Lesson Plan

Shipwreck Photomosaics

**Focus**
Learning about the technology used to inventory and map shipwrecks

**Focus Questions**
How do archaeologists learn about the detail of shipwrecks such as the Monitor?

**Learning Objective**
Students will understand how a photomosaic is used to obtain detailed information about an object by piecing together a simulation of the Monitor.

**Grade Level**
3-6, middle and high school

**Materials**
- One copy per student (or team) of the mosaic image
- Background information on the Monitor

**Teaching Time**
One class period

**Seating Arrangement**
Flexible

**Maximum Number of Students**
unlimited

**Key Words**
Monitor
Maritime archaeology
Photomosaic

**Background Information**
In 1974 National Geographic and the Monitor National Marine Sanctuary created a complete photomosaic of the wreck of the Monitor. Photos of small sections of the sunken ironclad were joined together to form a detailed image of the entire wreck site. The task of fitting all the images together was an arduous and lengthy process, but the product has provided invaluable information for the scientists and managers that study the site. Since the early 90s archaeologists have been recovering numerous artifacts from the Monitor, including the steam engine, propeller, cannons and its famous rotating gun turret. With all the changes to the site it was imperative that an updated photomosaic be created to document the changes and current status of the wreck site. In summer 2006, the MNMS worked with the University of Rhode Island and the Institute for Exploration to create a new photomosaic of the Monitor.
**Preparation**

Download the Monitor NMS factsheet

http://www.monitor.noaa.gov

Download related puzzles and activities

http://www.monitor.noaa.gov

**Learning Procedure**

1. Distribute a copy of the mosaic images to each student. Have them cut them apart.
2. Have students tape the images together. Some of the pieces may require some overlapping. Continue fitting images together until all images have been placed together.
3. Have students compare their photomosaic image to the original. Which makes more sense—one individual image or the entire photomosaic?

Note to teacher: give younger students a copy of the original image and let them place the mosaic pieces on top of it as an aid.

**The Bridge Connection**

www.vims.edu/bridge/

**The “ME” Connection**

Have students write a letter to the Monitor National Marine Sanctuary outlining what they learned about the current status of the Monitor and their understanding of why certain artifacts needed to be recovered.

Monitor National Marine Sanctuary
100 Museum Drive
Newport News, VA 23606

**Connections To Other Subjects**

English/Language Arts; Social Studies; Geography

**Evaluation**

1. Formative Evaluation: Evaluate the group work in progress, the related presentation, and the research project.

**Extensions**

Visit http://www.monitorcenter.org

Students can learn about current conservation efforts of artifacts that have been recovered from the Monitor.

**Resources**

http://www.monitorcenter.org
http://monitor.noaa.gov
http://www.sanctuaries.noaa.gov/education

**National Science Education Standards**

Science
- Science and Technology

Social Studies
- People, Places and Environments

**For More Information**

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CREDIT

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