



Reach the World and The Weddell Sea Expedition 2019

This is designed to act as a guide for you to adapt and use to meet your students' needs. We would love to hear how you adapt and use it with your students!

<p>Journey: Weddell Sea Expedition 2019 https://www.reachtheworld.org/weddell-sea-expedition</p>	<p>Title: Love, Explore, Conserve!</p>
<p>Article: Journal: Women of the Weddell Sea Expedition</p>	<p>Essential Question:</p> <ul style="list-style-type: none"> - How can you learn from scientists in the field? - What is involved in a scientific experiment? - How can you design your own experiment to research animal behavior?
<p>Learning Objectives:</p> <ul style="list-style-type: none"> - Students will be able to research from video and articles - Students will be able to design an experiment to research animal behavior 	<p>Materials: Article: Women of the Weddell Sea Expedition Ocean X's "Women in Science" video</p>
<p>Outline</p>	<p>Directions</p>
<p>Opening Questions:</p> <ul style="list-style-type: none"> - What is it that you love and want to protect, conserve, research or explore in the Ocean? 	<ol style="list-style-type: none"> 1. Students think about and/or write down or draw one thing that they love and want to protect, conserve, research or explore in the Ocean. 2. Students share out with the class or a small group.
<p>Watch video clips:</p> <ul style="list-style-type: none"> - Ocean X "Women in Science" <p>Read article:</p>	<ol style="list-style-type: none"> 1. Prepare students that they will be watching a video and reading an article about scientists. Have them pay attention to the science conducted and how the scientists collect the data. (For example: Dr. Edith Widder

<ul style="list-style-type: none"> - Women of the Weddell Sea Expedition - Supplement with other articles as needed 	<p>designed and created the e-jelly a stimulus for a squid. Her purpose was to study the behavior of the squid.)</p>
<p>Review</p>	<ol style="list-style-type: none"> 1. Review as a class or in small groups what they learned from watching the video and reading the articles. <ol style="list-style-type: none"> a. What did each scientist research? How did they conduct the research?
<p>Quote and Research</p>	<ol style="list-style-type: none"> 1. Share Dr. Sylvia Earle’s quote: “The greatest era of exploration is still ahead of us.” 2. Ask the students the opening question again. “What do you want to protect, conserve, research or explore in the Ocean?” 3. Have students choose an animal or plant they would like to research. 4. Students will gather background information on the animal and their behaviors.
<p>Brainstorm and Design</p>	<ol style="list-style-type: none"> 1. Students take what they have learned about their animal and design an experiment to research the animals behavior. **(Students will not test their design on live animals)**
<p>Share out</p>	<ol style="list-style-type: none"> 1. Students share their research ideas with the class.

Extension Activity: Have students run an experiment. If the experiment fails, great! Have them run it again with modifications and encourage them to reflect on the experience at its conclusion.