



Time Travel: Egypt

The Mini Time Machine Museum of Miniatures Education Outreach

Lesson Plan for 3-8th Graders

Rationale:

Museums are an important part of our communities, striving to sustain a beautiful mixture between entertainment, preservation, research cultivation, and education. Because museums have access to wonderful resources, they can be used as supplemental teaching tools to engage learners beyond traditional walls and invite further exploration. This lesson is designed to show students that, our knowledge and understanding of the ancient world (Egypt) enhances our perspectives and perceptions of our own worlds.

Materials:

- Glue or tape
- Scissors
- Coloring and writing implements
- PowerPoint projector and computer (if available)
- Images of Ancient Egyptian artifacts and printouts of the “tasks” or job types below.
- Paper pyramid and sarcophagus templates (attached below)

Alignment with standards:

This lesson will address the following Arizona College and Career Ready Standards in Social Studies:

Strand 2: World History

Concept 1: Research Skills for History

PO 4. Formulate questions that can be answered by historical study and research.

PO 7. Analyze cause and effect relationships among individuals and/or historical events.

(PO 8. Describe how archaeological research adds to our understanding of the past.)

Concept 2: Early Civilizations

PO 2. Determine how the following factors influenced groups of people to develop into civilizations in Egypt...

- a. farming methods
- b. domestication of animals
- c. division of labor
- d. geographic factors

PO 3. Describe the importance of river valleys in the development of ancient civilizations.

PO 4. Compare forms of government (Ancient Egypt’s Theocracy).

PO 5. Describe the religious traditions that helped shape the culture of the following ancient civilization: Egypt (i.e., belief in an afterlife).

PO 6. Analyze the impact of cultural and scientific contributions of ancient civilizations on later civilizations: Egypt (i.e., mummification, hieroglyphs, papyrus).

PO 8. Describe scientific and cultural advancements (e.g., networks of roads, aqueducts, art and architecture, literature and theatre, mathematics, philosophy) in ancient civilizations.

Strand 3: Civics/Government

Concept 4: Rights, Responsibilities, and Roles of Citizenship

(PO 1. Describe ways an individual can contribute to a school or community.)

Concept 5: Government Systems of the World

PO 1. Describe the structure of the following governments: Theocracy

Strand 4: Geography

Concept 2: Places and Regions

PO 3. Describe the interactions of people in different places and regions.

Concept 4: Human Systems

PO 5. Identify cultural norms that influence different social, political, and economic activities of men and women.

Concept 5: Environment and Society

PO 1. Describe ways that human dependence on natural resources influences economic development, settlement, trade, and migration.

PO 2. Describe the intended and unintended consequences of human modification (e.g., irrigation, aqueducts, and canals) on the environment.

PO 3. Explain how changes in the natural environment (e.g., flooding of the Nile) can increase or diminish its capacity to support human activities.

Anticipatory Lesson Sequence:**Intro:**

The instructor will describe The Mini Time Machine Museum and will ask if any of the students have visited the museum before. Then, after describing The Mini Time Machine Museum, a brief discussion will establish the idea that a miniature is a small, engineered, and artistically created resemblance of a larger counterpart. Emphasis will be given to the concept of room boxes and dioramas as miniatures that can depict a place and time. As well, the instructor should highlight the importance of the use of artifacts when building knowledge.

Content:

The instructor will invite students to join in discussing the importance of the Nile in Egyptian civilization and highlight the Nile's location on a world map or globe. The instructor will show images from The Mini Time Machine Museum's *Time of the Pharaohs* miniature, which depicts a scene of several different citizens and workers of Ancient Egypt during the construction of a pyramid. What can we learn from looking at something like this? Students will then divide into seven groups and each group will be assigned information about a different type of worker or station from Ancient Egypt. In groups of like roles, students should study the description of their duties and select a group spokesperson. Then, the student spokesperson will present their role to class, focusing on the answers to these questions:

1. What is your job, and what are your responsibilities?
2. What kinds of tools and materials do you use?
3. Is this a good or bad job to have? Why?
4. What is the closest thing to your job that exists in the present?

Assessment:

- Students will be placed in new groups of four to construct a miniature pyramid.
- Each group will decide on a one-word group name and up to four colors (white, black, red, green, yellow, and blue) to represent their group.
- The student designated 'Mason' cuts out the pyramid template.
- The student designated 'Scribe' writes the group's name in hieroglyphs on a sheet of paper and (after the 'Painter' colors the sides of the pyramid) writes the group's hieroglyphs on one side of the pyramid.
- The student designated 'Painter' colors the sides of the pyramid according to selected group colors.
- The student labeled 'Architect' folds and constructs the pyramid into its proper shape.
- All group members should individually write their names on the inside of the pyramid.

Closure:

Groups may elect to present their pyramids, names, and colors. Students and instructor will discuss the construction process of the mini-pyramid and its connection to the different citizen types of Ancient Egypt.

Extension:

Students may further research a role or position that interests them and share what they find with the class. Students and teacher may read about and discuss current news items involving modern Egypt, paying attention to the similarities and differences between modern and ancient Egypt.

Priest

Priests oversee the mummification process – preserving the bodies of pharaohs and other important figures for the afterlife. Because it is so important for a person’s spirit to be recognized and carried into the heavens, this is considered a sacred ritual and only a priest can carry it out.

A priest begins by removing the brain and other organs from the body – making sure to leave the form of the body in place. The stomach, liver, lungs, and intestines are placed in special containers called *canopic jars*. Only the heart is left in the body, because of the belief that the heart is the essence of the person who has died, and they will need it in the afterlife.

After the body’s organs have been removed, the priest spreads *natron*, a special salt, on top of and inside the body to dry it out. Then he carefully wraps the body with long strips of linen. The priest might need to wrap each finger or toe separately to keep the shape of the body in place. Hundreds of yards of linen are needed to wrap one body. Overall the mummification process takes about 70 days.

The priest may wear the mask of *Anubis*, the god of embalming. Anubis has the body of a man and the head of a jackal. As priests work, Anubis watches and makes sure they do each step correctly, so he can escort the body’s soul into the afterlife.

Mason

Masons and stone cutters haul, shape, and lay the stone blocks that make up the pyramid. The stone for the blocks is taken from an open mine called a *quarry* – an area rich in a specific type of mineral, and transported by boat to the building site. Sandstone and limestone are the most common materials used for pyramid bricks. The outer casings of the pyramid are built with harder materials than the core. A single brick might weigh about 2 ½ tons (5,000 pounds) or more, and over 2 million bricks are needed to build the pyramid.

Masons and stone cutters work with a variety of tools, mostly made of copper and dolerite which is harder than the types of stone used in the bricks. Other tools such as measuring instruments are made of wood. Chisels, mallets, and hammers are used to break up the bricks while trowels help put them smoothly together.

Although they work with hard, sturdy materials to build pyramids, most masons and stone cutters live in homes made of soft, affordable mud brick. Because Egyptian civilization is conducted without money, the workers on the pyramid are paid in clothing.

Scribe

The scribe is one of Egyptian civilizations most educated workers, and among the only people in Egypt who can read or write. Using an alphabet of symbols called *hieroglyphs*, the scribe records how much stone is being used to construct the pyramid. He also makes a note of the job that each worker is doing, which tools each worker is using and whether anyone is absent from his post.

The scribe's writing is done on *papyrus*, which is made from the reed of a plant. The paper used in modern times – even the word 'paper' comes from the Egyptian practice of writing on papyrus. The writing is done with reed brushes dipped in ink made with ground minerals and liquid.

To become a scribe, a person (usually a man) needs to be the son of a scribe and attend school for four to five years. At school, a learning scribe practices copying hieroglyphs by carving them into stone and broken pottery. Because of the long schooling and parentage needed to be a scribe, they are well-respected members of society. Scribes do not need to pay taxes or fight in military wars.

Most of what is known now about Ancient Egypt is taken from the writings of scribes, who sometimes managed to record personal histories of Egypt's people along with their business and political work.

Pharaoh

The pharaoh is the ruler of the Egyptian kingdom. He is believed by the people to be a descendant of the gods, and so he will continue to rule after his death. The pharaoh makes all the final decisions in government, although some queens have been known to rule alongside their husbands. Much of the pharaoh's lifestyle is supported by the taxes he collects from the people. These include grains, crops, livestock, and materials. The pharaoh's primary task is to keep those living in the north (Lower Egypt) and south (Upper Egypt) together as one society.

Most pyramids are constructed for pharaohs, as a house for their bodies after death, and to provide them with an easy journey to the afterlife. Since pyramids take such a long time to build, pharaohs usually begin planning their pyramids as soon as they take the throne. When he dies, the pharaoh's body is mummified and placed in a *sarcophagus* – a sculpted, painted coffin. The sarcophagus is brought to be buried in the finished pyramid and laid to rest with a variety of riches from the pharaoh's life. Food and other offerings are brought to a temple outside the pyramid daily in order to ensure the pharaoh's comfort in the afterlife.

Soldier

For many years, a soldier in Ancient Egypt was really a farmer or other laborer who joined a temporary army during a battle or war. Eventually it was decided that having a permanent army would provide a great advantage for the kingdom, and help Egypt maintain its civilization for many years. Soldiers either join and train as adults or are signed up as children for a military career. New soldiers are given uniform haircuts and trained to wrestle and to use various weapons including bow and arrow, spears, axes, knives, and swords. They are also equipped with shields, helmets, and other protective gear – as well as religious jewelry worn to keep the gods on their side.

In addition to soldiers on foot, the kingdoms of Ancient Egypt employed a *chariotry* – a fleet of high-level soldiers on horse-pulled chariots, and a navy which provided defense from rebels and attackers, and also transported food and materials along the Nile River in large rowing ships.

In exchange for their military service, soldiers are given food to eat or trade. Beyond their payment comes the public recognition for bravery or heroism. Even the pharaoh and his family have great respect for the military, making it an esteemed line of work. There are some instances where soldiers have gone on to become king.

Architect

Architects are also called “master builders” or “master planners” because their job is to make a plan for a pyramid and its tombs. They need to follow strict guidelines about the size and placement of a building and perform sacred rituals to ensure that the building will correctly house the spirit of its master. A tomb typically has two distinct chambers: an above-ground chamber called the *mortuary* chamber where food and other offerings can be left, and an underground *burial* chamber to contain the body and its spirit.

Before building can begin on a pyramid, a priest must use the stars to determine the locations of true North, South, East and West. These will be the directions that the walls of the pyramid face and will guide the architect in planning the rest of the pyramid.

An architect designs the inside of the pyramid to contain tombs for the pharaoh and his family, storage rooms for the pharaoh’s many treasures, and even secret passages and traps to ward off robbers. The pyramid’s rooms and passages need to be designed to withstand the weight of the bricks above it.

The architect’s biggest tool is a knowledge of mathematics. Using hieroglyphs that represent different numbers, the master planner draws a design and builds a model for the pyramid to ensure that it will have the perfect structure.

Artist

Artists use their skills in painting and sculpture to fill the interior rooms of the pyramid. The walls of the pyramid as well as the pharaoh's sarcophagus are ornately painted with scenes that depict the pharaoh's life, as well as tributes to the gods with whom the pharaoh will reside in the afterlife. Clay and wooden models are created representing different parts of Egyptian life and left as offerings at the mortuary chamber.

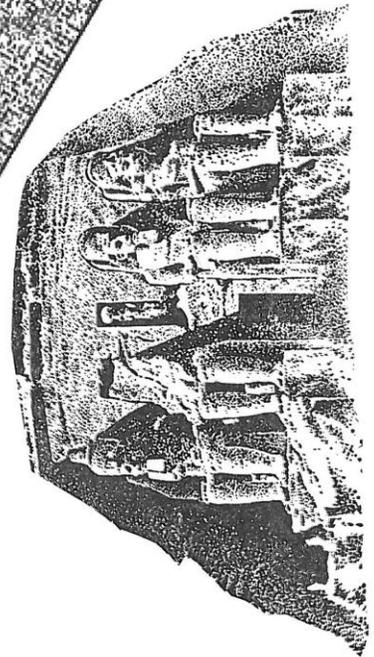
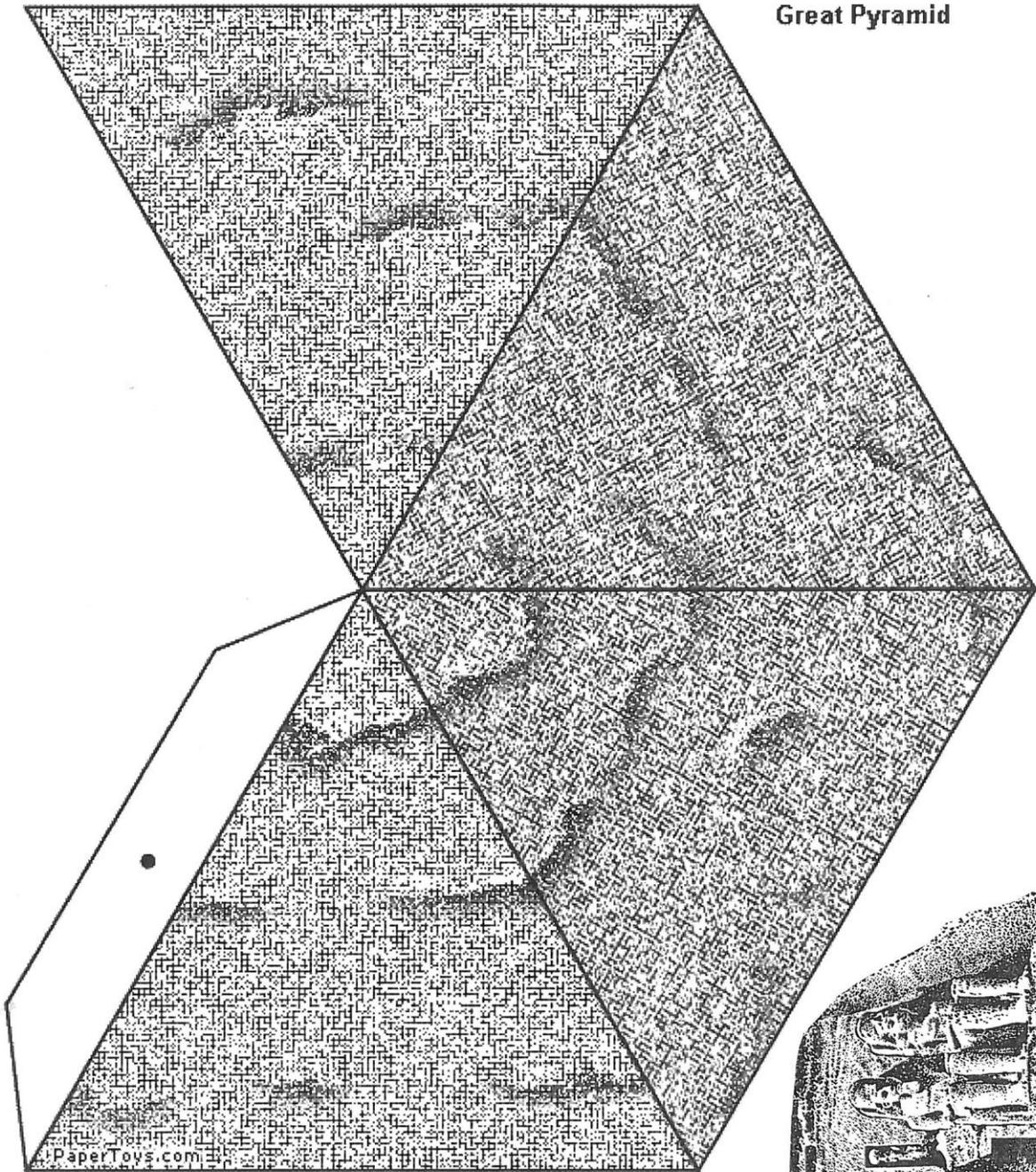
Artists create paints of different colors from melting colorful minerals or sometimes plant materials. Copper, iron, coal, gold, silica, and calcium are some of the most important minerals for artists. Each color used in painting carries important symbolism and stand for life or death, victory and power, heaven and Earth. People in paintings are also given different skin tones depending on their gender and nobility.

A sculpture of a pharaoh usually depicts the ruler as a god, often with an animal feature. Statues are commonly made from a single block of stone, or several pieces of wood put together. Statues are also made to show different noble positions in Egypt such as the soldiers and scribes.

Another art form important to Egypt is relief sculpture, in which figures and characters are chiseled onto a wall. The illustrations of a relief are first drawn with a brush made from reeds and then etched with a chisel.

RED Life Victory Anger Fire Chaos	YELLOW Sun Imperishable Eternal Indestructible	GREEN Vegetation New life Growth Joy
BLUE Sky Water Heavens Creation	BLACK Night Death Resurrection	WHITE Omnipotence Purity Cleanliness Simple Sacred

Great Pyramid



A 	B 	C 	CH 
D 	E 	F 	G 
H 	I 	J 	K 
L 	M 	N 	O 
P 	Q 	R 	S 
T 	TJ 	U 	V 
W 	X 	Y 	Z 

