

NAVAL HISTORY STEM-H LESSON PLAN

For the past half century, one ship has served as the backbone of the U.S. Navy. On 25 November 2011, USS *Enterprise* (CVN 65) celebrated the 50th anniversary of her commissioning. *Enterprise* is the oldest aircraft carrier in the U.S. fleet, and was also the first nuclear-powered aircraft carrier in the world. From her involvement in the U.S. naval blockade during the Cuban Missile Crisis, to launching air strikes against the Viet Cong during the Vietnam War, to her support in Operations Enduring Freedom and Iraqi Freedom, *Enterprise* has lived up to her motto of "We are Legend." *Enterprise* is on her final deployment. From there, the "Big E" will begin the deactivation process in November 2012 with a decommissioning date of 2015.

To paraphrase Secretary of the Navy John B. Connally Jr. at the Big E's commissioning ceremony, **she has reigned a long, long time as queen of the seas.**

1. Review the 1964 source document, the annual ship history report from the "Big E" above, plus view the short history of Task Force ONE in "Operation Sea Orbit" (video and naval history blog above).
 - a. What is the source of energy, propelling the ships of Task Force ONE?
 - b. What limits a nuclear ship's endurance (surface ship or submarine)?
 - c. When USS *Seawolf* (SSN 575) joined the *Enterprise*, *Long Beach*, and *Bainbridge* in a May 1964 exercise, what "first" was established in naval operations?
 - d. What significance does USS *Enterprise's* operation of 8 nuclear reactors for five decades have for future energy decisions?
 - e. Why do you think some people are opposed to nuclear energy, in particular Japanese people?
2. Review the short history of the Great White Fleet in the link above, and the student video produced from Navy source documents, also above.
 - a. Prior to coal, what were the main sources of energy for ship propulsion?
 - b. How does the voyage of the Great White Fleet compare to the voyage of Task Force ONE in Operation Sea Orbit?
 - c. Between the Great White Fleet's 14 month cruise around the world on coal power and Task Force ONE's cruise on nuclear power, what was the main type of fuel used for ship and submarine propulsion?
 - d. Other than our nuclear powered submarines and aircraft carriers today, what type of propulsion do you think is predominant in today's Navy? Why?

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3. What is the Navy's Green Hornet and the Great Green Fleet? View the internet for clues, and see the last two video links above.
 - a. How does the **Green Navy** compare to today's Navy fleet of nuclear powered and gas turbine ships?
 - b. When will the Navy's Great Green Fleet "set sail"?
 - c. How do you think the Great Green Fleet will compare to the Great White Fleet?
4. What do you think happens to a ship when it reaches its end of useful life?