



PROTECTED FOR ETERNITY:
The Coffins of *Nu-debehu-Aset*



— *Ideas for Introducing Ancient Egypt to Young Children* —

ART

- **Perspective Drawing**...what makes art look “Egyptian”?...grid drawing
Mural drawings on large paper hung on classroom walls
Ancient Egyptians drew people based on a grid and followed specific guidelines.
 1. A vertical line would divide the body in half with horizontal lines dividing the body into sections.
 2. The more important the person, the larger the drawing.
 3. The torso would face forward, the head and body from the waist down facing the side.
 4. Drawings on tomb walls were sketched on papyrus; a grid was drawn on the tomb wall, the person drawn doing everyday tasks and then covered with wax to preserve it.
- **Wrapping Objects in Linen**
When people and animals were mummified they were wrapped in linen during the final stages of mummification. Provide strips of linen for children to feel and wrap around dolls or stuffed animal cats.
- **Beaded Necklaces**
Both men and women wore jewelry in ancient Egypt. Beads were made from shells and bones. Faience beads were made by mixing sand and natron with water and wrapped over straw which was fired. Children can design necklaces using beads made of shell and colored tubes both of which can be purchased at area craft stores.
- **Hieroglyphs** (see attached Lesson Plan)
- **Plaster of Paris Scarab**
The scarab beetle is a sacred symbol in Ancient Egypt. It symbolizes rebirth. Make a mold from clay of the exoskeleton of a scarab beetle. Make sure the inside is hollow. Fill with Plaster of Paris, let dry and peel off the clay. Paint.
 - **Self Portrait...Part Human/Part Animal (Sphinx)** see attached Lesson Plan
Headdresses
pottery...on wheel
 - **Canopic Jars**
These jars were used during the mummification process to store and preserve the liver, lungs, stomach and intestines. The liver was stored in a jar with a human head, the lungs in a jar with a baboon head, the stomach in a jar with the head of a jackal and the intestines in a jar with the head of a falcon. Canopic jars can be created in two ways. They can either be created by wrapping *Model Magic* around empty hand soap containers and hand forming the different heads or they can be created in the art room as a joint class project by turning them on a potter’s wheel.

MATH

- **Sugar Cube Pyramids with Limited Number of Cubes**

Give each child a predetermined number of sugar cubes and see if the children can create a pyramid. Then choose another number and see if it will work. Have children work towards determining if a perfect number exists for pyramid construction.

- **Counting to 40 (see “Apple Preservation with Natron” lesson plan in SCIENCE section)**

- **Bake Bread**

Bread was a staple in the diet of Ancient Egyptians. Unfortunately, when the wheat was ground, sand and small stones often were not sifted out resulting in bread heavy with both. Over time the bread would wear down their teeth. Many children are unfamiliar with the processes of bread making. Bake yeast bread with them.

- **Broken Pottery Assembly**

One of the many ways archeologists learn about ancient people is by studying artifacts that remain. Take a vase or terra cot pot, break it and have the children reassemble it.

- **Numeral System**

The Egyptians counted by tens as we do, but used different symbols. The “ones” were designated by a single stroke, “tens” by an upside down “u,” “hundreds” by a coil of rope and “one thousands” by a lotus stalk. Study the different stroke marks used and then either write problems for children to solve or use problems found at www.eyelid.co.uk/maths2.htm.

- **Measure by cubits**

The Ancient Egyptians saw a need for a standard unit of measure. They decided on a cubit being the measure from elbow to fingertips, divided into 7 palms for the width of the hand and 28 digits representing the fingers. A cubit is roughly 21 inches. Have each child measure items around the room with a length of string that reaches from their elbow to their fingertips. Is everyone’s measurement the same? What can you do to standardize it? Why would you want to standardize it?

MUSIC

- **Traditional Music**

Scientists know that music was an integral part of Egyptian life because musical instruments have been found in tombs. Unfortunately no written pieces of music have been found. Show children and play instruments that were known to have existed in Ancient Egypt such as lyres, harps, flutes, drums and cymbals.

LITERACY: (see attached bibliography)

- **Hieroglyphic** names with stamps, papyrus and mixed ink.
Place stamps in fishing tackle box with letter labels on each section. Scribes wrote from left to right and also right to left. The reader would know which way to read by reading in the direction the characters are facing. See attached Lesson Plan.
- **Egyptian storytelling**
Teach children traditional Egyptian myths and stories and have them learn the stories to tell to others. Teachers can provide a copy of the audio CD *Egyptian Treasures: Mummies and Myths* for the listening center, provide copies of *Myths and Civilizations of the Ancient Egyptians* by Sarah Quie or visit www.pantheon.org/mythica.html for printable versions.
- **Question of the Day**
When children enter the room in the morning, ask them answer one of the listed questions. The question should be based on previously learned information or information you are hoping to teach that day. For younger children the questions can be on a large piece of paper, for older children the writing can take place in a journal.

SCIENCE

- **Apple Preservation with Natron** see attached Lesson Plan
- **Sleds For Pulling Over Sand**
During pyramid construction, large blocks of stone were transported by boat to the building site and then moved over the sand by sled. Place various small play sleds in the sensory table filled with sand. Include wooden blocks. Have children try to pull the loaded sleds across the sand. Provide other items to attach to the runners that will encourage children to try different alternatives.
- **Boats**
Boating was an important part of Egyptian life for travel as well as transportation of goods. Provide different types of boats in the sensory table. Fill the table with water over the sand so that children can experiment with docking the boats.
- **X-rays and CAT scans**
Scientists learn a great deal from using both X-rays and CAT scans on mummies. They can determine relative age, whether a woman ever gave birth, if a person was ever injured. The information provided can be more valuable than an autopsy and can be done without disturbing the mummy. Obtain X-Rays and CAT scan films to show and discuss with children. A resource for background information and pictures is www.rom.on.ca/egypt/djed/djedmaat.html.

SOCIAL STUDIES

Food/Drinks

Provide food at the snack table for children to try. Ancient Egyptians would have eaten bread, fish, beans, chick peas, lentils, green peas, dates, grapes, raisins, figs, walnuts and pomegranates. Wealthier people would have used honey as a sweetener. Beer (often made from stale bread), wine and water were the drinks of the time.

- **Pretend archeological dig**
Place items in the sand table and cover them with sand. Use paintbrushes to unearth them.
- **Compare the use of the Genesee River to the Egyptians use of the Nile**
Read *Story of The Nile* with the class and discuss ways in which the Egyptians used the Nile River and compare with ways New Yorkers have used the Genesee River.
- **Games of Ancient Egypt**
 - Mancala is a game that originated in Egypt and was first brought to the United States by African slaves. It involves a board with pits and stones. The game can be purchased at many area toy stores.
 - Senet is a game played by Ancient Egyptians. By studying ancient pictures, archeologists have been able to compose rules for the game although no written rules are known to exist. You can find a fabulous Inter-active game at ancientegypt.co.uk/life/activity/main.html
 - Children also played leap frog and tug of war.

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— English Language Arts for Young Children—

Title: Self Portrait

Grade Level: Pre-School through Grade Three

New York State Standard: Learning Standard One: English Language Arts

As listeners and readers, students will collect data, facts, and ideas: discover relationships, concepts, and generalizations; and use knowledge generated from oral written and electronically produced texts. As speakers and writers, they will use oral and written language to acquire, interpret, apply and transmit information.

Objective: Children will create artwork accompanied by written text explaining that Egyptian gods and goddesses appear in different forms.

Materials:

Butcher Paper
Cray pas
Pencil
Mirror

Procedure:

1. Children will read/be read or told stories about Bastet (a woman with a cat's head), Wadjet (a lioness) and Thoth (a man with the head of an ibis). Background information can be obtained electronically at: <http://www.pantheon.org/mythica.html>
2. Children and adults will have conversations about the combination of animal and human forms.
3. Children will examine their faces in mirrors and sketch what they see.
4. Children will add features of an animal to their self portraits.
5. Children will write/dictate a description of what they have created and why they included animal features.

Assessment: Children will share the knowledge they gained with their classmates and be able to answer questions posed about why they chose the specific animals to represent themselves.

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— Science for Young Children —

Title: Mummification

Grade level: Pre-School through Grade Three

New York State Learning Standard: Science

Students will understand and apply scientific concepts, principles and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

Objective: Children will observe an apple as it goes through the drying phase of mummification. They will record their findings and begin to use the scientific method of investigation.

Materials: Attached handouts

Procedure:

1. Children will be given/shown the materials listed on handout.
2. Using the scientific method, children will formulate a question regarding the materials and what will happen.
3. Children will gather information from books describing the drying process of mummification.
4. Children will make a hypothesis.
5. Children will conduct the experiments described at <http://www.newtonsapple.tv/TeacherGuide.php?id=1422>, recording their data as the weeks progress.
6. Children will analyze the data, looking for inconsistencies as well as similarities between their experiments and the experiments of other children in the class.
7. Children will state a conclusion.

Assessment: The observations and data will be shared and compared to other observations and data in the class.



Memorial Art Gallery
OF THE UNIVERSITY OF ROCHESTER

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Date	Observations (weight, diameter, height, description of appearance) <i>Indicate which substance was used here _____</i>
Week # 1	
Week # 2	
Week # 3	
Week # 4	
Week # 5	
Week # 6	
Week # 7	
Week # 8	
Week # 9	
Week # 10	

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PROTECTED FOR ETERNITY:
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— Social Studies for Young Children —

Title: Ancient Egyptian Language System

Grade Level: Pre-K through Grade Three

New York Learning Standard: Social Studies and World History

The skills of historical analysis include the ability to investigate differing and competing interpretations of the theories of history, hypothesize about why interpretations change over time, explain the importance of historical evidence and understand the concepts of change and continuity over time.

Objective: Children will learn about hieroglyphs and either write their name or create a story about everyday life in ancient Egypt.

Materials:

- Hieroglyphic stamps can be ordered through Amazon.com. The set is called *Egyptian Symbols-A Hieroglyphic Stamp Kit* and is by Jennifer Larson or they can be purchased in the Memorial Art Gallery gift shop.
- Hieroglyphic name Translation also available at www.p22.com/products/hieroglyphic.html
- Ink pad
- Paper
- Charcoal/soot
- Water
- Mixing bowl
- Cattail reeds
- Wooden dowels
- Ex-acto knife/carving tool
- Papyrus paper
 - Blank papyrus 8x11 \$2.50/sheet at www.papyrus-shop.com
 - Blank papyrus 11.8x15.7 \$4.99/sheet at www.egyptiangiftshop.com
 - Blank papyrus sheet sets in varying sizes at www.kingtutshop.com
 - Paper can also be purchased at Rochester Art Supply

Procedure 1:

1. Have children create their names inside a cartouche and place them on their desks for other children to learn. A cartouche is an oval shape in which a king would place his name. Use the cartouches in places children would ordinarily use their names. (A blank cartouche can be located www.nga.gov/exhibitions/2002/egypt/)
2. Having read several of the texts depicting life in ancient Egypt, have the children use the stamps to create a story. Include the translation into English.

Procedure 2:

1. Either cut a cattail reed or a wooden dowel to resemble a writing implement used by scribes.
2. Purchase papyrus paper and have children write their stories/names using papyrus and either charcoal or soot mixed with water, as the Ancient Egyptian scribes would have used.

Assessment: Each child will create a cartouche with his/her name and either help create a class story or an individual one. Children will be able to display understanding of different symbol systems through conversation and implementation of the task.

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