Every year, in the fall, the great river would overflow its banks. At first, the Egyptians lost their crops, their houses, and (in some cases) their lives. But the Egyptian people noticed after a time that the floods came about the same time every year, in June. So they planned ahead. They would make sure nothing important was on the banks of the river when it was time for the floods. Then, after the water level went back down, they would quickly plant new crops. The floods brought good, fresh soil up onto the land. This soil was ideal for planting barley and other grains.

We recreated this cycle with the children by building a mini river bed using sand, gravel and dirt. We flooded our river and then sprinkled grass seeds along the banks. After observing the river for a week we noticed that the grass seed did begin to grow along the banks!

Not only was the Nile River a source of food and water for the Egyptians, but it provided a way for them to trade with neighboring cities and countries. The Egyptians built wonderful barges to transport goods to and from their cities.
EGYPTOLOGIST

Egypt is a country with a very rich history. We were interested in this ancient history and became Egyptologists for this unit. Egyptology is the study of ancient Egyptian history, language, literature, religion, and architecture.

Egyptologists are archeologists, historians, linguists or art historians who specialize in the scientific study of Ancient Egypt and its antiquities. To kick off our study, we practiced our archeology skills by uncovering jewels that were embedded in rock. The children carefully extracted the jewelry by using hammers, brushes and picks. We discovered that it takes a lot of patience and care to be an Egyptologist.

LIFE ALONG THE NILE

To demonstrate all the knowledge that we have learned about the Nile River and the Egyptians that lived there so long ago, we decided to create a mural in the hallway. The children painted the river, delta, fertile land, and Sahara Desert. The desert was filled with golden sand and palm trees, and plants were added to the banks of the river. We learned that the Pyramids were built on the west side of the river, so we added some there. We learned about the importance of the papyrus plant and lotus flower so we added those to the river. We chose four animals: the Nile crocodile, hippopotamus, zebu and camel to read about. Boats, for transporting goods and people, were drawn in the river. We completed the mural by writing facts about all we had learned about Ancient Egypt.

THE IMPORTANCE OF PAPYRUS

Papyrus reeds grew along the side of the Nile River and were used to make everything! Egyptians made baskets, sandals, mats, ropes, blankets, tables, chairs, mattresses, medicine, perfume, food and clothes - all from papyrus. Probably the most important use of the plant was to make paper!

We made recycled paper from paper scraps. First the students tore paper into little pieces. The pieces were added to water with a dash of glitter and poured into an electric blender. The mixture was blended to a smooth, fine pulp. The pulp was then poured onto a screen. Using a towel, the children pressed down on the screen to remove all the excess water. After the water was removed, the screen was flipped onto a flat surface to dry.
**EGYPTIAN SELF PORTRAITS**

Ancient Egyptians did not create art simply to create something beautiful. Their art was functional. It was beautiful, but it had a purpose. Artists and craftsmen were considered to have the same type of talent - they were all craftsmen. Egyptian art was concerned mostly with the continuation of life. Egyptian craftsmen created protective amulets, tomb paintings, magical enchantments on papyrus, funeral jars, painted pottery to hold nourishment, pottery figures, painted scenes, cartouches, hieroglyphics, ivory grave goods, protective weapons, boats and barges, and other goods that helped to protect and continue life, both in this world and in the afterlife.

Artists had a special way of drawing or painting people. The Egyptians drew heads, eyes, legs, and feet as if you were looking at them from the side. They drew the shoulders and chests as if looking at them from the front. It was uniquely Egyptian and very distinctive.

We drew our monthly self portrait in this Egyptian style. We also added people to the hallway mural using this technique.

**Penelope adding hieroglyphics to her self portrait.**

**HIEROGLYPHICS**

Today, by virtue of the vast quantity of ancient Egyptian literature and the discovery of the Rosetta Stone, we know more about Egyptian society than most ancient cultures. We have Hieroglyphics to thank for this! Hieroglyphics is a system of writing that uses pictures instead of letters. Hieroglyphics were called by the Egyptians, “the words of God” and were used mainly by priests.

We practiced writing in Hieroglyphics by using the code to create a cartouche with our name, write messages to our friends, add writings to our sarcophagus, and decorate our tomb walls.

**EGYPTIAN DIET**

The Nile River’s fertile banks offered the Ancient Egyptians a plentiful bounty of fruits, vegetables, wheat and fish. A typical diet for an Egyptian consisted of pomegranates, okra, peaches, figs, dates, bread, honey, grapes, edamame, chickpeas, goat, beef and fish.

During our Work Time, students are able to sample foods that may have been new to them. After students tasted the foods, they recorded their preferences on a chart. The students enjoy sharing their opinions and counting the differences among the classmates. We tasted figs, dates, pomegranate, honey in the comb, edamame, grape leaves, hibiscus tea, and roasted chickpeas. Students enjoyed the pomegranate, edamame and honey the most!
GODS AND GODDESSES

The ancient Egyptians worshipped a huge number of gods and goddesses. The bodies of these ancient gods were always human but their heads might be an animals. Like the Super Heroes of today, some of these gods had special powers and could shape shift. The children were fascinated with the stories of the gods and incorporated the stories into their dramatic play!

Since there are over 2,000 Egyptian gods and goddesses, we focused on the top few. Ra, the sun god, was considered the King of the Gods because he created the world and all the other gods. Ra’s role was to sail across the heavens during the day in his boat. At the end of the day Ra “died” and sailed through the underworld, leaving the moon to light the night. Ra was reborn every morning after defeating his main enemy, Apep. Ra is depicted with the head of a falcon. Falcons are the fastest creatures on earth. After learning some interesting facts about flacons, the children tested the speed and accuracy of a variety of paper airplanes attempting to fly the planes through a hoop.

Each child chose a god or goddess to present to the class. They drew the head of the god, and created a relief of the drawing by adding aluminum foil over a dried glue outline. We added color with acrylic paint and shoe polish. The children then learned facts about their god and presented them to the class.

Naturally, the children loved learning about about the habits of the scarab beetle. We made our own scarab amulets with model magic and paint. Now we are protected against the “weighing of the heart”. Ma’at would be convinced that we are good and allow us into the after life.

EGYPTIAN MAKE UP AND PERFUME

Egyptians believed that their makeup had magical healing powers, and they weren’t entirely wrong. Research has shown that the lead-based cosmetics worn along the Nile actually helped stave off eye infections.

Throughout the ancient world, the Egyptians were famous for their scents and perfumes. We made our own perfume by smashing rose petals through a sieve into a cup of water. We repeated this action several times. The perfumed water was funneled into small vials to enjoy at home.
The ancient Egyptians’ Land of Two Fields, or the Afterlife, was a real place. It was a heavenly place. It took more than dying to enter the Land of Two Fields. You had to earn your way into the Afterlife by doing good deeds while you were alive. The more good deeds you did, the lighter your heart became. To avoid any trickery, the goddess Ma’at weighed your heart against the feather of truth. If your heart was light, you sailed away into the Afterlife.

Another requirement for the Afterlife was that you had to preserve the body. When the soul left the body after death, it needed to recognize the body in order to be reunited for the Afterlife.

We used the Egyptian technique of mummification on an apple slice to help the children understand the process. The children recorded the weight of an apple slice. They covered the slice in a mixture of salts: epson salt, rock salt, table salt, and himalayan pink salt. After 4 days, we weighed the apple slice and recorded the new weight. We observed that the apple slice shrunk and weighed less.

Each child prepared a “pipe cleaner body” for a trip to the Afterlife. The children mummified the “pipe cleaner” person by removing all the organs and leaving the heart (a heart shaped gem), sprinkling salt on the body, counting to 40 (to represent the days) and then wrapping the person in a burial shroud (toilet paper). We added magical spells and an amulet for protection against the monster in the Underworld. The children drew a death mask to place on top of the mummy so that the “Ka”, the soul, could find the body once it was buried.

Canonic jars were made for the organs that were removed from the body: the liver, the intestines, the lungs and the stomach. The jars were decorated with the heads of the four sons of Ra. We reused old marker caps and decorated these to resemble the canonic jars with the heads of a human, falcon, baboon and jackal.

The Egyptians believes the afterlife was a mirror-image of life on earth. When a person died, their individual journey did not end but was merely translated from the earthly plane to the eternal. In keeping with this concept of the mirror image, there was also work in the after life. The ancient Egyptians were very industrious and one’s work was highly valued by the community. In order to enjoy your afterlife and not have to work for all of eternity, the Egyptians came up with the concept of the Shabti doll. The Shabti is a small human figure representing a person who would perform a given task for the deceased in the afterlife. The children made Shabti dolls from wooden clothes pin and included these in the tomb.

The walls of the burial chamber were decorated with pictures of the life of the deceased. The Scarab Beetle and Eye of Horus were presented for protection.

The mummy was placed in the sarcophagus, with items needed for the afterlife: food, jewels, gold, furniture, Shabti dolls, canonic jars and anything else the deceased felt was important for them to take with them on their journey.
SARCOPHAGUS

A sarcophagus is a carved container that houses a coffin and an Egyptian mummy. The main purpose of the sarcophagus was the protection of the corpse. The children drew and decorated a life-sized sarcophagus, adding details, metallic paint and even traps to deter a tomb raider! All of the sarcophagi are displayed in the Valley of the Kindergarten Kings located in our hallway.

CROCODILE SUBTRACTION

Isaac working with “greater and less”.

The ancient Egyptians did not invent subtraction, but they did motivate our class to begin working with the concept. Using the Nile Crocodile and its enormous mouth, we introduced the concepts of “greater and less”. The ‘greater than’ (>) symbol resembles an open crocodile mouth. Giving the children two numbers, we asked which number the hungry crocodile would rather eat (the larger, of course). Once we were able to identify greater numbers, we introduced the concept of subtraction. The children explored this concept while playing “Crocodile Subtraction”, an activity where friends selected two numbered cards from two baskets. One basket was labeled with a crocodile (the number you subtract), the other labeled with a goldfish (the number you begin with). Students recorded the number on the goldfish card, then selected that many goldfish from a pile. Next, they recorded and “took away” that number of goldfish from the crocodile card. The amount of goldfish remaining was recorded as their answer (the difference).

We put addition, subtraction and finding the lesser number all together when we had to find out if our hearts were worthy of the Afterlife. Using the Rekenrek to help with counting, the children picked a card from the heart pile. We solved the addition or subtraction equation using the top row of the Rekenrek to record the answer. Next we chose a card from the Feather of Truth pile. We solved this equation on the bottom row of the Rekenrek. If your heart was lighter or less than the feather then you were able to enter the Afterlife. If the feather was lighter, then you were eaten by Apep (played by Mrs. Perovich).