a plane, or a space shuttle? Why? Accept response.
Traits (Trait)	[A feature of a person, animal, or thing that makes it unique]	I bet you will see some pictures of deep sea creatures as you preview the text features. You can look at the pictures to see the traits that make some of those creatures unique.

B. Preview Text Features

What do we preview next? [Text features] **Very good!** [Student A], **read the title.** [Exploring the Deep Sea]

[Student B], does the passage have any headings? [Yes] **Read it.** [Under Pressure; What's Down There?] **How do headings help us?** [They give us an idea about what we're going to read] **What do you think you'll read about in that section?** Accept reasonable responses. **What other text features do you see in this passage?** [Pictures & captions; diagrams]

[Student B], choose one of the pictures. Tell me what you see and read the caption. Allow response. **[Student A], tell us what you see in the other picture and read the caption.** Allow response.

What other text features do you see in our text for today? [A diagram]

Point to chart at the bottom of the page. **Do you know what this special kind of chart is called?** [A diagram] **Good! A diagram has labels to help us understand more about the picture. This diagram shows how far sunlight can travel into the deep ocean. What else do you notice in this diagram?** Point out that the deepest level is called the "Midnight Zone." Help students understand that no sunlight reaches the midnight zone. **Very good. Text features like titles, headings, tables and charts help us identify important facts and ideas in the passage. Based on the text features, what do you think this passage will be about?** [Exploring the deep sea]

Next we'll preview the text structure. Who remembers what text structure means? [The way the author organized the passage] **Great! We've learned two types of text structure already. Who can remember their names?** [Descriptive and Sequence] **That's right. What does a Descriptive passage do?** [Describes something] **What does a Sequence passage do?** [Tells events in the order that they happened]

Who remembers what TSWs are? [Text Structure Words] **Great job remembering!** If you see a lot of Sequence TSWs, like first, next, then, before or after, that's a clue that this passage has a Sequence structure. When we preview the text structure, think about whether it's Descriptive or Sequence because it will help you understand what you read.

Who remembers how to preview the text structure of a passage? [Read the first sentence of each paragraph.] **Very good! Now, let's preview the text structure. Take turns reading only the first sentence of each paragraph aloud. [Student A], you go first.** Allow students to finish reading the first sentence of each paragraph.

- Scientists don't know very much about the deep sea.
- We don't know very much about the deep sea because it is hard to explore.
- The deep sea is also very cold and dark.
- Scientists send a robot **submarine** down to the ocean floor.
- With the help of robots, scientists have discovered some very interesting animals.

Good job working hard, you two! Now point to the organizer that you think matches the structure of this passage. Does it describe something, or does it tell the events in a person's life in the order they happened? Students should point to the Descriptive organizer. **Great work, Reading Detectives! This passage has a Descriptive structure. It describes exploring the deep sea. Knowing the structure will help you figure out the big idea of the passage.**

C. Preview Background Knowledge

What's the next thing we preview? [Background knowledge] **Right! Who remembers what background knowledge is?** [What you already know about something] **Good.**

Your background knowledge can help you understand informational texts. So, whether you have a lot, or very little background knowledge, you should check what you already know to prepare for reading.

Point to the Preview Background Knowledge Poster. **We check our background knowledge by asking this question. Earlier we predicted this text would be about the deep sea. So you should ask "What do you already know about...?"** [The deep sea] **Good. Work together to check your background knowledge.** Allow both students to share their background knowledge about the deep sea.

Great job previewing your background knowledge. A great way to build your background knowledge, to make it bigger and more helpful to you, is to look at media.

Let's watch a video to build our background knowledge about the deep sea.

Choose your own video or use the video recommended in the Media Appendix. Play the video for the students.

After the video is finished, engage students in 2-3 minutes of discussion to get them to think more deeply about the video.

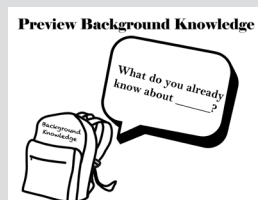
Remind



Use

Descriptive Text Structure	Sequence Text Structure
Describes someone or something	Tells events in the order that they happened.

Show



Use



Remind



III. During Reading Practice

Show

Main Idea Strategy	
1. Name the most important who or what	
+	
2. Tell the most important thing about _____	Use notes or rubric
3. Say the Main Idea	

We've done all the Before Reading Strategies on our poster. We're ready to start reading the text. You two share two important jobs, what are they? [Coach and Reader] Good. What does the Reader do? [Read aloud and answer questions] What does the Coach do? [Read along silently and help their partners] You'll do one job while your partner does the other. You will switch jobs after every paragraph.

[Student A], you're going to be the first Reader. Read the next paragraph. Remember to read quickly, carefully, and with expression. After you finish, we'll clarify and connect. Then, you'll find the main idea.

[Student B], you're going to be the Coach. You're going to read along silently and help your partner complete the activities. [Student B] will circle the most important who or what in each sentence while you're reading. You can use their notes to help you find the main idea.

A. Paragraph 1

Scientists don't know very much about the deep sea. In fact, scientists know more about every other habitat on Earth. Even though most of our planet is water, scientists have only explored about 5% of the oceans. Scientists even know more about the moon than they do about the bottom of the ocean!

Let's take a minute to clarify and connect.

Use

Clarify & Connect	
I need to Clarify! 1. Re-read the confusing part. 2. Remember what I read before. 3. Use my background knowledge. 4. Use the glossary. 5. Ask for help.	Make a Connection! 1. I wonder... 2. I'd like to know more about... 3. _____ made me think of...

Confusing Idea	Clarification Method	Tutor Script
Meaning of the word "habitat"	- Use background knowledge. - Ask for help.	"Habitat" isn't a vocabulary word, so the glossary can't help us. Point to the box titled "I need to Clarify!" on the Clarify & Connect Poster. I didn't see any clues in the other sentences that might explain this word. How should we clarify the meaning of this word? [Use background knowledge; ask for help] Have either of you ever heard the word "habitat" before? Use prompts below.
		[YES] What do you think it means and why? Accept student responses. A habitat is a place where an animal or plant lives. What animals might live in the deep sea habitat? Accept student responses. Great job using your background knowledge to clarify!
		[NO] That's okay! I'll help you. A habitat is a place where an animal or plant lives. Some plants and animals live in a desert habitat, can you name any? [Scorpions; birds; mice; cacti; etc.] What kinds of animals do you think live in the deep ocean habitat? Accept student responses.

Remind



Support

Main Idea Strategy

1. Name the most important who or what
2. Tell the most important thing about _____
3. Say the Main Idea

Show



Give

Mission 13.0 Exploring the Deep Sea

1. What do you know about the deep sea?

- a. Scientists don't know very much about the deep sea.
- b. Scientists have explored 5% of the ocean.
- c. Scientists have explored most of the deep sea.
- d. Scientists have explored the deep sea.

2. What do you know about the deep sea?

- a. The deep sea is very dark.
- b. The deep sea is very cold.
- c. The deep sea is very deep.
- d. The deep sea is very hot.

3. What do you know about the deep sea?

- a. The deep sea is very dark.
- b. The deep sea is very cold.
- c. The deep sea is very deep.
- d. The deep sea is very hot.

4. What do you know about the deep sea?

- a. The deep sea is very dark.
- b. The deep sea is very cold.
- c. The deep sea is very deep.
- d. The deep sea is very hot.

Now let's make a connection. I want you each to think about this paragraph. Point to the sentence starters in the "Make a Connection" box on the poster. Give the students an opportunity to use one of the prompts and have a short discussion. If either student is unable to generate a statement, demonstrate the strategy using one of the prompts below.

I wonder...	why scientists explored the moon before the ocean?
I'd like to know more about...	what lives at the bottom of the ocean?
_____ made me think of...	Scientists exploring the moon made me think of Guy Bluford exploring space as an astronaut.

Great job making a connection Detectives! You're really getting good at thinking while you read! Now, draw a thought bubble next to that paragraph in your workbook. That shows that we used the Clarify & Connect Strategies.

Now, it's time for main idea. [Student A], you were the Reader this time, so you'll find the main idea for this paragraph. Coach, what's the first step? [Name the most important who or what.] Great! Reader, go ahead and name the most important who or what for this paragraph. [Scientists]

Great! Check if the Coach also circled the most important who or what and related pronouns in the paragraph.

What's the next step, Coach? [Tell the most important thing about scientists.] That's right.

Now, on your own, think about where each sentence from the paragraph belongs on the tree. Does the sentence tell the most important thing about scientists, or is it a detail? Allow students to think for up to 1 minute.

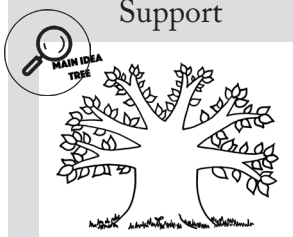
Do you have the main idea in your mind? Let's use it to answer a multiple choice question.

[Student A], please read aloud the question and possible answers.

Share your thoughts with your partner. Give me a thumbs up when you have agreed on an answer.

What is the most important idea in paragraph 1?		Tutor Feedback
A	Scientists don't know very much about the deep sea.	That's right! All of the sentences in the paragraph are related to how scientists don't know very much about the deep sea. [Student A], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary. [Student B], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary. Great work, Reading Detectives!
B	Scientists have only explored 5% of the oceans.	This answer is really a detail. This whole paragraph isn't about scientists only exploring 5% of the oceans. Let's use the Main Idea Tree to find the most important thing about scientists. Use the Tree Correction.

Support



What is the most important idea in paragraph 1?	Tutor Feedback
C Scientists have explored more of the deep sea than the moon.	This answer isn't quite right. It says that scientists have explored more of the deep sea than the moon. But the paragraph told us that scientists actually know more about the moon than the deep sea. Let's use the Main Idea Tree to find the most important thing about scientists. Use the Tree Correction.
D Many scientists study and explore the deep sea.	This answer isn't quite right. It doesn't say anywhere in the paragraph that many scientists study and explore the deep sea. It might be true, but it's not the most important thing about scientists in this paragraph. Let's use the Main Idea Tree to find the most important thing about scientists. Use the Tree Correction.

Paragraph 1 Tree Correction Key

Sentence	Explanation
1. Scientists don't know very...	Main idea.
2. In fact, scientists know more about every other habitat on Earth.	Example that shows how little scientists know about the deep sea.
3. Even though most of our planet is water, scientists have only...	Example that shows how little scientists know about the deep sea.
4. Scientists even know more about the moon than...	Example of a habitat we know more about than the deep sea.

Make sure students circle answer "A" and cross out any incorrect answers.

[Student B], you're going to be the next Reader. Read the second paragraph. Remember to read quickly, carefully, and with expression. After you're done, we'll clarify and connect. Then, you'll find the main idea.

[Student A], you're going to be the Coach. You're going to read along silently and help your partner find the main idea. [Student A] will circle the most important who or what wherever it appears while you're reading. You can use their notes to help you find the main idea.

B. Paragraph 2

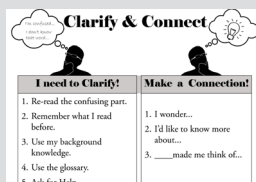
Under Pressure

We don't know very much about the deep sea because it is hard to explore. There is very high pressure in the deep sea, which can be dangerous for humans. For example, if you swim to the bottom of a deep pool, your ears will probably hurt at the bottom. That feeling is the pressure of the water pushing in on your body. Deeper water means more pressure. Swimming pools are only 12 feet deep, but the deepest part of the ocean is 36,000 feet deep! The pressure of that much water would crush our bodies.

Let's take a minute to clarify and connect. Encourage and support students as necessary to move through the Clarify & Connect Strategy steps. Students should clarify 1 confusing concept and make 1 connection.



Hint that the most important what in paragraph 2 is different than paragraph 1
Use



Confusing Idea	Clarification Method	Tutor Script
Why does the paragraph talk about a swimming pool when the passage is about the deep sea?	Re-read the confusing part.	How should we figure out why the author wrote about a swimming pool in this paragraph? [Re-read the confusing part.] Point to the sentences that tell us what happens when you swim in a pool. Wait for students to point to the correct sentence. Let's re-read the rest of the paragraph. Take turns reading sentences until you get to the end. Wait for students to finish reading. What causes your ears to hurt at the bottom of the pool? [Pressure] The author mentions another place where the water pressure is high. What is it? [The deep sea] How deep is a pool compared to the ocean? [12 ft. vs. 36,000 ft.] What does water pressure feel like at the bottom of a 12 ft. deep pool? [It hurts your ears.] What does the paragraph say that water pressure would feel like 36,000 ft under the ocean? [It would crush you.] That's scary! Why do you think the author used the example of a swimming pool to help you think about water pressure? Elicit responses similar to those below. - Kids might have been to a swimming pool and experienced a little water pressure. - It's an example that helps you understand the idea of water pressure.
Why is it hard to explore the deep sea?	Re-read the confusing part.	How should we figure out why it's so hard to explore the deep sea? [Re-read the confusing part.] Let's re-read the confusing sentence. Pick one student to re-read the first sentence. We know the deep sea is hard to explore, but why? Let's keep reading. Pick one student to read the next sentence. Why is the deep sea hard to explore? [The high pressure is dangerous.]

Now let's make a connection. I want you each to think about this paragraph. Point to the sentence starters in the "Make a Connection" box on the poster. Give the students an opportunity to use one of the prompts and have a short discussion. If either student is unable to generate a statement, demonstrate the strategy using one of the prompts below.

Remind

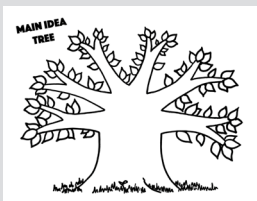


Support

**Main Idea Strategy**

1. Name the most important who or what
+
2. Tell the most important thing about _____
the who or what
3. Say the Main Idea

Show



I wonder...	how are scientists exploring the deep sea if there is so much pressure?
I'd like to know more about...	how people can go all the way down to the bottom of the ocean?
_____ made me think of...	Reading about pressure in this paragraph made me think of a time I dove to the bottom of a pool and my ears really hurt.

Great job reading for understanding, Detectives! How does clarifying and connecting help you understand what you read? [You stop when you don't understand something, and you try to figure it out; when you connect to your background knowledge, you're more likely to understand what you're reading] **Great! Let's draw a thought bubble next to that paragraph to show that we used the Clarify & Connect Strategies.**

Now, it's time for main idea. [Student B], you were the Reader this time, so you'll find the main idea for this paragraph. Coach, what's the first step? [Name the most important who or what.] **Great! Reader, go ahead and name the most important who or what for this paragraph.** [The deep sea]

Great! Check if the Coach also circled the most important who or what and related pronouns in the paragraph.

What's the next step, Coach? [Tell the most important thing about the deep sea.] **That's right.**

Now, on your own, think about where each sentence from the paragraph belongs on the tree. Does the sentence tell the most important thing about the deep sea, or is it a detail? Allow students to think for up to 1 minute.

Do you have the main idea in your mind? Let's use it to answer a multiple choice question.

[Student B], please read aloud the question and possible answers.

Share your thoughts with your partner. Give me a thumbs up when you have agreed on an answer.

What is the most important thing you learned in paragraph 2?	Tutor Feedback
A The deepest part of the ocean is 36,000 feet deep.	That answer is really a detail. The whole paragraph isn't about the fact that the deepest part of the ocean is 36,000 feet deep. Let's use the Main Idea Tree to find the most important thing about the deep sea. Use the Tree Correction.
B Humans can explore the deep sea easily.	This answer isn't right. This answer says that humans can explore the deep sea easily. But the paragraph tells us that the deep sea is hard to explore. Let's use the Main Idea Tree to find the most important thing about the deep sea. Use the Tree Correction.
C Living things cannot survive in the deep sea.	This isn't quite right. It doesn't say anywhere in the paragraph that living things can't survive in the deep sea. Let's use the Main Idea Tree to find the most important thing about the deep sea. Use the Tree Correction.
D The deep sea has very high pressure.	That's right! All of the sentences in the paragraph are related to how the deep sea has very high pressure. [Student A], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary. [Student B], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary. Great work, Reading Detectives!



Support



Paragraph 2 Tree Correction Key

Sentence	Explanation
1. We don't know very much about...	Tells that exploring the deep sea is difficult.
2. There is very high pressure in the deep sea...	Close to main idea: Explains that the high pressure makes it difficult to explore.
3. For example, if you swam to the...	Example that explains water pressure.
4. That feeling is the pressure of...	Example that explains water pressure.
5. Deeper water means more pressure.	Example that explains water pressure.
6. Swimming pools are only 12 feet deep, but the deepest part...	Compares the pressure in a swimming pool to the pressure in the deep sea.
7. The pressure of that much water would crush our bodies.	Explains how exploring the deep sea is difficult because of high water pressure.

Make sure students circle answer "D" and cross out any incorrect answers.

[Student A], you're going to be the next Reader. Read the third paragraph. Remember to read quickly, carefully, and with expression. After you're done, we'll clarify and connect. Then, you'll find the main idea.

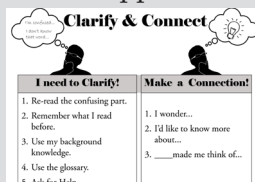
[Student B], you're going to be the Coach. You're going to read along silently and help your partner find the main idea. [Student B] will circle the most important who or what wherever it appears while you're reading. You can use their notes to help you find the main idea.

C. Paragraph 3

The deep sea is also very cold and dark. The temperature there is barely above freezing and the deep sea is darker than the night sky! These things make it very hard for humans to explore the deep sea safely. Since the deep sea is so dangerous, scientists use **robots** to help them explore it.

Let's take a minute to clarify and connect. Encourage and support students as necessary to move through the Clarify & Connect Strategy steps. Students should clarify 1 confusing concept and make 1 connection.

Support



Confusing Idea	Clarification Method	Tutor Script
Why is it so cold and dark in the deep sea?	- Remember what I read before. - Use background knowledge.	Point to # 2 in the Clarify box. Were there any text features that could help us answer this question? Point to a text feature that might help us answer the question, "Why is it so cold and dark in the deep sea?" Wait for students to point at the diagram. What is the title of this diagram? [Distance sunlight travels in the ocean] Use the diagram to explain how sunlight can't reach the bottom of the ocean. Point to # 3 in the Clarify box. Now use your background knowledge, "where does most of Earth's heat and light come from?" [The sun] Sunlight can't reach the bottom of the ocean. That's why it is so cold and dark down there.

Confusing Idea	Clarification Method	Tutor Script
Why is it difficult for humans to explore the deep sea?	Re-read the confusing part.	Point to # 1 in the Clarify box. Let's re-read the confusing part. Point to the place where it says that it is hard for humans to explore the deep sea. Read that sentence. [These things make it very hard for humans to explore the deep sea safely.] What are "these things?" [Student B] read the sentence before that one to see what "these things" refers to. [The temperature there is barely above freezing and the deep sea is darker than the night sky.] Great! So what two things make it hard to explore the deep sea? [The deep sea is very cold and dark.] Is there anything else you remember reading about in another paragraph that makes it hard to explore the deep sea? [Water pressure] Very good!

Now let's make a connection. I want you each to think about this paragraph. Point to the sentence starters in the "Make a Connection" box on the poster. Give the students an opportunity to use one of the prompts and have a short discussion. If either student is unable to generate a statement, demonstrate the strategy using one of the prompts below.

I wonder...	if it's so cold and dark down there, are there any living creatures?
I'd like to know more about...	how robots help scientists explore the deep sea.
_____ made me think of...	A time I was in a place where it was completely dark. Provide personal ex.

Remind



Support



Main Idea Strategy

1. Name the most important who or what
2. Tell the most important thing about _____
3. Say the Main Idea

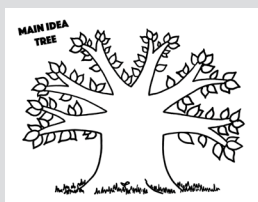
Great job reading for understanding, Detectives! How does clarifying and connecting help you understand what you read? [You stop when you don't understand something, and you try to figure it out; when you connect to your background knowledge, you're more likely to understand what you're reading] **Great! Let's draw a thought bubble next to that paragraph to show that we used the Clarify & Connect Strategies.**

Now, it's time for the main idea. [Student A], you were the Reader this time, so you'll find the main idea for this paragraph. **Coach, what's the first step?** [Name the most important who or what.] **Great! Reader, go ahead and name the most important who or what for this paragraph.** [The deep sea]

Great! Check if the Coach also circled the most important who or what and related pronouns in the paragraph.

What's the next step, Coach? [Tell the most important thing about the deep sea.] **That's right.**

Show



Now, on your own, think about where each sentence from the paragraph belongs on the tree. Does the sentence tell the most important thing about the deep sea, or is it a detail? Allow students to think for up to 1 minute.

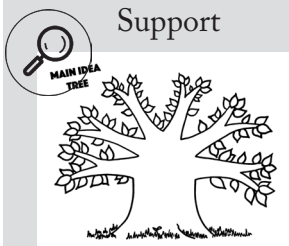
Do you have the main idea in your mind? Let's use it to answer a multiple choice question.

[Student A], please read aloud the question and possible answers.

Share your thoughts with your partner. Give me a thumbs up when you have agreed on an answer.

What is the main idea of paragraph 3?	Tutor Feedback
A The deep sea is very cold and dark.	That answer is really a detail. The whole paragraph isn't about the fact that the deep sea is very cold and dark. Let's use the Main Idea Tree to find the most important thing about the deep sea. Use the Tree Correction.
B The water at the ocean floor is frozen.	This isn't quite right. It doesn't say anywhere in the paragraph that the water at the ocean floor is frozen. Let's use the Main Idea Tree to find the most important thing about the deep sea. Use the Tree Correction.
C Deep sea explorers swam down to the ocean floor, but couldn't see anything.	This isn't quite right. It doesn't say anywhere in the paragraph that deep sea explorers swam down to the ocean floor. Let's use the Main Idea Tree to find the most important thing about the deep sea. Use the Tree Correction.
D It is difficult for humans to explore the deep sea safely.	That's right! All of the sentences in the paragraph are related to how it is difficult to explore the deep sea safely. [Student A], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary. [Student B], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary. Great work, Reading Detectives!

Support



Paragraph 3 Tree Correction Key	
Sentence	Explanation
1. The deep sea is also very cold...	Example of why the deep sea is difficult to explore safely.
2. The temperature there is barely above freezing...	Example of why the deep sea is difficult to explore safely.
3. These things make it very hard for...	Close to main idea (references details information about why).
4. Since the deep sea is so dangerous, scientists use robots...	Explains one way the deep sea can be explored safely.

Make sure students circle answer "D" and cross out any incorrect answers.

Use



Play



Use



IV. Wrap Up

A. Review Lesson & Behavior

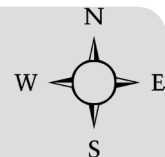
Great job using our comprehension strategies to help you put the clues together to read and understand the passage. Tell me two ways you can build your background knowledge. [Watch media; read informational texts] Good. We've just finished previewing the passage and reading two paragraphs about the deep sea. Tell me one thing you've added to your background knowledge about this topic. Accept student responses.

Great! You'll be able to use this background knowledge to help you understand the text next time you read about the deep sea.

If time, do any of the following:

- Ask questions about what the students read. For example: **What is one thing you learned about the deep sea? How is the deep sea alike or different from (a lake; river; the beach)?**
- Play Explorers Unit Board Game
- Play Strategy Review Games
- Review text features
- Review vocabulary words [pressure, robots, submarine, traits]
- Student thoughts on text
- Watch extra videos

Lesson 16: Exploring the Deep Sea, Part 2



Outline	Activities	Materials
I. Review	A. Review Rules B. Review Strategies C. Agenda	• Rules Poster • Comprehension Strategies Poster • Point Sheets • Strategy Flash Cards • Timer
II. Reading Challenge	A. Reading Challenge 3	• Mission 14.0 Worksheets • Mission 15.0 Worksheets • Reading Challenge Discussion Poster • Timer
III. During Reading Practice	A. Review Exploring the Deep Sea, Part 1 B. Paragraph 4 C. Paragraph 5 D. Big Idea	• Explorers Workbooks • Clarify & Connect Poster • Main Idea Poster • Tree Correction Poster • Mission 13.0 Worksheets
IV. After Reading Practice	A. Answer Comprehension Questions	• In or Out Poster #1
V. Wrap Up	A. Review Lesson & Behavior	• Rules Poster • Point Sheets • Explorers Unit Flash Cards • Explorers Unit Game Board • Laptop • Media

Show



Set out



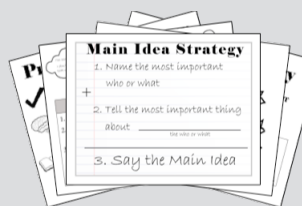
Use



Set for 1 min.



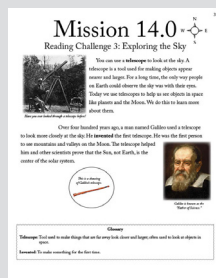
Set out



Set for 10 min.



Give



I. Review

A. Review Rules

Review routines as needed.

What are the rules for every session?

1. Be Respectful
2. Work Hard
3. Be a Good Team Member

What is one rule you would like to work especially hard on today? Accept response from both students.

B. Review Strategies

Today we're going to review our strategies with the game Headbands. Do you guys remember how to play? Review rules with students if necessary.

If you are the partner, you can't say the name of the strategy, but what type of clues could you give? [When you use the strategy; what you do during the strategy; how it helps you; etc.] **Remember, I want to see you two working together. [Student B], you'll go first, and then we will switch.** Put the stack of cards on the table in front of the students.

You have 1 minute to guess as many strategies as you can. Ready?...Go! Allow students 1 minute to play. Afterward, review the strategies, paying particular attention to any that they struggled to guess.

C. Agenda

Today, you're going to complete a Reading Challenge. Then, we'll review what we did last time. After that, you'll continue to practice the Clarify & Connect and Main Idea Strategies as you finish reading about exploring the deep sea. After you finish reading, you'll work together to practice the In or Out Strategy to answer questions about the text.

II. Reading Challenge

Reading Challenge Steps	Tutor Script and Directions
Review the purpose of Reading Challenges.	Tell me something, what's the goal of tutoring? [Becoming a better reader] That's right, I want you to become better readers. But I want you to become stronger readers everywhere, not just in our lessons. Using these strategies during our lessons is just the first step to becoming a better reader. I want you to practice transferring your strategies with another Reading Challenge today because I won't always be here to help you use your strategies while you read.
Talk about what's the same and different in this Reading Challenge.	How is this challenge similar to what we read in our lessons? [Examples: It's about exploring; there are pictures and captions; there's a glossary; there are questions on the back; there are no paragraph boxes]

Give

Mission 15.0

Reading Challenge 3: Self-Evaluation Checklist

Self-Evaluation	Yes	No
I prepared the vocabulary.	☒	☐
I prepared the text format.	☒	☐
I prepared my background knowledge.	☒	☐
I read every word carefully.	☒	☐
I checked everything. I didn't understand, I made a connection.	☒	☐
I found the main idea for each paragraph.	☒	☐
I found the big idea for the whole text.	☒	☐
I found for evidence inside the text to answer questions.	☒	☐

Today's challenge was _____






walk a little walk a little fast really fast



Use discretion
when sharing
scores

Use



Reading Challenge Discussion

An illustration of a person riding a bicycle. A large speech bubble originates from the person, containing the text: "What did you do well?" and "What will you do better next time?".

Give



Give

[illegible]

Reading Challenge Steps	Tutor Script and Directions
Set up students to do Reading Challenge.	Let's see if you can transfer your strategies in just a small way today. The small transfer of learning I want you to try is this: I want you to follow the strategy steps by yourself on a passage. Here is a list of strategies you've learned. You should use this checklist as you read to help you remember what to do next. Put a check in the "yes" column every time you use one of your strategies. Are you ready for the challenge? Answer any questions the students have. Go ahead, remember to work hard and try your best! Start the 10 minute timer.
Check and observe during Reading Challenge.	Answer Key: 1. (A) (Main Idea, Paragraph 2) 2. (A) (Big Idea) 3. (D) (Factual, Paragraph 1) 4. (B) (Factual, Paragraph 1) 5. (C) (Factual, Paragraph 2)
Start Reading Challenge discussion.	I've looked at your answers. Right now, I'm more interested in how you used your strategies than if you answered all the questions correctly because using your strategies makes you a better reader and that is our goal. Use the back of Reading Challenge Discussion Poster to facilitate discussion and wrap up.

III. During Reading Practice

A. Review Exploring the Deep Sea, Part 1

Last time you practiced your Before Reading Strategies. You previewed the vocabulary and text features for “Exploring the Deep Sea.” Remind me what the vocabulary words were. [Pressure, robots, submarine, traits]

What text features did you find? [Title, headings, picture & caption, diagram] **Based on the text features who or what did you think this text might be about?** [Exploring the deep sea]

What type of text structure does this text have? [Descriptive] That's right, this passage is a science text that tells us important facts about the natural world. It describes the deep sea.

After you previewed the vocabulary and text features, you previewed one more thing, what was it? [Background knowledge] You thought about what you already knew about the deep sea. Then you watched a video to build you background knowledge.

Your background knowledge grows whenever you read or watch something. We're going to add more information to our background knowledge about exploring the deep sea today as we finish reading the text.

Show

Comprehension Strategies		
Before Reading	During Reading	After Reading
Preview	Clarify	Find the Main Idea
☐ Vocabulary	☐ Connect	☐ Find the Big Idea
☐ Text Features		
☐ Background Knowledge		Answer questions with In or Out
		

Show

Main Idea Strategy	
1. Name the most important	who or what
2. Tell the most important thing	about
3. Say the Main Idea	



Hint that the most important what in paragraph 4 is different than previous paragraphs

Support

Clarify & Connect	
I need to Clarify!	Make a Connection!
1. Re-read the confusing part.	1. I wonder...
2. Remember what I read before.	2. I'd like to know more about...
3. Use my background knowledge.	3. ...made me think of...
4. Use the glossary.	
5. Ask for Help.	

You already read the first 3 paragraphs. Find “Exploring the Deep Sea” in your workbook. [Student A] please read the answer to the first question, the main idea for paragraph 1 [Scientists don’t know very much about the deep sea.] [Student B], read the second main idea for us. It’s the answer to question #2. [The deep sea has very high pressure.] What was the main idea for paragraph 3? [It is difficult to explore the deep sea safely.]

Let’s begin.

You and your partner share two important jobs, what are they? [Coach and Reader] Good. Readers read aloud and answer questions. Coaches read along silently and help their partners. You’ll do one job while your partner does the other. You will switch jobs after every paragraph. The Coach will become the Reader and start reading the next paragraph. The Reader will become the Coach.

[Student B], you’re going to be the first Reader. Read the fourth paragraph. Remember to read quickly, carefully, and with expression. After you’re done, we’ll clarify and connect. Then, you’ll find the main idea.

[Student A], you’re going to be the Coach. You’re going to read along silently and help your partner find the main idea. [Student A] will circle the most important who or what wherever it appears while you’re reading. You can use their notes to help you find the main idea.

B. Paragraph 4

Scientists send a robot submarine down to the ocean floor. There are no people in it, but a person on land controls it, like in a video game. The submarine has a camera, but the person tells it when to take a picture. The submarine has a robot arm, but the person tells it which rocks to pick up. With the robots’ help, scientists can explore the deep sea safely.

Let’s take a minute to clarify and connect. Encourage and support students as necessary to move through the Clarify & Connect Strategy steps. Students should clarify 1 confusing concept and make 1 connection.

Confusing Idea	Clarification Method	Tutor Script
What are the scientists controlling like a video game?	Re-read the confusing part.	How should we figure out what the scientists are controlling? [Re-read the confusing part.] Ask the students to locate the sentence in their workbooks. The sentence says “Then, a person on land controls it, like a video game.” The pronoun “it” refers to something that was already named. Let’s look back at the sentences before that one until we find an object. Give me a thumbs up when you know what “it” refers to. [Submarine; robot] People on land control the robotic submarine while it’s deep in the ocean.

Confusing Idea	Clarification Method	Tutor Script
Why aren't there any people in the robot submarine?	- Remember what you read before. - Re-read the confusing part.	How should we figure out why there aren't any people in the submarines? [Remember what you read before or re-read the confusing part.] Discuss with students how the first sentence of this paragraph mentions that scientists use robots to explore the deep sea because it's dangerous. Prompt them to recall what makes the deep sea so dangerous. [Pressure; cold; dark]

Now let's make a connection. I want you each to think about this paragraph. Point to the sentence starters in the "Make a Connection" box on the poster. Give the students an opportunity to use one of the prompts and have a short discussion. If either student is unable to generate a statement, demonstrate the strategy using one of the prompts below.

I wonder...	what the submarine is made out of so that it can go to the deep sea.
I'd like to know more about...	how the scientists control the robots from land and how they know when to ask them to take pictures or collect rocks.
_____ made me think of...	Reading about scientists controlling the submarines from far away made me think of driving a remote controlled car or flying a drone.

Remind



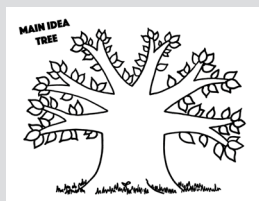
Support



Main Idea Strategy

1. Name the most important who or what
2. Tell the most important thing about _____
(Use who or what)
3. Say the Main Idea

Show



Great job making a connection Detectives! Clarifying and connecting reminds you how important it is to think while you read. Let's draw a thought bubble next to that paragraph to show that we used the Clarify & Connect Strategies.

Now, it's time for the main idea. [Student B], you were the Reader this time, so you'll find the main idea for this paragraph. Coach, what's the first step? [Name the most important who or what.] **Great! Reader, go ahead and name the most important who or what for this paragraph.** [Robot submarines]

Great! Check if the Coach also circled the most important who or what and related pronouns in the paragraph.

What's the next step, Coach? [Tell the most important thing about robot submarines.] **That's right.**

Now, on your own, think about where each sentence from the paragraph belongs on the tree. Does the sentence tell the most important thing about robot submarines, or is it a detail? Allow students to think for up to 1 minute.

Do you have the main idea in your mind? Let's use it to answer a multiple choice question.

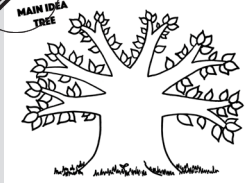
[Student B], please read aloud the question and possible answers.

Share your thoughts with your partner. Give me a thumbs up when you have agreed on an answer.

What is the main idea of paragraph 4?		Tutor Feedback
A	Robotic submarines drive themselves to the sea floor.	This answer isn't right. It doesn't say anywhere in the paragraph that robotic submarines drive themselves to the sea floor. Let's use the Main Idea Tree to find the most important thing about robotic submarines. Use the Tree Correction.
B	Robotic submarines help scientists explore the deep sea.	That's right! All the other sentences in the paragraph are related to how robotic submarines help scientists explore the deep sea. [Student A], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary. [Student B], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary. Great work, Reading Detectives!
C	Video game makers created the robotic submarines.	This answer isn't quite right. It doesn't say anywhere in the paragraph that video game makers created the robotic submarines. Let's use the Main Idea Tree to find the most important thing about robotic submarines. Use the Tree Correction.
D	Robotic submarines can explore the deep sea by themselves.	This answer isn't right. This answer says that robotic submarines can explore the deep sea by themselves. But the paragraph says that a person tells it what to do. Let's use the Main Idea Tree to find the most important thing about robotic submarines. Use the Tree Correction.



Support

**Paragraph 4 Tree Correction Key**

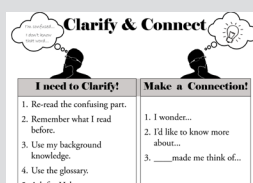
Sentence	Explanation
1. Scientist send a robot submarine...	Describes how robots help scientists explore.
2. There are no people in it...	Describes how robots help scientists explore.
3. The submarine has a camera...	Describes how robots help scientists explore.
4. The submarine has a robot arm...	Describes how robots help scientists explore.
5. With the robot's help...	Close to main idea.

Make sure students circle answer "B" and cross out any incorrect answers.



Hint that the most important what in paragraph 5 is different than previous paragraphs

Use



[Student A] you're going to be the next Reader. Read the last paragraph. Remember to read quickly, carefully, and with expression. After you're done, we'll clarify and connect. Then, you'll find the main idea. [Student B] you're going to be the Coach. You're going to read along silently and help your partner find the main idea.

[Student B] will circle the most important who or what wherever it appears while you're reading. You can use their notes to help you find the main idea.

C. Paragraph 5

What's down there?

With the help of robots, scientists have discovered some very interesting animals. Deep sea creatures have special **traits** to help them survive in the deep sea. For example, some deep sea creatures have a layer of fat that acts like a winter coat on each of their cells. Other deep sea creatures have very large eyes. Big eyes help them see even the tiniest amount of light. Other animals make their own light using chemicals in their bodies! The chemicals glow brightly and act like a lantern.

Let's take a minute to clarify and connect. Encourage and support students as necessary to move through the Clarify & Connect Strategy steps. Students should clarify 1 confusing concept and make 1 connection.

Confusing Idea	Clarification Method	Tutor Script
How do animals make their own light?	• Re-read the confusing part. • Use background knowledge.	Point to #1 in the Clarify box. Let's re-read the confusing part. [Other animals make their own light using chemicals in their bodies.] So they make light using chemicals inside their bodies. I'm still a little confused about how that works. Let's try using our background knowledge. Have you ever seen a glow stick?
		[Yes] Usually you bend a glow stick to make it glow brightly, right? When you bend the glow stick, you're actually mixing chemicals. Once they're mixed, they glow! Some deep sea creatures have similar chemicals in their bodies. They use those to make their own glowing light! Great job clarifying!
		[No] Have you seen a firefly at night? Accept student responses. If the student has never seen a firefly before, briefly describe it to them. Fireflies have chemicals in their bodies that make them light up. Some deep sea creatures do the same thing! Can you imagine seeing something like that in the dark deep sea? Accept student responses. Great job clarifying!

Confusing Idea	Clarification Method	Tutor Script
How does an extra layer of fat help deep sea creatures?	• Re-read the confusing part. • Remember what I read before.	Point to #1 in the Clarify box. Find the sentence where it talks about “a layer of fat” and re-read it. Wait for students to re-read the sentence. Point to #2 in the Clarify box. Remember what you read before. Why would deep sea creatures need something like a winter coat? [It is very cold in the deep sea, so the fat keeps them warm.] Look at the picture at the bottom of your workbook page. Do you see a creature you think might have an extra layer of fat? [The blob fish] Great job clarifying!

Now let's make a connection. I want you each to think about this paragraph. Point to the sentence starters in the “Make a Connection” box on the poster. Give the students an opportunity to use one of the prompts and have a short discussion. If either student is unable to generate a statement, demonstrate the strategy using one of the prompts below.

I wonder...	why aren't these creatures crushed by the pressure?
I'd like to know more about...	other creatures that live in the deep sea.
_____ made me think of...	Deep sea creatures make me think of how creatures adapt to different habitats. Give an example.

Great job making a connection Detectives! Clarifying and connecting reminds you how important it is to think while you read. Let's draw a thought bubble next to that paragraph to show that we used the Clarify & Connect Strategies.

Now, it's time for the main idea. [Student A], you were the Reader this time, so you'll find the main idea for this paragraph. Coach, what's the first step? [Name the most important who or what.] **Great! Reader, go ahead and name the most important who or what for this paragraph.** [Deep sea creatures]

Great! Check if the Coach also circled the most important who or what and related pronouns in the paragraph.

What's the next step, Coach? [Tell the most important thing about deep sea creatures.] **That's right.**

Now, on your own, think about where each sentence from the paragraph belongs on the tree. Does the sentence tell the most important thing about deep sea creatures, or is it a detail? Allow students to think for up to 1 minute.

Do you have the main idea in your mind? Let's use it to answer a multiple choice question.

[Student A], please read aloud the question and possible answers.

Share your thoughts with your partner. Give me a thumbs up when you have agreed on an answer.

Remind



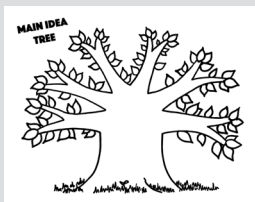
Support



Main Idea Strategy

1. Name the most important who or what
2. Tell the most important thing about _____
(Use who or what)
3. Say the Main Idea

Show



What is the main idea of paragraph 5?		Tutor Feedback
A	Deep sea creatures have special traits to help them survive.	That's right! All of the sentences in the paragraph are related to the fact that deep sea creatures have special traits to help them survive. [Student A], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary. [Student B], pick one sentence and explain how it's related to the main idea. Accept student responses, scaffold if necessary.
B	Deep sea creatures look scary.	This answer isn't quite right. It doesn't say anywhere in the paragraph that deep sea creatures look scary. Let's use the Main Idea Tree to find the most important thing about deep sea creatures. Use Tree Correction.
C	Some deep sea creatures have very large eyes.	That answer is really a detail. The whole paragraph isn't about some deep sea creatures having very large eyes. Let's use the Main Idea Tree to find the most important thing about deep sea creatures. Use the Tree Correction.
D	Scientists have discovered some interesting deep sea creatures.	That answer is really a detail. The whole paragraph isn't about how scientists discovered the deep sea creatures. Let's use the Main Idea Tree to find the most important thing about deep sea creatures. Use the Tree Correction.



Support

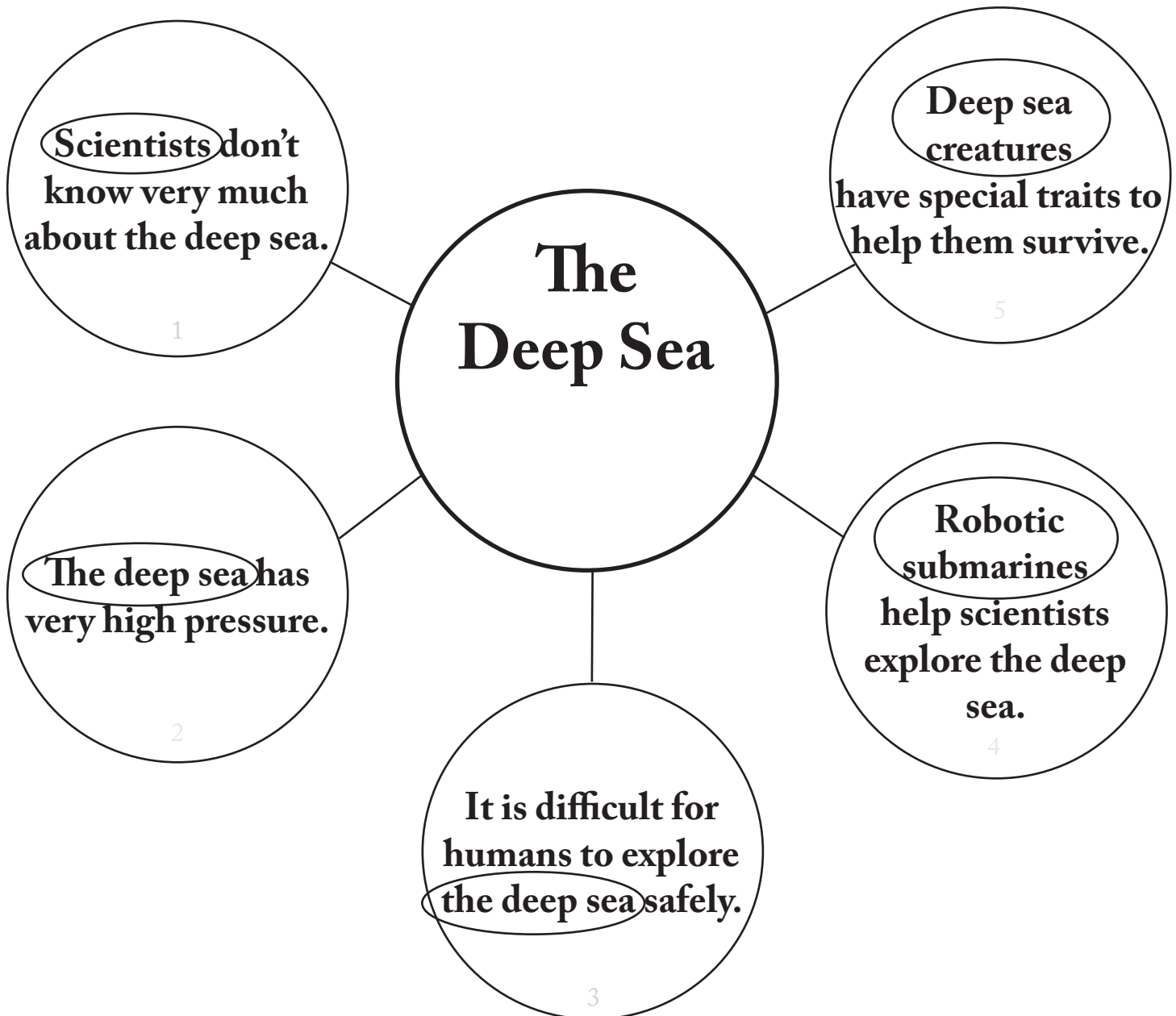


Paragraph 5 Tree Correction Key

Sentence	Explanation
1. With the help of robots, scientists have discovered...	Gives an example of what scientists have discovered.
2. Deep sea creatures have special...	Main idea.
3. For example, some deep sea creatures have a layer of fat...	Example of a special trait deep sea creatures have.
4. Other deep sea creatures have very large eyes.	Example of a special trait deep sea creatures have.
5. Big eyes help them see even the tiniest amount of light.	Tells more information about one of the special traits.
6. Other animals make their own light using chemicals in their bodies...	Example of a special trait deep sea creatures have.
7. The chemicals glow brightly and act like a lantern.	Tells more information about one of the special traits.

Make sure students circle answer "A" and cross out any incorrect answers.

Descriptive Text Structure



Use

Main Idea Strategy

1. Name the most important who or what
2. Tell the most important thing about _____
3. Say the Main Idea

D. Big Idea

Just like how we use these steps to find the main idea in a paragraph, we're going to use them to find the big idea in a passage. Look up here. Each of the main ideas we found for the paragraphs in "Exploring the Deep Sea" is written in one of these bubbles. Take turns reading the main ideas out loud. Students read all 5 paragraph main ideas out loud.

Point to Step 1 on the Main Idea Poster. **What do we do first?** [Name the most important who or what.] **What is the most important thing in this passage?** [The deep sea]

Point to Step 2 on the Main Idea Poster. **What do we do next?** [Name the most important thing about the deep sea.] **Let's see.** Point to main idea 1. **In this paragraph we learned that scientists don't know much about the deep sea.** Point to main ideas 2 and 3. **In these paragraphs we learned why.** Point to main idea 4. **In this paragraph we learned how scientists are starting to explore the deep sea.** Point to main idea 5. **And in this paragraph we learned about some of the creatures they have discovered. This passage has a Descriptive structure, so the big idea will be the most important thing you learned about the deep sea.**

Look at the answer choices for question #6 on your Mission 13.0 Worksheet. What do you think is the most important thing you learned about the deep sea? Give me a thumbs up when you've decided on an answer! Allow students time to think. Use the feedback table below.

Big Idea Tutor Feedback

A	The best answer is actually D. The deep sea is hard to explore, but scientists are starting to learn about it with the help of robotic submarines.
B	The best answer is actually D. The whole passage wasn't about how high the pressure is in the deep sea. It's true, but it's not the most important thing.
C	The best answer is actually D. The whole passage wasn't about how robotic submarines explore the deep sea. It's true but it wasn't the important thing we learned about the deep sea.
D	That's correct!

Now let's do Step 3 and say the big idea. Scientists have started to explore the deep sea with help from robots.

Make sure students circle answer choice "D" and cross out any incorrect answers.

IV. After Reading Practice*A. Answer Comprehension Questions*

Okay, now we're going to practice using the In or Out Strategy to find Key Words and answer comprehension questions. What do the Key Words in the question tell us? [What the question is asking about; where to find the answer]

Sometimes the answer is in the same sentence as the Key Words, but not always. If you read the sentence that contains the Key Words and you don't find the answer, what else do you need to do? [Read the nearby sentences] That's right, you need to read the sentences before and after the sentence that has the Key Words.

Now, I'll read out loud each question and the possible answers. Then, you will work together to find the Key Words in the text and choose an answer.

Show

In or Out Strategy

1. Find the Key Words in the question.
2. Go back and find the Key Words in the text.
3. Read around.
4. Answer the question and prove it with evidence.



Support

In or Out Strategy



1. Find the Key Words in the question.
2. Go back and find the Key Words in the text.
3. Read around.
4. Answer the question and prove it with evidence.

For each question provide immediate corrective feedback, if necessary. For each question, ensure students fill in the paragraph box, circle the correct answer choice and cross out incorrect answer choices.

7. (Factual) What does the passage say that scientists know more about than the bottom of the ocean? (Paragraph 1)
 - a. The animal kingdom.
 - b. Space.
 - c. The moon.
 - d. People.
8. (Factual) How does the submarine know when to take a picture? (Paragraph 4)
 - a. It is robotic so it decides when to take a picture.
 - b. A person on land tells it when to take a picture.
 - c. It has a motion sensor that takes a picture of anything that passes by.
 - d. When it sees a deep sea creature it takes a picture.
9. (Factual) Why don't we know very much about the deep sea? (Paragraph 2)
 - a. It is not an interesting place to explore.
 - b. We don't have the equipment to travel to the deep sea.
 - c. Scientists know a lot about the deep sea.
 - d. The deep sea is difficult to explore.
10. (Factual) Why is the deep sea hard to explore? (Paragraphs 2 & 3)
 - a. The creatures that live in the deep sea are dangerous and scary.
 - b. The deep sea has high pressure and is very cold and dark.
 - c. Scientists do not have the right equipment.
 - d. The ocean can be 36,000 feet deep.
11. (Factual) Why do your ears hurt at the bottom of a deep swimming pool? (Paragraph 2)
 - a. Because your ears are filled with water.
 - b. Because your hearing does not work as well underwater.
 - c. Because humans cannot survive underwater.
 - d. Because the water pressure is pushing in on your body.
12. (Factual) How cold is the deep sea? (Paragraph 3)
 - a. Barely above freezing temperature.
 - b. Colder than outer space.
 - c. Just below freezing temperature.
 - d. A comfortable temperature, not too cold.

Use



Play



Use



V. Wrap Up

A. Review Lesson & Behavior

Great job using the In or Out Strategy to help you put the clues together to answer the questions! We'll practice that more next time.

We've just finished reading a passage about the deep sea. Tell me one thing you've added to your background knowledge about this topic. Accept student responses.

Great! You'll be able to use this background knowledge to help you understand the text next time you read about the deep sea.

If time, do any of the following:

- Ask questions about what students read. For example: **What is one thing you learned about deep sea creatures? How are they alike or different from other fish you have seen or learned about?**
- Play Explorers Unit Board Game
- Play Strategy Review Games
- Review text features
- Review vocabulary words [pressure, robots, submarine, traits]
- Watch extra videos



Animals Unit Overview



Lesson Outline	Page #
Lesson 17: Inference Training	225
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Animals Unit Materials List:

- Animals Unit Board Game
- Animals Unit Flash Cards

The first lesson in the Animals Unit is an inference training lesson. You'll introduce the concept of inference making, model inference making and conduct guided practice with students. You will introduce a new In or Out Poster (#2) that will be used for all subsequent lessons. Throughout the remainder of the unit, there is additional scripting included for inference questions that will support you in guiding the students toward making good inferences.

In the Animals Unit, there are several major procedural changes that are designed to increase student independence and release control of the strategies from the teacher to the students. First, the passages are now completed in 1 lesson, instead of spanning two lessons. Second, the students are working as a team to complete the Before Reading Strategies without help from you, if possible (see below for more guidance)

Do not stop to find the main idea of each paragraph anymore. You will read 2-3 paragraphs at a time and students are instructed to generate a main idea in their minds after each paragraph and give you a thumbs up if they have created one. If students ask for help, the script provides a suggested main idea as well as a Tree Correction table to help you explain the details of the paragraph to the students (see below for more guidance)

Introduce the Coach Correction Poster to support additional peer mediation. When you get to a Main Idea Check, the student who was the Reader for that paragraph will create the main idea. The Coach uses the Main Idea Poster and Coach Correction Poster to ensure the Reader follows the strategy steps. If the Reader makes a mistake, you should prompt the Coach to provide a correction. If both students need support, you should provide support, guidance, or correction.

Before Reading Sections:

Listen in on students' discussion and scaffold student responses or provide assistance when necessary. For vocabulary, use the follow-up questions as needed to check student understanding. When students get to text structure, make sure they always read the first sentence of each paragraph, identify the correct text structure, and tell you why.

During Reading Sections:

Main Idea

Each of the Tree Correction tables now includes an optional Follow-up Discussion prompt. You may use this to ensure your students truly understand the main idea of a particular paragraph. You can use the follow up question to check student comprehension without completing the 3 steps of the Main Idea Strategy or the Tree Correction as a group. For example, your students generally give you a thumbs up for each main idea that they make in their heads, but when you get to the Main Idea Check, they do not know the main idea. You should consider using the Follow-up Discussion prompt after each paragraph to ensure students understand the main idea. You may also use the Follow-up Discussion prompt after completing the Tree Correction to ensure student understanding.

Clarify & Connect

Encourage and support students as necessary to move through the Clarify & Connect strategy steps. Students should clarify 1 confusing concept and make 1 connection from each set of paragraphs. Clarify and connect checks generally come after 2 to 3 paragraphs. If students naturally clarify or connect while reading, acknowledge it in the moment by naming the strategy the student just used, clarify or making a connection. If they identify something that is confusing, clarify it then.

After Reading Sections:

In this unit, the After Reading Practice sections have three types of questions mixed together (main idea, factual, and inference). Students need to identify what type of question they are working on and label it. This is important because by labelling the question, students must think about which strategy they should use to answer the question. Additionally, beginning in lesson 19, the students choose Key Words in the question (previously Key Words were already underlined). Keep in mind that students chosen Key Words don't need to exactly match the suggested Key Words in the script, but there should be some overlap in order to help students find clues and evidence in the passage.

- *For Main Idea Questions*, if one student gets the question correct, have the two students discuss their answers and if they can agree on the right answer, move on. If not, then go to the tree correction procedure. If you are unsure if students understood the paragraph well enough, use the follow-up discussion to check their understanding.
- *For Factual Questions*, if one student gets the question correct, have the two students discuss their answers and if they can agree on the right answer, move on. If not, use the corrective feedback on the back of the In or Out Poster.
- *For Inference Questions*, you lead discussions and ensure that students think about clues from the passage as well as their own background knowledge before attempting an inference question. If students spontaneously answer inference questions correctly, don't try to force them through the script as written. Ask the student to identify (with support if necessary), what information they used from the passage and their own background knowledge to help them answer the question.

Animals Scope and Sequence

Strategies	Script Structure and Format	Tutor Role	Student Roles
Preview Vocabulary	Vocabulary information is presented in chart form.	Prompts students to name the first Before Reading Strategy. Gives the Preview Vocabulary Poster to students. Ensures students follow the strategy steps and switch roles after each word. Asks follow up questions to check student understanding, as needed. Reminds students to make a checkmark in their workbooks next to each vocabulary word after completing the strategy for it.	Identify the first Before Reading Strategy. Work as partners to identify vocabulary words. Take turns working as Coach and Reader to complete the strategy steps for each word. Answer the follow up questions asked by the tutor. Make a checkmark next to each vocabulary word after completing the strategy for it.
Preview Text Features	Problem & Solution and Compare & Contrast text structures are introduced in Lessons 21 and 22.	Prompts students to name the next Before Reading Strategy. Displays the Preview Text Features Poster. Asks students to state the importance of text features. Guides discussion of each text feature. Introduces Problem & Solution and Compare & Contrast text structures. Reminds students to make a checkmark next to each text feature after previewing it.	Identify the next Before Reading Strategy. State the importance of text features. Work as partners to identify text features. Participate in discussion of text features. Preview and identify text structure with guidance from tutor. Make a checkmark next to each text feature after previewing it.
Preview Background Knowledge	The language in the script includes the verb “connect” to more directly link background knowledge to the inference making strategy.	Prompts students to name the next Before Reading Strategy. Displays the Preview Background Knowledge Poster. Asks students to state the importance of background knowledge. Prompts students to connect their background knowledge to the days’ topic by asking each other the question. Reminds students to make a checkmark at the top of their passage after previewing their background knowledge.	Identify the next Before Reading Strategy. State the importance of background knowledge. Ask each other the question. Watch a videos to build background knowledge. Participate in discussion of the video. Make a checkmark at the top of their passage after previewing their background knowledge.

Animals Scope and Sequence

Strategies	Script Structure and Format	Tutor Role	Student Roles
Clarify & Connect	- Students should be encouraged and praised for independently and spontaneously identifying confusing ideas to clarify and making connections during reading. - If students do not do this, the script ensures that the group will stop to clarify and connect after reading 2 or 3 paragraphs.	Prompts students to clarify and connect after 2 or 3 paragraphs. Displays the Clarify & Connect Poster Supports students as needed to identify confusing ideas and select a method to use when clarifying. Supports students as needed to make connections. Reminds students to draw a thought bubble after clarifying & connecting.	Identify confusing ideas to clarify, independently and spontaneously during reading, if possible. Make connections, independently and spontaneously during reading, if possible. Draw a thought bubble after clarifying & connecting.
Main Idea	- The Coach Correction Poster is introduced in Lesson 18. - Students are expected to make main ideas in their minds, silently. - Tutor only checks 1 or 2 main ideas per passage, unless more frequent checks are necessary. - Main ideas generated in the during reading section are open-ended in format rather than multiple choice. - Multiple choice main idea questions are still represented on the worksheet but they are mixed in with in or out questions. - Script provides a table that explains the details for the Tree Correction for all main ideas. - Script provides feedback tables for each answer option for the multiple choice main idea questions.	Introduces Coach Correction Poster Reminds students of Coach and Reader roles, if necessary. Prompts students to complete the strategy steps in their heads after each paragraph. Displays the Main Idea Poster. Provides support if asked, or if correction is necessary, using the Main Idea Poster and the Tree Correction Poster. Provides support when correction is necessary on big idea questions. Reminds students about the relationship between text structure and big idea.	Take turns acting as Coach and Reader to read the paragraphs. Coach circles the most important who or what. Generate a main idea in their head when prompted by the tutor. Share a main idea with the group during main idea checks. Help their partner using the Coach Correction Poster during main idea checks. Work as partners to label main idea questions on the worksheet. Work as partners to answer main idea multiple choice questions on the worksheet. Work as partners to answer big idea questions.

Animals Scope and Sequence

Strategies	Script Structure and Format	Tutor Role	Student Roles
In or Out	• Inference making is introduced in Lesson 17 (Training lesson). • Inference questions are accompanied by additional tutor script in the manual to support the tutor as they lead guided practice on inferential questions. • Inference questions, factual questions and main idea questions are mixed on student worksheets. • Question type should be labeled by students. • After Lesson 18, students find the Key Words in the question (no longer underlined on the worksheets for them).	• Introduces inference making. • Guides students through questions one at a time. • Provides support for students as they identify Key Words in the questions (after lesson 18). • Reminds students to prove their answer by pointing to the evidence in the passage and noting the paragraph number where they found the answer and to label the question type. • Guides students through answering inference questions.	• Work as partners to label question types. • Work as partners to answer factual, inference, main idea and big idea questions. • Write the paragraph number on the worksheet next to the question in which they found their answer.



Media Appendix

Explorers Unit						
Passage Title	Media Title	Purpose of Media	Description of Media Content	Key Words	Source	What to Show
Jessica Watson	What does sailing on the ocean look like?	Help students understand one of the dangers of sailing. Help students understand how hard it would be to sail alone.	Photos that show sailing in different situations and presenting different kinds of dangers.	CNN edition waves best sailing pictures 2016	CNN International	Photos from a slide show.
Discussion Questions:						
Jessica Watson	What kind of creatures might you meet while sailing around the world?	Help students learn about animals someone may come across while sailing.	Video of surfers with humpback whale.	Surfing with whales ride of the week	YouTube	1:45 to 2:29
Discussion Questions:						
Guy Bluford	What is it like to sleep in space?	Help students learn about sleeping in space and see what its like to live and work on the International Space Station.	Video of a male astronaut explaining how he sleeps in space.	Sleeping in space	Canadian Space Agency	Entire video is 2:44
Discussion Questions:						

Explorers Unit					
Passage Title	Media Title	Purpose of Media	Description of Media Content	Key Words	Source
Exploring the Deep Sea	What type of submarine is needed to explore the deep sea?	Help students understand ways to get to deep sea and methods of preparing for deep sea exploration.	Documents an explorer preparing to go into deepest point in the ocean in a submarine.	Deepsea challenge, 3D	National Geographic
<i>Discussion Questions:</i> - The video said only a special type of submarine can explore the bottom of the sea; what did that submarine look like? [is was a cylinder, or sphere] - With your background knowledge of the deep sea, would you want to travel in that submarine to the deep sea? Why or why not?					
Exploring the Deep Sea	How strong is the water pressure in the deep ocean?	Help students understand water pressure and how it affects human bodies and demonstrate water pressure visually.	Demonstration of water bottle traveling through depths of water to see water pressure effects.	Water pressure on plastic air bottle	YouTube
<i>Discussion Questions:</i> - What did the water pressure do to the soda bottle when the diver took it down into the ocean? [it crushes the water bottle] - Knowing that, how do you think water pressure would affect a human? What part of the body would it most affect? [the lungs because they are full of air] - Make a prediction, what do you think would happen to the bottle if it went all the way down to the deep ocean?					
Exploring the Deep Sea	What types of creatures can be seen in the deep sea?	Help students understand the deep sea ecosystem, and methods of exploring variety of life in deep sea.	Documents a team of ocean explorers going into the deep sea in the Galapagos.	Creatures of the Deep Sea	National Geographic
<i>Discussion Questions:</i> - What types of creatures can be seen in the deep sea? [fish, starfish, sharks, worms, corals, jellyfish] - Why do you think going in the submarine made Jessica, the scientist interviewed in the video, feel like a real explorer? - What do you think it means to be an explorer?					
				Entire Video is 4:07, can stop at 3:50	

Animals Unit						
Passage Title	Media Title	Purpose of Media	Description of Media Content	Key Words	Source	What to Show
Why Do We Need Wolves?	Why do we need wolves?	Help students understand the effects of removing an animal from the food chain causing trophic cascade. Also, help students understand how species are interconnected in an ecosystem.	Video of different animals with voiceover explaining food chains and ecosystems.	Wolves Change Rivers	YouTube	From 0:11 to 4:05
<i>Discussion Questions:</i> • What happened to the deer when the wolves were not in Yellowstone? What else was affected? • How did Yellowstone change once the wolves came back?						
We Can Fix This	Endangered Species Act	Help students understand how the Endangered Species Act helps protect animals and what endangered and threatened means.	Video describing the Endangered Species Act.	The Endangered Species Act, Ocean Today	Ocean Today	Entire video is 2:45
<i>Discussion Questions:</i> • What does the Endangered Species Act do? [Conservation laws that puts threatened and endangered species on a list and protects them and their habitats] • What did you see the scientist do to help the endangered or threatened animals? [identify threatened and endangered species, create recovery plans]						