

## Sample Unit Plans

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This site was designed to allow teachers to pick and choose what they'd like to include in the unit based on their grade level and time available. Below are two suggestions unit plans for the classroom:

- ✓ **"Just the Facts"** takes 4 days and focuses specifically on the BP oil spill in the Gulf, including what happened at Deepwater Horizon and the cleanup efforts.
- ✓ **"Full Unit"** outlines how to incorporate all of the lessons. Teachers can delete slides or lessons as necessary to tailor the information to their grade level and schedules.

### Just the Facts

Day 1	<ul style="list-style-type: none"><li>• View <i>Trouble in the Gulf</i> PowerPoint (20-30 minutes)</li><li>• Introduce how oil behaves in water using hands-on activities: Oil Floats and Spreads (5 minutes) Making Mousse (5 minutes)</li></ul>
Day 2	<ul style="list-style-type: none"><li>• View <i>Environmental cleanup</i> PowerPoint "Oil in the Water" (40 minutes) <i>*includes information on removing oil from the water/protecting coastlines</i></li></ul>
Day 3	<ul style="list-style-type: none"><li>• Explore clean-up methods using <b>one</b> of the following activities: Oil Spill Solutions (inquiry activity to get oil out of water) Goo Be Gone: Cleaning up oil spills using sorbents Bird Baths (experience what it's like to be covered in oil) Cleaning Oiled Feathers</li></ul>
Day 4	<ul style="list-style-type: none"><li>• View <i>Environmental cleanup</i> PowerPoint "Wildlife Rescue" (20 min)</li><li>• Students write an essay about the Deepwater Horizon Oil Spill (20 min)</li></ul>



### Full Unit

Day 1	<ul style="list-style-type: none"><li>View <i>Oil in our lives</i> PowerPoint “Oil in our lives” (30-40 minutes) <i>*engage in several class discussions during the PowerPoint</i></li></ul>
Day 2	<ul style="list-style-type: none"><li>View beginning of <i>Drilling for oil</i> PowerPoint “Drilling for Oil” <i>*If you do NOT plan to do the activity, then delete the 2 slides marked in the notes pages and continue on with Day 3</i> <i>*if you are doing the activity go VERY quickly through the first 8 slides (5 min)</i></li><li>Activity: “Drilling into Science: Oil Exploration Activity” in <i>Drilling in the Ocean</i> (40 minutes) <i>*this activity can be modified for lower graders by using poker chips (or something similar) instead of cards. Each group gets 5 chips. Every time they drill and come up empty, they lose a chip (because it costs money to drill and they didn’t find oil). The best company is the one with the most wells and chips at the end.</i></li></ul>
Day 3	<ul style="list-style-type: none"><li>Optional: finish watching the end of the PowerPoint which goes into further detail about drilling operations and what crude oil produces. (15 minutes) <i>*there are links to several YouTube graphic animations</i></li><li>Class discussion or writing assignment about drilling in national parks and other areas set aside to preserve their natural beauty. Should drilling be allowed there?</li></ul>
Day 4	<ul style="list-style-type: none"><li>View <i>Oil in history</i> PowerPoint “A History of Oil Extraction” (40 minutes) <i>*includes information on the largest <b>oilrig spills</b> in history, including the BP oil spill in the Gulf of Mexico.</i></li></ul>
Day 5	<ul style="list-style-type: none"><li>Explore activities under <i>Environmental cleanup</i>: Oil Floats and Spreads (10 minutes) along with Making Mousse (10 minutes.) Then, just the forearm oiling of Bird Baths (experiencing what it’s like to be covered in oil) (10 minutes) and the Cleaning Oiled Feathers activity (10 minutes.) Students can journal what they’ve learned about oil.</li><li><b>OR</b> do the Liquid Density and Oil Spills activity (2-3 hours)</li></ul>
Day 6	<ul style="list-style-type: none"><li>View <i>Trouble in the Gulf</i> PowerPoint “Deepwater Horizon” (40 minutes) <i>*there are graphic pictures of the oilrig fire. Please delete any slides you think may be too upsetting for your grade level.</i></li></ul>

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Days 7 & 8	<ul style="list-style-type: none"><li>Activity under <i>Environmental cleanup</i> “Oil Spill Solutions” <i>*inquiry activity where students try different materials to corral and remove oil from the water. You don’t have to go over the cleanup methods because there is a PowerPoint explaining them. The development of the system, the evaluation and follow-up questions are outstanding. Students can present their findings to each other.</i></li></ul>
Day 9	<ul style="list-style-type: none"><li>View <i>Environmental cleanup</i> PowerPoint “Oil in the Water” (45 minutes)</li></ul>
Day 10	<ul style="list-style-type: none"><li>Activity under <i>Environmental cleanup</i>: Cleaning Oiled Feathers (30 minutes)</li><li>Students can then write a story from a bird’s point of view or write a conclusion for the activity.</li></ul>
Day 11	<ul style="list-style-type: none"><li>View <i>Environmental cleanup</i> PowerPoint “Wildlife Rescue” (40 minutes) <i>*there are graphic pictures, especially slide # 7 (the brown pelican totally covered in oil.) Please delete any slides you think may be too upsetting for your grade level.</i></li></ul>
Day 12	<ul style="list-style-type: none"><li>View <i>Scientific Research</i> PowerPoint “Scientists at sea and on the shore”</li><li>Think-Pair-Share “What questions would you research related to the oil spill?”</li></ul>
Day 13	<ul style="list-style-type: none"><li>View <i>Following the oil with IOOS</i> PowerPoint</li></ul>
Day 14	<ul style="list-style-type: none"><li>Activity under <i>Following the oil with IOOS</i>: Making gliders</li></ul>
Day 15	<ul style="list-style-type: none"><li>View <i>Help from ROVs</i> PowerPoint</li></ul>
Day 16	<ul style="list-style-type: none"><li>Activity under <i>Following the oil with IOOS</i>: Modeling the Loop Current <i>*this activity may take more than one class period</i></li></ul>
Day 17	<ul style="list-style-type: none"><li>View <i>Oil in History</i> PowerPoint “The largest spills in history” which gives information on the top 11 biggest spills in history.</li></ul>

