



Mabee-Gerrer Museum of Art

## *Start with Art*

### Ancient Egypt

*Arts Integration Educator's Guide for Teachers and Parents*

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#### **MUMMY 101:**

##### **About Ancient Egypt:**

The ancient Egyptian culture flourished in Africa's Nile River Valley. The civilization began in around 5,000 B.C.E., but was divided into two kingdoms until united in 3100 B.C.E. Egypt's most notable monuments, including the great pyramids of Giza and the Sphinx, were constructed around 2500 B.C.E. The ancient Egyptians were a highly religious people that firmly believed in life after death. They took great pains to prepare the body and the tomb for the afterlife.

##### **About the Museum's Mummy, Tutu:**

Tutu arrived in the United States in the late 1800's and became part of Father Gerrer's collection in 1921. She came from the Fayum area of Lower Egypt where she died in approximately 332 B.C.E. In 1991, Tutu was x-rayed at the Shawnee Medical Center Hospital. These x-rays reveal many things about Tutu: her brain was removed through her nose (as was the normal process); her arms are crossed and legs extended (as is consistent with high-status mummification); she was in her 40's when she died; she had suffered from arthritis and had degenerating knee joints; and, she had likely given birth. When Tutu died, she still had most of her teeth (which was unusual for the time because of poor diet) and her mouth was opened to allow evil spirits to escape from the body and to enable her to take nourishment in the afterlife.

#### **POINT-OF-ENTRY:**

##### **Build a Mummy:**

**OK PASS (listed for 6th grade but applicable to additional grade levels):** VA 3.1-2, 3.5, 4.1-3

**Supplies:** 1 large sheet of cardboard, butcher paper, scissors markers, masking tape, poster board

1. Observe and study Tutu at the Museum.
2. Visit <http://www.mgmoa.org/education/programs-for-schools/start-with-art> to download a handout with step-by-step photos of this project.
3. Draw and cut out a mummy shape (2 to 4' tall) from cardboard.
4. Using butcher paper, make long paper rolls 2" in diameter and wrap them around the perimeter of the cardboard mummy shape. Secure the paper to the cardboard with masking tape.

5. Continue wrapping the rolls within the perimeter, overlapping areas to create taller forms. Use the tape to secure the paper and to shape the forms, making them look like a body.
6. On the poster board, draw and color a mask and breastplate for your mummy. Use Tutu's mask and breastplate for inspiration, copying some of the ancient Egyptian symbols. Use hieroglyphics to write your mummy's name on the breastplate. Tape the mask and breastplate to your mummy.

## CURRICULAR CONNECTIONS:

### Science:

**OK PASS** (listed for 6<sup>th</sup> grade but applicable to additional grade levels): **LS 3.2**

Before completing the art activity, have students draw the internal organs on white paper. Discuss where the organs are located in the body and what their functions are. Have students place organs in the appropriate places on the cardboard cut out. Students should then create canopic jars from poster board and place the lungs, intestines, liver, and stomach within. Have students discard the brain and wrap the heart with paper to place it within their mummy sculpture.

**OK PASS** (listed for 6th grade but applicable to additional grade levels): **SP&I 1, 3, 4, 5**

How is natron used to make a mummy? How are mummified bodies able to last over 3000 years? Students can experiment with two apple slices to answer these questions and others. One apple slice is the control subject and the other is the experimental subject. First, students should develop hypotheses about the experiment. Then, both apple slices should be weighed, measured, and photographed first. Next, one slice is covered with a mixture of equal parts of baking soda and salt (a *desiccant* similar to natron). Then, both slices should be left in a cool, dark place for one week. After the week is up, students should compare the slices to each other and to the records of their previous states, recording the results of the experiment.

### Social Studies:

**OK PASS** (listed for 6th grade but applicable to additional grade levels): **WS 1.2, 2.1, 3.3**

Have students discover the location of Egypt, the Nile River Valley, and Fayum on a map. What is the latitude and longitude of each? How far is Fayum from other notable locations, such as Giza (home to the Great Pyramids and the Sphinx) and the Valley of the Kings, the burial location for many pharaohs. Then, discuss the types of lands (farm land, grass land, desert, etc.) in Egypt and in Africa. Students should discuss whether or not the land was a factor in the development of early Egyptian civilization. The discussion should include the yearly, cyclical flooding of the Nile. Finally, have students research Egyptian areas in order to pick a location for their mummies' tombs.

**OK PASS** (listed for 6th grade but applicable to additional grade levels): **WS 1.1, 3.1-2, [LA VL 1.1]**

Have students examine the symbols on Tutu's breastplate (a *primary* source). Students should then write down what they believe can be determined about the ancient Egyptian culture based on these images and the translated hieroglyphs (available via a handout at <http://www.mgmoa.org/education/programs-for-schools/start-with-art> (i.e. polytheism, belief in afterlife, need to physically prepare

for the afterlife). As a class, visit the library to locate, gather, and analyze other sources to confirm or refute the students' suggestions.

### Language Arts:

**OK PASS** (listed for 6th grade but applicable to additional grade levels): **R/L 5.1; W/G/U&M: 1.1-5**

Have students write a eulogy for their mummies. The eulogies should explore how the "deceased" lived and died. Students should research ancient Egyptian culture in order to include viable information in the eulogies. Verses from the eulogies could be written on their mummies' breastplates.

**OK PASS** (listed for 6th grade but applicable to additional grade levels): **R/L 3.2.c, 4.1.b, 4.2.d, 4.4, 5.1-2; W/G/U&M: 1.1-5, 2.2, 2.6, 2.7; VL 1.1**

First, students should research ancient Egyptian mythology to discover the purposes of the symbols and deities located on Tutu's breastplate. Based on this research, students should choose the symbols for their mummies' breastplates. Then, in research papers, have students compare and contrast an Egyptian myth to a Greek or Roman myth. Questions for research may include: How are they alike and/or different? Do they have similar purposes? How are the characters alike or different?

### Math:

**OK PASS** (listed for 6th grade but applicable to additional grade levels): **MPS 1.1&3; MCS 4.2-3**

Weigh and measure a volunteer's body. Then, divide students into groups and have the students determine how they will create a smaller mummy based on the volunteer's proportions. Students should then track the amount of materials needed to create the mummy (i.e. length of paper, length of tape, etc.) and how much time it takes to create it. After the mummy is complete, students should measure and weigh the mummy and compare its measurements/weight to those of the volunteer's body, recording the differences. Compare the different methods that the student groups used to solve the problem. Based on the students' records of the creation process, have them determine: How much material (paper and tape) would be needed to create a mummy of weight equal to the volunteer? How tall would that mummy likely be? How long would it take to make a mummy that size? Students should record their measurements in combined units.

### WEB RESOURCES:

Visit <http://www.mgmoa.org/collections/ancient-egypt/> for more information about Tutu, mummification, and the ancient Egyptian culture.

Make a mummy online at <http://oi.uchicago.edu/OI/MUS/ED/mummy.html>, an interactive, educational site for kids.

Check out <http://www.nationalgeographic.com/tv/mummy/> to see how a contemporary scientist has explored the ancient art of mummification.

Get more information about the apple mummification experiment at <http://www.unmuseum.org/exmum.htm>.