

## 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/](http://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

Krista Trono

Communications Coordinator

*Monitor* National Marine Sanctuary

100 Museum Drive

Newport News, VA 23606

757.591.7328

Krista.Trono@noaa.gov



### ACKNOWLEDGEMENT

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### CREDIT

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