STAGE THREE OVERVIEW

Established Goals:

1. The students will be able to understand the resources of the ocean and why they are important to our ecosystem by engaging in an interactive PowerPoint and discussion.
2. The students will be able to explain why the resources from the ocean are important towards our ecosystem through a written newspaper article.
3. The students will be able to understand organisms and their environments by reading a section about marine life with a pencil and interacting in a discussion.
4. The students will create a poster to expand their understanding of organisms and their environments.
5. The students will be able to understand coral reefs by engaging in a Read-Aloud and interacting in a discussion about the book they just listened to.
6. The students will be able to demonstrate their understanding of coral reefs through writing a RAFT.
7. The students will be able to understand ocean currents by reading along to a Think-Aloud and interacting in a challenging discussion about ocean currents.
8. The students will expand their knowledge of ocean currents by completing a Venn diagram.

Standards:

1. Develop the topic with facts, definitions, and details. W.3.2.b
2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. W.3.2
3. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. SL.3.1
4. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). S.L.3.1.b
5. Understand relationships among organisms and their physical environment. E2, 115, 118
6. Read with sufficient accuracy and fluency to support comprehension. RF.3.4
7. Read on-level text with purpose and understanding. RF.3.4.a

Big ideas:

1. Resources from the Ocean
2. Organisms and their Environment
3. Coral Reefs
4. Ocean Currents

Essential Questions:

1. How are the resources from the ocean important to our ecosystem?
2. Why do organisms of the ocean live in different environments?
3. Why are coral reefs a necessity in the ocean?
4. How do ocean currents greatly affect Earth?

Enduring Understanding:

1. The ocean offers a vast supply of resources.
2. The ocean is divided into two main environments in which organisms live.
3. Coral reefs are homes to some of the animals and fish in the ocean.
4. Ocean currents work together to form a pattern of surface currents on earth.

Students will know:

- Living resources
- Nonliving resources
- How resources are important to our ecosystem
- The pelagic environment
- The benthic environment
- Marine life inside the two environments
- Corals/Reefs
- Organisms around the coral reefs
- The shelter coral reefs provide
- Ocean currents
- Deep currents
- Surface currents
- How ocean currents greatly affect Earth

Students will be able to:

- Engage effectively in collaborative discussions
- Write informative texts
- Express their understanding on the subject
- Read with accuracy
- Read with purpose and understanding
- Develop topics, definitions, and details.

CALENDAR OF ACTIVITES

Resources from the ocean

Day 1:

- Students will be given a **KWL**. The students will complete the K – what they know and the W – what they want to know about resources from the ocean.

Acquire: Students will take Cornell notes from an **Interactive PowerPoint** about the different resources form the ocean.

Process: Teacher will ask questions throughout after each resource is presented. The students will be able to answer the last question of the slide from their Cornell Notes. These question include:

1. Why would pulling food from the ocean be important for our ecosystem?
2. Thus far, what are the living resources of the ocean and why are they important to our ecosystem?
3. What are the nonliving resources of the ocean and why are they important to our ecosystem?
4. Last Slide: Why are all these resources important to our ecosystem?

The students will fill out a **Y-Chart** to compare living and nonliving resources. The students will be able to use this to generalize what will be done for homework the next day.

Day 2: Continued

- The teacher will review living and nonliving resources as well as the importance they have to our ecosystem.
- The students will fill out the L of their **KWL** of what they have learned thus far about resources from the ocean.
- The students will group up and discuss the information on their **Y-Chart**.

- For homework, the teacher will have the students develop a performance assessment that is a persuasive/informative newspaper article written to citizens in a community to defend why the resources of the ocean are important to our ecosystem.

Organisms and their Environments

Day 3:

- The students will fill out an **Anticipation Guide**. The students will mark whether or not they agree or disagree with each statement I have given them on the left side of the page. At the end of the lesson the students will go back and decide whether they still agree or disagree on the right side of the page.

Acquire: Students will read section three of the three groups of marine life through **Read with a Pencil**. I will print this off for them. The teacher will start ask questions to get a discussion going. These questions include:

1. **Knowledge:** How would you describe the benthic and pelagic environment?
2. **Comprehension:** Can you explain each zone in the benthic and pelagic zone?
3. **Application:** What facts would you show to differentiate where both the environments are located?
4. **Analysis:** Can you categorize the different animals in each environment?
5. **Synthesis:** In what way would you design the two environments to better understand where they are located and what animals are in each?
6. **Evaluation:** How would you compare the two environments?

Process: Teacher will then ask more challenging questions such as:

1. In the benthic environment, what would happen in the intertidal zone if there were no change in tides?
2. In the pelagic environment, what would happen if the neritic zone did not receive any sunlight?
3. How would the ocean's ecological zones change if sea level dropped 300 meters?

Day 4: Continued

- The teacher will review from the day before about organisms and their environment.
- The students will fill out the left side of the **Anticipation Guide** and review what they had gotten right or wrong.
- The students will also do a **3-2-1** as their ticket out the door. The students will write three things they learned about the two environments of the ocean, two questions they have, and one thing they enjoyed.
- For homework, the students will create a poster of each environment with the different animals in each.

Coral Reefs

Day 5:

- The students will do a **KWL**. The students will fill out the K – What they know and the W – What they want to know about coral reefs.

Acquire: The teacher will conduct a **Read Aloud** with the students with the book "One Night in the Coral Sea". Assuming the students have already learned how to do literal, inferential, and critical questions. The teacher will quickly go over what each are as well as an example.

Process: The teacher will have the students do the **Comprehension Strategy**. The students will read a paragraph about coral reefs in the book "Our Wet World". With this paragraph, the students will come up with their own literal, inferential, and critical questions. 4 literal questions, 3 inferential questions, and 2 critical questions.

Day 6: Continued

- The teacher will go over what was taught the day before about coral reefs.
- The students will fill out the L of the **KWL** about what they had learned.
- The students will share and discuss their literal, inferential, and critical questions.

Day 7: Continued

- The teacher will teach the students about a RAFT,

- For, homework the students will write a **RAFT**. Prompt: Students will perform a RAFT that explains an oceanographers experience through the Australian Great Barrier Reef. They will act as the oceanographer and write to themselves.

    R: Role of writer: Oceanographer

    A: Audience: Self

    F: Format: Diary

    T: Topic: Coral Reefs: My Travel of the Australian Great Barrier Reef

Ocean Currents

Day 8:

- The students will organize their thoughts in a **Predicting ABC chart** from vocabulary words that the teacher gives them. The teacher will have the students predict what the vocabulary words mean, then after the reading, the students will be able to write what the actual definitions are.

Acquire: The teacher will print off section 1 from their textbook entitled "Currents" for each student. The teacher is going to do a **Think-Aloud.** The teacher is going to read through section one as the students follow along and she is going to say things out loud such as what she is confused about, what she can predict, what pictures show up in her mind, and whatever else she may be thinking in her head. The teacher then will start a **Discussion** about what was just read. The teacher will start off the questions with anchor questions:

1. **Knowledge:** Can you list reasons on why ocean currents affect our Earth??
2. **Comprehension:** Will you state or interpret in your own words Heyerdahl's theory?
3. **Application:** How would you show your understanding of a global wind?
4. **Analysis:** Can you make a distinction between deep currents and surface currents?
5. **Synthesis:** What conclusions can you draw from the Coriolis Effect?
6. **Evaluation:** What is your opinion of the handcrafted Kon-Tiki?

Process: The teacher will then ask the students challenging/critical questions to deeper their understanding of the ocean currents and how they affect Earth. These questions include:

1. How do ocean currents greatly affect Earth?
2. If there were no land on Earth's surface, what would the pattern of surface currents look like?
3. What would the effects be if Earth did not have a rotation?
4. What could you infer would happen if ocean currents did not exist?
5. What would happen if surface currents had no movement?
6. How would you have improved Thor Heyerdahl's raft that he sailed on?
7. Do ocean currents affect coral reefs? If so, how?
8. How do the resources from the ocean depend on the ocean currents?

Day 9: Continued

- The teacher will review the lesson from the day before about ocean currents.
- The students will fill out their **Predicting ABC chart**. They will fill in the correct definitions of the vocabulary.
- For homework, the teacher is going to have the students fill out a **Venn Diagram** between the surface currents and deep currents.

Day 10:

- The teacher is going to wrap up all the lessons about the ocean and make sure the students have a good understanding of each topic.

Student Teacher Candidate: Peyton Allen

Lesson Subject(s)/Title: Resources from the Ocean

Lesson Date(s): Day 1-2

Course & Grade(s): Science – 3rd Grade

ESSENTIAL QUESTIONS/ SUBSIDIARY QUESTIONS:
Essential Question: How are the resources from the ocean important to our ecosystem?
Subsidiary Questions:
What are the living resources from the ocean?
What are the nonliving resources from the ocean?

PURPOSE:

Big Idea: Resources from the Ocean

Generalization: The Ocean offers a vast supply of resources.

Purpose: To teach students the resources form the ocean and why they are important to our ecosystem. The students will learn the living and non-living resources of the ocean that will help them in discovering why the resources are important to our ecosystem.

SPECIFIC LEARNING OBJECTIVES: (clear, observable)

[Through a KWL], students will **complete** the K and W of the KWL to see what they already know and want to know.

Students will **explain [**through their Cornell Notes] why the resources of the ocean are important to aid the teacher in completing the last slide of the PowerPoint.

Students will be able to **differentiate and make generalizations** between living and non-living resources [through a Y-Chart].

[After the students fill out the Y-Chart], the students will **complete the L part of the KWL** to identify what they have learned from the PowerPoint and Y-Chart.

Students will be able to **explain why and how** the resources from the ocean are important to our ecosystem [through a performance assessment].

ANTICIPATORY SET: KWL

Students will be given a **KWL**. Individually, students will fill out the K - what they already know and the W - what they want to know about the resources from the ocean. The students will share with the class what they know and what they want to know. To facilitate this, the teacher will answer these questions throughout the PowerPoint.

INPUT/ ACQUIRE NEW KNOWLEDGE:

The teacher will introduce a PowerPoint explaining the resources from the ocean with examples of living and nonliving resources. The last slide will be for the students to finish. Throughout the PowerPoint, the students will be using **Cornell Notes.** The teacher will also go over questions during the PowerPoint that he or she had integrated into the slides. The last slide will be for the students to answer.

and/or

APPLY/ DEEPEN NEW KNOWLEDGE:

The students will then use their Cornell Notes to answer the last slide of the PowerPoint. From the questions integrated into the slides and the notes the students have taken, the students will

Sensory Register	STM	LTM
Attention Recognition Perception	Focus Organization Rehearsal Visualization	Connections Elaborations Meaning

Facets of Understanding

1. Explanation
2. Interpretation
3. Application
4. Perspective
5. Empathy
6. Self-Knowledge

Multiple Intelligences

1. Linguistic [words]
2. Visual [pictures]
3. Mathematical [numbers & reasoning]
4. Kinesthetic [hands-on]
5. Musical [music]
6. Interpersonal [social]
7. Intrapersonal [self]
8. Naturalist [nature]

Multiple Exposures [4 x 2]

1. Dramatization
2. Visualization
3. Verbal

Complex Interactions

1. Discussion
2. Argumentation

Bloom's Taxonomy

1. Knowledge [Verbatim]
2. Comprehension [Own Words]
3. Application [Problem-Solving]
4. Analysis [Identify components]
5. Synthesis [Combine information]
6. Evaluation [Decisions]

Aspects of the Topic

1. Facts
2. Compare
3. Cause/Effect
4. Characteristics
5. Examples
6. Relationships

9 Effective Strategies

1. Similarities and Differences
2. Summarization and Note Taking
3. Reinforcing Effort and Providing Recognition
4. Homework and Practice
5. Nonlinguistic Representations
6. Cooperative Learning
7. Setting Objectives and Providing Feedback
8. Generating and Testing

be able to answer, “Why all these resources are important to our ecosystem?” The teacher will have the students’ share their answers and the teacher will write them into the slide. The teacher will facilitate this by clarifying the answers if needed. After the PowerPoint, the students will each be given a **Y-Chart.** On the Y-Chart, the students will compare and contrast living and non-living resources. The students can use their Cornell Notes and the knowledge they just learned from the PowerPoint to help them fill out this chart. The students will group up and discuss as a class what each group had written down. This Y-Chart will allow the students to organize their information and make generalizations for what is to be done for their homework. These generalizations include:

1. How will these resources provide to our ecosystem?
2. Are these resources important?
3. Why are these resources important to our ecosystem?
4. Which resources provide to our ecosystem the most?

The teacher will monitor the class as the students fill out their charts. If the teacher sees that the students are not filling out the Y-Chart correctly, the teacher will refer back to the PowerPoint. If the teacher sees that all students have complied, the teacher will move on.

CLOSURE/ASSESSMENT: KWL

The students will then fill out the L part of the **KWL** – What they have learned. They will also turn this in.

HOMEWORK: (Purpose- Preparation, Practice, Expansion)

Purpose: Expansion: The teacher will have the students develop a performance assessment that is a persuasive/informative newspaper article written to citizens in a community to defend why the resources of the ocean are important to our ecosystem.

This will allow me to assess the students understanding of the ocean resources and their importance to our ecosystem.

INSTRUCTIONAL PROCEDURES:

Time:

The teacher will:	The students will:
1. The teacher will give the students a KWL to have them fill out the K and W to access prior knowledge. 2. The teacher will facilitate their answers from the KWL throughout the PowerPoint. 3. The teacher will give the students Cornell Notes to use throughout the PowerPoint. 4. The teacher will present a PowerPoint to the students about all the resources from the ocean. 5. The teacher will ask questions throughout the PowerPoint that are integrated into the slides. 6. The teacher will have the students use their Cornell Notes to aid them in answering the last question on the last slide. 7. The teacher will facilitate by clarifying answers if needed. 8. The teacher will give the students a Y-Chart to differentiate between living and nonliving resources.	1. The students will fill out the K and W part of the KWL. 2. The students will use their Cornell Notes throughout the PowerPoint. 3. The students will answer questions that the teacher asks them throughout the PowerPoint. 4. The students will use their Cornell Notes to aid them in answering the last slide of the PowerPoint. 5. The students will fill out the Y-Chart and make generalizations about it. 6. The students will fill out the L part of the KWL. 7. The students will write a persuasive letter for homework.

9. The teacher will facilitate how the students are doing on their Y-Chart. 10. The teacher will have the students fill out the L part of the KWL. 11. The teacher will assign the students homework that will assess their understanding.	

Student Teacher Candidate: Peyton Allen

Lesson Subject(s)/Title: The Benthic and Pelagic Environment

Lesson Date(s): Day 3-4

Course & Grade(s): Science 3rd Grade

ESSENTIAL QUESTIONS/ SUBSIDIARY QUESTIONS:
Essential Question: Why do organisms of the ocean live in different environments?
Subsidiary Questions:
What kind of unique life forms can be found in the benthic environment?
Which environment is near the ocean's surface?

PURPOSE:

Big Idea: Organisms and their Environments

Enduring Understanding: The ocean is divided into two main environments in which organisms live.

Purpose: For students to understand the two different types of environments in the ocean and what animals live there.

SPECIFIC LEARNING OBJECTIVES: (clear, observable)

[Through an anticipation guide], students will **complete** the left side of the worksheet.

[While reading section three of Life in the Ocean], students will **read with a pencil** to identify surprising information, important information, or confusing sections.

[Through a class discussion], students will **answer anchor questions** to have a successful class discussion and to further understand the environments.

[After the discussion], the students will **re-evaluate** their knowledge on the anticipation guide.

[After the anticipation guide], the students will **complete a 3-2-1** to explain 3 things they learned, two things they found interesting, and 1 question they had.

Students will **demonstrate**, [through a poster], their understanding of what each environment looks like to expand their knowledge of the subject.

ANTICIPATORY SET: Anticipation Guide

Individually, the students will fill out an **Anticipation Guide**. The students will mark whether or not they agree or disagree with each statement I have given them on the left side of the page. At the end of the lesson the students will go back and decide whether they still agree or disagree on the right side of the page.

INPUT/ ACQUIRE NEW KNOWLEDGE:

The teacher will have the students **Read with a Pencil** section three of Life in the Ocean from their textbooks. The teacher will print this off for them and the students will do this in class individually. The teacher will have the students interact in a discussion about what they just read. The students will be able to share what they thought was important, interesting, and confusing. The teacher will facilitate this by clarifying what they think is confusing. The teacher will first provide questions to start off the discussion. These questions include:

Knowledge: How would you describe the benthic and pelagic environment?

Comprehension: Can you explain each zone in the benthic and pelagic zone?

Sensory Register	STM	LTM
Attention	Focus	Connections
Recognition	Organization	Elaborations
Perception	Rehearsal	Meaning
	Visualization	

Facets of Understanding

7. Explanation
8. Interpretation
9. Application
10. Perspective
11. Empathy
12. Self-Knowledge

Multiple Intelligences

9. Linguistic [words]
10. Visual [pictures]
11. Mathematical [numbers & reasoning]
12. Kinesthetic [hands-on]
13. Musical [music]
14. Interpersonal [social]
15. Intrapersonal [self]
16. Naturalist [nature]

Multiple Exposures [4 x 2]

4. Dramatization
5. Visualization
6. Verbal

Complex Interactions

3. Discussion
4. Argumentation

Bloom's Taxonomy

7. Knowledge [Verbatim]
8. Comprehension [Own Words]
9. Application [Problem-Solving]
10. Analysis [Identify components]
11. Synthesis [Combine information]
12. Evaluation [Decisions]

Aspects of the Topic

7. Facts
8. Compare
9. Cause/Effect
10. Characteristics
11. Examples
12. Relationships

9 Effective Strategies

10. Similarities and Differences
11. Summarization and Note Taking
12. Reinforcing Effort and Providing Recognition
13. Homework and Practice
14. Nonlinguistic Representations
15. Cooperative Learning
16. Setting Objectives and Providing Feedback
17. Generating and Testing

Application: What facts would you show to differentiate where both the environments are located?

Analysis: Can you categorize the different animals in each environment?

Synthesis: In what way would you design the two environments to better understand where they are located and what animals are in each?

Evaluation: How would you compare the two environments?

To facilitate this discussion, the teacher will add information or clarify their answers.

and/or

APPLY/ DEEPEN NEW KNOWLEDGE:

The teacher will then provide the students will questions again, but challenging/critical thinking questions that will allow the students to think more deeply about the subject. These questions include:

4. In the benthic environment, what would happen in the intertidal zone if there were no change in tides?
5. In the pelagic environment, what would happen if the neritic zone did not receive any sunlight?
6. How would the ocean's ecological zones change if sea level dropped 300 meters?

The teacher will facilitate this by adding important information if needed.

CLOSURE/ASSESSMENT: Anticipation Guide, 3-2-1

The students will go back and decide whether they still agree or disagree on the right side of the **Anticipation Guide**. They will keep this as a self-evaluation source. The students will share some of their answers on what they had before and what they had at the end. The teacher will facilitate this by making corrections where need be.

The students will also do a **3-2-1** as their ticket out the door. The students will write three things they learned about the two environments of the ocean, two questions they have, and one thing they enjoyed. They will turn this in.

HOMEWORK: (Purpose- Preparation, Practice, Expansion)

Purpose: Expansion: The students will create a poster of each environment with the different animals in each.

INSTRUCTIONAL PROCEDURES:

Time:

The teacher will:	The students will:
12. The teacher will have the students fill out an anticipation guide. 13. The teacher will have the students read with a pencil, section three of Life in the Ocean. 14. The teacher will have the students interact in a discussion about what they just read and provide anchor questions for them. 15. The teacher will facilitate by clarifying what they thought was confusing, or provide more information or clarify answers if needed 16. The teacher will have the students finish the anticipation guide and share their evaluation. 17. The teacher will facilitate by making corrections if needed.	8. The students will fill out an anticipation guide. 9. The students will read section three of Life in the Ocean with read with a pencil. 10. The students will interact in a discussion, answering questions. 11. The students will complete the anticipation guide and share their evaluation. 12. The students will do a 3-2-1. 13. The students will create a poster of each environment with the different animals in each.

18. The teacher will have the students do a 3-2-1 as the ticket out the door. 19. The teacher will have the students create a poster of each environment with the different animals in each.	

Student Teacher Candidate: Peyton Allen

Lesson Subject(s)/Title: The Coral Reef

Lesson Date(s): Day 5-7

Course & Grade(s): Science – 3rd Grade

ESSENTIAL QUESTIONS/ SUBSIDIARY QUESTIONS:
Essential Question: Why are coral reefs a necessity in the ocean?
Subsidiary Questions:
What are corals?
What kind of organisms live in coral reefs?

PURPOSE:

Big Idea: Coral Reefs

Enduring Understanding: Coral reefs are homes to some of the animals and fish in the ocean.

Purpose: To allow the students to understand what coral reefs are, how they are made, and the necessity they give to the ocean.

SPECIFIC LEARNING OBJECTIVES: (clear, observable)

[Through a KWL], the students will **complete** the K and W of the KWL to see what they already know and what they want to know about coral reefs.

[Throughout the read-aloud] of "One Night in the Coral Sea", students will **answer questions** that the teacher asks to keep them engaged.

[At the end of the read-aloud], students will **answer questions** in a mini discussion that will help them understand the novel better.

[After the discussion], the students **will fill out** a worksheet with a literal, inferential, and critical question as a class to help them better understand how to create these questions and further their understanding of coral reefs.

[After the class example], the students will **read** a paragraph from "Our Wet World" to engage them in coming up with their own literal, inferential, and critical questions.

[After the students read a paragraph] from "Our Wet World", the students will **produce** their own literal, inferential, and critical questions to further their understanding of coral reefs.

[After the students have produced their own questions], the students **will fill out** the L part of the KWL to show what they have learned.

Students will **perform** a RAFT to coral reefs [after they fill out the L part of the KWL].

ANTICIPATORY SET: KWL

The students will do a **KWL**. The students will fill out the K – What they know and the W – What they want to know about coral reefs. The students will share with the class what they know and what they want to know. To facilitate this, the teacher will answer these questions throughout the reading, the mini discussion, or paragraphs the students read throughout their literal, inferential, and critical questions.

INPUT/ ACQUIRE NEW KNOWLEDGE:

The teacher will conduct a **Read Aloud** with the students with the book "One Night in the Coral Sea". The teacher will engage the student's interest by asking questions before reading such as:

1. Judging from the title and cover, what do you think this will be about?

Sensory Register	STM	LTM
Attention Recognition Perception	Focus Organization Rehearsal Visualization	Connections Elaborations Meaning

Facets of Understanding

13. Explanation
14. Interpretation
15. Application
16. Perspective
17. Empathy
18. Self-Knowledge

Multiple Intelligences

17. Linguistic [words]
18. Visual [pictures]
19. Mathematical [numbers & reasoning]
20. Kinesthetic [hands-on]
21. Musical [music]
22. Interpersonal [social]
23. Intrapersonal [self]
24. Naturalist [nature]

Multiple Exposures [4 x 2]

7. Dramatization
8. Visualization
9. Verbal

Complex Interactions

5. Discussion
6. Argumentation

Bloom's Taxonomy

13. Knowledge [Verbatim]
14. Comprehension [Own Words]
15. Application [Problem-Solving]
16. Analysis [Identify components]
17. Synthesis [Combine information]
18. Evaluation [Decisions]

Aspects of the Topic

13. Facts
14. Compare
15. Cause/Effect
16. Characteristics
17. Examples
18. Relationships

9 Effective Strategies

19. Similarities and Differences
20. Summarization and Note Taking
21. Reinforcing Effort and Providing Recognition
22. Homework and Practice
23. Nonlinguistic Representations
24. Cooperative Learning
25. Setting Objectives and Providing Feedback
26. Generating and Testing

2. What do you already know about Coral Reefs?

The teacher will read with enthusiasm, maintain students' engagement such as asking:

1. Were you right about what you thought this was going to be about?
2. Now what do you think?

The teacher will engage students in figuring out confusing concepts or terminology by explaining through quickly, then moving on back to reading.

Lastly, the teacher will hold a small discussion that gets the students to think beyond the text.

1. What confused you? Surprised you? Confirmed on what you believed to be true?
2. What are coral reefs?
3. What organisms live in the coral reefs?
4. What activities go on in coral reefs?
5. How are coral reefs made?
6. Why are coral reefs a necessity to the ocean?

To facilitate this, the teacher will add important information or clarify the student's answers.

Assuming the students have already learned how to do literal, inferential, and critical questions. The teacher will quickly go over what each are as well as an example. The students will get a handout of this with the example and the teacher will go over the example as a class. The students will answer as she asks for a literal, inferential, and critical question from the example. The students will also underline where they found the literal answer and circle where they found the inferential answer. This example will be a paragraph from "Our Wet World" and about coral reefs.

and/or

APPLY/ DEEPEN NEW KNOWLEDGE:

The teacher will have the students do the **Comprehension Strategy**. The students will read a paragraph about coral reefs in the book "Our Wet World". With this paragraph, the students will come up with their own literal, inferential, and critical questions. 4 literal questions, 3 inferential questions, and 2 critical questions. In the paragraph, I want the students to underline where they found the answers for their literal questions and to circle the clues they used to answer their inferential questions. The teacher will facilitate this by selecting students to share their questions and answers to the class. The teacher will clarify any answers or questions that may not be correct.

CLOSURE/ASSESSMENT: KWL

The students will fill out the L part of the **KWL** – What they have learned. They will turn this in.

HOMEWORK: (Purpose- Preparation, Practice, Expansion)

Purpose: Expansion: The students will write a **RAFT**. Prompt: Students will perform a RAFT that explains an oceanographers experience through the Australian Great Barrier Reef. They will act as the oceanographer and write to themselves. They can use examples or information from the read-aloud or from their literal, inferential, and critical questions.

R: Role of writer: Oceanographer

A: Audience: Self

F: Format: Diary

T: Topic: Coral Reefs: My Travel of the Australian Great Barrier Reef

INSTRUCTIONAL PROCEDURES:

Time:

The teacher will:	The students will:
20. The teacher will have the students fill out the K and W of the KWL to access their prior knowledge.	14. The students will fill out the K and W of the KWL

21. The teacher will asks questions before the reading. 22. The teacher will read-aloud to the class and engage them in the reading. 23. The teacher will engage the students in a min discussion. 24. The teacher will facilitate their answers and clarify if needed. 25. The teacher will go over literal, inferential, and critical questions. 26. The teacher will go over an example having the students give literal, inferential, and critical questions and answering them. 27. The teacher will have the students read a paragraph and develop questions on their own. 28. The teacher will facilitate this by listening to their answers when they share them. 29. The teacher will have the students fill out the L of the KWL. 30. The teacher will have the students perform a RAFT.	15. The students will answer questions that the teacher asks before the read-aloud. 16. The students will listen to the read-aloud. 17. The students will answer questions in a mini discussion. 18. The students will do an example of literal, inferential, and critical questions as a class. 19. The students will do their own literal, inferential, and critical questions. 20. The students will fill out the L part of the KWL. 21. The students will perform a RAFT.

Student Teacher Candidate: Peyton Allen

Lesson Subject(s)/Title: Ocean Currents

Lesson Date(s): Day 8-10

Course & Grade(s): Science - 3rd Grade

ESSENTIAL QUESTIONS/ SUBSIDIARY QUESTIONS:
Essential Question: How do ocean currents greatly affect earth?
Subsidiary Questions:
What is an ocean current?
What causes surface currents to flow?

PURPOSE:

Big Idea: Ocean Currents

Enduring Understanding: Ocean currents work together to form a pattern of surface currents on earth.

Purpose: For students to understand what ocean currents are, the difference between the currents, and how they affect earth.

SPECIFIC LEARNING OBJECTIVES: (clear, observable)

[At the beginning of the lesson], the students will **organize their thoughts** in a predicting ABC chart that will eventually be facilitated after the reading.

[During the Think-Aloud], students will **follow along** with the teacher to see how good readers do things.

[Through a class discussion], students will **answer anchor questions** to have a successful class discussion and to further understand the environments.

[After the class discussion], students will **fill out** the Predicting ABC chart to finalize their vocabulary words.

Students will **demonstrate**, [through a Venn Diagram], their understanding of the two different ocean currents and what each does.

ANTICIPATORY SET: Predicting ABC Chart

The students will organize their thoughts in a **Predicting ABC chart** from vocabulary words that the teacher gives them. The teacher will have the students predict what the vocabulary words mean, then after the reading, the students will be able to write what the actual definitions are. The teacher will also be able to see what the students know already about these vocabulary words. The teacher will facilitate these vocabulary words throughout the reading.

INPUT/ ACQUIRE NEW KNOWLEDGE:

The teacher will print off section 1 from their textbook entitled “Currents” for each student. The teacher is going to do a **Think-Aloud.** The teacher is going to read through section one as the students follow along and she is going to say things out loud such as what she is confused about, what she can predict, what pictures show up in her mind, and whatever else she may be thinking in her head. This allows students to see how good readers do things and makes the invisible thinking process of reading and problem solving visible. The teacher then will start a **Discussion** about what was just read. The teacher will start off the questions with anchor questions:

7. **Knowledge:** Can you list reasons on why ocean currents affect our Earth??
8. **Comprehension:** Will you state or interpret in your own words Heyerdahl’s theory?

Sensory Register	STM	LTM
Attention Recognition Perception	Focus Organization Rehearsal Visualization	Connections Elaborations Meaning

Facets of Understanding

19. Explanation
20. Interpretation
21. Application
22. Perspective
23. Empathy
24. Self-Knowledge

Multiple Intelligences

25. Linguistic [words]
26. Visual [pictures]
27. Mathematical [numbers & reasoning]
28. Kinesthetic [hands-on]
29. Musical [music]
30. Interpersonal [social]
31. Intrapersonal [self]
32. Naturalist [nature]

Multiple Exposures [4 x 2]

10. Dramatization
11. Visualization
12. Verbal

Complex Interactions

7. Discussion
8. Argumentation

Bloom’s Taxonomy

19. Knowledge [Verbatim]
20. Comprehension [Own Words]
21. Application [Problem-Solving]
22. Analysis [Identify components]
23. Synthesis [Combine information]
24. Evaluation [Decisions]

Aspects of the Topic

19. Facts
20. Compare
21. Cause/Effect
22. Characteristics
23. Examples
24. Relationships

9 Effective Strategies

28. Similarities and Differences
29. Summarization and Note Taking
30. Reinforcing Effort and Providing Recognition
31. Homework and Practice
32. Nonlinguistic Representations
33. Cooperative Learning
34. Setting Objectives and Providing Feedback
35. Generating and Testing

9. **Application:** How would you show your understanding of a global wind?
10. **Analysis:** Can you make a distinction between deep currents and surface currents?
11. **Synthesis:** What conclusions can you draw from the Coriolis Effect?
12. **Evaluation:** What is your opinion of the handcrafted Kon-Tiki?

The teacher will facilitate this by clarifying up the students answers if needed.

and/or

APPLY/ DEEPEN NEW KNOWLEDGE:

The teacher will then ask the students challenging/critical questions to deeper their understanding of the ocean currents and how they affect Earth. The teacher will also ask questions that may refer back to previous lessons that may connect with this topic. These questions include:

9. How do ocean currents greatly affect Earth?
10. If there were no land on Earth's surface, what would the pattern of surface currents look like?
11. What would the effects be if Earth did not have a rotation?
12. What could you infer would happen if ocean currents did not exist?
13. What would happen if surface currents had no movement?
14. How would you have improved Thor Heyerdahl's raft that he sailed on?
15. Do ocean currents affect coral reefs? If so, how?
16. How do the resources from the ocean depend on the ocean currents?

The teacher will facilitate this by adding important information and clarifying the student's answers.

CLOSURE/ASSESSMENT: Predicting ABC Chart

The students will fill out their **Predicting ABC chart**. They will fill in the correct definitions of the vocabulary. They will turn this in.

HOMEWORK: (Purpose- Preparation, Practice, Expansion)

Purpose: Expansion: The teacher is going to have the students fill out a **Venn Diagram** between the surface currents and deep currents. This will show me that they really know the difference/similarities between the two currents and what each does.

INSTRUCTIONAL PROCEDURES:

Time:

The teacher will:	The students will:
31. The teacher will give students a predicting ABC chart to organize their thoughts about the vocabulary they are about to learn and access prior knowledge. 32. The teacher will facilitate the words throughout the reading. 33. The teacher will do a Think-Aloud as the students follow along. 34. The teacher will get the students engaged in a discussion. 35. The teacher will facilitate this discussion. 36. The teacher will have the students fill out the predicting ABC chart to fill in the correct vocabulary words. 37. The teacher will have the students fill out a Venn Diagram for homework.	22. The students will fill out the predicting ABC chart as best as they can. 23. The students will follow along the reading as the teacher does the Think-Aloud. 24. The students will answer questions in the discussion. 25. The students will fill out the predicting ABC chart with the correct definitions. 26. The students will fill out a Venn Diagram for homework.

Performance Assessment: The students will write a persuasive and informative newspaper article to citizens in a community to defend why the resources of the ocean are important to our ecosystem.

GRASP:

Goal: Your goal is to defend why the resources of the ocean are important to our ecosystem.

Role: You are an advocate for the resources that come from the ocean.

Audience: You need to convince citizens in the community.

Situation: The challenge you find yourself in is convincing citizens in your community that resources from the ocean are important to our ecosystem.

Product: You need to develop a newspaper article that is persuasive and informative to convince citizens how important resources are from the ocean to our ecosystem. In detail, you will need to explain the kinds of resources that are harvested from the ocean and explain why each are important for our ecosystem.

Standards and Criteria for Success: Your performance needs to be:

-One page article

-Needs a title

-Persuasive/Informative

-Position/Support for position taken

-Needs evidence

-No grammar and spelling mistakes

-Detailed explanation of resources and why they are important

-Be able to answer questions if asked about the resources

Reflects Goals 1 & 2