Featured Selection:
- **20,000 Leagues Under the Sea** written by Jules Verne and adapted by Judith Conaway, published by Random House in 1983
  - Professor Pierre Aronnax is a teacher at the Paris Museum of Natural History and is also an author. When stories are heard about a “Thing” in the ocean, everyone wants to know what he thinks it might be. Then, he is invited to go with Commander Farragut and his ship, Abraham Lincoln, to fight the sea monster, which Aronnax assumes to be a giant sea unicorn. The crew finds what they decide is the Thing and begin to attack it; however, it is actually a submarine. Aronnax and a few others are captured and forced to travel with the submarine crew. Although not sure exactly what he should think or feel, Aronnax knows he is in for quite an adventure.

Related Materials:
- **The Magic School Bus on the Ocean Floor** by Joanna Cole; Scholastic Paperbacks, 1994
  - Aronnax and the rest of the submarine crew are able to see many treasures and animals while they are traveling at the bottom of the ocean. *The Magic School Bus* takes a deeper look at all of the plants, animals, and other treasures that lie on the ocean floor.

  - This is another book by Jules Verne dealing with the topic of travel/exploration. An Englishman, Phileas Fogg, accepts a challenge to travel around the globe in eighty days.

- **Submarines Up Close** by Andra Serlin Abramson; Sterling, 2008
  - This non-fiction book provides many pictures of what a submarine looks like on the inside. It shows the reader how submarines are built and maintained, as well as how the crew carries out duties and how the submarine can stay hidden from enemies.

- **Ocean Life From A to Z Book and DVD** by Cynthia Stierle, Annie Crawley; Reader's Digest, 2007
  - This shows over 50 different types of sea creatures with many pictures. *The DVD contains 45 minutes of underwater footage to let students have a chance to see the ocean without ever going there.*
- **20,000 Leagues Under the Sea DVD** directed by Charles A. Nichols and Richard Fleischer; Walt Disney, 1954
  - *This is a video based on Jules Verne’s book. It shows the journey that the Nautilus takes throughout the seven seas.*

**Goals:**
- Students will learn to estimate distances on a map using locations mentioned in the book.
- Students will be able to round whole numbers up to 10,000 to the nearest thousand.
- Students will research information on a sea creature (including at least two ways that it interacts with the bigger ocean) and make a model of it to be displayed in a classroom ocean exhibit.
- Students will give an oral summary of significant details about their sea creature.
- Students will be able to define simile, locate examples in the text, and use at least one in their oral presentation about their sea creatures.

**Academic Standards**
- Social studies 4.3.2 – *Estimate distances between two places on a map, using a scale of miles, and use cardinal and intermediate directions when referring to relative location.*
- Science 4.3.3 – *Identify salt as the major difference between fresh and ocean waters.*
- Science 4.6.1 – *Demonstrate that in an object consisting of many parts, the parts usually influence or interact with one another.*
- Math 4.1.3 – *Round whole numbers up to 10,000 to the nearest ten, hundred, and thousand.*
- Language Arts 4.2.3 – *Draw conclusions or make and confirm predictions about text by using prior knowledge and ideas presented in the text itself, including illustrations, titles, topic sentences, important words, foreshadowing clues (clues that indicate what might happen next), and direct quotations.*
- Language Arts 4.3.5 – *Define figurative language, such as similes, metaphors, hyperbole, or personification, and identify its use in literary works.*
- Language Arts 4.7.13 – *Deliver oral summaries of articles and books that contain the main ideas of the event or article and the most significant details.*
- Visual Arts 4.13.2 – *Create a work of art using subject matter, concepts, or sign systems of another discipline.*

**Unit Plan:**

**Pre-Reading:**
- The teacher will lead the students in a creative dramatics activity in which they pretend to be scuba divers, imagining that the classroom is the ocean. Students will be reminded to think about how they would move
differently, especially with all the scuba equipment and being underwater. (PE/Movement)
  • **Grouping:** Whole group

- The teacher will ask students what they know about the ocean. In a discussion, the class will compare fresh and ocean waters, and the teacher will make sure students understand that salt is in oceans but not in fresh water. (Science) Then, the teacher will give a brief book talk about the book and how it relates to the ocean, also defining what a “league” is in this context.
  • **Grouping:** Whole group

**Reading:**
- The teacher will read the first chapter out loud to the students and will also read two others out loud, including the final chapter. (**Teacher Read-Alouds**) Throughout the unit, the students will be responsible for all other chapters. (**Student Reading**)
  • **Grouping:** Individual or buddy

**Responding:**
- The students will periodically write in their journals, responding to and making connections with what they have read. (**Written Language**) They will also make predictions and practice using similes after the teacher presents minilessons on the topics.
  • **Grouping:** Individual
- The students will meet with the teacher at least twice during individual reading time throughout the unit. Students will talk about what they have read and answer comprehension questions. Teachers will keep a log of these conferences.
  • **Grouping:** Individual
- After reading chapter five in which Captain Nemo is playing the organ, the teacher will play a selection of organ music. (**Music**) The students will listen and write about the music in their journals.
  • **Grouping:** Whole group listening, individual writing

**Exploring:**
- Students will read at least one of the related books and write a journal entry about what they learned. They will also be expected to make connections with their life, with the world, and with the featured selection.
  • **Grouping:** Individual
- The students will play a vocabulary memory game.
  • **Grouping:** Partner
- Students will research information about a sea creature of their choice, looking at what it is and how it influences and interacts with the ocean around it, (**Science**) and they will prepare an oral summary to give during the exhibit presentation. They will also make the sea creature by drawing and cutting out the front and back side and then painting it. (**Art**)
Grouping: Individual

- Students will list some of the places the submarine travels in the book. The students will then be given a map and asked to place five locations and estimate the distances between them. (Social Studies) The map, with distances labeled, will be turned in to be graded by the teacher.

Grouping: Whole class for introduction, individual for practice

- After students estimate the differences between locations on the map, the teacher will give each student the actual distances for the locations they chose. Then, the students will work in partners to round the distances to the nearest ten, hundred, and thousand. (Math) This will also be turned in for the teacher to grade.

Grouping: Whole class instruction, practice in partners

Applying:

- Students will create an ocean exhibit for the parents to come see. The teacher will hang blue bulletin board paper in one corner of the room. The sea creatures that the students made will be hung from the ceiling, and other ocean props may be added. Once the parents are there, each student will give a brief oral summary about what they learned about their sea creature. (Culminating activity, Oral language) The teacher will grade each student according to a rubric including completion of the sea creature, demonstrating two ways that the creature interacts with/influences other parts of the ocean, and the students’ ability to orally summarize information learned from books.

Grouping: Whole class

Time Schedule:

<table>
<thead>
<tr>
<th>1 Pre-reading minilesson: Ocean vs. Fresh Water</th>
<th>2 Minilesson: making predictions</th>
<th>3 Journal – making predictions for the chapters</th>
<th>4 Minilesson: estimating distances; go over vocabulary</th>
<th>5 Worksheet: estimating distances</th>
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</thead>
<tbody>
<tr>
<td>Ch. 1 - Teacher</td>
<td>Ch. 2 – Individual</td>
<td>Ch. 3 – Individual</td>
<td>Ch. 4 – Buddy</td>
<td>Ch. 5/6 - Individual</td>
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<td>Journal responses</td>
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<td>Ch. 2 – Buddy</td>
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<td>Ch. 5/6 - Individual</td>
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<tr>
<td>6 Math – rounding and worksheet</td>
<td>7 Teaching similes and finding them in the text</td>
<td>8 Simile journal entry</td>
<td>9 Minilesson: each part influences another, examples</td>
<td>10 Work on making sea creature – drawing, painting, etc.</td>
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<tr>
<td>Ch. 7 – Individual</td>
<td>Ch. 8 – Buddy</td>
<td>Selection of sea creature</td>
<td>Library – research sea creature information</td>
<td>Ch. 10 - Individual</td>
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<td>Journal responses</td>
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<td><strong>11</strong></td>
<td>More vocabulary Journal responses</td>
<td><strong>12</strong></td>
<td>Work on finishing sea creature Vocabulary memory game</td>
<td><strong>13</strong></td>
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<td>Ch. 11 – Teacher</td>
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**Assignment Checklist:**

- [ ] Journal responses
- [ ] Prediction journal
- [ ] Estimating distances worksheet
- [ ] Rounding worksheet
- [ ] Simile journal
- [ ] Oral summary – sea creature
- [ ] Sea creature

**15** Ocean Exhibit