

Introduction

This teacher's guide offers background information and ideas for classroom activities that complement the large format film *Mysteries of Egypt*. The first chapter includes a synopsis of the film; the others focus on ancient Egypt and the amazing accomplishments of its civilization.

Each chapter contains topics for discussion and research, fact and activity sheets, and a mystery suggestion – a question or statement that can be used to stimulate interest in the study of ancient Egypt. The fact and activity sheets can be photocopied for use by students.

This guide has been designed to supplement educational resources available on the World Wide Web and elsewhere. Teachers are encouraged to adapt the information and activities to suit the ages and interests of their students.

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Chapter 1



Mysteries of Egypt, a large format Film

Preparation for Viewing the Film

Objectives

To spark interest in ancient Egypt, prepare students for viewing the film, and develop critical thinking.

Discussion and Research Projects

To introduce the film *Mysteries of Egypt*, start by discussing the word “mystery” and the methods used to solve mysteries, then move to a discussion focused on ancient Egypt.

1. What does the word “mystery” mean?

The dictionary gives several definitions:

- a hidden or secret thing, something beyond human knowledge or comprehension, an enigma;
- a truth known only by divine revelation;
- in ancient religions, certain rites to which only the initiated were admitted;
- a doctrine of faith involving difficulties that human reason is incapable of understanding.

2. In a murder mystery, who helps solve the case? How do they go about their work?

3. Which “detectives” search for clues about the unsolved mysteries of ancient cultures?

Multidisciplinary teams work on collecting data, analyzing their findings and drawing conclusions from them. As more information is brought to light, earlier conclusions or theories are often modified or discarded in favour of new ones.

The “detectives” who work on solving the mysteries of ancient Egypt are called Egyptologists. This is a general term that includes a large number of specialists such as:

anthropologists, historians, art historians, environmentalists, botanists, ecologists, geologists, zooarchaeologists (ancient animal remains), paleobotanists (ancient plant remains), physical anthropologists (ancient human remains), epigraphers (ancient writing systems), soil scientists, theologians, microbiologists (DNA analysis), architects, mathematicians, astronomers.

4. Why do you think the film is called *Mysteries of Egypt*? Can you describe some of the mysteries surrounding ancient Egypt?
5. What do you know about ancient Egypt? Where did the Egyptians live? How old is their civilization? What are some of their famous accomplishments? What do you know about the pharaohs?
6. The film shows views of many of the famous sites of ancient Egypt. If you were the filmmaker, what would you want to include in a film on this topic? Make a list of the sites you would choose and compare it with what you see in the film.
7. Many historical events are re-enacted in the film. Why do filmmakers use this technique? What type of research should be done in order to make these scenes historically accurate? Before shooting begins, what has to be done (research and writing a script, production of costumes and props, set design and fabrication, hiring actors and crew, securing shot locations, etc.)?
8. If you were the filmmaker, what historical events would you re-enact in a film on ancient Egypt? Make a list of these events and compare it with what is included in the film.
9. What do you know about IMAX® technology? How big are the camera, projector and screen?
10. Use **Activity Sheet 1** to get your students thinking about some of the mysteries that surround ancient Egypt.

Follow-up after Viewing the Film

Objectives

To reinforce what your students learned from the film, and to develop the ability to summarize and evaluate the content of the film.

Discussion and Research Projects

1. What did you like best about the film? How would you rate the film in terms of its educational and entertainment value?
2. Pretend you are a film critic. Write a review of the film, or present one orally. Outline the main theme and the storyline, and describe the special effects.
3. Before viewing the film, you made a list of the sites and historical events you would include in the film if you were a filmmaker. How closely does your list agree with the content of the film? Do you think the filmmakers made a good choice? Explain why.
4. Why did the filmmakers use black-and-white film for the re-enactment scenes of the discovery of Tutankhamun’s tomb by Howard Carter in 1922?

5. The English girl in the film is visiting her grandfather, who takes her to some of Egypt's most important sites. What did she learn from her grandfather?
6. Ask your students if any of them have returned to their family's homeland to visit their grandparents. What did they learn about their country of origin from their grandparents?
7. Have your students discuss what they have learned from their grandparents about the history of their family and their country of origin.

FACT SHEET: The large format Film *Mysteries of Egypt*

The splendours of the ancient Egyptian civilization have been a source of inspiration down through the ages. Since the Greek historian Herodotus first wrote about his travels through Egypt in the fifth century B.C., people have speculated about how the Egyptians built their massive monuments, and marvelled at the beauty of their art and architecture.

The Egyptian civilization originated over 5,000 years ago, and the country's historic sites are among the world's greatest tourist attractions. The seeds of civilization were sown in the fertile Nile Valley, surrounded by the endless desert, at the crossroads between East and West. Here, the first multinational state was born, one of the first writing systems using hieroglyphs was invented, and the concepts of kingship, religion and bureaucracy were developed.

Ancient Egypt's monumental achievements have now been captured on the giant IMAX screen. Through the magic of large-format cinematography, *Mysteries of Egypt* takes you on a breathtaking flight over the world's longest river, through the Valley of the Kings and into the famous tombs of the pharaohs.



The Great Sphinx at Giza
CMC S97 10293



*Priests prepare Tutankhamun's mummy for burial. Re-enactment scene from the film *Mysteries of Egypt*.*
CMC ECD98-016 #45



Omar Sharif and Kate Maberly in the Valley of the Kings. Re-enactment scene from the film *Mysteries of Egypt*.

Photo: Adham Mostafa (CMC S97 10659)

You will go back in time to relive important chapters in Egyptian history, to witness the building of pyramids and the drama of the tomb robbers. You will see how Tutankhamun's mummy was ceremoniously placed in his tomb and feel the excitement when Howard Carter first peered into the tomb. You will also learn about the mummy's curse!

In *Mysteries of Egypt*, the ancient Egyptian civilization is seen through the eyes of a young girl (British actress Kate Maberly) who visits her grandfather. Played by well-known Egyptian actor Omar Sharif, the grandfather takes her around the country to introduce her to the wonders and magic of the ancient Egyptian civilization. At first, she doesn't share her grandfather's enthusiasm, but she soon changes her mind. Like so many tourists who visit the pyramids, she is awestruck by the sheer magnitude of these architectural wonders. As she listens to her grandfather's stories, she is fascinated by the mummy's curse and begins to appreciate the incredible legacy of the land of the pharaohs.

Western civilizations trace their roots to the ancient world, the Greeks, the Romans and the Egyptians. *Mysteries of Egypt* explores the legacy of the Egyptians. Only the giant IMAX screen can truly capture the magnitude of this amazing civilization!

IMAX® Technology

Since the film is extremely large, it is not surprising that the IMAX camera is oversized and heavy, weighing 38 kg (84 lbs.). Lightweight portable cameras are used for special applications, but the regular camera is the workhorse of the film crew. Sturdy tripods, cranes, dolly tracks and pure muscle



IMAX camera filming a re-enactment of the building of pyramids
CMC ECD98-010 #76

are required to manoeuvre it into position. Special mounts on helicopters and small planes hold the camera steady for those exciting aerial shots audiences have come to expect in a large format film.

A frame of the film holds an image 10 times larger than that of a 35 mm film, so a cartridge is good for a mere three minutes of recording. The usual camera speed of 24 frames per second is sometimes increased to 48 or 96, which really limits the time a film cartridge can be used. For this reason, the IMAX camera is reloaded often during the filming of lengthy sequences.

The IMAX projector is the most powerful projector ever built and has the highest resolution. Its lamp is so bright that it would be possible to see it from the moon.

Both IMAX and IMAX dome-screen theatres use a “15 perf 70”^{*} format. The only difference between them lies in the size and shape of the screen. Films are projected onto a flat vertical screen that is approximately six to seven storeys high or onto a circular ceiling screen with a diameter as large as 24 metres (79 feet).

^{*} “15 perf 70” means that there are 15 perforations per picture frame on a 70 mm film.

Chapter 2

Geography and the Environment

Objectives

To gain an understanding of the geography of Egypt and its influence on the ancient Egyptian way of life, and to develop skills in information gathering and analysis.

Mystery

Why did the ancient Egyptian civilization emerge in the Nile Valley? What environmental factors provided the right setting for nomadic hunters and gatherers to settle into farming communities?

Discussion and Research Projects

1. Describe how Egypt's geography has changed since the time the country was covered by an ancient sea.
2. What geographic features allowed ancient Egypt to develop in relative isolation from its neighbours?
3. Explain why the Nile River Valley is considered a gift to Egypt.
4. Describe the annual flood cycle of the Nile. Why was this so important to the survival of the people?
5. In the ancient Egyptian calendar, the new year began in July. Can you think of a reason for that?
6. What were the principal crops and domesticated animals raised by the ancient Egyptians?
7. What are the main crops and animals raised in Egypt today?
8. How did the ancient Egyptians travel around the country? What animals were used to move goods on land?



9. The civilization of ancient Egypt was one of the first to emerge. What factors contributed to its development?
10. Name some of the dangerous animals and insects that live in and along the Nile.

Creative Projects

1. Use **Activity Sheet 2** to make a map of Egypt. Name the major geological features, such as the rivers, delta, lakes and deserts, and indicate the location of the principal cities, pyramids, tombs and temples of ancient Egypt.
2. Use **Activity Sheet 3** to identify the animals of ancient Egypt and learn about their habits and characteristics. This will give your students insight into why the ancient Egyptians chose certain animals to represent their gods.
3. Use **Activity Sheet 4** to learn about some of the plants that were important to the ancient Egyptians.
4. Make a chart showing the average temperatures and precipitation in your region and in Egypt in December and July. Describe the winter and summer climate in Upper Egypt (southern region, around Aswan) and Lower Egypt (northern region, around Cairo and the delta).

FACT SHEET: Geography and the Environment

Early Beginnings

The desert and the Nile River emerged when the ancient sea that covered most of Europe and northern Africa 45 million years ago shifted, forming the Mediterranean Sea basin. This shift occurred when the earth's plates moved, creating the Himalayas and the Alps. As the Mediterranean basin sank to a much lower level than it is today, the Nile rushed down to it from the Ethiopian highlands. Over thousands of years, it evolved into its present shape. Fossils from the ancient sea can still be found throughout Egypt.



The Nile River with the Valley of the Kings in the distance
CMC S97 10231

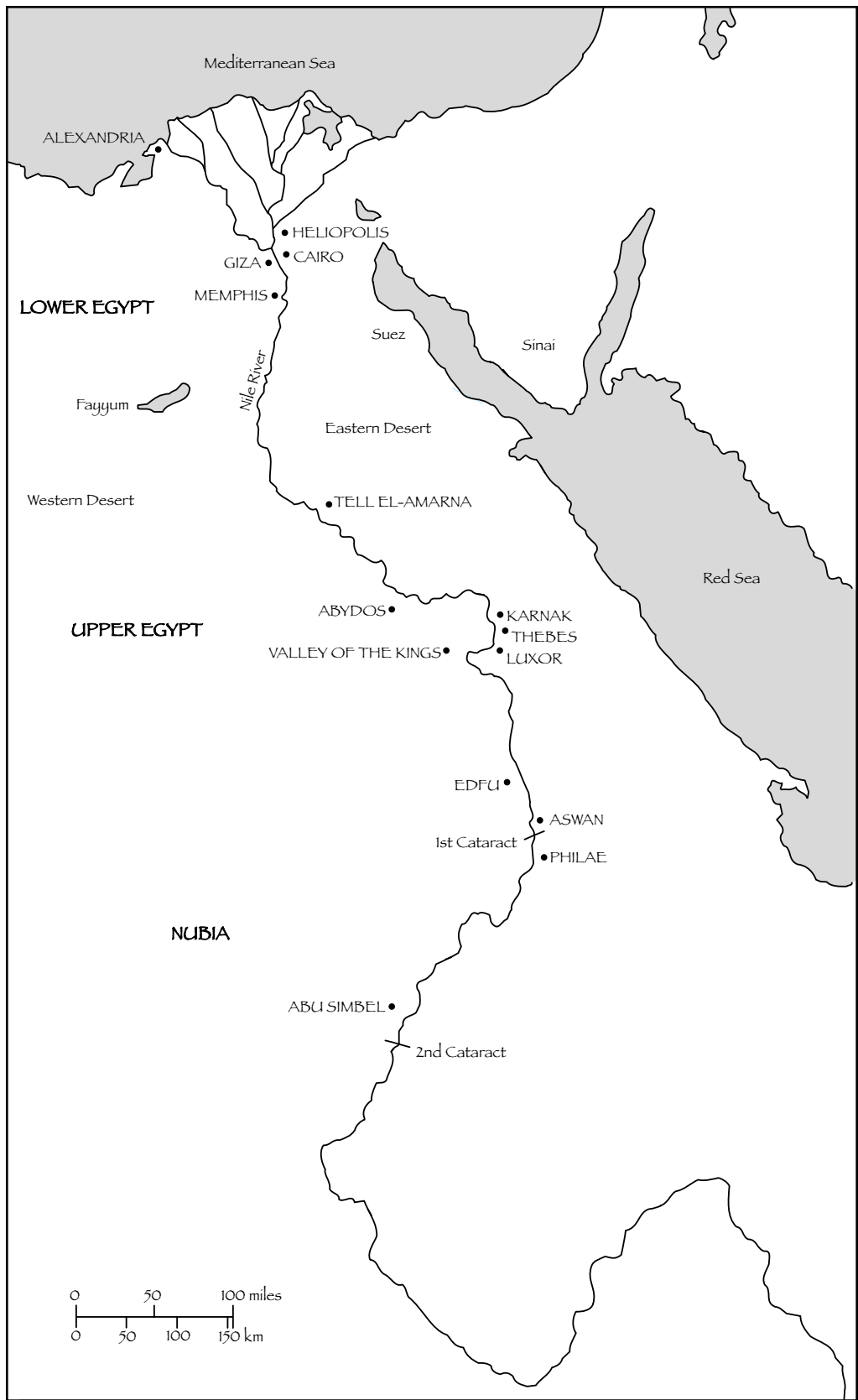
The northern region of Egypt is surrounded by two deserts, the mountainous Eastern, or Arabian, Desert and the sandy Western, or Libyan, Desert. In ancient times, the Egyptians called the desert the “red land”, distinguishing it from the flood plain around the Nile River, called the “black land”. These colours reflect the fact that the desert sands have a reddish hue and the land around the Nile turned black when the annual flood waters receded.



The desert near Giza
CMC S97 10082

In the pre-dynastic period, nomadic hunting tribes roamed these desert regions as they had done for centuries, stopping at oases to replenish their water supplies. Around 5000 B.C., when the climate became more arid, they retreated to the Nile Valley, creating the first urban settlements and making a transition from hunting to farming. These communities were concentrated in the northern and southern regions. As a result, Egypt became known as the “Double Land” or the “Two Lands” of Upper and Lower Egypt.

The two lands were united in 3000 B.C. by the legendary King Menes (who is believed to have been King Narmer). He established a new administrative city where the Nile River branches out into the delta. In ancient times, it was called “White Walls” or Mennefer; the Greeks called it Memphis (near Cairo). It remained the capital of Egypt until the New Kingdom, when Thebes became the capital.



Ancient Egypt

In the pre-dynastic period, Egypt's isolation was a determining factor in the birth of its civilization.¹ The majority of Egyptians lived in the Nile Valley, which is bounded by deserts. To the north lay the Mediterranean, and to the east, the Red Sea, leaving them virtually isolated from their neighbours on all sides except the Sinai Peninsula. The country's geography protected it from invasion and allowed the people to develop a strong sense of national identity and a highly individual culture. The way the pharaohs perceived themselves reflects the country's pride. They considered themselves to be gentlemen — the only true men — and spoke of the leaders of neighbouring countries in contemptuous terms, calling them vile.²

Nile River Valley

The majestic Nile River flows north from the headwaters in Burundi to the Mediterranean Sea, a distance of 6,741 kilometres³ (4,189 miles). This makes it the longest river in the world!

The shape of the Nile River Valley resembles a lotus flower, the ancient Egyptian symbol of the regeneration of life. The long, narrow river valley is the stem, the delta that spreads out in the shape of a triangle is the flower, and the Fayyum region is a bud.

The Upper Nile is divided into three tributaries: the White Nile, the Blue Nile and the Atbara River. The White Nile flows from sources near Lake Victoria, and the Blue Nile originates in the Ethiopian mountains. The Atbara River flows from the Ethiopian highlands and meets the combined White Nile and Blue Nile just north of Khartoum. Before the river enters the Mediterranean Sea, it divides into four smaller tributaries in the delta region.

For centuries, the Nile River flooded the valley, enriching the land with a thick layer of alluvial soil. Flooding occurred from July to September as the result of the tropical rains in the Ethiopian tableland. The river attained its highest level in October then began to recede to its lowest point sometime between April and June.



Two figures of the Nile god, Hapi, tying lotus and papyrus plants together around the lungs and windpipe of Egypt. The drawing symbolizes the union of Upper and Lower Egypt.

CMC ECD98-025 #8



Bas-relief of Hapi, the god who controlled the flooding of the Nile

CMC ECD98-019 #94

Some degree of flood control has been practised since early times. River banks were raised and canals dug to funnel the water over the land. Elaborate precautions were taken to prevent overflowing, but, at times, excessive flooding caused destruction and a loss of property and life. The land has not experienced flooding since the construction of the Aswan Dam, however. The dam was built in 1902 and raised to its current height sixty years later.

Agriculture

The flooding of the Nile rendered the narrow strip of land on either side of the river extremely fertile. Intensive agriculture was practised by the peasant population. As the flood waters receded, sowing and ploughing began, using primitive wooden ploughs.

Since rainfall is almost non-existent in Egypt, the floods provided the only source of moisture to sustain crops. Irrigation canals were used to control the water, particularly during dry spells. The principal crops cultivated during the Pharaonic era were barley, emmer (a coarse wheat), lentils, beans, cucumbers, leeks, onions, dates, figs and grapes. The abundance of flowers provided nectar for bees to produce honey, which the Egyptians processed. Flax was grown for making linen.

A variety of domesticated animals were raised, including cattle, oxen, sheep, goats, pigs, ducks and geese. Donkeys and horses came from Asia around 1600 B.C., and camels were introduced around the ninth century B.C. In early pharaonic times, camels were unknown.



Peasant farmers used shadufs to conduct water from canals onto the fields to irrigate the crops.

*Painting: Winnifred Needler
Photo: Harry Foster (CMC S97 10791)*



Harvesting wheat

*Painting: Winnifred Needler
Photo: Harry Foster (CMC S97 10796)*



Image of geese painted almost 5,000 years ago on the wall of a tomb near the pyramid of Meidoum

Photo: Harry Foster (CMC S98 3541)

The Marshes

The marshes and swamps along the Nile were well stocked with fish, including mullet, perch, eel and catfish. Nearly all the species were edible. They were eaten raw, dried or pickled.

The wetlands were also the nesting and feeding grounds of a variety of birds, animals and insects. Frogs, grasshoppers, butterflies, dragonflies, kingfishers, ibis, herons, pigeons, lapwings, weasels and mongooses are but a few of the species found there. Crocodiles, hippopotamuses, scorpions and poisonous snakes were particularly dangerous. The ancient Egyptians hunted the hippopotamuses but left the crocodiles alone, fearing the god of these animals.

A rich variety of plants were harvested in the swamps and marshes. Of chief importance were papyrus, reeds and water lilies (lotus). Papyrus stalks and reeds were used to make ropes, mats, baskets, huts and light skiffs (boats). Papyrus was also made into paper, and part of the stalk was chewed, much like the way people chew on sugar cane. Water lilies were collected for their perfume and their beautiful petals.



Hunting birds in the marshes
CMC ECD98-024 #44



Man casting a fish net from a papyrus skiff
CMC ECD98-027



Marshland along the Nile River
Photo: Danielle Cormier (CMC S97 10679)

The Climate

Classified as desert, Egypt is a hot, dry country. The deserts that surround the Nile Valley comprise over 90 percent of the country's surface. In the summer, the upper regions are dry and the delta humid. In the winter, the temperature is more moderate, and at night, the desert can be cold, even in the summer.

The days are generally bright and sunny throughout the year. There is virtually no rain in the summer, and very little in the winter. From March to mid-May, dust storms can rise up, keeping people indoors.

Chapter 3

The Ancient Egyptian Civilization

Objectives

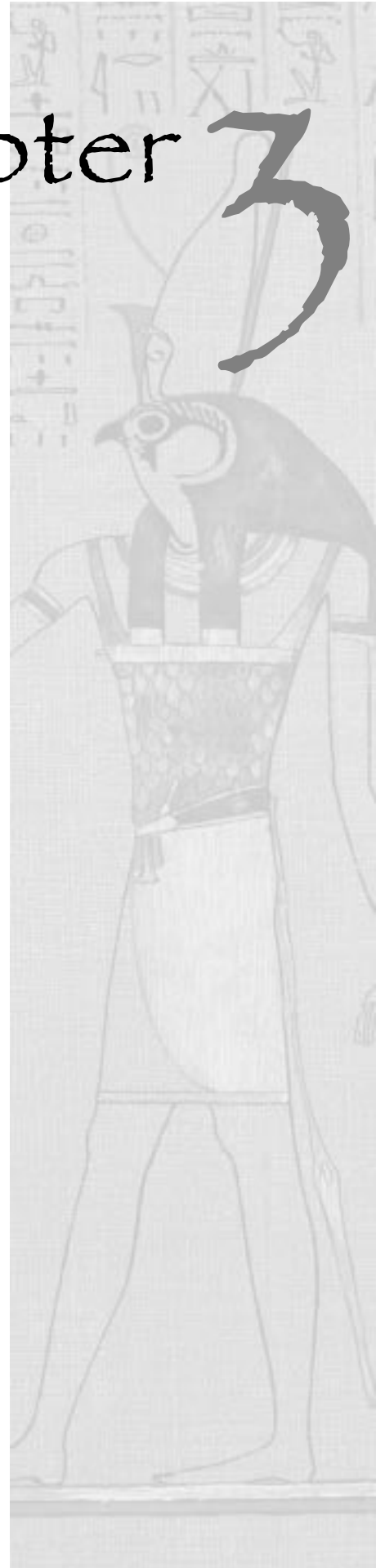
To put the ancient Egyptian civilization into historical perspective and to look at why it is considered a great civilization.

Mystery

Why did the ancient Egyptian civilization last so much longer than all the other civilizations that came after it?

Discussion and Research Projects

1. a) When did the pharaohs rule Egypt?
b) Make a list of the pharaonic periods and the corresponding dates. The dates will vary from one source to another. Compare this on a time line with other ancient civilizations you have studied.
2. The ancient Egyptian civilization has been acclaimed as one of the greatest of the ancient world. Do you agree? Why? Use the criteria for evaluating ancient civilizations to see how Egypt rates (see **Activity Sheet 5**).
3. How did the ancient Egyptians explain the origins of their first pharaoh?
4. Why are so many vestiges of the ancient Egyptian civilization visible today?
5. Why did the ancient Egyptian civilization fall into decline?
6. Compare the reasons for the decline of the ancient Egyptian civilization with those for other civilizations you have studied.
7. What two nations ruled Egypt in the last period of dynastic rule?



8. History has shown that all great civilization go through a cycle of rise and fall. What factors may pose a threat to the survival of contemporary civilizations?

Creative Projects

1. Use **Activity Sheet 5** to learn about the characteristics that distinguish ancient Egypt as a great civilization. Some of the criteria used to evaluate a civilization are: a unified world view or a religion, a government, a communication system, trade and defence capabilities, architectural achievements, proliferation of the arts, and a diversified workforce.
2. Use **Activity Sheet 6** to learn how to read the symbols on Narmer's palette. King Narmer united Upper and Lower Egypt in 3000 B.C. (late pre-dynastic period). Ask your students why Narmer had such a palette made. Consider the importance of creating visual images in a society that was largely illiterate.

FACT SHEET: The Ancient Egyptian Civilization

Egyptian Time Line

The pharaohs ruled ancient Egypt for almost 3,000 years. The first dynasty started in 3000 B.C. with the reign of King Narmer. In 332 B.C., Alexander the Great drove out the hated Persians to become the new ruler of the land. This brought the pharaonic era to an end.

In the fourth century B.C., a high priest and scribe of the sacred shrines of Egypt named Manetho compiled the first comprehensive list of the pharaohs. He grouped their reigns into dynastic divisions that to a large degree are still considered accurate today.

Mythical Beginnings

Ancient cultures trace their origins to a mythical time when the earth was formed and humans were born. Creation stories — accounts of that mythical time — were passed down through the ages and recorded in paintings and in writing.

In ancient Egypt, these accounts were written in hieroglyphs on the walls of pyramids, tombs and temples, and on wooden tablets and sheets of papyrus. These sacred writings provide an indication of how the Egyptians explained the origins of their culture.

The texts make reference to the very early history of Egypt, to a time when the land was ruled by god-kings. The mythical god Horus was believed to be the first god-king to rule Upper and Lower Egypt. The pharaohs were considered the living Horus, and when they died, they became Osiris, Lord of the Dead. As intermediaries between the human world and the world of the gods, the pharaohs brought wisdom and justice to their people, and taught them the secrets of life and death.

The Decline of Ancient Egypt

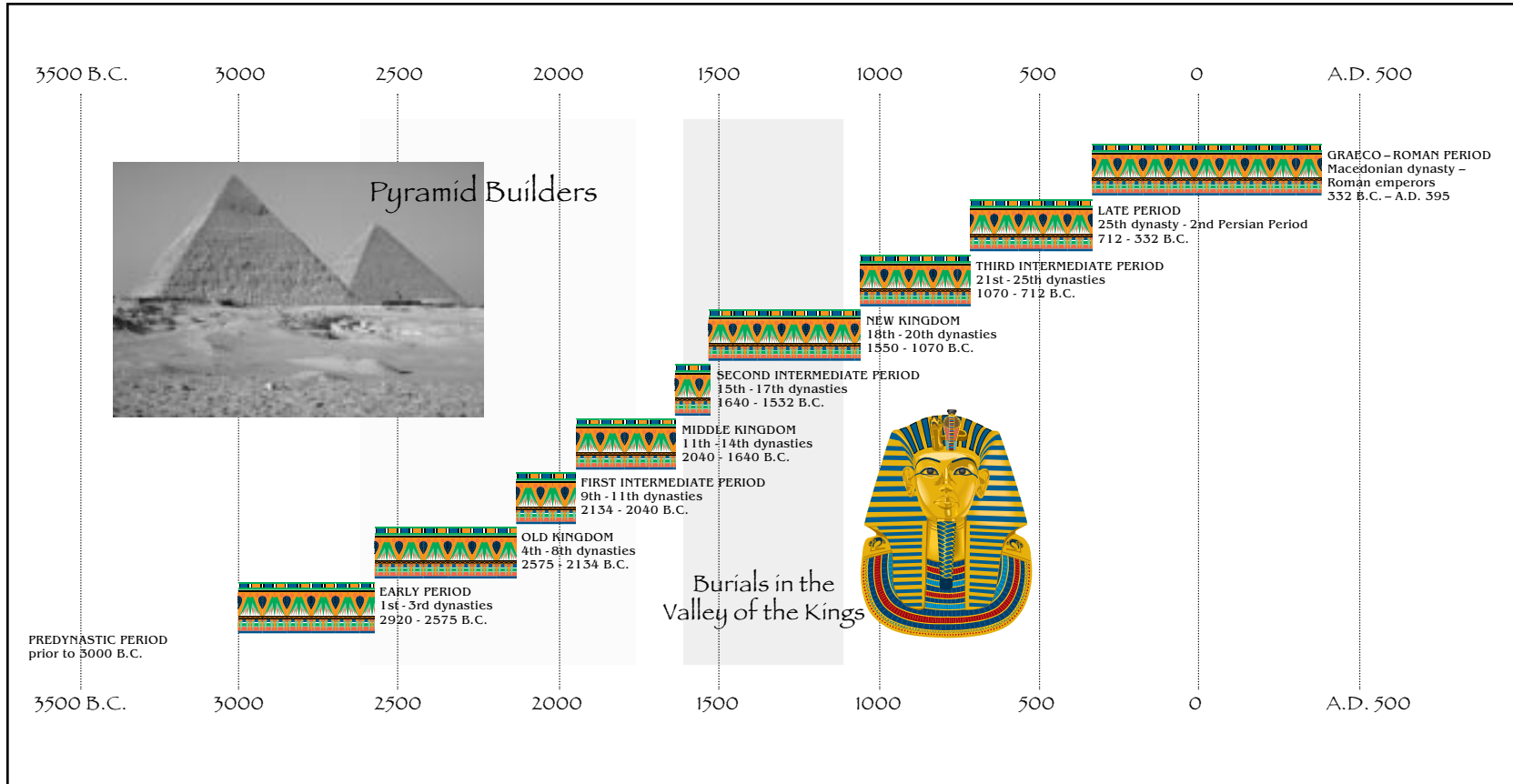
Although Egypt was sometimes ruled by foreign princes during the pharaonic period, it continued to maintain its independence. Over the centuries, the power of the pharaohs increased and decreased numerous times before Egypt came under foreign rule. Around 1000 B.C., Egypt was virtually bankrupt and its strength began to decline.⁵



Horus wearing the Double Crown of Upper and Lower Egypt
Photo: Harry Foster (CMC S98 3562)

Chronology of the Pharaonic Periods⁴

It should be noted that the dates assigned to the pharaonic periods vary slightly from one Egyptologist to another.



Graphics: Danielle Dupont



A pharaoh making an offering to an Apis bull
CMC ECD98-014 #15

The Persians and the Macedonian Greeks were the first foreign powers to rule the country. In 350 B.C., a new Persian ruler, Artaxerxes III, attempted to invade the country but failed. Seven years later, Egypt did fall to the Persians, during the reign of Nectanebo II, the last Egyptian pharaoh. According to Greek accounts, the Persians were cruel masters, robbing temples, killing sacred animals and burdening the people with taxes.

The Macedonian Greek emperor Alexander the Great waged a campaign to destroy the Persian empire. When he entered Egypt in 332 B.C., he was hailed as a divine being and saviour. He hastened to Memphis, performed a sacrificial ceremony to the Apis Bull and was accepted as the new pharaoh. The founding of the city of Alexandria, on the Mediterranean coast, marked the beginning of the end for ancient Egypt.

Egypt changed immensely under Greek rule, although to a large degree the population maintained its way of life, and continued to write in its own language and to observe its traditional customs. Greek and demotic (a form of hieroglyphs) were both used in the Late Period, but in the third century A.D., hieroglyphic writing began to be replaced by Coptic, a form of Greek writing. As time passed, fewer and fewer priests could read hieroglyphs, and gradually the Egyptian language died out. Following the deaths of Mark Anthony and Cleopatra VII in 30 B.C., Egypt became part of the Roman Empire. When the Empire was divided in A.D. 395, Egypt was controlled from Byzantium until the Arab conquest in A.D. 641.

Chapter 4

The Egyptian Religion and Creation Myth

Objectives

To gain an understanding of the Egyptian creation myth and to become familiar with the primary gods of the Egyptian pantheon.

Mystery

How did the ancient Egyptians explain the creation of the world? Which gods played a role in forming the earth and bringing civilization to the people?

Discussion and Research Projects

1. What are myths? Do they contain truths? How can you understand their symbolic meaning?
2. Where do myths come from? How did myths, particularly Egyptian myths, influence other religious beliefs?
3. Describe the events that unfolded in the creation myth.
4. What symbols found in the creation myth were used by the pharaohs?
5. The creation myth is full of dualities (opposites). Can you name them?
6. How does the creation myth explain the arrival of pain and suffering on earth?
7. Why do you think the sun god was so important to the Egyptians?
8. Compare the Egyptian creation myth to other creation myths from other parts of the world.
9. Compare the Egyptian creation myth with modern scientific theories on how the earth and the universe were formed.



Creative Projects

1. Use **Activity Sheets 7, 8 and 9** to learn about how the ancient Egyptians visualized the creation of the world.
2. Use **Activity Sheet 10** to learn about the cosmic gods of the creation story.
3. Divide your students into small groups. Ask each group to create a dialogue and act out the events of the Egyptian creation myth.
4. Ask your students to produce drawings illustrating the events that unfolded in the creation myth.

FACT SHEET: The Egyptian Religion and Creation Myth

Myths

Myths are stories that become part of humanity's collective memory.⁶ They are said to represent the dreams of a society. It is possible to interpret them from a variety of perspectives to explain natural phenomena, such as how the earth was formed. At another level, they are a rich source of insights into society and human behaviour.

Myths, particularly creation myths, have had a profound effect on ancient cultures. They form the foundation of religious beliefs that influenced all forms of cultural expression, as well as values and attitudes.⁷ Nowhere is this more true than in Egypt.

Myths are rich in symbolic meaning. Their settings may seem strange and their characters larger than life, but by learning to understand their meaning, we can unlock their secrets. Capable of amazing feats, such as changing shape, the characters in myths often represent aspects of human behaviour such as love and jealousy, or phenomena such as order and destruction.



In this depiction of a myth, the Great Cat performs an heroic deed by killing Apophis, the evil snake. The snake symbolizes hostile forces that cause problems for the deceased during their journey to paradise.

Photo: Harry Foster (CMC S98 3544)

The Evolution of Religion

One of the most interesting aspects of ancient Egypt is its religion. The depth of Egyptian thinking and the rich imagination displayed in the creation of ideas and images of the gods and goddesses are beyond compare. In elaborating their beliefs, the Egyptians were searching for an understanding of the most basic laws of life, death and the universe.



The pharaoh Seti I holding a sekhem, a sceptre symbolizing power and authority

They developed the first thought forms of the Godhead — the beginnings of a religion. Their beliefs evolved slowly over the centuries and gradually developed into a comprehensive world view shared by the people of the Nile.

Religion is the glue that binds local communities into nationhood and creates common understandings and shared values that are essential to the growth of a civilization. No religion is fully formed at its inception. By looking at ancient Egypt, one can see how belief systems evolved to become the driving force of cultural expressions. In the early stages of human thought, the concept of God did not exist. Our early ancestors were concerned about natural phenomena and the powers that controlled those phenomena; they did not worship a personalized form of God. This stage of religious development is referred to as “magical”.⁸



Thoth, the god of writing, depicted with the head of an ibis and a human body
CMC ECD98-018 #21

In Egypt, before the concept of God existed, magical power was encapsulated in the hieroglyph of a sceptre (or rod or staff). This is one of the most enduring symbols of divine power, ever present in images of the pharaohs and the gods.

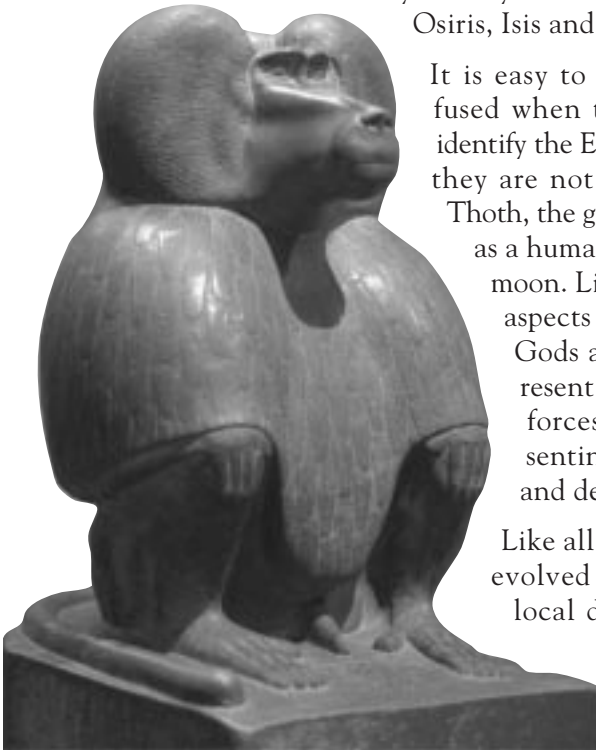
As human society evolved, people gradually gained a degree of personal identity. With a higher sense of individuality, they began to conceive the gods in a personalized form. This stage in development is called “mythical”. In Egypt, this process began during the late prehistoric period, when writing was being invented and myths were being formulated.

At that stage, every Egyptian town had its own deity, manifested in a material fetish or a god represented in the shape of an animal, such as a cat goddess, cobra goddess, ibis god or jackal god. As the pantheon grew in cohesiveness, these gods and goddesses were given human bodies and credited with human attributes and activities.

The temples in the major cities throughout the land were constructed to venerate local gods. During the New Kingdom, these temples honoured a triad of gods based on the pattern established by the mythical family of Osiris, Isis and Horus.



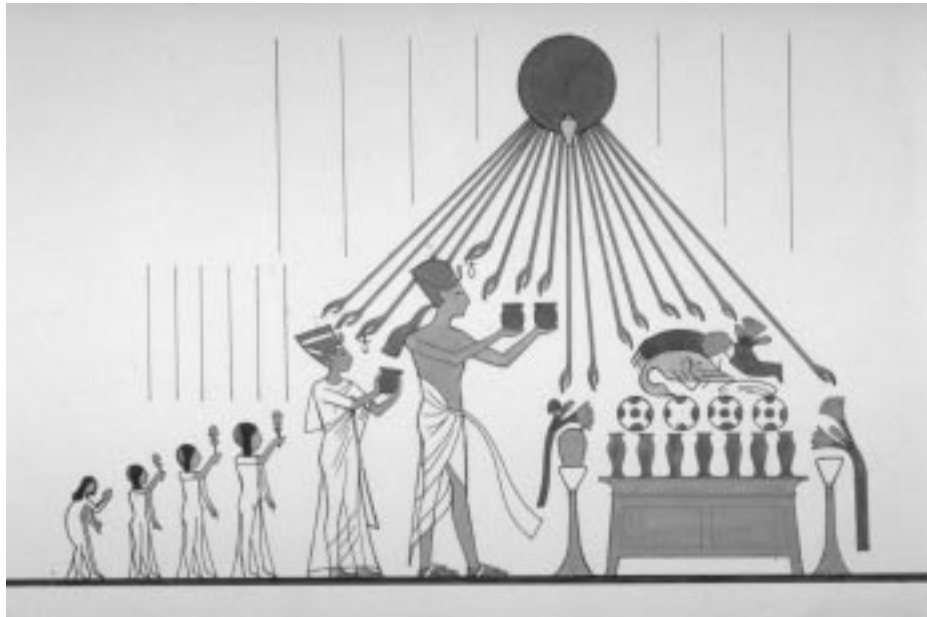
Ibis
Photo: Harry Foster (CMC S98 3493)



Sculpture of a baboon representing the god Thoth
CMC ECD98-029 #16

It is easy to get confused when trying to identify the Egyptian gods. There is a large number of them and they are not always depicted the same way. For example, Thoth, the god of writing and messenger of the sun god, is seen as a human with the head of an ibis, or as a baboon or the moon. Like the Greek gods, the Egyptian gods symbolized aspects of life, human emotions and the physical world. Gods and goddesses are often grouped in pairs to represent the dual nature of life, the negative and positive forces of the cosmos. An example is Osiris, representing life and order, and Seth, representing disorder and destruction.

Like all religions, that of ancient Egypt was complex. It evolved over the centuries from one that emphasized local deities into a national religion with a smaller number of principal deities. Some theologians think that Egypt was moving towards a monotheistic faith in a single creator, symbolized by the sun god.



The pharaoh Akhenaten and his family worshipping the sun god, Aten
Photo: Royal Ontario Museum (CMC ECD98-040 #58)

When the Greeks and the Romans conquered Egypt, their religion was influenced by that of Egypt. Ancient pagan beliefs gradually faded and were replaced by monotheistic religions. Today, the majority of the Egyptian population is Muslim, with a small minority of Jews and Christians.

The Egyptian Creation Myth⁹

Introduction

Like other creation myths, Egypt's is complex and offers several versions of how the world unfolded. The ancient Egyptians believed that the basic principles of life, nature and society were determined by the gods at the creation of the world. It all began with the first stirring of the High God in the primeval waters.

The creation myth is recounted in the sacred hieroglyphic writings found on pyramids, temples, tombs and sheets of papyrus. These writings describe how the earth was created out of chaos by the god Atum. The earth was seen as a sacred landscape, a reflection of the sky world where the gods resided.

The creation of the universe took place over a long period of time when the gods lived on earth and established kingdoms based on the principles of justice. When the gods left the earth to reside in the sky world, the pharaohs inherited the right to rule.

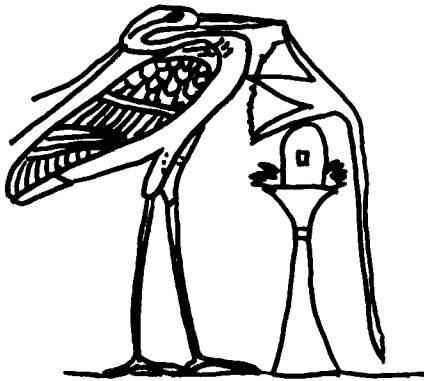


Heh, god of chaos

The First Gods

The *Book of the Dead*, dating to the Second Intermediate Period, describes how the world was created by Atum, the god of Heliopolis, the centre of the sun-god cult in Lower Egypt. In the beginning, the world appeared as an infinite expanse of dark and directionless waters, named Nun. Nun was personified as four pairs of male and female deities. Each couple represented one of four principles that characterized Nun: hiddenness or invisibility, infinite water, straying or lack of direction, and darkness or lack of light.

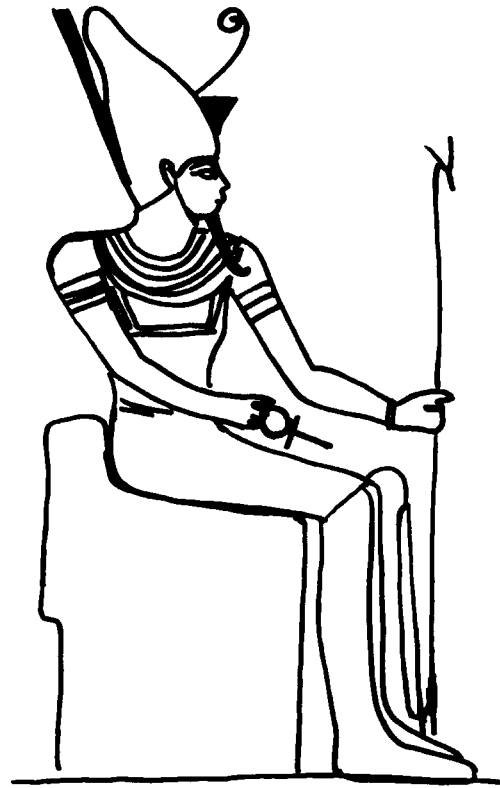
Atum created himself out of Nun by an effort of will or by uttering his own name. As the creator of the gods and humans, he was responsible for bringing order to the heavens and the earth. As Lord of the Heavens and Earth, he wears the Double Crown of Upper and Lower Egypt and carries the *ankh*, a symbol of life, and the *was* sceptre, a symbol of royal authority.



The mythical Benu bird standing before an offering table

According to the Pyramid Texts, written on the walls of pyramids, the creator god

emerged from the chaotic darkness of Nun as a mythical Benu bird (similar to a heron or phoenix). He flew to Heliopolis, an ancient city near Cairo, where, at dawn, he alighted on the Benben, an obelisk representing a ray of the sun. After fashioning a nest of aromatic boughs and spices, he was consumed in a fire and miraculously sprang back to life. The capstone placed at the top of an obelisk or a pyramid is associated with the Benu. Called a pyramidion or the Benu, it is a symbol of rebirth and immortality.



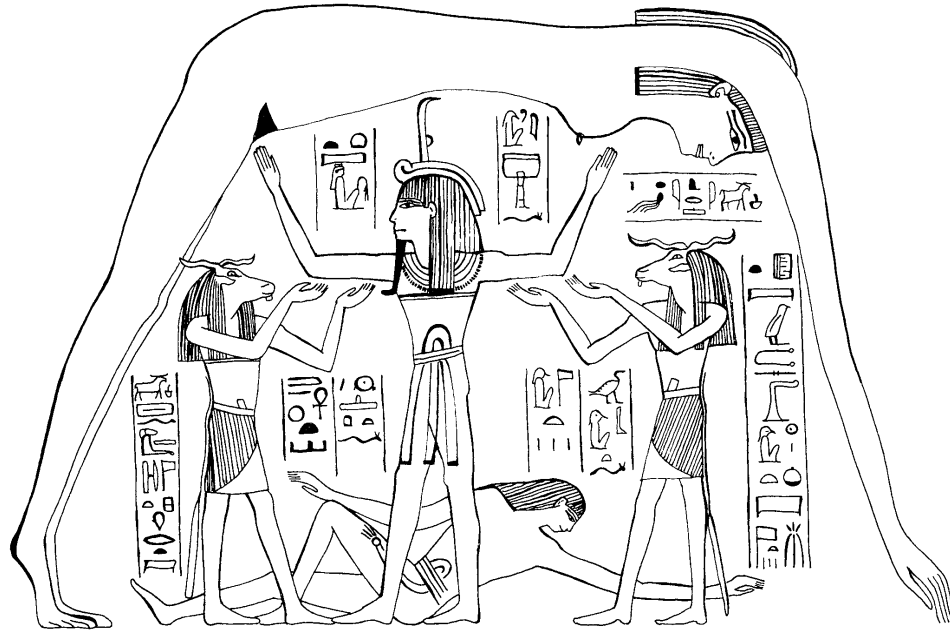
Atum, the Creator

The Creator God's Offspring

At a time the Egyptians called *Zep Tepi* (the First Time), Atum created two offspring. His son, Shu, represented dry air, and his daughter, Tefnut, represented corrosive moist air. The twins symbolize two universal principles of human existence: life and right (justice).

The twins separated the sky from the waters. They produced children named Geb, the dry land, and Nut, the sky. When the primeval waters receded, a mound of earth (Geb) appeared, providing the first solid dry land for the sun god, Re, to rest. During the dynastic period, Atum was also known as Re, meaning the sun at its first rising.

Geb and Nut produced four offspring: Seth, the god of disorder; Osiris, the god of order; and their sisters, Nephthys and Isis. This new generation completed the Heliopolitan Ennead, the group of nine deities that began with Atum, the primeval creator god.



Shu, the god of air, separates the sky goddess, Nut, from the earth god, Geb. Two ram-headed gods stand beside Shu.

Drawing: Catherine Fitzpatrick
Photo: Harry Foster (CMC S98 3504)

In another version of the creation story, the city of Hermopolis, in Middle Egypt, substituted the Ennead with a group of eight deities called the Ogdoad. It consisted of four pairs of gods and goddesses symbolizing different aspects of the chaos that existed before creation. The goddesses were depicted as snakes and the gods as frogs. Their names were Nun and Naunet (water), Amun and Amaunet (hiddenness), Heh and Hauhet (infinity), and Kek and Kauket (darkness).

The Sun God's Eye

The sun god, Re (a form of Atum), ruled over the earth, where humans and divine beings coexisted. Humans were created from the Eye of Re or *wedjat* (eye of wholeness). This happened when



Eye of Re or *wedjat*
CMC S97 10364

the eye separated from Re and failed to return. Shu and Tefnut went to fetch it, but the eye resisted. In the ensuing struggle, the eye shed tears from which humans were born.

The familiar eye motif is an enduring symbol for the creator, Atum, for Re and for Horus, the son of Osiris and Isis. It represents the power to see, to illuminate and to act. The act of bringing the eye back to the creator was equivalent to healing the earth — the restoration of right and order. Maintaining right and order to pre-

vent the earth from falling into chaos was central to the pharaoh's role.

Another version of the creation myth states that the *wedjat* simply wandered off, so Re sent Thoth, the moon god, to fetch it. When it returned, the eye found that another eye had taken its place. To pacify the furious eye, Re placed it on his brow in the shape of a uraeus (a cobra goddess), where it could rule the whole world. Pharaohs wore the uraeus on their brows as a symbol of protection and to show that they were descended from the sun god.

The First Rebellion

When Re became old, the deities tried to take advantage of his senility. Even humans plotted against him, which led to their fall from divine grace. In reaction to the rebellion, Re sent his eye

to slaughter the rebels, a deed he accomplished by transforming himself into Sekhmet, a

raging powerful goddess (depicted as a lion). After punishing his foes, he changed himself into the contented goddess Hathor (depicted as a cow).

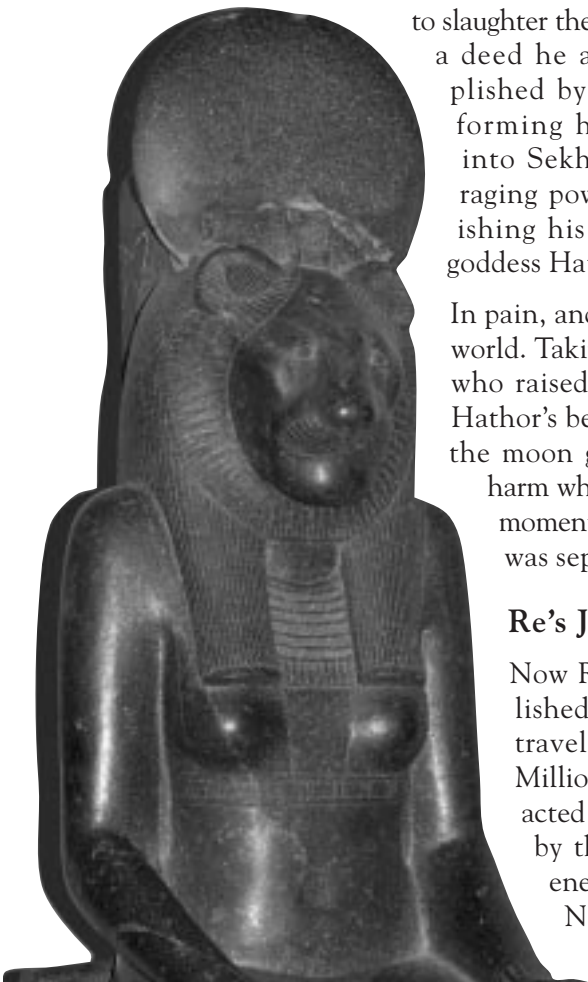
In pain, and weary of these problems, Re withdrew from the world. Taking the form of Hathor, he mounted on Nut (sky), who raised him to the heavens. The other gods clung to Hathor's belly and became the stars. Following this, Thoth, the moon god, was given a spell to protect humans from harm when the sun disappeared below the earth. From that moment on, humans were separated from the gods, as earth was separated from the heavens.

Re's Journey

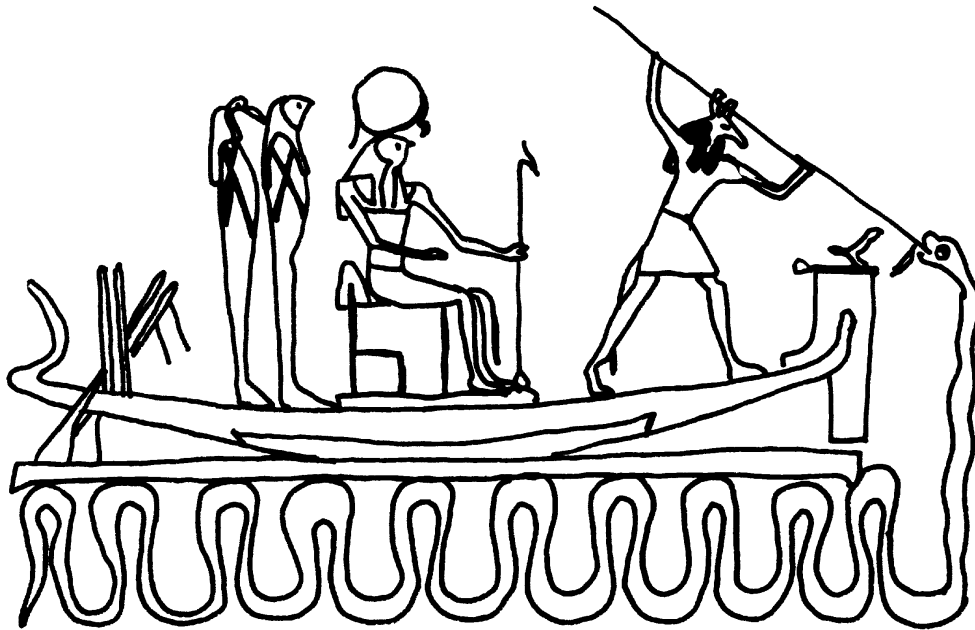
Now Re lived in the heavens, where order was established. Each morning he was reborn in the east and travelled across the sky in a boat, called the Bark of Millions of Years, accompanied by a number of gods who acted as his crew. The sun god was carried across the sky by the scarab god, Khepri, a dung beetle. His chief enemy was the Apep, a huge serpent that lived in the Nile and the waters of Nun. Apep tried to obstruct the solar bark's daily passage, but the sun god was ultimately victorious.



Pharaoh with a uraeus on his crown
CMC ECD98-029 #9 (photo)



Sekhmet, the lion-headed goddess
CMC ECD98-024 #99 (photo)



Seth, at the prow of a solar bark, repels Apep, the evil snake of chaos. Re-Horakhty, the sun god, sits on his throne, and behind him stand Horus and Thoth.

The sun god was the most important deity in the Egyptian pantheon. He had many names: as the sun disk, he was Aten; as the rising sun, he was Khepri, the scarab; at the sun's zenith, he was Re, the supreme god of Heliopolis; and as the setting sun, he was Atum. Egypt's pyramids and obelisks, as well as the sphinx, were associated with the sun god. In the New Kingdom, the sphinx was a symbol for the sun god as Re-Horakhty, the winged sun disk that appeared on the horizon at dawn.

The sun, symbol of light and enlightenment, is probably the most enduring symbol found in ancient and modern religions. Living in a land of eternal sunshine, it is little wonder the ancient Egyptians chose the sun as the prime symbol for the creator of the universe.



The winged sun disk represents the sun god. It consists of the wings of Horus, two hooded cobras and a sun disk.

CMC S97 10416

Chapter 5

The Divine Family: Osiris, Isis and Horus

Objectives

To familiarize your students with the myth of the divine family and to understand the role these gods played in the Egyptian religion.

Mystery

The Egyptian pharaohs believed they were descended from the gods. Where did this idea come from?

Discussion and Research Projects

1. What are the names of the three members of the divine Egyptian family?
2. What was the parents' mission on earth?
3. What did they teach humanity?
4. How did Seth murder his brother Osiris?
5. Where did Isis find her husband's coffin and how did she bring it back?
6. What form did Isis take when she magically conceived her son Horus?
7. What did Seth do when he found Osiris's coffin after it was returned to Egypt?
8. What did Isis do to restore Osiris to eternal life?
9. Where did Isis go to protect her child? What powers did she have to protect him from danger?
10. What did Seth do to try to kill the infant Horus?



11. How did the god Thoth cure Horus? What happened to the sun when Horus was bitten by a poisonous snake?
12. Horus became the first pharaoh god of the Egyptian people. What would happen to the earth if the people did not continue to love and care for Horus?
13. What did Isis do to gain the power of the sun god, Re? What secrets do you think she got from him?
14. How did Horus learn the secret name of the sun god?
15. Why did Seth and Horus quarrel? Who won the fight?
16. What was Horus given that elevated him to the position of king of all Egypt?
17. Why do you think the gods intermarried with their siblings? Example: Osiris married his sister Isis, and Seth married his sister Nephthys.
18. Unbelievable events often happen in myths. Point out the ones in this myth.
19. In many ancient cultures, kings and queens were thought to be descended from the gods. Can you explain why kings and queens would want to be associated with the gods?
20. What qualities did Horus have that made him a model for the pharaohs to follow?

Understanding the Symbolic Meaning of the Myth

1. Osiris's family represents an ideal family. What family values do their relationships imply?
2. Myths express human hopes and dreams. What are some of the hopes and dreams found in this myth?
3. Myths often express dualities (opposites). What are some of the dualities found in this myth?
4. Given all the events in this myth, what do you think the lesson or moral of the story is?

Creative Projects

1. Use **Activity Sheet 11** to identify the gods and goddesses in the story of the divine family.
2. Use **Activity Sheet 12** to create the family tree of the characters in the divine family.
3. Write a script for the story of the divine family. Divide your class into small groups and ask each group to perform one of the sequences in the story.
4. Make a sequence of drawings illustrating the major events in the story of the divine family. The drawings could be put into cartoon format.

FACT SHEET: The Divine Family — Osiris, Isis and Horus¹⁰

Introduction

The pharaohs of Egypt traced their lineage to the god Horus. Horus was the son of Osiris and Isis, two of the nine primeval gods of the Egyptian Ennead.

The story begins when Osiris reigned on earth and married his sister Isis. Their mission was to bring civilization to humanity, to teach people about the practice of government, religion and marriage. Isis's magical healing powers, and her knowledge of weaving, crop growing, corn grinding and flax spinning were also passed on to the Egyptian people.

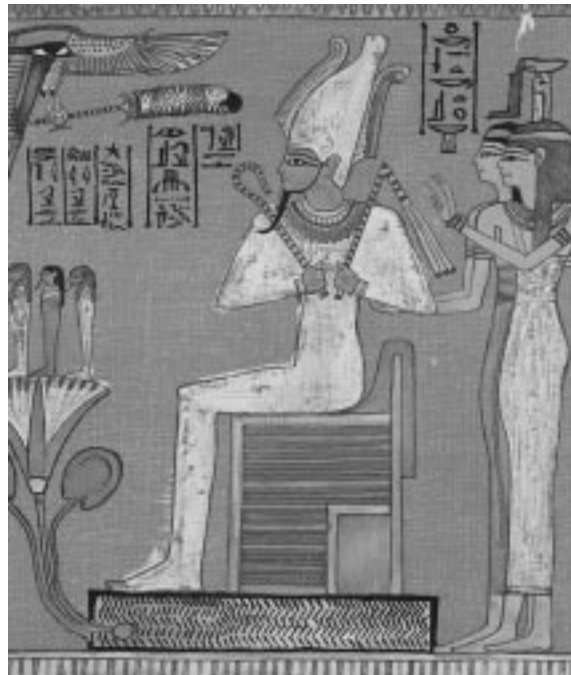
Murder

One day, disaster struck. Seth, the god of disorder, murdered his brother Osiris, the god of order. Seth was furious because his wife, Nephthys, had conceived a child, named Anubis, by Osiris. The murder happened at a banquet when Seth invited guests to lie down in a coffin he had made for the king. Several guests tried unsuccessfully. When Osiris climbed in, Seth and his conspirators nailed down the lid, weighed the coffin down with lead and cast it into the Nile.

This happened in July when the waters of the Nile were rising. Nun (the primeval sea) took Osiris away to hide his secrets. The death of Osiris threw the cosmos into chaos and made the gods weep. Isis, greatly distraught, wandered throughout the land in search of her husband, asking everyone if they had seen him.

A Child Is Conceived

Through divine revelation, Isis found out that the coffin had



Osiris sitting on his throne. His wife, Isis (left), and his sister Nephthys stand behind him.

Photo: Harry Foster (CMC S98 3565)



Anubis, the jackal-headed god

Photo: Royal Ontario Museum (CMC ECD-040 #49)

drifted down to the sea and washed ashore at Byblos, in Phoenicia. A tamarisk tree had grown up around the coffin, completely enclosing it in its trunk. When Isis found the tree, she released the coffin from it and shipped it back to Egypt. While grieving over her husband's body, she transformed herself into a kite. As she flew over the body, she miraculously conceived a child.

Hiding in the Marshes

When Isis returned to Egypt, she hid from Seth in the delta marshes. One day, Seth discovered Osiris's coffin and dismembered his body into fourteen parts that he scattered throughout the land. Isis managed to find all the parts, except the phallus, which she reconstituted. She anointed his body with precious oils and performed the rites of embalment for the first time. In so doing, she restored Osiris to eternal life. Osiris went on to live in the land of the deceased, presiding over the judgement of the dead.

Isis tried to hide her pregnancy from Seth. Thoth, the god of wisdom, advised her to flee because Seth would try to kill her child. She went to the marshes, where she gave birth to her son, Horus. Isis hid the child in the marshes, where she cured him from scorpion, snake and crocodile bites. One day, she left her son to search for food, and upon her return, she found him half dead. Seth had entered the marsh, transformed himself into a poisonous snake and bit the child.



Horus the child sits with his finger to his mouth. He appears to be born out of the lotus flower that rose from the primeval waters.

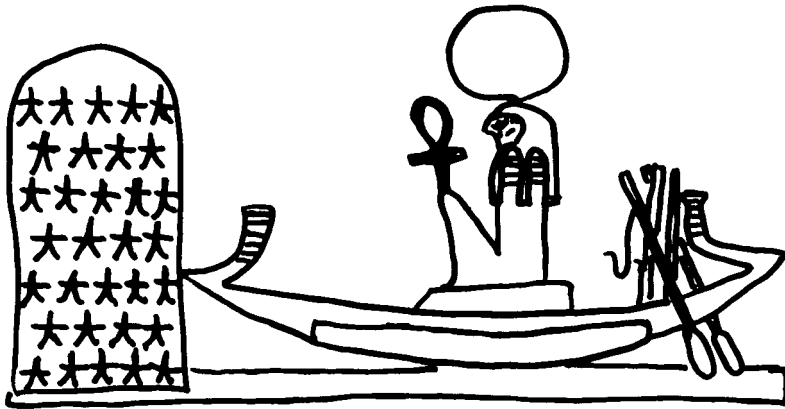


Wild ducks fly over a papyrus thicket in the Nile marshlands. This painting comes from Amarna, the city built by the pharaoh Akhenaten (probably Tutankhamun's father).

Photo: Harry Foster (CMC S98 3531)

Healing Horus

Isis called for help from the high gods. Her pleas were heard by the gods in the Bark of Millions of Years (the solar bark). Thoth descended to talk to her. He told her that the powers of Re would set things right and that good would triumph over evil. Then the solar bark stopped and the earth fell into darkness. Thoth assured Isis that the earth would remain in



The sun god travels through the darkness of night in his solar bark.

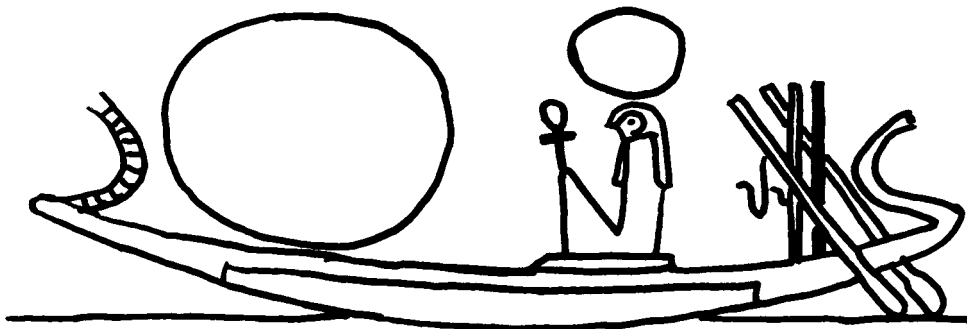
darkness, that wells would dry up and that crops would fail until Horus was cured. Then, in the name of the sun, he exorcised the poison from Horus's body and cured the child.

The people of the marshland rejoiced with Isis at the recovery of her son. Horus became the archetype of the pharaohs, the sun god's representative on earth. It was now the duty of the people to protect the pharaohs from harm, to love and respect them. If they did not, world order would collapse and the people would perish. Isis kept her young son hidden until he became an adolescent and could face Seth to claim his rightful inheritance, the throne of Egypt.

The Sun God's Secret

While Horus was growing up, the sun god, Re, grew old and started drooling. Isis took the saliva that fell to the ground and modelled it into a serpent. She placed the serpent across Re's daily path in the sky, and it bit the sun. Since the sun had not made the serpent, he could not cure himself. He turned to Isis for help. She said she could do nothing unless he revealed his secret name to her. By learning his name, she would gain knowledge of his power.

Re realized this was the only way he could be cured. He hid from the other gods and allowed his secret name to be passed from his bosom directly to hers. Isis was forbidden from revealing it to anyone except her son Horus. The Eye of Re — the supreme power of the creator — was thus given to Horus, and subsequently to all the pharaohs down through the ages. It then became known as the Eye of Horus.

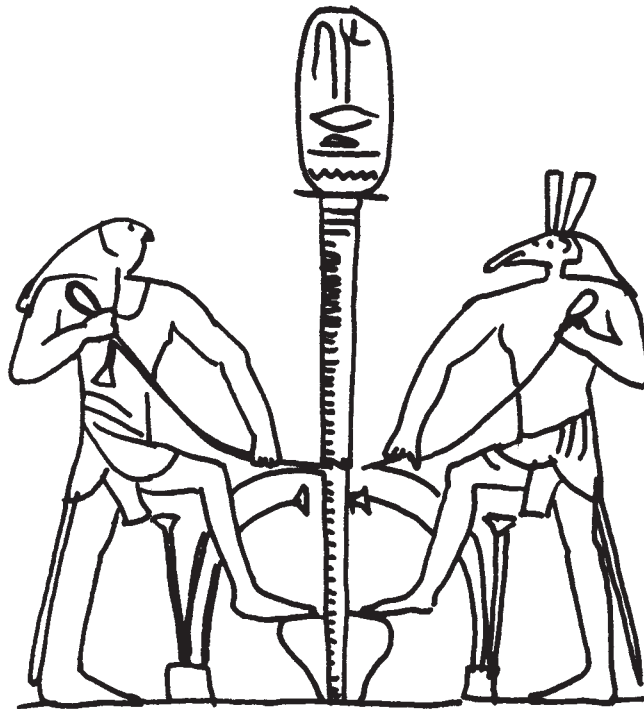


The sun god travels through the light of day in his solar bark.

Horus, King of the Two Lands

When Horus was a young man, he and his uncle Seth quarrelled over who was the legitimate divinely appointed ruler of Egypt. During the fierce battle that ensued, Horus castrated Seth, and Seth tore out Horus's weak eye, the moon. A tribunal of the gods was held to settle the dispute.

It was decided that Horus should rule over Lower Egypt and Seth should rule over Upper Egypt. This was later considered unworkable, so Horus was made king of the Two Lands of Egypt, and Seth took on the role of defender of Re by standing at the prow of the solar bark. Horus became the god of kingship, and the pharaohs traced their lineage to him, the god who triumphed over evil.



Horus (left) and Seth fought a fierce battle that ended with no clear victor. They are binding lotus and papyrus plants together as a symbol of the unification of Egypt.

Chapter 6

The Egyptian Pantheon

Objectives

To discover the physical characteristics of the gods and goddesses, and to identify the role each deity played in the land of the living and the land of the dead.

Mystery

How did the ancient Egyptians conceive and visualize their invisible gods and goddesses?

Discussion and Research Projects

1. Like many other ancient cultures, the Egyptians worshipped a multitude of gods and goddesses. Why do you think they had so many deities?
2. Gods and goddesses can be classified into pairs of opposites. The pairs may be male and female, or represent opposite phenomena such as order and chaos. Make a list of the gods and goddesses that constitute pairs of opposites.
3. Classify the gods and goddesses according to their role in the land of the living and the land of the dead. The land of the living would include the natural world on earth and the sky; the land of the dead is the invisible world where the Egyptians hoped to be reborn into eternity.
4. The gods and goddesses were visualized with bodies, heads and headdresses that gave each a unique appearance. Most had human bodies with either a human, animal, bird or insect head. Which god does not fit this pattern?

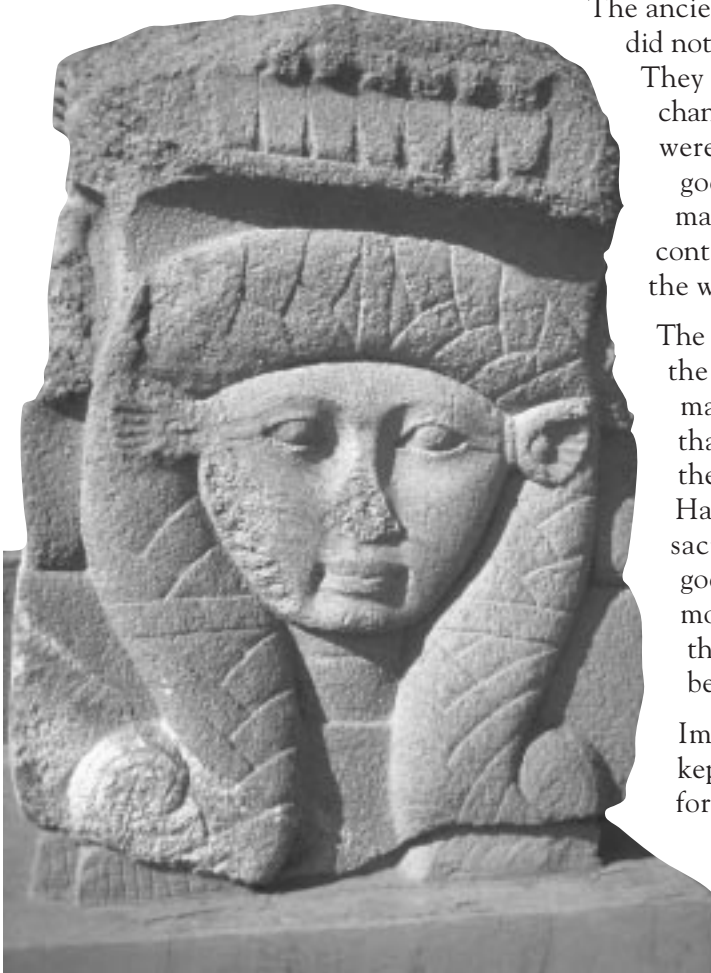


5. Classify the gods and goddesses into the following categories:
 - bird heads
 - insect heads
 - human heads
 - animal heads
 - mythical heads
 - a single animal body
 - a combination of animal bodies
 - a combination of human and bird bodies
6. Classify the gods and goddesses according to what they hold in their hands:
 - crook and flail
 - feather
 - rod or sceptre
 - *ankh* (symbol of life)
 - sistrum (rattle)
7. List the various types of headgear worn by the gods and goddesses.
8. Since the Egyptians portrayed their gods and goddesses as part human, part animal, bird or insect, do you think they worshipped animals, birds and insects?
9. Some gods and goddesses were depicted in several ways. Can you give examples of this?
10. The sun god was the principal god of ancient Egypt. Identify a number of ways this god was depicted.
11. Many gods and goddesses have sun symbols on their heads. Make a list of them and draw their headdresses.
12. The sun disk worn by the gods and goddesses is often surrounded by a snake. What do you think the snake represents?
13. Do you think the ancient Egyptians worshipped the sun? Why do you think the sun god was so important to them?
14. The sun god is a symbol of light and enlightenment. Which god was given the task of enlightening humans and giving them wisdom? What does he carry in his hand that symbolizes learning and writing?

Creative Projects

1. Use **Activity Sheet 13** to learn to identify the gods and goddesses in the Egyptian pantheon that are represented in animal form.
2. Use **Activity Sheet 14** to learn about the cosmic gods and goddesses and what they represent.
3. Use **Activity Sheet 15** to learn about the symbolic meaning of human- and animal-headed gods and goddesses.
4. The ancient Egyptians displayed incredible imagination in visualizing their gods and goddesses. See if you can do as well! Do a number of drawings showing some of the characteristics of the ancient Egyptian gods and goddesses. Example: sun, moon, earth, sky, order, disorder, love, justice, wisdom.

FACT SHEET: The Gods and Goddesses



Hathor, with a human face and cow ears
CMC S97 10018 (photo)

The ancient Egyptians recognized many gods and did not have a single system of religious beliefs. They were always ready to adopt new gods or change their views about the old ones. There were local gods, cosmic gods and personal gods. The prime role of the gods was to maintain order in the universe, ensure the continuance of the cycles of life and prevent the world from falling into chaos.

The oldest gods in the pantheon appeared in the pre-dynastic period and represent animals, birds or reptiles. Egyptians believed that animals possessed divine powers, so they associated them with certain deities. Hathor, the goddess associated with the sacred cow, is an example. The cosmic gods representing the forces of nature are more recent. They did not appear until the historic era, when the dynastic period began.

Images of the gods and goddesses were kept in temples, where the pharaohs cared for them, assisted by an army of priests and priestesses. By the New Kingdom, however, the priesthood was the exclusive domain of men. Temples were not a place of worship for the common people. Only the pharaohs and priests were allowed into them to worship and care for the deities.



Thoth, represented as a baboon wearing a lunar crescent and disk

It is easy to get confused when trying to identify the Egyptian gods. There is a large number of them and they are not always depicted the same way. For example, Thoth, the god of writing and messenger of the sun god, is seen as a human with the head of an ibis, or as a baboon or the moon. Like the Greek gods, the Egyptian gods symbolized aspects of life, human emotions and the physical world. Gods and goddesses are often grouped into pairs to represent the dual nature of life, the negative and positive forces of the cosmos. An examples is Osiris and Seth, representing life and death, order and destruction.



Amemet

Amemet

Depicted with the rear of a hippopotamus, the fore of a lion and the head of a crocodile, she devoured the hearts of those judged guilty when their hearts were weighed against a feather in the afterworld.

Amun

Chief of the gods during the New Kingdom, Amun was depicted as a man with two tall plumes rising above his headdress, or as a ram or a goose. He, his wife, Mut, and their son, Khonsu, represented the Theban Triad, the sacred family of Thebes. Amun rose in prominence but did not become a state deity. He was associated with the god Re and venerated as the god Amun-Re.



Amun

Amun-Re

Amun-Re, a form of the sun god, is sometimes depicted as a sphinx or as a human with the head of a hawk. The disk of the sun is a symbol of this god.

The word Amun means “the hidden” or the “hiddenness of divinity”, whereas Re means “the sun” or the “divinity in the power of the sun”. The god Amun-Re is a representation of these two ideas: the ever-present invisible power and radiant light of the divine force that sustains life.



Amun-Re

To trace the origin of Amun-Re, we must go back to the Old Kingdom and Heliopolis, where the god Re first appeared as the primary manifestation of the sun god. Re is depicted with the head of a falcon surmounted by the sun disk during his passage across the sky, and with the head of a ram during his nocturnal voyage in the underworld. This local god became a national god, resulting in the erection of sun temples throughout the land. In the fourth dynasty, the pharaohs began to consider themselves manifestations of this god. Later, during the Middle Kingdom, when Amun became the most important god, Re was fused with him to become Amun-Re.

Re is sometimes spelled Ra, and Amun-Re is sometimes written as Amen-Ra or Amun-Ra.



Anubis

Anubis

Anubis was a jackal-headed deity who presided over the embalming process and accompanied dead kings to the afterworld. When kings were being judged by Osiris, Anubis placed their hearts on one side of a scale and a feather representing Maat (order and truth) on the other. The god Thoth recorded the results, which indicated whether the king could enter the afterworld. Anubis is the son of Osiris and Nephthys.



Atum

Atum

A primeval cosmic god, Atum is the sun god as creator, the substance from which all creation unfurled. He is the Lord of the Universe. In his human form, he represents the king of Egypt, who wears the Double Crown of Egypt.



Photo: Royal Ontario Museum
CMC ECD98-040 #39

Bastet

A cat goddess, Bastet represents the more protective aspects of motherhood, compared to the aggressive lion-headed Sekhmet. With a female body and a cat's head, she is often seen holding a sistrum.

Bes

This dwarf god has a grotesque mask-like face and protruding lips. He is often shown carrying musical instruments, knives or the hieroglyph representing protection. Despite his appearance, he is a protector of the family and is associated with sexuality and childbirth.

Geb and Nut

These two gods embody opposites. The earth god Geb, who represents dry land, is the husband of sky goddess Nut, who represents the sky, a mirror image of the watery sea. Nut is portrayed as a woman with the hieroglyph of her name on her head or as a woman with an arched body covered with stars. She is the daughter of Shu and Tefnut.

Hapi

Hapi, who brought abundance, controlled the annual flooding of the Nile that enriched the land for growing crops. This deity is depicted as a man who has plants on his head and holds an offering table filled with the produce of the land.

Hathor

This goddess is represented in three different ways: as a woman holding a *menit* necklace and wearing a crown consisting of a cow's horns and a sun disk; as a woman with cow ears; and as a cow. She is the daughter of Re and the consort of Horus, the falcon god of the heavens. She is also regarded as the mother of each reigning king (as is the goddess Isis). Hathor has two aspects to her personality: her vengeful side took on the leonine form of the goddess Sekhmet and tried to destroy humanity following the rebellion in the creation myth; and her bovine form is associated with sexuality, joy and music.

Horus

Horus, the falcon-headed god, is a familiar ancient Egyptian deity. He has become one of the most commonly used symbols of Egypt, seen on Egyptian airplanes, and on hotels and restaurants throughout the land.

Horus is the son of Osiris and Isis, the divine child of the holy family triad. He is one of many gods associated with the falcon. His name means "he



Bastet



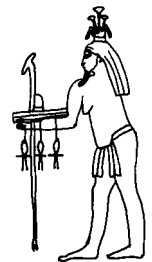
Bes



Geb



Nut



Hapi



Hathor



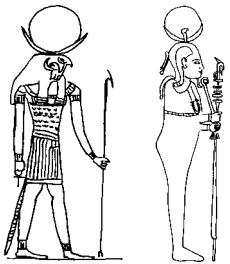
Horus



Isis



Khnum



Khonsu

Khonsu



Maat

who is above” and “he who is distant”. The falcon had been worshipped from earliest times as a cosmic deity whose body represented the heavens and whose eyes represented the sun and the moon. Horus is depicted as a falcon wearing a crown with a cobra or the Double Crown of Egypt. The hooded cobra (uraeus), which the gods and pharaohs wore on their foreheads, symbolizes light and royalty. It is there to protect the person from harm.

When Horus was an infant, his father was killed by his brother Seth. To keep her son from being harmed, Isis hid Horus in the marshland of the Nile, where she protected him from the poisonous snakes, scorpions, crocodiles and wild animals. As he grew up, he learned to ward off danger and became strong enough to fight Seth and claim his rightful inheritance, the throne of Egypt. As a result, Horus is associated with the title of kingship, the personification of divine and regal power. Kings believed they were descended from Horus, who was considered to be the first divine king of Egypt.

Isis

Isis represents the power of love to overcome death. She brought her husband and brother, Osiris, back to life and saved her son Horus from certain death. She is portrayed wearing the hieroglyph for “throne” on her head; from the New Kingdom onward, she sometimes wore a solar disk between cow horns. She is also often depicted mourning the death of her husband and nursing their son.

Khnum

A straight-horned, ram-headed god who is often depicted creating humans on his potter’s wheel, Khnum emerged from two caverns in the subterranean world in the ocean of Nun. He was the god of the First Cataract of the Nile in Upper Egypt and controlled fertility by sending half the waters of the river to the south and half to the north.

Khonsu

Son of the Theban couple Amun and Mut, he is a moon god often depicted with the head of a hawk surmounted with a crescent moon and a lunar disk. He is also seen as a youth with a sidelock of hair, and a crescent moon and a lunar disk on his head.

Maat

Maat is the goddess of truth and justice. She is identified as a woman with an ostrich plume in her headband.

Min

A human or mummified god, Min is depicted with an erect phallus. He carries a flail in his right hand and wears a crown with two plumes. He is the protector of fertility and of travel in the desert.



Min

Mut

Wife of the Theban god Amun, she was first portrayed as a vulture and later as a woman. She, Amun and their son, Khonsu, represent the Theban Triad, the sacred family of Thebes.



Mut

Neith

A goddess linked to war and weaving, she is an important personage of the funerary cult, along with Isis, Nephthys and Selkis. She is usually depicted wearing the red crown of Lower Egypt.

Nekhbet

Portrayed as a vulture, Nekhbet was the principal goddess of Upper Egypt, whose king she protected. Her northern counterpart was the cobra goddess Wadjet.



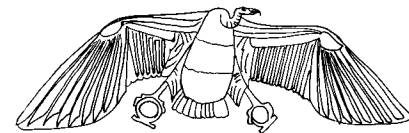
Neith

Nephthys

Nephthys is the daughter of Nut, sister of Isis and wife of Seth, the god of disorder. Her loyalties, however, lay with Osiris, by whom she had a child, Anubis. When Seth found out who the father was, he murdered Osiris, and Nephthys joined Isis in the search for Osiris's body. Along with her sister Isis, she befriends and protects the dead. She is represented as a female with the hieroglyph of her name on her head.

Osiris

Osiris is one of the principal Egyptian gods who first appeared in funerary texts during the Pyramid Age, when the practice of mummification began (2400 B.C.). He presided over the court that determined the fate of kings when they died. He is portrayed as a mummified man wearing a tall white crown adorned with two ostrich feathers.



Nekhbet

According to Egyptian mythology, Osiris was murdered by his brother Seth then brought back to life by the love of his sister and wife, Isis. This myth describes the forces of destruction that initiated the process of mummification. The love of Isis is symbolic of regeneration and the promise of eternal life. The cycle of destruction, death and rebirth was repeated each year in the annual flooding of the Nile, the river that provided the essential ingredients needed to sustain life, giving birth to one of the first civilizations.

Osiris is also equated with the miracle of the Nile and the rich harvest, as the text from the sarcophagus of a high priestess of Amun named Ankhnesneferibra attests:



Nephthys



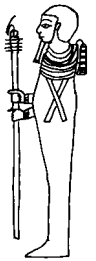
Osiris

Hail, you are the maker of grain, he who gives life to the gods with the water of his limbs, and bread to every land with the water that takes form under him.¹¹

Osiris and Isis had a son named Horus. Together they represent a holy family: god, goddess and divine child. In the New Kingdom, the main temples throughout Egypt venerated a holy family modelled on the Osiris, Isis and Horus triad.

Ptah

Creator god of the city of Memphis and husband of Sekhmet, Ptah is depicted as a mummified man holding the *was* sceptre (one that has a crooked handle in the shape of an animal head and a forked base).



Ptah

Re, the Sun God

The sun god was considered the central and original power of creation. The daily rising and setting sun offered tangible evidence of the sun's power to fall into the western sky and be reborn each morning in the eastern sky.

Re brought the concept of Maat — the principle of truth (Right) and balanced justice — to the Egyptians. This fundamental concept became the cornerstone of the Egyptian civilization. The cosmic journey of the sun, symbolized by the scarab (dung beetle that pushes the sun disk across the sky), would continue as long as the cult of the sun god and Maat were respected. In the beginning stages of the deities, the kingship of Re was transferred to other forms of the sun god — to Shu, then Geb and, finally, Osiris.



Re, the Sun God

On earth, the kings of the Old Kingdom were considered the mortal embodiment of the sun god. In other words, a king was a god on earth, and his right actions prevented the world from falling into chaos.

The sun god is also known as Re-Horakhty (the Horus of the Horizon) and Atum (the All), the substance from which all creation unfurled. Re-Horakhty is identified as a god with a human body and falcon head who wears a crown in the form of a sun disk

surrounded by a cobra, or a crown made from ram horns and ostrich feathers. Atum is depicted as King of Egypt and Lord of the Universe and wears the Double Crown of Egypt. All these forms of the sun god represent the promise of resurrection, an answer to the dilemma of human mortality.

The cult of the sun was maintained by the Egyptian kings over the centuries. They built pyramids (symbols of the stairway to the sun or the angled rays of the sun) and later solar temples in honour of the sun god. When a king died, his actions were judged in the afterworld by Osiris, a form of the sun god and ruler of the underworld. If they were considered just, the king was transformed into a form of the sun god.

Sekhmet

Sekhmet is depicted as a woman with a lion's head wearing a sun disk and a uraeus (cobra). She was an important goddess in the Theban capital during the New

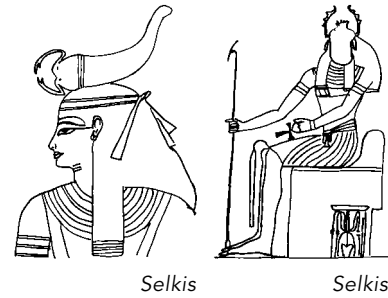


Sekhmet

Kingdom (1550–1070 B.C.). Her name means “she who is powerful”, and as such, she personifies the aggressive aspects of female deities.

Selkis

Selkis is usually depicted as a woman with a scorpion on her head. Her name means “the one who causes the throat to breathe”. She is a protector of the falcon-headed canopic jar, and along with three other deities, Isis, Nephthys and Neith, guarded the royal coffins and canopic chests.



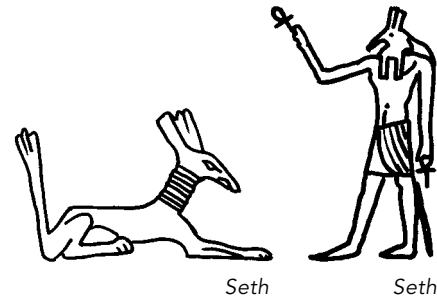
Selkis

Selkis

Seth

Seth is the offspring of Geb and Nut. As the god of disorder, he was responsible for killing his brother, Osiris. In the Egyptian dualistic concept of the cosmos, Seth is placed in juxtaposition with Horus, the god who ruled the land with order and stability.

Seth is an animal-headed deity with a curved head, tall square-topped ears and an erect arrow-like tail. The animal he represents has not been identified. He is sometimes portrayed with a human body and an elongated bird-like head, similar in appearance to the god Thoth.

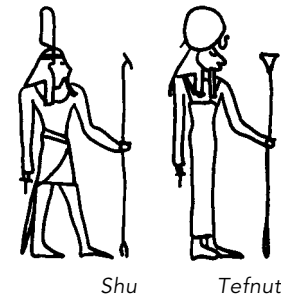


Seth

Seth

Shu and Tefnut

Shu is a male god who is paired with his sister, Tefnut. Together they represent two fundamental principles of human existence. Shu symbolizes dry air and the force of preservation. Tefnut symbolizes moist or corrosive air that brings about change, creating the concept of time. Shu and Tefnut are the offspring of Re (or Atum, a form of the sun god), a primeval cosmic god, progenitor of the elements of the universe.

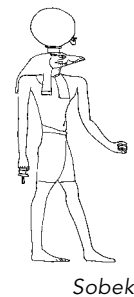


Shu

Tefnut

Sobek

The name of this crocodile-headed god means “he who causes to be pregnant or fertile”. At his cult centre at Kom Ombo, he shared a temple with Horus. He was later assimilated into the cult of Amun, being worshipped as a manifestation of the sun god, Re.



Sobek

Sphinx

A statue with the body of a lion and the head of a human or an animal, the sphinx represents a form of the sun god.



Sphinx



Taweret

Taweret

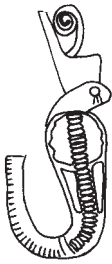
A goddess that protected women in childbirth, Taweret is portrayed with the head of a hippopotamus, the arms and legs of a lion, and the back and tail of a crocodile. Her heavy breasts and full belly indicate she is pregnant.

Thoth

Thoth is the messenger of the sun god. He is the god of learning and wisdom, the inventor of writing and science, and the protector of the scribes. He is depicted as a human with the head of an ibis, or as a baboon or the moon.



Thoth



Wadjet

Wadjet

She was a cobra goddess whose lethal force protected the king of Lower Egypt. Her northern counterpart was the vulture goddess Nekhbet.



Two cobra goddesses (Wadjets) flank a pharaoh's cartouche
CMC ECD98-030 #30

Chapter 7

The Journey to Eternity

Objective

To learn about how the ancient Egyptians perceived death and the afterlife.

Mystery

Why did the ancient Egyptians mummify the bodies of the deceased? What did they believe would happen to them when they died?

Discussion and Research Projects

1. What did the ancient Egyptians put in tombs to ensure the comfort and happiness of the deceased in the afterlife?
2. Describe the “opening of the mouth” ceremony and explain its purpose.
3. What dangers did the deceased face on their journey to the afterworld?
4. How did the deceased protect themselves from these dangers?
5. Describe what happened in the “weighing of the heart” ceremony.
6. Who was the first being to be mummified?
7. Describe the mummification process.
8. Why were animals mummified?

Creative Projects

1. Use **Activity Sheet 16** to learn about the “opening of the mouth” ceremony, which was performed on the deceased to restore the senses.
2. Use **Activity Sheet 17** to learn about the “weighing of the heart” ceremony that took place in the afterworld to determine if a deceased person could enjoy everlasting life.



3. Write a dialogue for the “opening of the mouth” and the “weighing of the heart” ceremonies. Make the required props and re-enact these ceremonies.
4. Do a series of drawings showing what happened to the deceased on the journey to the after-world. Start with the mummification process and end with the arrival of the deceased in the Land of the Gods.

FACT SHEET: The Journey to Eternity

Egyptian Civilization — Life after Death

The ancient Egyptians believed in immortality, and this influenced their attitude towards death. They regarded death as a temporary interruption, rather than the cessation of life. During the Old Kingdom, it was believed that only pharaohs could attain immortality. Around 2000 B.C., attitudes changed, however: everyone could live in the afterworld as long as the body was mummified and the proper elements were placed in the tomb. But since mummification was expensive, only the wealthy were able to take advantage of it.

To ensure the continuity of life after death, people paid homage to the gods, both during and after their life on earth. When they died, they were mummified so the soul would return to the body, giving it breath and life. Household equipment and food were placed in the tomb to provide for the person's needs in the afterworld. Funerary texts consisting of spells or prayers were also included to assist the dead on their journey to the afterworld.

To prepare the deceased for that journey, the “opening of the mouth” ceremony was performed on the mummy and the mummy case by priests. This elaborate ritual involved purification, censing (burning incense), anointing and incantations, as well as touching the mummy with ritual objects to restore the senses — the ability to speak, touch, see, smell and hear.

The journey to the afterworld was fraught with danger. Travelling on a solar bark, the mummy passed through the underworld, which was inhabited by serpents armed with long knives, fire-spitting dragons and reptiles with five ravenous heads. Upon arriving in the realm of the Duat (Land of the

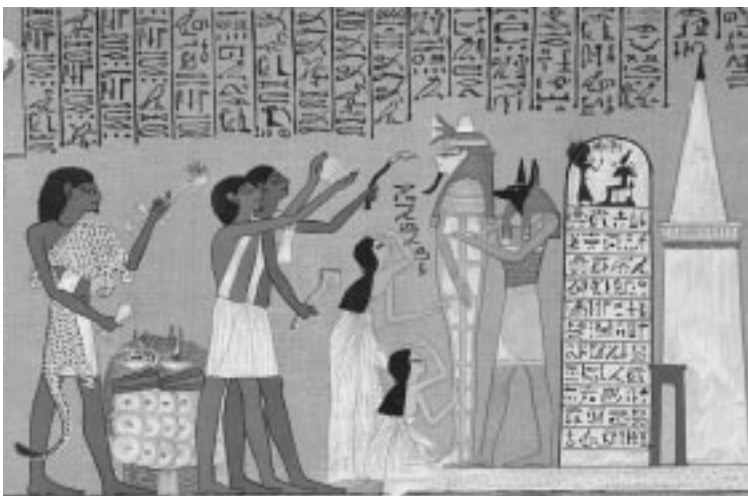
Gods), the deceased had to pass through seven gates, reciting accurately a magic spell at each stop. If successful, they arrived at the Hall of Osiris, the place of judgement.

Here the gods of the dead performed the “weighing of the heart” ceremony to judge whether the person's earthly deeds were virtuous. The weighing of the heart was overseen by the jackal-headed god Anubis, and the judgement was recorded by Thoth, the god of writing.



A priest wearing an Anubis jackal mask performs funeral rites over a mummified body.

*Drawing: Catherine Fitzpatrick
Photo: Harry Foster (CMC S98 3519)*



The “opening of the mouth” ceremony

Photo: Harry Foster (CMC S98 3573)

Forty-two gods listened to the confessions of the deceased who claimed to be innocent of crimes against the divine and human social order. The person's heart was then placed on a scale, counterbalanced by a feather that represented Maat, the goddess of truth and justice. If the heart was equal in weight to the feather, the person was justified and achieved immortality. If not, it was devoured by the goddess Amemet. This meant that the person would not survive in the afterlife. When pharaohs passed the test, they became one with the god Osiris. They then travelled through the underworld on a solar bark, accompanied by the gods, to reach paradise and attain everlasting life.



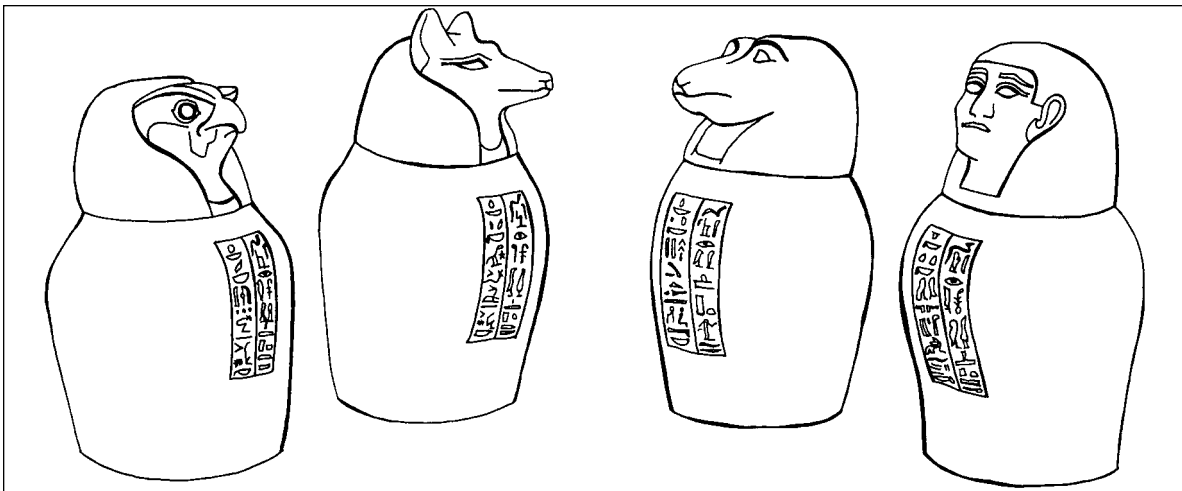
Priests mummifying the deceased

*Drawing: Catherine Fitzpatrick
Photo: Harry Foster (CMC S98 3521)*

Egyptian Civilization — Mummification

Mummification, the preservation of the body, was described in the ancient Pyramid Texts. With the death of Osiris, god of the dead, the cosmos fell into chaos and the tears of the gods turned into materials used to mummify his body. These materials included honey, resins and incense. Before mummification evolved, the corpse was placed in a sleeping fetal position and put into a pit, along with personal items such as clay pots and jewellery. The pit was covered with sand, which absorbed all the water from the body, thus preserving it.

The practice of mummification began in Egypt in 2400 B.C. and continued into the Graeco-Roman Period. Natron, a disinfectant and desiccating agent, was the main ingredient used in this process. A compound of sodium carbonate and sodium bicarbonate, natron essentially dried out the corpse. By removing the organs and packing the internal cavity with dry natron, the body



Canopic jars

*Drawing: Catherine Fitzpatrick
Photo: Harry Foster (CMC S98 3516)*



Mummified crocodiles

Photo: Danielle Cormier (CMC S97 10689)

tissues were preserved. The lungs, stomach, liver and intestines were placed in four canopic jars, but the heart was left in the body because it was considered the centre of intelligence. The corpse was then washed, wrapped in linen and soaked in resins and oils. This gave the skin a blackened appearance resembling pitch. The term “mummification” comes from the Arabic word *mumiyah*, which means “bitumen”, a pitch substance that was first used in the preservation process during the Late Period.

The Egyptians mummified humans as well as animals. This practice reached its height during the eleventh and twelfth centuries B.C. in Thebes, where the present-day cities of Luxor and Karnak are located. The purpose of mummification was to keep the body intact so it could be transported to a spiritual afterlife.



Everlasting Life

Left to right: Horus, wearing the Double Crown of Upper and Lower Egypt; the mummified body of Hunefer protected by Isis and Nephthys (birds); Hunefer kneeling before two cobras wrapped around the emblems of Upper and Lower Egypt; an offering table and a sacred eye; two water gods, one holding a was sceptre and the other the sign for “a million years”.

Photo: Harry Foster (CMC S98 3543)

Chapter 8

Kings and Queens

Objectives

To learn about the role of the pharaohs and their wives, and to identify the symbols associated with the office of the pharaoh.

Mystery

The kings and queens of ancient Egypt depicted themselves as being incredibly self-confident. Where did they get their highly developed sense of purpose? What symbols did they use to reinforce their position as powerful rulers?

Discussion and Research Projects

1. How did the pharaohs explain their relationship with the gods? How did the explanation proposed in the Old Kingdom evolve in the Middle Kingdom?
2. How did we find out about the deeds of the pharaohs?
3. Look at images of the kings. Can you tell what activities kings engaged in?
4. How did the kings reinforce their image as powerful rulers?
5. Not all images of kings doing heroic deeds were true to life. Why did kings create these images of themselves if they were not true?
6. What did the pharaohs think would happen to them if they were not just rulers?
7. How were new pharaohs chosen?
8. What is a bureaucracy?
9. What position did pharaohs hold in the bureaucracy? What duties did they perform?

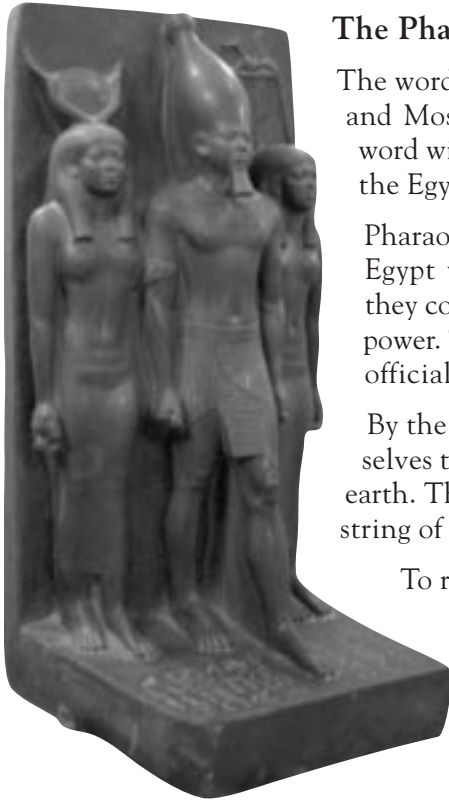


10. Next to the pharaoh, who was the most powerful person? What were his duties?
11. Did the merit principle apply to the appointment of officials in the pharaoh's administration? What factors determined who got high positions in the pharaoh's government?
12. What code of behaviour governed civil servants in their relationship with their superiors?
13. Why did pharaohs sometimes marry women they were related to?
14. What did royal women wear or carry that signified their royalty?
15. Why do you think pharaohs had many wives?
16. Name some of the powerful women in ancient Egypt? What were they famous for?
17. What circumstances led Queen Hatshepsut to seize the throne and declare herself pharaoh of Egypt? Why do you think she wanted to be pharaoh?
18. What type of work did the pharaoh's wives do in the royal palaces?
19. What type of rivalry may have existed between the pharaoh's wives and children?
20. Name the symbols that surround drawings of royalty and deities, and explain their purpose.
21. What symbols do the royals hold in their hands to indicate their station in life?
22. Which symbols represent the idea of protection?
23. Which symbols are related to the creation myth?
24. Which symbols are associated with eternal life?
25. Compare the royal symbols of the ancient Egyptians with those of other ancient cultures. Which of these symbols are still used today to denote royalty?

Creative Projects

1. Use **Activity Sheet 18** to learn to identify various royal symbols.
2. Compare the headgear worn by royalty and deities. Draw the various types of headgear and explain their symbolic meaning.
3. Write an imaginary interview with one of the pharaoh's wives. Ask about her relationship with her husband, her children and the members of her extended family.
4. Try inventing a symbol for: a) life; b) protection; c) love; d) death; or e) anything else you can think of.

FACT SHEET: The Kings and Queens of Ancient Egypt



King Menkaure (fourth dynasty) flanked by the goddess Hathor (left) and a female figure representing a district of Egypt. Menkaure would have been considered a god. This statue was found in the temple of his pyramid.

CMC ECD98-028 #78 (photo)

The Pharaoh as Religious Leader

The word “pharaoh” comes from the Bible. It was first used by Joseph and Moses in the “Second Book of Kings”. Although we use this word without distinction, it is an anachronism when used to refer to the Egyptian kings prior to the eighteenth dynasty.

Pharaohs began ruling Egypt in 3000 B.C., when Upper and Lower Egypt were united. During the Old Kingdom (2575-2134 B.C.), they considered themselves to be living gods who ruled with absolute power. They built pyramids as testimony of their greatness but left no official records of their achievements.

By the Middle Kingdom, the pharaohs no longer considered themselves to be living gods, but rather the representatives of the gods on earth. They left records of their deeds, but these were no more than a string of titles and laudatory epithets.

To reinforce their image as powerful divine rulers, the pharaohs represented themselves in writings and sculptured reliefs on temple walls. They often depicted themselves as warriors who single-handedly killed scores of enemies and slaughtered a whole pride of lions. Similar depictions were repeated by one pharaoh after another, which leads one to question the validity of the scenes. For example, the war pictures of Ramses III at Karnak are exact copies of those of Ramses II. These deeds of heroism were, in part, designed for propaganda purposes. They reinforced the position of the king as head of state rather than reflecting historical reality.



The pyramid of Mycerinus at Giza

CMC S97 10283



Pharaoh Den smiting an Asian enemy with a mace. His name is written in the serekh in front of his face.

In the fourth century B.C., a high priest and scribe of the sacred shrines of Egypt named Manetho compiled the first comprehensive list of the pharaohs. He grouped their reigns into dynastic divisions that to a large degree are still considered accurate today. The dynasties are grouped into several periods, starting with the Early Period (2920–2575 B.C.) and ending with the Late Period (712–332 B.C.). The first dynasty began with the legendary King Menes (who is believed to have been King Narmer), and the last one ended in 343 B.C. when Egypt fell to the Persians. Nectanebo II was the last Egyptian-born pharaoh to rule the country.

Not all the pharaohs were men, nor were they all Egyptian. Before the Graeco-Roman Period, at least three women ascended the throne, the most important being Queen Hatshepsut. Over several periods, Egypt was dominated by foreign powers that appointed kings from their own ranks.

Exactly how successive pharaohs were chosen is not entirely clear. Sometimes a son of the pharaoh, or a powerful vizier (head priest) or feudal lord assumed the leadership, or an entirely new line of pharaohs arose following the collapse of the former monarchy. For example, Tutankhamun was succeeded by his elderly chief advisor, Ay, who was not of royal birth.



A pharaoh striking an enemy. Bas-relief carving on a wall at Medinet Habu.

CMC S97 10423



Pharaoh Amenophis I reigned for a quarter of a century and led a successful military expedition to Kush, a land to the south of Egypt that was rich in gold.

CMC ECD98-024 #89 (photo)



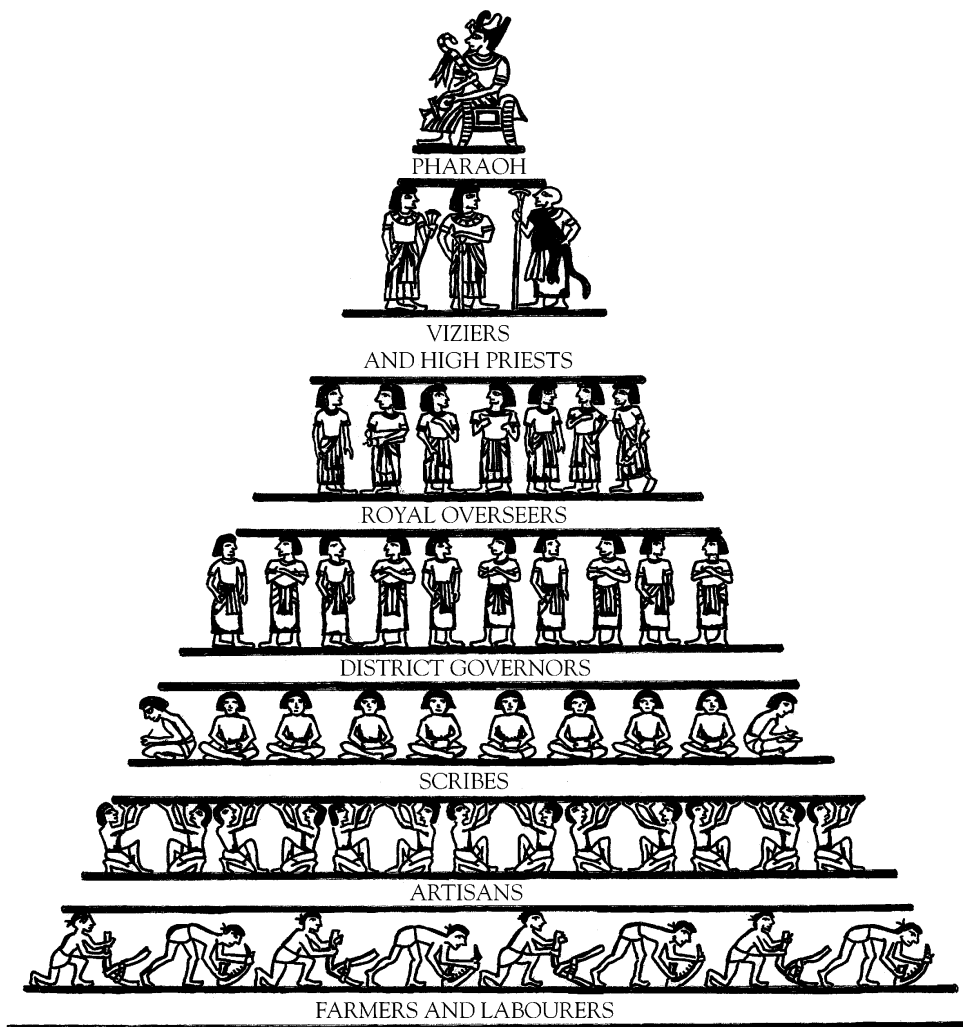
A statue of Amenophis III (right), shown next to one of the god Sobek. Amenophis III reigned for almost 40 years during one of ancient Egypt's most prosperous and stable periods.

CMC ECD98-034 #15 (photo)

Bureaucracy

Bureaucracy is not a modern invention; it was conceived by the Egyptians over 5,000 years ago. The creation of a bureaucracy in the Old Kingdom was a key factor in the inception of the Egyptian civilization. The king was the supreme head of state. Next to him, the most powerful officer in the hierarchy was the vizier, the executive head of the bureaucracy. The position of vizier was filled by a prince or a person of exceptional ability. His title is translated as “superintendent of all works of the king”.

As the supreme judge of the state, the vizier ruled on all petitions and grievances brought to the



The Egyptian Hierarchy
 Drawing: Catherine Fitzpatrick

court. All royal commands passed through his hands before being transmitted to the scribes in his office. They in turn dispatched orders to the heads of distant towns and villages, and dictated the rules and regulations related to the collection of taxes.

The king was surrounded by the court, friends and favoured people who attained higher administrative positions. The tendency was to fill these positions on the basis of heredity. One of the most ardent wishes of these administrators was to climb the bureaucratic ladder through promotions and to hand their offices to their children.

Many concepts in modern bureaucracies can be traced to the Egyptians. The hierarchical structure and code of ethics of the Egyptian bureaucracy are echoed in modern governments. Ancient Egyptian bureaucrats, who aspired to higher positions, were counselled to obey their superiors and keep silence in all circumstances,¹² in other words, not to contradict or challenge the wisdom of those in charge. They were expected to have tact and good manners, be faithful in delivering messages, and display humility that verged on subservience.¹³ It is perhaps for these reasons that Egyptian officials were called civil servants, a designation that governments have adopted down through the ages.



Monumental statue of Ramses II, one of the most powerful Egyptian pharaohs
CMC ECD98-019 #275

Royal Women

Royal mothers, wives and daughters derived their status from their relationship with the king. Kings had many wives and royal families were large. The most prolific was Ramses II, who had eight wives and over a hundred children. To keep the royal bloodline pure, kings often married within their family, a sister or half sister, for example. In a few cases, they married their daughters, although it is not clear whether or not these marriages were true conjugal unions.

The status of royal women is evident in Egyptian art. One of the oldest royal insignia worn

by queens is the vulture headdress. The vulture's wings and body were spread over a tightly fitted cap, and the head jutted out at the front. The uraeus (cobra) head could be substituted for the vulture head. Both the vulture and the cobra served to protect the wearer from harm. They were the most characteristic marks of kingship and may have also been, by association, a symbol of divine queenship.

Another royal symbol worn by women from the thirteenth dynasty onward was a pair of falcon plumes mounted on a circular support. Similar double-feather headdresses were worn by Min, the fertility god, Amun, the creator god, and Hathor, the powerful goddess who controlled the cycles of nature. Like deities and kings, royal women are seen holding symbols such as the *ankh* (symbol of life), the *sistrum* (rattle) and the *menit* necklace.



Queen Nefertari wearing a vulture headdress surmounted by a pair of falcon plumes.



The nobleman Hunefer and his wife with arms raised in praise of the gods

Photo: Harry Foster (CMC S98 3568)



Queen Nefertari, wife of Ramses II, wearing a vulture headdress

Girls born to royal wives were given the title “king’s daughters” to distinguish them from those of non-royal wives. Royal wives were called the king’s principal wives to distinguish them from the others, although the principal wife was not always of royal birth. An example is Queen Tiy, the wife of Amenhotep III, Tutankhanum’s grandfather. Daughters of foreign kings were sometimes wed to the pharaohs in diplomatic marriages. Not all these women had children by the king, however. Many were engaged in spinning,

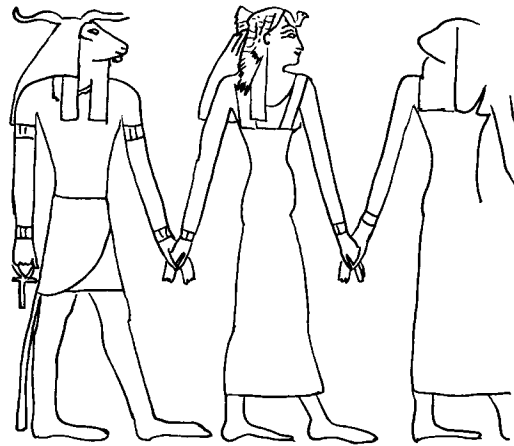


Queen Hatshepsut was depicted on a temple wall dressed like a pharaoh with a beard and a slender masculine body.

weaving and other household duties within the various palaces throughout Egypt.

Little is known about the queens, but there are exceptions.

Ahmose-Nefertari, the wife, and sister, of the first pharaoh of the eighteenth dynasty, King Ahmose, became a very powerful queen. She was the first in the history of Egypt to be given the title of God’s Wife. When her son died, there was no obvious heir to the throne, so an army general, Thutmose I, became king. Upon his death, his son, Thutmose II, ruled with his half sister Hatshepsut. When he died, Hatshepsut took command and ruled Egypt as a pharaoh for 20 years. This was the first time a woman wielded such power and influence over the affairs of the state. During the Graeco-Roman period, Cleopatra VII was the most illustrious queen. Since the rulers of this period were of Macedonian (Greek or Roman) descent, they are not included in the list of Egyptian rulers of the pharaonic era.



Queen Ahmose-Nefertari, pregnant with her daughter Hatshepsut, is led to the birthing room by the gods

Royal Symbols¹⁴

Egyptian art is rich in symbols related to royalty and its religious beliefs. By learning to read these symbols, one can gain a better understanding and appreciation of Egyptian art. Below are a few of the most common symbols.

Ankh

In the shape of a mirror or a knot, the *ankh* is a symbol of life. It was often carried by deities or people in a funeral procession, or offered to the king as the breath of life.



Cartouche

A cartouche is an elliptical outline representing a length of rope that encloses the names of royal persons in hieroglyphs. It symbolized the pharaoh’s status as ruler of all that the sun encircled. Napoleon’s soldiers gave the cartouche its name. The word is derived from the Italian *cartoccio*, meaning a cornet of paper (a piece of paper rolled into the shape of a cone).



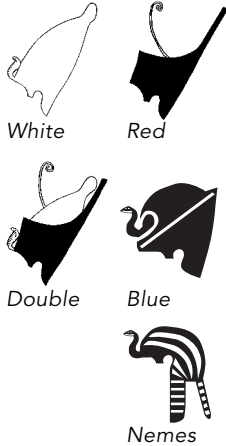
In Italian art, the names of the people represented in paintings were enclosed in a drawing of a *cartoccio*.

Crook and Flail



The crook and flail are two of the most prominent items in the royal regalia. Kings held them across their chest. The crook, in the shape of a shepherd's staff, is a sceptre symbolizing government and may be related to the concept of a good shepherd leading his flock.

Crowns and Headgear



Egyptian kings and gods are depicted wearing different crowns and headdresses. Before 3000 B.C., there was the white crown of Upper Egypt and the red crown of Lower Egypt. When Egypt was united, these two crowns were amalgamated into the Double Crown of Upper and Lower Egypt. Starting in the eighteenth dynasty, kings also wore the blue crown, and the white crown with a plume on either side and a small disk at the top.

Kings are often represented wearing the *nemes* headcloth, a piece of cloth pulled tight across the forehead and tied at the back, with two flaps hanging on the sides. Cobra (uraeus) and vulture heads were worn on the forehead. Kings shaved their heads but had a prominent beard.

Gold



The Egyptian symbol for gold is a collar with beads along the lower edge. Gold has long been associated with the gods and royalty. This imperishable metal reflects the brilliance of the sun and the hope of eternal life. Isis and Nephthys, two of the goddesses who protected the dead, are often shown kneeling on the gold sign at the ends of royal coffins.

Isis Knot



This sign is similar to the *ankh* sign, but rather than having a horizontal bar, it has two arms that are bent downward. It is closely associated with the *djed* pillar that represents Osiris, Isis's husband, and symbolizes the binary nature of life itself.

Lotus



The blue lotus was a symbol of the sun god and the pharaohs. Like the sun that sets in the evening and rises in the morning, the lotus flower blooms in the day and closes each night. In one version of the creation myth, the sun first rose out of a giant lotus flower that bloomed on the primordial mound. The lotus thus became a symbol of rebirth, the renewal of life and the promise of everlasting life.

Menit Necklace

This heavy beaded necklace with a crescent front piece and a counterweight at the back is associated with the goddess Hathor. It serves as a medium to transfer the goddess's power to the pharaoh. The pharaoh's wife is sometimes depicted offering the necklace to her husband, since she is the earthly representative of Hathor.



Reed and Bee

The Egyptian word *nsw* (he who belongs to the reed) is a symbol for Upper Egypt, and the word *bit* (he who belongs to the bee) is a symbol for Lower Egypt. When placed together, they represent the domain of the pharaoh, ruler of Upper and Lower Egypt.



Papyrus

A water plant, the papyrus symbolizes the primeval marshes of the creation story. The heraldic plant of Lower Egypt, it was used to decorate columns in temples built by the pharaohs.



Scarab

The scarab's habit of laying its eggs in a ball of dung, which is then rolled along the ground and dropped into a hole, made it an obvious symbol for the sun god. It represented the rising sun god and, through association, the pharaohs.



Shen Ring

The circular *shen* ring represents the concept of eternity, having no beginning and no end. It is associated with the solar disk, the serpent that bites its tail, and divine birds that are often shown holding the sign in their claws.



Sistrum

A ceremonial instrument, the sistrum is a rattle that is often shaped like the *ankh* symbol. It is associated with the goddess Hathor, and its sound is thought to bring protection and divine blessing through fertility and rebirth.



Sceptres

The sceptre, or rod, is one of the oldest and most enduring symbols associated with royalty and the deities. Two types of sceptres are found in Egyptian art. The *was*, a symbol of power and dominion, has a straight shaft, a crooked handle in the shape of an animal head and a forked base. The *sekhem* symbolizes divine power and has a straight shaft with an enlarged cylindrical end.



Was



Sekhem



Uraeus

The uraeus represents a rearing cobra with a flared hood. The cobra is associated with the sun god, the kingdom of Lower Egypt, the kings and their families, and several deities. A symbol of protection, it guards the gates of the underworld, wards off the enemies of the royals and guides the deceased pharaohs on their journey through the underworld.



Vulture

The vulture was the symbol of Upper Egypt. Pharaohs wore the uraeus (cobra) and the head of a vulture on their foreheads as symbols of royal protection. The goddess Nekhbet was also portrayed as a vulture.

Chapter 9

The Royal Image

Objective

To see how the royals were portrayed in Egyptian art.

Mystery

What did the royals wear and what symbols did they use to indicate their station in life?

Discussion and Research Projects

1. What type of clothing did the elite class wear?
2. What type of clothing did priests wear?
3. Can you guess the age of the people portrayed in Egyptian art? Why do you think they chose to be portrayed as young adults? What does this say about the value placed on youth?
4. Why would the royals choose to be depicted with an idealized figure rather than as they really looked?
5. Describe the hairstyle of the priests, and the elite men and women.
6. Why do you think the Egyptians wore scented cones on top of their wigs?
7. Describe how young people wore their hair.
8. What type of make-up did the men and women wear?
9. What practical purpose did their eye make-up have?
10. How do you think the clothing and hairstyles of the ancient Egyptians have influenced today's fashions?



11. Find examples of how people and deities are depicted in two-dimensional drawings. How is the body drawn? Which parts of the body are shown in profile and which are shown from the front?
12. Look at drawings to compare the proportions given to the head, torso, arms and legs. Are the proportions generally the same from one drawing to the next or do they differ?

Creative Projects

1. Use **Activity Sheet 19** to learn about the clothing worn by royal women and goddesses.
2. Use **Activity Sheet 20** to learn about the clothing worn by royal men and gods.
3. Use **Activity Sheet 21** to learn about headgear, hairstyles and make-up.
4. Use **Activity Sheet 22** to give your students a chance to dress an Egyptian man and woman.
5. Use **Activity Sheet 23** to learn about how the ancient Egyptians drew the human figure.
6. Use **Activity Sheet 24** to make a drawing of human figures using a grid similar to the one used by the ancient Egyptians.

FACT SHEET: The Royal Image

Clothing

When royalty, gods and goddesses were portrayed in statues, temple carvings and wall paintings, it was the beauty and self-confidence of the subject that was conveyed. Egyptian artistic conventions idealized the proportions of the body. Men are shown with broad shoulders, slim bodies, and muscular arms and legs; and women have small waists, flat stomachs and rounded busts. Both wear elegant clothing and jewellery, and stand tall with their heads held high. Their stately appearance commands the respect of all who gaze upon their portraits.

In the Old Kingdom, goddesses and elite women were portrayed wearing a sheath with broad shoulder straps. In the New Kingdom, the dress had only one thin strap. These dresses were made of linen, and decorated with beautifully coloured patterns and beadwork. By the reign of Amenhotep III (1390-1352 B.C.), women's garments were made of very light see-through linen.

The men wore knee-length shirts, loincloths or kilts made of linen. Leather loincloths were not uncommon, however. Their garments were sometimes decorated with gold thread and colourful



Women weaving linen cloth

Drawing: Winnifred Needler
Photo: Harry Foster (CMC S97 10782)



Queen Nefertari (left) wears a white linen robe in the New Kingdom style. Isis wears a tight-fitting linen dress typical of the style popular during the Old and Middle kingdoms.

Photo: Harry Foster (CMC S98 3534)



A nobleman plays a board game called senet. He wears a long white linen robe in the New Kingdom style.

Photo: Harry Foster (CMC S98 3552)



A sem-priest (left) wears a short kilt and a leopard skin, and the men wear short kilts.

CMC ECD98-014 #9



Tomb painting of a pharaoh wearing a short kilt

CMC ECD98-007 #72



A prince wearing the sidelock of youth and a uraeus on his forehead

CMC S97 9822

beadwork. The priests, viziers and certain officials wore long white robes that had a strap over one shoulder, and *sem*-priests (one of the ranks in the priesthood) wore leopard skins over their robes.

Hairstyles

The Egyptian elite hired hairdressers and took great care of their hair. Hair was washed and scented, and sometimes lightened with henna. Children had their heads shaved, except for one or two tresses or a plait worn at the side of the head. This was called the sidelock of youth, a style worn by the god Horus when he was an infant.

Both men and women sometimes wore hairpieces, but wigs were more common. Wigs were made from human hair and had vegetable-fibre padding on the underside. Arranged into careful plaits and strands, they were often long and heavy. They may have been worn primarily at festive and ceremonial occasions, like in eighteenth-century Europe.

Priests shaved their heads and bodies to affirm their devotion to the deities and to reinforce their cleanliness, a sign of purification.



Women wearing perfumed cones and wigs

Drawing: Winnifred Needler
Photo: Harry Foster (CMC S97 10785)



A priest with shaven head

CMC S97 9833

Make-up

Elite men and women enhanced their appearance with various cosmetics: oils, perfumes, and eye and facial paints. When putting on make-up, they used a mirror, as we do today. Galena or malachite (a mineral pigment) was ground on stone palettes to make eye paint. Applied with the fingers or a kohl pencil, eye paint emphasized the eyes and protected them from the bright sunlight. Rouge to colour the face and lips was made from ochre. Oils and fats were applied to the skin to protect it, mixed into perfumes, and added to the incense cones men and women wore on top of their head.



Make-up kit: kohl pots and sticks, and a palette for mixing mineral pigments into eyeliner, blush and eye shadow

Photo: Royal Ontario Museum
CMC ECD98-040 #30



Two bronze mirrors and a razor

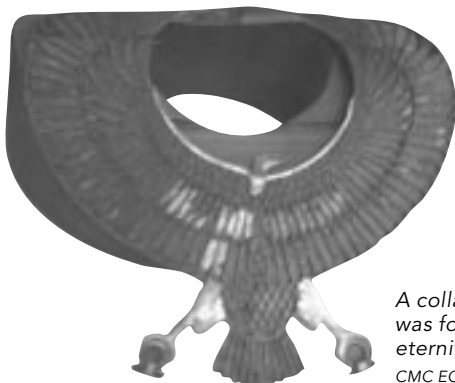
Photo: Royal Ontario Museum
CMC ECD98-040 #32

Jewellery

From the earliest times, jewellery was worn by the elite for self-adornment and as an indication of social status. Bracelets, rings, earrings, necklaces, pins, belt buckles and amulets were made from gold and silver inlaid with precious stones such as lapis lazuli, turquoise, carnelian and amethyst. Faience and glass were also used to decorate pieces of jewellery.

The elegant design of Egyptian jewellery often reflected religious themes. Motifs included images of the gods and goddesses; hieroglyphic symbols; and birds, animals and insects that played a role in the creation myth. Commonly seen were the scarab; the Eye of Re; lotus and papyrus plants; the vulture and the hawk; the cobra; and symbols such as the Isis knot, the *shen* ring (symbol of eternity) and the *ankh* (symbol of life). A person's jewellery was placed in his

or her grave to be used in the afterworld, along with many other personal items.



A collar fit for a king. This collar, in the shape of Nekhbet, the vulture goddess, was found in Tutankhamun's tomb. The vulture holds two shen rings (symbols of eternity) in its claws.

CMC ECD98-028 #9 (photo)



Rings

Photo: Royal Ontario Museum
CMC ECD98-040 #35



Necklaces

Photo: Royal Ontario Museum
CMC ECD98-040 #36



This drawing illustrates how artists idealized the human figure. Ramses I (centre) makes an offering to the god Nefertem (left). The goddess Maat stands behind Ramses.

Drawing: Catherine Fitzpatrick
Photo: Harry Foster (CMC S98 3509)



Artists used an 18-square grid to sketch their figures.

Drawing: Catherine Fitzpatrick

Depicting Royalty

The main themes found in Egyptian works of art that depict royalty, the deities and daily life are related to the continuity of the universe. For this reason, Egyptian art tends to reflect an idealized world rather than reality.

In two-dimensional images, the parts of the body were drawn from the most representative angle. The torso and the eyes are best appreciated from the front, and the face, arms, legs and feet from the side.

Artists followed a formula that makes standing and sitting figures look stiff. Using a traditional grid of 18 squares, they sketched figures according to a predetermined pattern, making no attempt to show perspective. For example, if a seated figure is shown in profile, the inner leg is drawn behind the outer one but in the same size.

Despite this, the individual style of the artists is still evident, as can be seen in the tomb drawings in the valleys of the Kings, Queens and Nobles. This is particularly true of works created in the Amarna period, during the reign of Akhenaten, who may have been Tutankhamun's father. At that time, the members of the royal family were shown in unusually intimate scenes, and their facial and bodily features were exaggerated: the skull and torso were elongated, the hips enlarged and the belly extended. After Akhenaten's death, the artist reverted to the more familiar classic representation of the human form.



The elongated skull of this bust of Tutankhamun is typical of the Amarna style of art.



Bust of Tutankhamun as the sun god, Re, emerging from a blue lotus in the primeval sea at the moment of his birth

Replica by Abed Zeibdawi
Photo: Harry Foster (CMC S98 3500)

Chapter 10

The Pyramids and the Great Sphinx at Giza

Objective

To learn about how Old Kingdom pharaohs prepared for life after death.

Mystery

Why did the pharaohs build pyramids? How did the ancient Egyptians build such monumental structures?

Discussion and Research Projects

1. What did the pharaohs believe would happen to them when they died?
2. Why did the pharaohs believe it was important to preserve their bodies?
3. Where were the pharaohs of the first and second dynasties buried?
4. What did the pyramid built by King Djoser in the third dynasty look like?
5. What were the first pyramids made of?
6. Why are the Giza pyramids so famous?
7. What was placed at the top of the pyramids?
8. What covered the Giza pyramids when they were completed?
9. What is found inside pyramids?
10. How do you think the huge limestone blocks were moved up the Giza pyramids during construction?



11. Many engineering problems had to be overcome when building the Giza pyramids. Find out why some of the early pyramids collapsed under their own weight and how this problem was solved at Giza.
12. What does the Giza Sphinx represent?
13. Why are New Age seekers interested in the Sphinx?

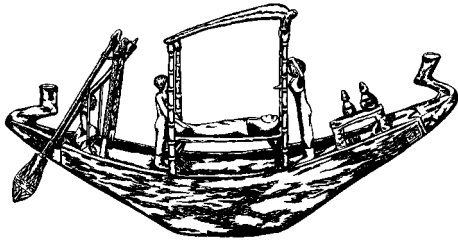
Creative Projects

1. Use **Activity Sheet 25** to learn about the evolution of pyramid styles.
2. Make a model of the Giza plateau. Include the three pyramids, the Sphinx and the ceremonial causeways.
3. Do a drawing of a pyramid under construction.
4. Pretend you are a journalist. Interview the chief architect and builder of the Great Pyramid. Ask him how long it took to build, what difficulties were encountered, and what was learned about the construction of pyramids.

FACT SHEET: The Pyramids and the Sphinx

The King Lives

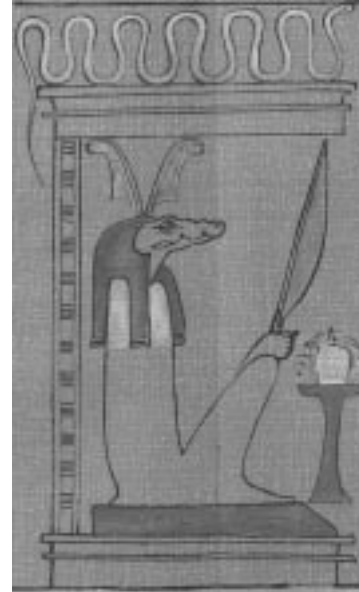
The Egyptians believed that when a king died, he travelled to the underworld, where his deeds on earth were judged. If his heart was pure and light as a feather, he became one with Osiris. As the deceased pharaoh lived on in the afterworld, a new pharaoh received his divine mandate in a coronation ceremony. In this way, the station of the king was passed from one generation to another. The expression “the king is dead, long live the king” encapsulates the principle of kingship: the physical body of the king dies but lives into eternity; the office of the king lives on, being passed from one generation to the next.



Bark carrying a deceased person to the burial grounds on the west side of the Nile

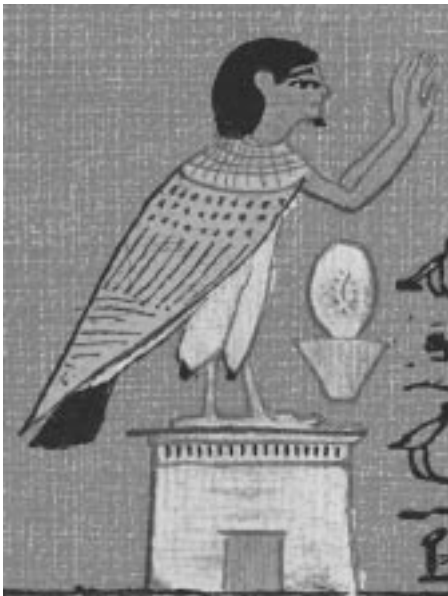
*Drawing: Catherine Fitzpatrick
Photo: Harry Foster (CMC S98 3507)*

In preparation for the journey to the afterworld, the kings of the Old Kingdom built pyramids as tombs to house their bodies. They believed that when they died their bodies and souls would be reunited in the afterworld, and they would thus attain eternal life.



A guardian of the gates in the underworld. The deceased had to correctly recite a magic spell before being allowed to pass through the gates that led to paradise.

Photo: Harry Foster (CMC S98 3546)



Ba bird with a human face standing on a tomb. The ba represented an aspect of the soul, a person's personality.

Photo: Harry Foster (CMC S98 3577)

The First Pyramids

The Pyramid Age began during the Old Kingdom (2575–2134 B.C.), when the first pyramid was built by King Djoser in the third dynasty. Construction of pyramids continued until 1640 B.C. During the first and second dynasties, Egyptian kings were buried in mastabas. The deceased were laid to rest in an underground chamber at the bottom of a shaft, and a flat-topped building was placed over them.

King Djoser established a powerful centralized administration based in the city of Memphis, not far from the present-day city of Cairo. One of his officials, the famous architect and scholar Imhotep, designed the Step Pyramid, a pharaoh's tomb at Saqqara that looks like a stairway to heaven. This tomb is an elaboration of the original mastabas, with its central burial chamber.



The Step Pyramid was built by the pharaoh Snefru. It looks like a stairway to heaven.
CMC ECD98-025 #15



The Bent Pyramid was built by the pharaoh Snefru. During construction, the engineers realized that the top half had to be bent inward to prevent the whole structure from collapsing.
CMC S97 10630

In the fourth dynasty, the pharaoh Snefru built the first geometrically true pyramids at Dahshur, south of Saqqara. He started by adding a smooth casing over the steps of two pyramids built by his predecessors. He then built two pyramids of his own.

The pyramids built during the fifth dynasty had a core of rubble and mud bricks, and a limestone facing. When the limestone was removed, the core collapsed.

Why the pharaohs chose a pyramid for their tombs is still a mystery. Perhaps the shape originated from the creation story, in which the world is conceived as a flat plane with four corners representing the north, east, south and west. When the sky rose up, forming an invisible central axis like a pole or tree in the centre, the world took on the shape of a pyramid. The pyramid may also represent the primeval mound that rose out of chaos and provided a resting place for the sun god, Re. Its peak may symbolize the point where sacred energy from the sky world enters the human world. Another theory suggests that when Re became more important in the Egyptian religion, the pyramid (like the obelisk) represented a ray of the sun.



The site of the Giza pyramids is one of the seven classic wonders of the ancient world, the only one that has survived the passage of time.
CMC S97 10296

Giza Pyramids

The most famous pyramids are found at Giza. They were built by three pharaohs — Cheops (or Khufu *), Chephren (Khafre*) and Mycerinus (Menkaure*) — during the second half of the third millennium B.C. This site is one of the seven classic wonders of the ancient world, the only one that has survived the passage of time. The other six are the Mausoleum at Halicarnassus (in Bodrum, Turkey), the statue of Zeus at Olympia (Greece), the Colossus of Rhodes, the Temple of Artemis at Ephesus (Turkey), the Hanging Gardens of Babylon, and the Pharos of Alexandria.

* The pharaoh's Greek name is followed by his Egyptian name in brackets.



The Great Pyramid at Giza built by the pharaoh Cheops. It was once encased in polished white limestone, so that when the sun hit it, it appeared to be made of gold.

CMC ECD98-015 #100



The corridor that leads to the burial chamber in the Bent Pyramid

CMC ECD98-025 #55

The Great Pyramid of Cheops, the largest of the three at Giza, is estimated to comprise 2.5 million limestone blocks with an average weight estimated at 2.5 tonnes (2.75 tons). The king's burial chamber is located in the middle of the pyramid, high above the ground, and a series of relieving chambers were built above it to prevent it from collapsing. The entire structure was encased in a fine white polished limestone brought from the hills at Tura, on the opposite side of the Nile. This highly prized material has been removed and used to decorate mosques in Cairo.

When completed, the Great Pyramid stood 146.6 metres (481 feet) tall, and its base was 230.3 metres (756 feet) square. The capstones (pyramidions) of all the pyramids were made of solid polished granite. For conservation reasons, they have been removed to the Egyptian Museum in Cairo, where they are on display.

The Great Pyramid is open to the public, but it is sometimes closed for conservation reasons. After climbing a number of steps, one enters through a narrow passage on the north side. This passage leads to a sloping corridor with a low ceiling where one is obliged to bend over while climbing up a ramp. The ramp leads to a passage with a high ceiling called the Grand Gallery, from where stairs lead to the king's burial chamber. Good walking shoes and light clothes are advised for anyone entering the pyramid. The climb is strenuous and the narrow passages tend to trap the heat.

Pyramid Construction

Pyramids were constructed by work gangs over a period of many years. The Pyramid Age spans over a thousand years, starting in the third dynasty and ending in the Second Intermediate Period. The Greek historian Herodotus was told that it took 100,000 men 20 years to build the Great Pyramid at Giza. Scholars today, however, think it may have been built by only 20,000 men over 20 years.



Ramps were used to haul stone blocks on wooden sleds up the sides of the pyramids

CMC ECD98-027 #97

A pyramid's large square base creates a very stable structure. A number of astronomical observations were used to precisely align its corners with the four cardinal points. Approximately eighty percent of the building materials are found in the lower half. This means that relatively few stone blocks were hauled to the upper levels. Since pyramids are solid, no walls or pillars were required to support the structure. Despite its simple design, a pyramid is an incredible engineering feat. Several theories attempt to explain how pyramids were constructed, but for now, the mystery has yet to be solved.



Water was sprinkled under the sleds to lubricate the ramps, making it easier to move the heavy stone blocks. Re-enactment scene from the film Mysteries of Egypt.

CMC ECD98-020 #6

One theory suggests that causeways were used to haul the stone blocks on wooden sleds up the side of the pyramids. The ramps were lubricated with water to reduce friction when hauling the blocks. As few as 10 men were needed to drag a stone block up a ramp. There may have been several ramps on each side of the pyramid at different levels, and a ramp may have been coiled around the pyramid as it grew in height. Once a stone block reached its desired level, wooden rockers may have been used to manoeuvre it into position.

Another theory suggests that a wooden crane with a counterweight on one end may have been used to lift the blocks from one level to the next. This theory has been disputed, since the Egyptians did not have access to trees strong enough for this type of work. The enormous weight of the stone blocks would undoubtedly break a wooden crane before the blocks could be lifted.

Another possibility involves the use of pulleys to hoist the blocks up the ramps and fulcrums to manipulate the blocks into place. Pulleys were used on ships at the time.

The pyramids were probably not built by slaves because slave labour was not widely used in Egypt at the time. Peasant farmers, however, were required to spend a number of weeks working on construction projects. Since the fields were under water during the summer, wages earned in building the gigantic pyramids supplemented the family's income.

Pyramids did not stand alone; they were part of a funerary complex. The complex included a landing stage where boats docked, a mortuary temple, a processional causeway linking the mortuary temple to the pyramid, an open court, solar barks (buried beside the pyramid), and mastabas and smaller pyramids where the family of the king and nobles were buried.



Bas-relief of Re-Horakhty
CMC ECD98-007 #63

The Giza Sphinx

The Great Sphinx at Giza, near Cairo, is probably the most famous sculpture in the world. With a lion's body and a human head, it represents Re-Horakhty, a form of the powerful sun god, and is the incarnation of royal power and the protector of the temple doors.

The Sphinx is the oldest and longest stone sculpture from the Old Kingdom. During the eighteenth dynasty, it was called Horus of the Horizon and Horus of the Necropolis, the sun god that stands above the horizon. In later times, many sphinx images were carved in smaller sizes or in cameos with the faces of the reigning monarchs. The face of the Great Sphinx is believed to be that of Chephren, the fourth-dynasty pharaoh who built the second-largest pyramid in the Giza triad. In the image of the sphinx, the pharaoh was seen as a powerful god.

Carved out of a natural limestone outcrop, the Sphinx is 19.8 metres (65 feet) high and 73.2 metres (240 feet) long. It is located a short distance from the Great Pyramid. Between the enormous paws is a stele that records a dream Thutmose IV had when he was a prince. He dreamt that he stopped to rest in the shadow of the Sphinx during a hunting expedition in the desert. While asleep, the Sphinx spoke to him, saying that he would become king if he cleared away the sand that all but buried the Sphinx. When he became king, Thutmose IV cleared the sand and erected a stele that tells the story of his dream. After the work was completed, a chapel was built next to the Sphinx to venerate this sun god.

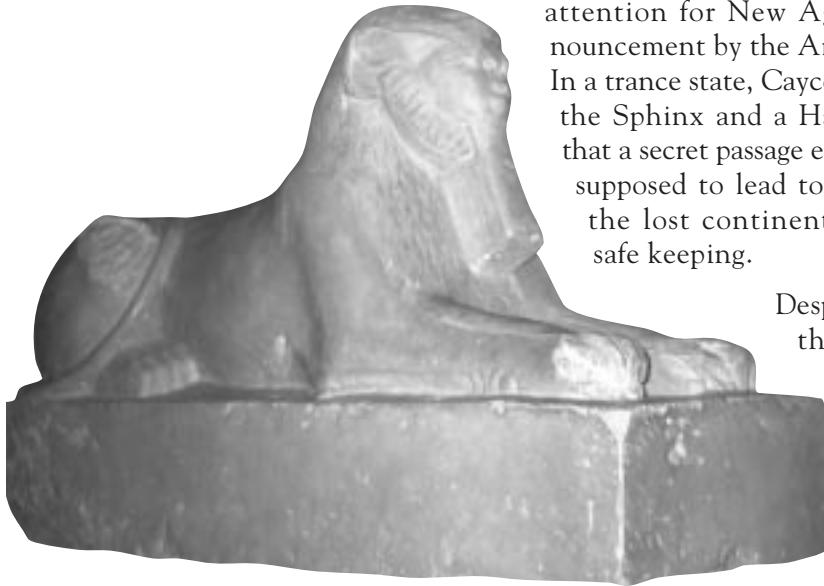


The Great Sphinx at Giza
Photo: Adham Mostafa (CMC S97 10252)

Down through the ages, attempts have been made to protect the Sphinx from the effects of wind and sand erosion. A restoration project is currently under way to replace the stone casing that once protected this monument.

Sphinxes sometimes had a female face. For example, a sphinx of Queen Hatshepsut was sculpted with her face and a pharaoh's beard. Queen Tiy, wife of Amenhotep III, was the first to have a truly female sphinx sculpted in her likeness. Besides a female face without a beard, her sphinx had breasts and wings.

The Sphinx differs from other deities in that it has an animal body and a human head, whereas most other deities have human bodies and animal heads. One explanation for this anomaly is that the Sphinx is the earthly representation of the constellation Leo, which has a lion's body. Images of the sphinx are found in various sizes and shapes, as the collection at the Egyptian Museum in Cairo and the temples throughout Egypt attest.



Sphinx bearing the features of Queen Hatshepsut. She ruled as a pharaoh for 20 years.

CMC S97 10816

The Giza Pyramids and Sphinx have been the focus of attention for New Age seekers, following a pronouncement by the American psychic Edgar Cayce. In a trance state, Cayce spoke of vaults at the base of the Sphinx and a Hall of Records. He suggested that a secret passage exists under the Sphinx. This is supposed to lead to a tomb where the annals of the lost continent of Atlantis are hidden for safe keeping.

Despite the intrigue surrounding this psychic reading, modern archaeologists have not yet found evidence of a secret passage under the Sphinx. This story, however, continues to stir the imagination and contribute to the mystique of ancient Egypt.

Chapter 11

Tutankhamun and the Discovery of His Tomb

Objective

To learn about Tutankhamun and the drama surrounding the discovery of his tomb by Howard Carter in the Valley of the Kings.

Mystery

Who was Tutankhamun and how did he die? Why has the discovery of his tomb been called the greatest archaeological find of all time? What is the mummy's curse all about?

Discussion and Research Projects

1. During the New Kingdom, where did the royals bury their dead?
2. How were the tombs constructed?
3. How were the walls of the tombs decorated?
4. What was placed in the tombs to assist the deceased in the afterlife?
5. Why were household items and food placed in the tombs?
6. Of all the tombs in the Valley of the Kings, which is the most famous? Explain why it is so famous.
7. How old was Tutankhamun when he became pharaoh? Do you think he ruled as a true pharaoh at such a young age?
8. What are some of the theories about Tutankhamun's death?
9. Who became pharaoh after Tutankhamun died? What happened to him?
10. What became of Tutankhamun's wife?
11. What was done to Tutankhamun's body after he died?



12. Can you explain the “opening of the mouth” ceremony that was performed on Tutankhamun’s mummy?
13. What do you know about the discovery of Tutankhamun’s tomb? Who found it, when was it found and what happened to it in the years immediately following its discovery?
14. What kinds of treasures were found in Tutankhamun’s tomb?
15. What do you know about the mummy’s curse?
16. Gather information about the different theories on Tutankhamun’s death. Discuss the pros and cons of each theory.

Creative Projects

1. Pretend you are a journalist at the press conference held to announce Howard Carter’s discovery of the tomb. Write a story to communicate the news to the world.
2. Interview Tutankhamun and his sister-wife, and ask them about their childhood. Find out about life at Tell el-Amarna, the city their father, Akhenaten, built when he moved away from Thebes.
3. Create a dialogue between yourself and Tutankhamun, who now lives in the afterworld. Ask him to describe his journey to the afterworld and to explain what it is like to live there. Ask him to tell you about the circumstances surrounding his premature death.
4. Use **Activity Sheet 26** to learn about Tutankhamun’s tomb.
5. Use **Activity Sheet 27** to learn about some of the treasures found in Tutankhamun’s tomb.
6. Use **Activity Sheet 28** to learn about Tutankhamun’s life from artwork found in his tomb.

FACT SHEET: Tutankhamun and His Tomb

Valley of the Kings

The Valley of the Kings is famous for its royal tombs. These beautifully painted tombs have been designated a World Heritage Site by UNESCO. For over a thousand years, the kings, queens and nobles of the New Kingdom (1550-1070 B.C.) were buried in the Theban necropolises, the world's most magnificent burial grounds.

The tombs were cut into the limestone rock in a remote wadi (a dry river valley) on the west side of the Nile, opposite the present-day city of Luxor. Their walls were painted and sculpted with magnificent murals depicting scenes of daily life and the Land of the Gods. The chambers were filled with treasures — everything from furniture to food, statues, boats and jewels, which a person needed to sustain life into eternity. The royals hoped to find refuge from robbers and their enemies, who caused such havoc in the pyramid tombs of their predecessors.

The Valley of the Kings is located across the Nile from Thebes, the capital of Egypt during the New Kingdom. The Theban Peak, shaped like a pyramid, can be seen high above the burial grounds. This is perhaps one of the reasons the pharaohs chose this remote location.

The valley contains 62 known tombs, 24 of which are royal burials. The most famous (KV No. 62) belongs to the boy king Tutankhamun. Its entrance was found 3.9 metres (13 feet) below that of the tomb of Ramses VI, which was built after Tutankhamun's. The rubble from the construction of Ramses' tomb had fallen over the entrance to Tutankhamun's, concealing it and protecting it from further intervention by robbers.

Who Was Tutankhamun?

Tutankhamun is the best-known pharaoh of ancient Egypt. He was probably the son of Akhenaten, the heretic king of the eighteenth dynasty. His mother was probably Queen Kiya, one of the king's secondary wives. Ankhesenamun,



Road leading to the tombs in the Valley of the Kings. The Theban Peak can be seen in the background.

CMC ECD98-018 #5



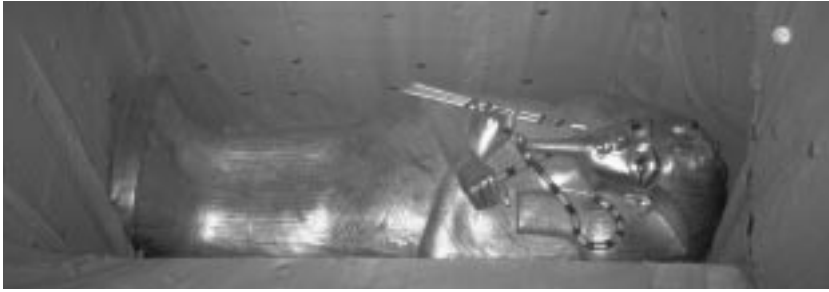
Entrance to Tutankhamun's tomb in the Valley of the Kings

CMC ECD98-034 #39



Inside the tomb of Ramses VII in the Valley of the Kings

CMC ECD98-007 #47



One of Tutankhamun's gold coffins, inside his sarcophagus
 Replica at the Pharaonic Village, Cairo
 CMC S97 9965



Statue of Akhenaten, who may have been Tutankhamun's father
 CMC S97 10043 (photo)

his older half sister, became his queen. Tutankhamun ascended the throne in 1333 B.C., at the age of nine, and reigned until his death at the age of seventeen or eighteen. Some speculate that he was murdered, and others think he may have been deliberately sent into battle to be killed. However, the exact cause of his death is unknown. Those who believe he was murdered point to the hole in his skull as evidence, but some experts believe the hole was made after his death. His mummified body was so badly preserved that we may never know the true fate of this minor pharaoh.

Not all scholars agree on the identity of Tutankhamun's parents. One theory suggests that he was the son of Amenophis III and his principal wife Tiy or his secondary wife Meritre. When the results of DNA testing on the pharaohs become available, we may get a clearer picture of the royal lineage.

Clues into Tutankhamun's Death

Researchers continue to investigate the cause of Tutankhamun's premature death. Bob Brier, a mummy specialist from Long Island University, has been tracking down clues that indicate Tutankhamun may have been killed by his elderly chief advisor and successor, Ay. An X-ray of his skull revealed a calcified blood clot at its base. This could have been caused by a blow from a blunt instrument, which eventually resulted in death.

The painting in Tutankhamun's burial chamber depicts his successor, Ay, at the "opening of the mouth" ceremony, giving life and breath to the young deceased pharaoh. Ay, a commoner, is wearing the leopard skin of a vizier and the crown of a pharaoh. Since Tutankhamun did not have a child to succeed him, some scholars speculate that Ay decided to seize the crown and declare himself king of Egypt.

There were at least two other deaths following that of Tutankhamun. His young wife, Ankhesenamun, pleaded with the king of the Hittites to send her one of his sons for a husband. She did not want to marry a servant, such as Ay. A son was sent, but he was murdered before he arrived.



Ay (right) performs the "opening of the mouth" ceremony on Tutankhamun's mummy. Scene from Tutankhamun's burial chamber.

Photo: Harry Foster (CMC S98 3522)

So who did Ankhesenamun marry? There is now evidence that she married Ay. A ring has been found with her cartouche inscribed next to his. Did Ay force her to marry him, thus legitimizing his claim to the throne? Within three years of Ay's death, Ankhesenamun disappeared. Could she also have been the victim of a serial killer?

What happened to Ay? He died within a few years of seizing the throne. His cartouches, which he had inscribed on temple walls, were eradicated, his tomb was robbed and vandalized, and his mummy disappeared. His name was also eliminated from the official list of pharaohs, as was that of Tutankhamun.

Another theory on Tutankhamun's death suggests that he was murdered by General Horemheb, a man of low birth who became one of Akhenaten's closest advisors. Under Tutankhamun, he was appointed commander-in-chief of the army and deputy of the king. Following the demise of Tutankhamun and Ay, Horemheb became pharaoh. During his reign, he had the names of Akhenaten, Tutankhamun and Ay removed from the royal list of pharaohs, which suggests that he had personal reasons for eradicating those rulers from the records.

Tutankhamun's Funeral

Since Tutankhamun died suddenly, his burial was arranged in haste. Following the mummification of his human remains, his body was placed in a gold coffin and transported across the Nile to the Valley of the Kings. In the funeral procession were Tutankhamun's wife and close relatives, priests and the highest officials of the land.

The tomb in which Tutankhamun was buried was probably intended for another person, but because of the young pharaoh's untimely death, it became his final resting place. Following the ritual "opening of the mouth" performed by his suc-



Bust of Tutankhamun found in his tomb

CMC ECD98-010 #79 (photo)



*Priests lead the funeral procession taking Tutankhamun's coffin to his tomb. Re-enactment scene from the film *Mysteries of Egypt*.*

CMC ECD98-010 #52

cessor, Ay, his body and coffins were placed in a red sarcophagus in the burial chamber. The foot of the outer coffin was sliced off and splashed with resin before the lid was set in place. The mismatched lid may have been dropped as it was being lowered into place because it was cracked. By the looks of it, the shrines around the sarcophagus were hastily erected, banged into place without due care as to the proper ritual orientation. A wall was constructed to seal the burial chamber from the antechamber. With all the worldly goods required for a happy existence in the afterworld in place, the entrance to the tomb was sealed, and Tutankhamun's cartouche was stamped on the wet plaster wall. The outer corridor was then closed off and the entrance to the tomb filled with rubble to prevent access to the burial chamber.



Howard Carter's water boy found the first step that led to Tutankhamun's tomb. Re-enactment scene from the film Mysteries of Egypt.

Photo: Adham Mostafa (CMC S97 10385)



Howard Carter and Lord Carnarvon peer into Tutankhamun's tomb. Re-enactment scene from the film Mysteries of Egypt.

Photo: Adham Mostafa (CMC S97 10671)

Tutankhamun's Tomb

The discovery of Tutankhamun's tomb on November 4, 1922 by the English archaeologist Howard Carter is considered the most important archaeological find of the century. Here is a quote from Carter's diary describing his reaction as he first peered into the tomb's antechamber.

I inserted the candle and peered in, Lord Carnarvon, Lady Evelyn and Callender standing anxiously beside me to hear the verdict. At first I could see nothing, the hot air escaping from the chamber causing the candle flame to flicker, but presently, as my eyes grew accustomed to the light, details of the room within emerged slowly from the mist, strange animals, statues and gold — everywhere the glint of gold . . . ¹⁵

When Lord Carnarvon, the English patron who financed Carter's work, could no longer stand the suspense, he asked, "Can you see anything?" Carter replied, "Yes, wonderful things." ¹⁶

This famous quote sums up the excitement of this incredible discovery that took the world by storm. The awe-inspiring beauty of Tutankhamun's treasures has generated enormous interest in ancient Egypt.



Tutankhamun's internal organs were placed in these canopic jars made of calcite (a translucent stone).

CMC ECD98-037 #90 (photo)

Tutankhamun's Treasures

Over 3,000 treasures were placed in Tutankhamun's tomb to help him in his afterlife, and the walls of the burial chamber were painted with scenes of his voyage to the afterworld. His mummy was found in the burial chamber. Four nested gilded wooden boxes (shrines) surrounded a red quartzite sarcophagus, inside which were three nested coffins. His body was wrapped in linen and over his face was placed an exquisite gold mask decorated with bands of glass paste imitating lapis lazuli and adorned with semi-precious stones and

glass. The mummy rested in the inner coffin, which is made of solid gold and weighs approximately 110.4 kilos (242.9 pounds).

Plan of Tutankhamun's Tomb

Tutankhamun's tomb is located in the Valley of the Kings between the tombs of Ramses II and Ramses IV. Although robbers probably entered the tomb at least twice in antiquity, its contents were virtually intact when it was discovered by Howard Carter.

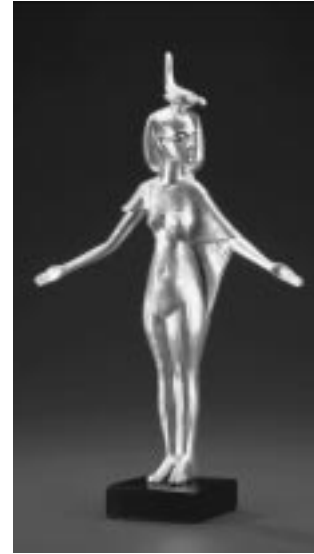
The design of Tutankhamun's tomb is typical of that of the kings of the eighteenth dynasty. At the entrance to

the tomb there is a flight of stairs leading to a short corridor. The first room is the antechamber, where many household items were found. Off this room is an annex, and at the far end is an opening that leads to the burial chamber. This chamber was guarded by two black sentry-statues that represent the royal *ka* (soul).

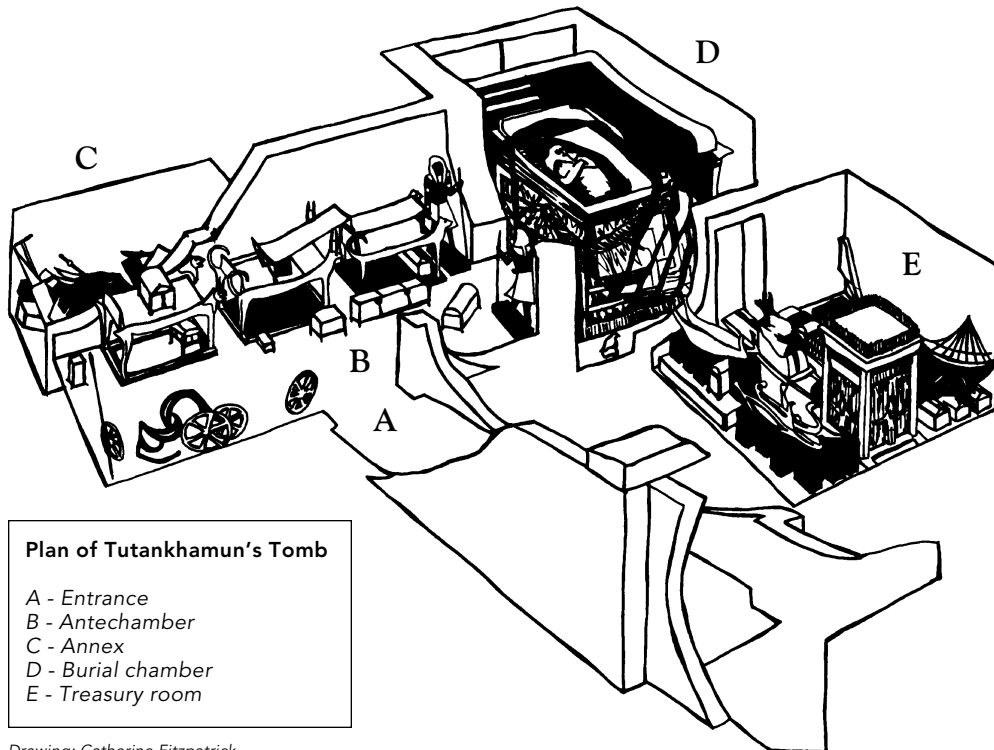


Tutankhamun's golden throne chair. The back of the chair bears an image of Tutankhamun and his wife.

CMC S97 10030 (photo)



Selkis, one of the four goddesses who protected the gold shrine that held Tutankhamun's canopic jars
Photo: Harry Foster (CMC S98 3498)



Plan of Tutankhamun's Tomb
A - Entrance
B - Antechamber
C - Annex
D - Burial chamber
E - Treasury room

Drawing: Catherine Fitzpatrick



*Inside the antechamber. One of two guardian figures that protected the entrance to Tutankhamun's burial chamber. Re-enactment scene from the film *Mysteries of Egypt*.*

CMC ECD98-026 #43



*Royal beds, chests and round boxes of food were found in the antechamber of Tutankhamun's tomb. Robbers had left the tomb in a state of disorder. To prevent further intervention, priests resealed the tomb immediately after the robbers were discovered, without cleaning up the mess. Re-enactment scene from the film *Mysteries of Egypt*.*

CMC ECD98-027 #61

The burial chamber contains Tutankhamun's sarcophagus and coffin. Its walls are painted with scenes of Tutankhamun in the afterworld: the ritual of "opening the mouth" to give life to the deceased, the solar bark on which he travelled to the afterworld, and Tutankhamun's *ka* in the presence of Osiris. Off the burial chamber is the Treasury room, where a magnificent gilded canopic shrine was found. This was the most impressive object in the Treasury. A gold chest held four canopic jars containing the dead pharaoh's internal organs (lungs, stomach, intestines and liver). Four goddesses protected the shrine — Neith to the north, Selkis to the south, Isis to the west and Nephthys to the east. Also found in this room were thirty-five model boats and a statue of Anubis, a god represented as having the head of a jackal. For conservation purposes, all these treasures have been removed to the Egyptian Museum in Cairo.

The Mummy's Curse

The Egyptians were preoccupied with the cult of the dead. The mummified bodies of kings and commoners were placed in tombs filled with all the necessities of life. To protect the deceased in the afterlife and to prevent robbers or political enemies from desecrating the burials, the tombs were hidden in out-of-the-way places and a curse was invoked against violators.

The belief in the mummy's curse was rekindled when Lord Carnarvon, patron of Howard Carter's archaeological excavations, died of blood poisoning (following a mosquito bite that became infected) five months after the discovery of Tutankhamun's tomb. The public, however, preferred to explain his sudden death as the consequence of having disturbed Tutankhamun's tomb. For years, Carnarvon had been in poor health due to a car accident. To escape the damp winters in England, he went to Egypt and became interested in its ancient civilization. His unexpected death was undoubtedly the result of his weakened condition rather than the "curse", as many



Carter's golden canary in its cage at the archaeologist's residence. Re-enactment scene from the film Mysteries of Egypt. CMC ECD98-026 #8

journalists suggested when reporting the story.

Prior to Carnarvon's death, Carter's yellow canary perished under strange circumstances. Carter had bought a canary in a gilded cage with the idea that its song would cheer up his lonely house. Upon seeing the bird, one of his servants exclaimed, "It's a bird of gold that will bring luck. This year we will find, inshallah (God willing), a tomb full of gold."¹⁷ Within a week of purchasing the canary, Carter discovered Tut's tomb. Not knowing whose tomb they had found, the workers nicknamed it "the tomb of the Golden Bird".¹⁸

The death of the canary at this most propitious moment was seen as a bad omen. Here is an account of what happened to the canary from the report of the inspector general in charge of antiquities.

During the recent excavations which led to the discovery of the tomb of Tutankhamen, Mr. Howard Carter [the discoverer] had in his house a canary which daily regaled him with its happy song. On the day, however, on which the entrance to the tomb was laid bare, a cobra entered the house, pounced on the bird, and swallowed it. Now, cobras are rare in Egypt, and are seldom seen in winter; but in ancient times they were regarded as the symbol of royalty, and each Pharaoh wore the symbol upon his forehead, as though to signify his power to strike and sting his enemies.¹⁹



The cobra slithers over the floor and up a bench on its way to the canary's cage. Re-enactment scene from the film Mysteries of Egypt. CMC ECD98-026 #10

Some people believe that the protective curses placed on Tutankhamun's tomb and those of his ancestors may have been responsible for these two deaths. There is plenty of evidence to the contrary. The water boy who first entered the antechamber and Howard Carter both lived to a ripe old age, as did many of the workers who excavated the tomb.

Chapter 12

Daily Life in Ancient Egypt

Objective

To learn about how the Nile River Valley provided for the daily needs of the people.

Mystery

How did the land of Egypt provide for the daily needs of the people?

Discussion and Research Projects

1. What happened when the Nile River rose too high or not high enough?
2. What was deposited on the flood plain when the waters of the Nile receded?
3. What did the Egyptians eat? What was their favourite drink?
4. Why did the pharaohs have scenes of themselves on hunting and fishing expeditions painted on the walls of their tombs?
5. Where did people find the materials needed to build houses and make containers?
6. How were bricks manufactured for building houses?
7. How did the homes of the wealthy differ from those of the craft-workers and peasants?
8. What was the main mode of transportation in ancient Egypt?
9. What were the skiffs (boats) used for fishing and hunting in the marshes made of? Why was this material particularly buoyant?
10. How did the climatic conditions facilitate travel up and down the Nile?
11. How were boats used for ceremonial purposes?



12. How did people travel on land?
13. What crop was grown to make clothing?
14. Describe the clothing worn by men and women of the working class. What else did they wear besides clothing?

Creative Projects

1. Write a story about a day in the life of a person your age in ancient Egypt.
2. Make jewellery similar to that worn by the ancient Egyptians.
3. Both men and women wore loincloths, tunics and wraparound garments made from a single piece of woven flax. Find out how much material was needed and how it was placed on the body. Using a piece of cotton cloth of similar size, demonstrate how men and women wore their garments.
4. Find photographs of the model boats that were found in Tutankhamun's tomb. Try making a model based on one of them.
5. Use **Activity Sheets 29 and 30** to learn about daily activities.

FACT SHEET: Daily Life in Ancient Egypt

Food

Each summer, starting in July, the Nile River rose, flooding the low-lying plains on either side. Swollen by the monsoon rains of Ethiopia, it deposited a layer of black soil over the land, rich in nutrients needed for growing crops. The river rose about 8 metres (27 feet) on average. If it rose 2.5 metres (8 feet) higher or lower, disaster struck. When it rose too high, villages were flooded, causing extensive damage and loss of life. When it did not rise high enough, the fields did not receive sufficient nutrients and moisture to support the crops, which resulted in famine.

Under normal conditions, the flood plains supported a rich variety of plants and animals that provided food for the ancient Egyptians. The vast majority of the people were involved in farming.

When the flood waters began to recede in mid-September, farmers blocked canals to retain the water for irrigation. The principal food crops, barley and emmer, were used to make beer and bread, the main staples of the Egyptian diet. Grains were harvested and stored in granaries until ready to be processed. The quantities harvested each season far exceeded the needs of the country, so much was exported to neighbouring countries, providing a rich source of income for the Egyptian treasury.

A large variety of vegetables were grown, including onions, garlic, leeks, beans, lentils, peas, radishes, cabbage, cucumbers and lettuce. There were also fruits such as dates, figs, pomegranates, melons and grapes, and honey was produced for sweetening desserts. The Egyptian diet was supplemented by fish, fowl and meat, although peasants probably enjoyed meat only on special occasions.



Farmers work the wheat fields of the afterlife
Photo: Harry Foster (CMC S98 3569)



Woman plowing the fields



Workmen crush grapes for making wine

Painting: Winnifred Needler
Photo: Harry Foster (CMC S97 10792)



Tutankhamun and his wife hunting birds in a papyrus thicket
 Photo: Harry Foster (CMC S98 3526)

Domesticated animals raised for food included pigs, sheep and goats. Grapes were processed into wine for the noble class, but beer was the favourite drink of the common people. Food was served in pottery bowls, but no utensils were used for eating.

Although the land was worked by the peasants, it was owned by the king, his officials and the temples. Farmers had to meet grain quotas, which were handed over to the owners as a form of taxation. They were allowed to keep a portion of the crops for their own benefit. If they did not produce the quantity expected, however, they were severely punished.

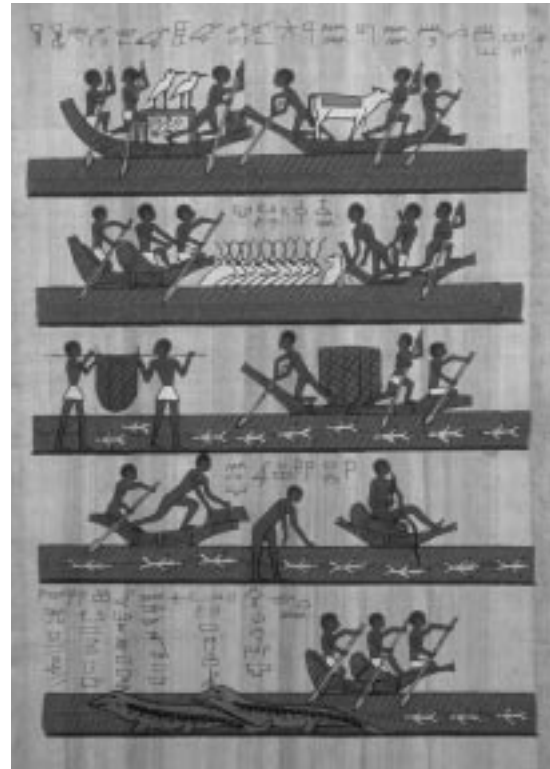
Pharaohs and nobles participated in hunting, fishing and fowling expeditions, a means of recreation that had ritualistic and religious significance. Hunting scenes often depicted on temple walls and tombs reinforce the prowess of kings and nobles. Rabbits, deer, gazelles, bulls, oryx, antelopes, hippopotamuses, elephants and lions were among the wild animals hunted for their meat and skins.

Fishing allowed the working class to add variety to its diet. The poor substituted fish for meat, which they could not afford. The Nile, the marshes of the delta and the Mediterranean Sea offered them a rich variety of species. Birds, including geese and ducks, were also hunted in the marshes and papyrus thickets along the Nile.

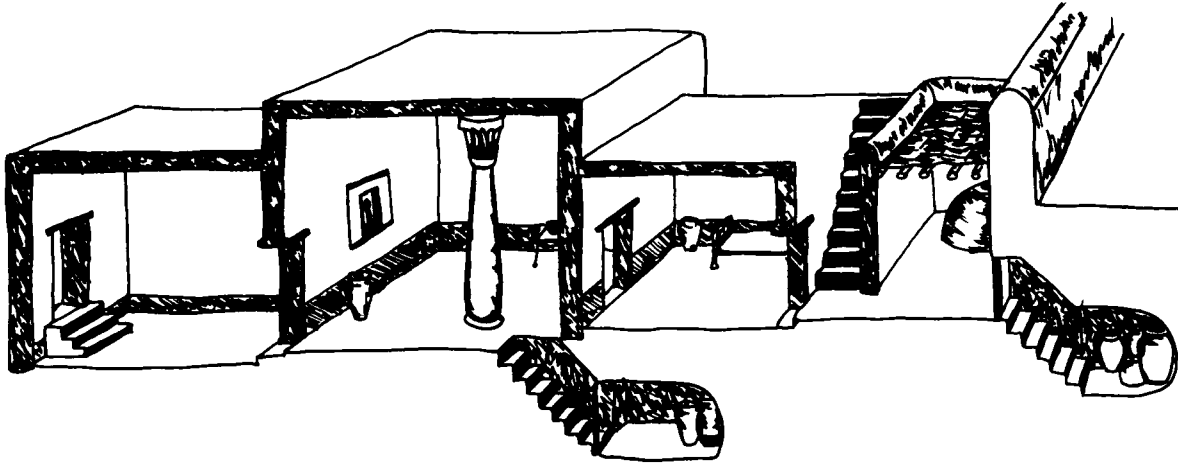
Shelter and Containers

The banks of the Nile provided the mud and clay used to make bricks and ceramic ware. Food was cooked in clay pots, which also served as containers for grains, water, wine, beer, flour and oils. Baskets were the other type of container found in the home. They were made from reeds and the leaves of date palms that grew along the Nile.

Most houses were made of brick. Brick makers collected mud, added straw and water to it as needed, and stomped it with their feet until it reached the right consistency. The mixture was then placed in a mould. Once shaped, the bricks were removed from the mould and left on the ground to dry in the sun.



Fishing on the Nile River
 Photo: Steven Darby (CMC S97 10823)



Cross-section of a typical house in the workers' village at Deir el-Medina. The workers who built the tombs in the Valley of the Kings lived in this village.

Drawing: Catherine Fitzpatrick

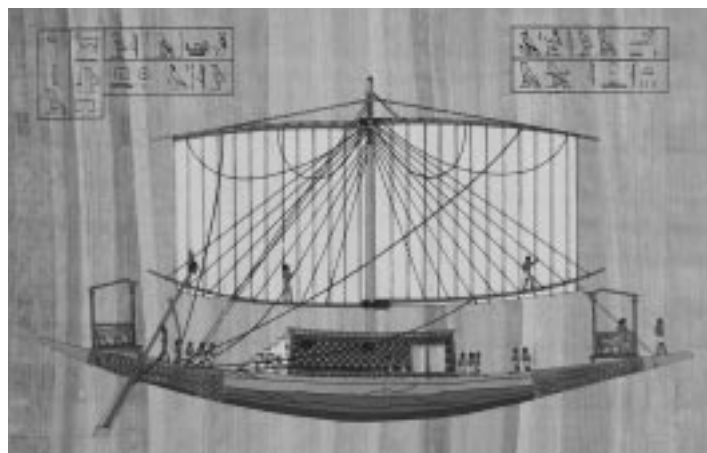
Egyptian peasants would have lived in simple mud-brick homes containing only a few pieces of furniture: beds, stools, boxes and low tables.

Craftworkers lived in one- or two-storey flat-roofed dwellings made of mud bricks. The walls and roof would have been covered with plaster and painted. Inside, there was a reception room, a living room, bedrooms and a cellar in which food and beverages were stored. Food was prepared in an outdoor kitchen equipped with a mud-brick oven. Stairs on the exterior of the house led to a roof-top terrace.

The homes of the wealthy were larger and more luxurious. Spacious reception and living rooms opened onto a central garden courtyard with a fish pond and flowering plants. Each bedroom had a private bathroom, and the walls, columns and ceilings were painted with beautiful designs inspired by nature. Elaborate and highly decorated furniture included beds, chairs, boxes and tables. Painted clay pots and vessels, as well as alabaster bowls and jars, were also found in the homes of the nobles.

Transportation

The Nile River was the highway that joined the country together. Up until the nineteenth century, travel by land was virtually unknown. Ships and boats were the main means of transporting people and goods around the country. Egyptian watercraft had a high stern and bow, and by the New Kingdom, they were equipped with cabins at both ends. The prevailing winds blew south, propelling boats travelling in that direction, while boats heading north relied on the current and oars.



Tutankhamun's royal ship

Photo: Harry Foster (CMC S98 3533)



A papyrus skiff in front of a wooden bark. Re-enactment scene from the film Mysteries of Egypt.

Photo: Max Crier (CMC ECD98-029 #53)

The simplest type of boat used in ancient Egypt was the skiff, made from papyrus reeds that were tied together. Since the reeds are filled with air pockets, they are particularly buoyant. Skiffs were used for fishing and hunting game in the marshes, or for travelling short distances.

Large wooden ships were equipped with square sails and oars. Their planks, held together with rope, expanded in the water, making the vessel watertight. Acacia wood was used in Lower Nubia to build the ships that transported massive blocks of stone from the Aswan district to the building sites of the pyramids, temples and cities along the Nile. Ships could travel with ease up and down the Nile from the delta region to the First Cataract at Aswan.

Boats also served a ceremonial purpose. They were used to move images of gods from temple to temple, and to transport the mummified bodies of royals and nobles across the Nile to their tombs on the west bank. Even the sun god travelled by boat (the solar bark) on his daily journey across the sky. Today, the Egyptians still cross the Nile by boat. The vessel they use is the fellucca, a small boat with a large triangular sail.



Replica of a model barge found in Tutankhamun's tomb

Photo: Harry Foster (CMC S98 3497)

The roads in ancient Egypt were little more than paths. To get around on land, people walked, rode donkeys or travelled by wagon. They carried goods on their head, but the donkeys and wagons hauled heavier loads. Camels were unknown in Egypt until the end of the pharaonic period.



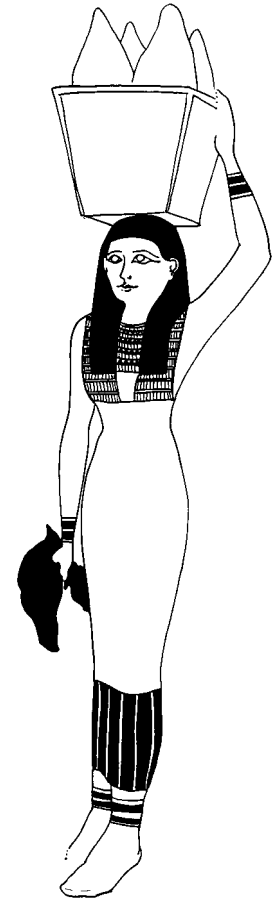
Servant wearing a short kilt
CMC S97 10432

The wheel was probably introduced into Egypt by the Hyksos, an Asiatic people who invaded the country and ruled it in the fifteenth and sixteenth dynasties. The Hyksos most likely had horse-drawn chariots, which were used in warfare. New Kingdom pharaohs and nobles adopted this mode of transportation for hunting expeditions, but it was not used for travel by the common people.

Clothing and Personal Adornment

Flax grown by farmers was woven into fine linen for clothing. Working-class men wore loincloths or short kilts, as well as long shirt-like garments tied with a sash at the waist. Kilts were made from a rectangular piece of linen that was folded around the body and tied at the waist. Wealthy men also adorned themselves with jewellery — a string of beads, armbands and bracelets. Both men and women wore sandals made of papyrus.

Women wore full-length wraparound gowns and close-fitting sheaths. In the Old Kingdom, elite women were portrayed wearing sheaths with broad shoulder straps. In the New Kingdom, they wore sheaths decorated with gold thread and colourful beadwork, and a type of sari made of light see-through linen. They enhanced their appearance with make-up, earrings, bracelets and necklaces.



Servant girl wearing a close-fitting sheath
Drawing: John Ide

Chapter 13

The Sciences

Objective

To learn about ancient Egyptian writing, astronomy, mathematics and medicine, as well as the calendar that was used at the time.

Mystery

While much of the world was living in primitive conditions, the ancient Egyptians were inventing writing and advancing the sciences. What sparked the advancement of learning in the Nile Valley?

Discussion and Research Projects

1. Egyptian hieroglyphs have been called the most beautiful writing in the world. What makes them so different from modern forms of writing?
2. Who knew how to write in ancient Egypt? What tools did they use in their craft?
3. How did the ancient Egyptians make paper from papyrus stems?
4. Why was it important for people to have their names inscribed on their tombs in hieroglyphs?
5. Name the months in the Egyptian calendar and the seasons.
6. Why was the Egyptian calendar not accurate in relation to the yearly cycle of the earth's rotation?
7. How were the stars used to determine the orientation of the pyramids and temples?
8. How did the ancient Egyptians align the pyramids with the earth's four cardinal points?
9. What was the ancient Egyptian number system based on?



10. How did the Egyptians write numbers? Can you explain how they added and multiplied?
11. How did the Egyptians measure length? Do you know of any other measuring system that used the human body as a basis of measurement?
12. How did the ancient Egyptians explain the causes of illness?
13. Besides prescribed medicines, what else did doctors use to treat their patients? Do you think this would have had a positive effect on patients? Explain why.
14. What test did women use to find out if they were pregnant?
15. Where does the modern symbol for prescriptions come from?

Creative Projects

1. Use **Activity Sheet 31** to learn about hieroglyphs.
2. Use **Activity Sheet 32** to make a cartouche.
2. Use **Activity Sheet 33** to write numbers the way the ancient Egyptians did.

For Further Research

1. Find out more about the three types of hieroglyphic symbols: phonograms, logograms and determinatives.
2. Find out how Jean-François Champollion unlocked the secrets of hieroglyphs by studying the Rosetta Stone and other documents.

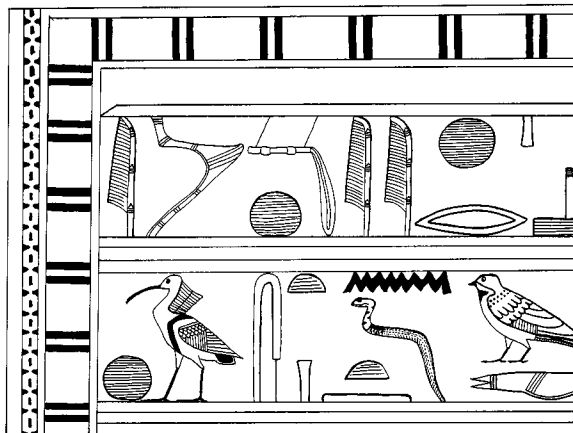
FACT SHEET: The Sciences

Writing — Hieroglyphs

The word “hieroglyph” literally means “sacred carvings”. The Egyptians carved and painted hieroglyphic inscriptions on temple walls. This form of pictorial writing was also found on tombs, sheets of papyrus, wooden tablets covered with a stucco wash, potsherds and fragments of limestone.

The ancient language was written by scribes who went through a long apprenticeship before they mastered the skill of writing. A scribe’s equipment consisted of a stone or wooden palette containing two cakes of ink, usually red and black, a leather bag or pot filled with water, and a set of reed brushes.

To make the paper-like writing material, the exterior of the papyrus stems was discarded and the interior was cut into thin strips. The strips were soaked in water and beaten to break down and flatten the fibres. They were then layered crosswise and lengthwise to produce a sheet, which was beaten again to mesh the strips together. Weights were placed on the sheets while they dried. Once dry, the sheets were rolled up and stored until needed.



A spell (written in hieroglyphs) to unite the ba (soul) of a deceased person with its mummy

*Drawing: Catherine Fitzpatrick
Photo: Harry Foster (CMC S98 3518)*



*Hieroglyphic text from the Book of the Dead
Photo: Harry Foster (CMC S98 3572)*

Hieroglyphics are an original form of writing out of which other forms have evolved. Two of the newer forms were called hieratic and demotic. Hieratic was a simplified form of hieroglyphics used for administrative and business purposes, as well as for literary, scientific and religious texts. Demotic, a Greek word meaning “popular script”, was in general use for the daily requirements of society. In the third century A.D., hieroglyphic writing began to be replaced by Coptic, a form of Greek writing. The last hieroglyphic text was written at the Temple of Philae in A.D. 450. The spoken Egyptian language was superseded by Arabic in the Middle Ages.

Egyptian hieroglyphs were deciphered in the early nineteenth century. Several people had been trying to crack the code when a brilliant young Frenchman, Jean-François Champollion, discovered the

secret to this ancient writing. After Thomas Young deciphered the demotic text, Champollion used the information to break the code by comparing the texts written on the Rosetta Stone. Three scripts were inscribed on the Stone: hieroglyphics, demotic and Greek. The text described a decree issued at Memphis (near Cairo) on March 27, 196 B.C. In 1828, Champollion published the results of his work in the famous “Précis” that marked the first real breakthrough in reading hieroglyphs.

Hieroglyphs are written in columns or in horizontal lines. They are generally read from right to left and from top to bottom. Sometimes the script is read from left to right. The reader can determine the orientation by looking at the animal and human figures — they face the beginning of the text. For example, if a figure faces right, the text should be read from right to left.

Words and names written in hieroglyphs were believed to have magical powers. For this reason, funeral texts and the names of the deceased were written on coffins and tomb walls. A name written in hieroglyphs embodied a person’s identity. If it was obliterated, the person’s identity was lost, along with his or her means to continue living in the afterworld. The names of pharaohs such as Tutankhamun and Queen Hatshepsut, for example, were removed from temple walls by their successors.

Calendar

The Egyptian civil calendar was based on a year of 365 days, with twelve months and three seasons. It was invented in the third dynasty, around the time Djoser built the first pyramids. Each month had three ten-day weeks, for a total of 30 days. The last five days of the year corresponded to the birthdays of five deities: Osiris, Isis, Horus, Seth and Nephthys. Since the Egyptians did not take leap years into account, their calendar got further and further away from the actual seasons. This meant that at one point the summer months actually fell in winter. Only every 1,460 years did their calendar year synchronize with the seasonal year.



The Denderah zodiac with 36 decans, the constellations that enabled the Egyptians to tell the time at night. Each decan appeared on the horizon for about ten days. By observing the position of the decan, priests could determine the hour.

CMC S97 10807

The three seasons corresponded to the cycle of the Nile and agriculture. New Year’s day was on July 19 (in the Julian calendar) and marked the beginning of the first season, *akhet*. This was the time of the flooding of the Nile. The second season, during which the crops began to emerge, was called *peret* and started on November 16. *Shemu*, the third season, began on March 17. The last five days of the year, corresponding to the birthdays of the deities, were July 14 to 18, days which were considered unlucky and dangerous.

Besides the civic calendar, there was a religious calendar that marked the festivals and ceremonies associated with particular deities and temples. This calendar was based on a 29.5-day month, which made it more accurate according to the phases of agriculture and the astronomical cycle of the stars.

Astronomy

Like many ancient peoples, the Egyptians studied the night sky, taking measurements from the stars to accurately align their pyramids and sun temples with the earth's four cardinal points. Taking sightings of the Great Bear and Orion with an instrument called a *merkhet* (similar to an astrolabe), astronomer-priests marked out the foundations of buildings with astonishing accuracy.



The pyramid of Chephren, the second-largest at Giza
CMC ECD98-033 #99

The Great Pyramid at Giza provides an example. This remarkable building has a footprint of over 13 acres and consists of approximately 6.5 million limestone blocks. Its four sides are accurately aligned to face north, east, south and west, with an error of less than half a degree. They are also virtually identical in length, with less than a 20-centimetre (8 inch) variance between one side and another.

The Egyptians believed that the gods lived in the Duat, the kingdom of Osiris. It was located in the region of the sky where Orion and Sirius rise heliacally just ahead of the sun at dawn on the summer solstice. Some Egyptologists have proposed that the Giza plaza, with its three large pyramids, the Sphinx and the Nile, is a mirror reflection of the Duat. The three pyramids represent the three stars in the belt of Orion, the Sphinx corresponds to the constellation Leo, and the Nile corresponds to the Milky Way. The concept of creating sacred landscape on earth that reflects the night sky is not uncommon in other ancient cultures. By building pyramids, temples and tombs aligned with stars and the earth's cardinal points, ancient peoples venerated their gods, bringing divine energy to the earth, which prevented the world from falling into chaos.



The Hall of Osiris in the Duat (Land of the Gods)








Photo: Harry Foster (CMC S98 3575)

Mathematics

Although the Egyptians lacked the symbol for zero, they calculated numbers based on the decimal and the repetitive (numbers based on the power of 10). Numbers were usually written from left to right, starting with the highest denominator. For example, in the number 2,525 the first number to appear on the left would be 2000, then 500, 20 and 5, as follows:



The following signs were used to represent numbers in the decimal system:

1	
10	
100	
1000	
10,000	
100,000	
1,000,000 (often means "more than I can count")	

The Egyptians did not develop abstract mathematical formulas. They used the simple arithmetic of addition and subtraction. To multiply and divide, they referred to tables of duplication that gave the multiplier and the multiplicand. For example, to multiply 9 by 15, they would double and redouble the multiplier as follows:

Multiplier		Multiplicand		
1	x	15	=	15
2	x	15	=	30
4	x	15	=	60
8	x	15	=	120
16	x	15	=	240

Once a multiplier was reached that was equal to half or more of the desired multiplier, no further doubling was required. For example, to arrive at the correct answer for 9×15 , they would refer to the table ($8 \times 15 = 120$ plus $1 \times 15 = 15$) to arrive at 135 ($120 + 15$). Division was achieved by reversing this process.

The Egyptians knew about fractions and used special signs for two-thirds, three-quarters, four-fifths and five-sixths. They also had some basic knowledge of geometry, such as the fact that the area of



Colossal pillars and statues at Karnak Temple
CMC ECD98-018 #16



Giant statues of Osiris in the courtyard of Ramses III, Karnak Temple
CMC ECD98-021 #51

a rectangle was equal to its length multiplied by its width, and they were able to calculate the area of a circle according to the length of its diameter.

When building the pyramids; the hypostyle hall at Karnak, with its gigantic pillars and colossal statues; and the many temples and palaces throughout the land, architects and engineers used their knowledge of mathematics to design and develop the specifications. To calculate length, they used a cubit, which was equal to the length of the forearm, from the elbow to the tip of the thumb (approximately 52.3 centimetres or 20.6 inches). A cubit was subdivided into seven hands, each equalling one-seventh of a cubit. A short cubit, measuring 45 centimetres (17.7 inches) was also in use.

Medicine

The doctors of ancient Egypt combined magic spells with remedies. If a person fell sick for no apparent reason, the illness was thought to be caused by the wrath of the gods or by an evil spirit that had entered the body. Both priests and doctors were called upon to heal the sick. The most common cure for maladies was an amulet and a magic spell to modify the incorrect behaviour that had caused the illness in the first place.

By the fifth century B.C., Egyptian doctors had their own specialization. Most of the doctors were men, and within their ranks there was a hierarchy. At the top were the Greatest Physicians of Lower and Upper Egypt, followed by the chief medical officer of the land. Under him were superintendents and inspectors of physicians, the chief of physicians and, at the bottom, the physicians themselves. Throughout the pharaonic times, the most sought-after positions were in the royal court. These doctors looked after the health of the pharaohs, their families and members of their court.

Although the Egyptians practised mummification, doctors did not understand the internal functioning of the body. They did not realize that the brain had anything



Brain hooks and other mummification tools
Photo: Steven Darby (CMC S97 10830)



Isis nursing her son Horus
Photo: Royal Ontario Museum
CMC ECD98-040 #46

to do with thinking; it was believed that the heart was the centre of reason. They also thought that blood, urine, excrement and semen circulated constantly around the body.

Women practised contraception by using concoctions such as honey and natron, which they injected into their vaginas. The Egyptians also devised the earliest-known pregnancy test. Women moistened a sample of barley and emmer (wheat) with their urine each day. If the barley grew, it meant the child would be a male; if the emmer grew, it would be a female. If neither grew, it meant the woman was not pregnant. The effectiveness of this test has been validated by modern science. The urine of non-pregnant women will prevent barley from growing!

Remedies and prescriptions for various ailments, wounds, stomach complaints, skin irritations, broken bones and many other conditions were recorded on sheets of papyrus. Some prescriptions had definite physical benefits, while others would have had a purely psychological effect.

The modern symbol for prescriptions is believed to have originated from the Eye of Horus symbol. In the second century, a Greek physician named Galen first adapted this symbol to impress his patients. Gradually, the symbol evolved into the one we use today.

Conclusion

The Legacy of Ancient Egypt

As the Nile was a gift to Egypt, so ancient Egypt was a gift to the modern world. There are many ways to appreciate this land and the legacy of the pharaohs. We marvel at the beauty of its art and architecture, its sacred writings, clothing, jewellery and furniture. Many Egyptian ideas related to the search for immortality, the concept of the soul, the role of the monarch and the bureaucracy continue to resonate in the modern world. And there are echoes of ancient Egypt in our fashions, food, art and architecture, as well as in the structure of government and religious practices.

Objective

To think about what the modern world has inherited from the ancient Egyptians.

Mystery

How have ideas, customs and attitudes from ancient times influenced the modern world?

Discussion and Research Projects

1. List the different ways ancient Egypt has influenced our modern way of life.
2. Organize a debate about life in ancient Egypt versus life today. Have one group argue that the ancient Egyptians had a better life than we do today and the other group argue the opposite.



Appendix 1

Answers to the Activity Sheets

Activity Sheet 1 — Mysteries of Ancient Egypt

There is no right or wrong answer to these questions. Here are suggested answers.

1. Teams of 10 men pulled the blocks on wooden sleds. Wooden rockers (poles) may have been used to manoeuvre them into position.
2. Many of the ancient gods were depicted as animals or with human bodies and animal heads. The sphinx has a lion's body and a human head. The lion was one of the most powerful animals in ancient Egypt. The face of a pharaoh gave the sphinx the appearance of a powerful person. The sphinx may be a representation of the constellation Leo, which is associated with the sun god.
3. Tutankhamun died at the age of 17 or 18. The cause of his death appears to be an injury to the back of the head. This may have been caused by a fall, or he may have been struck by a blunt instrument. There is speculation that he was murdered.
4. The Egyptians mummified humans and many animals, birds and insects in order to ensure their life in the afterworld. By preserving the physical remains, they believed that the soul would return to the body and find sustenance to carry on life after death.

Activity Sheet 2 — Map of Ancient Egypt

See the map on page 16.

Activity Sheet 3 — Animals of Ancient Egypt

Names of animals that match the deities:

1. d; 2. c; 3. h; 4. g; 5. a; 6. f; 7. e; 8. b



Characteristics: A number of characteristics are possible for each animal. The scarab pushes a ball of dung, which is why the Egyptians chose it to represent the god that pushed the sun out of the eastern horizon at dawn.

Activity Sheet 4 — Plants of Ancient Egypt

Question 1: a. 4; b. 3; c. 2; d. 5; e. 5; f. 6; g. 2; h. 2; i. 1; j. 3

Question 2: 1. c; 2. e; 3. a; 4. h; 5. i; 6. d; 7. f; 8. b; 9. g

Activity Sheet 5 — Characteristics of a Civilization

a. 7; b. 5; c. 6; d. 2; e. 8; f. 4; g. 1; h. 3

Activity Sheet 6 — Narmer's Palette

Side 1: a. 3; b. 8; c. 7; d. 9; e. 4; f. 5; g. 6; h. 2; i. 1

Side 2: a. 8; b. 1; c. 7; d. 3; e. 5; f. 6; g. 2; h. 4

Activity Sheet 7 — The Creation of the World

a. 2; b. 4; c. 1; d. 5; e. 3

Activity Sheet 8 — The Path of the Sun God

a. 4; b. 5; c. 8; d. 3; e. 2; f. 9; g. 11; h. 12; i. 6; j. 7; k. 10; l. 1

Activity Sheet 9 — The Sun God

a. 8; b. 10; c. 7; d. 11; e. 1; f. 9; g. 2; h. 12; i. 4; j. 6; k. 5; l. 3

Activity Sheet 10 — Cosmic and Earthly Deities

1. e; 2. f; 3. b; 4. i; 5. j; 6. g; 7. c; 8. a; 9. h; 10. d

Activity Sheet 11 — The Divine Family

1. e; 2. i; 3. b; 4. h; 5. g; 6. a; 7. c; 8. d; 9. f

Activity Sheet 12 — The Divine Family Tree

a. 4; b. 1; c. 6; d. 2; e. 7; f. 3; g. 5

Activity Sheet 13 — Deities and the Creatures that Represent Them

a. 11; b. 1; c. 3; d. 7; e. 9; f. 10; g. 2; h. 6; i. 12; j. 4; k. 8; l. 5

Activity Sheet 14 — The Symbolic Meaning of the Deities

a. 4; b. 3; c. 1; d. 5; e. 9; f. 6; g. 7; h. 8; i. 10; j. 2

Activity Sheet 15 — Pairs of Deities

1. c; 2. f; 3. a; 4. i; 5. g; 6. b; 7. e; 8. h; 9. d

Activity Sheet 16 — "Opening of the Mouth" Ceremony

Question 1: touch, smell, taste, hearing and sight

Question 2: a. 2; b. 10; c. 4; d. 5; e. 8; f. 1; g. 3; h. 7; i. 9; j. 6

Activity Sheet 17 — "Weighing of the Heart" Ceremony

Question 1: This is an open question with no right or wrong answer.

Question 2: a. 6; b. 2; c. 8; d. 1; e. 5; f. 3; g. 9; h. 4; i. 7; j. 10

Activity Sheet 18 — Identifying Royal Symbols

a. 9; b. 5; c. 8; d. 3; e. 4; f. 10; g. 7; h. 6; i. 2; j. 11; k. 12; l. 2; m. 3; n. 1; o. 4

Activity Sheet 19 — Fashion: Royal Women and Goddesses

a. 9; b. 1; c. 10; d. 6; e. 8; f. 4; g. 7; h. 14; i. 11; j. 12; k. 5; l. 3; m. 13; n. 2

Activity Sheet 20 — Fashion: Royal Men and Gods

a. 4; b. 3; c. 2; d. 1; e. 4; f. 3; g. 2; h. 5; i. 9; j. 7; k. 8; l. 2; m. 6; n. 11; o. 13; p. 1; q. 10 r. 14; s. 12

Note: The tail of war was worn by the pharaohs, and gods such as Horus and Thoth. It symbolizes divine authority and military might. It may represent the tail of a lion, an animal associated with the sphinx and the sun god.

Activity Sheet 21 — Headgear, Hairstyles and Make-up

Fig. 1 — a. 8; b. 4; name 3. Fig. 2 — a. 15; b. 2; name 4. Fig. 3 — a. 5; b. 6; c. 14; d. 3; e. 7; name 1. Fig. 4 — a. 1; b. 4; c. 11; name 2. Fig. 5 — a. 12; b. 13; c. 9; d. 14; name 5. Fig. 6 — a. 10; b. 14; name 6.

Activity Sheet 22 — Clothing and Personal Adornment

No right or wrong answer

Activity Sheet 23 — Drawing the Human Figure

Both figures — face in profile; eye from the front; shoulders from the front; torso in profile; arms, legs and feet in profile

Activity Sheet 24 — Drawing with a Grid

Number of squares needed to draw the woman:

1. lower leg = 6 squares
2. knees to waist = 6 squares
3. waist to shoulders = 4 squares
4. neck to top of head = 3 squares
5. width of shoulders = 5 squares
6. width of hips = 3 squares

Number of squares needed to draw the man:

1. lower leg = 6 squares
2. knees to waist = 6 squares
3. waist to shoulders = 4 squares
4. neck to top of head = 3 squares
5. width of shoulders = 6 squares
6. width of hips = 3 squares

Activity Sheet 25 — Pyramids

1. stone and metal hammers and chisels, wooden mallets, plumb lines (used to ensure that the blocks were set upright and not at an angle)
2. Suggested answers: as tombs to bury their pharaohs; to venerate the gods; to create a sacred landscape that mirrored the heavens (alignment of the pyramids with the heavens); to create a stairway to heaven
3. a. Step Pyramid; b. Bent Pyramid; c. Great Pyramid
4. a. 4; b. 2; c. 8; d. 3; e. 9; f. 6; g. 1; h. 7; i. 5

Activity Sheet 26 — Tutankhamun's Tomb

a. 7; b. 8; c. 3; d. 2; e. 9; f. 1; g. 4; h. 6; i. 5; j. 10

Activity Sheet 27 — Tutankhamun's Treasures

a. 4; b. 7; c. 6; d. 2; e. 10; f. 3; g. 9; h. 1; i. 8; j. 5

Activity Sheet 28 — Tutankhamun's Life and Death

1. He became pharaoh.
2. He died at the age of 17 or 18. He may have died from a blow to the back of the head or from a fall. Some experts think he was murdered. His body was mummified and placed in a tomb in the Valley of the Kings.

3. A — a. 5; b. 6; c. 3; d. 2; e. 8; f. 4; g. 11; h. 1; i. 13; j. 7; k. 12; l. 9; m. 10
 B — a. 7; b. 3; c. 5; d. 4; e. 8; f. 2; g. 1; h. 6

Activity Sheet 29 — Men’s Work

- a. 6; b. 4; c. 1; d. 5; e. 7; f. 3; g. 8; h. 2

Activity Sheet 30 — Women’s Work and Leisure

- a. 2; b. 3; c. 8; d. 5; e. 4; f. 6; g. 1; h. 7

Activity Sheet 31 — Reading Hieroglyphs

1. Meaning of logograms — a. 4; b. 11; c. 2; d. 10; e. 6; f. 1; g. 8; h. 9; i. 3; j. 7; k. 12; l. 5
2. Sounds of phonograms — a. 4; b. 3; c. 7; d. 2; e. 5; f. 6; g. 8; h. 1
3. Determinatives — a. 2; b. 5; c. 3; d. 8; e. 7; f. 6; g. 4; h. 1
4. A: start upper right, finish lower left; B: start upper left, finish lower right; C: read from right to left; D: read from left to right

Activity Sheet 32 — Make Your Own Cartouche

- Question 2: a. 14; b. 2; c. 4; d. 6; e. 12; f. 7; g. 3; h. 16; i. 12; j. 9; k. 4; l. 13; m. 17; n. 1; o. 8; p. 15; q. 11; r. 22; s. 18; t. 10; u. 5; v. 2; w. 5; x. 20; y. 19; z. 21

Activity Sheet 33 — Mathematics

- Question 1: a. 12; b. 79; c. 368; d. 832; e. 1,690; f. 10,500; g. 200,123; h. 3,200,016

Question 2:

- a.
- b.
- c.
- d.
- e.
- f.
- g.
- h.



ACTIVITY SHEET 1

Mysteries of Ancient Egypt

What do you know about the mysteries of ancient Egypt?

1. How were the huge limestone blocks put in place during the construction of the pyramids? They fit so tightly together that there is virtually no space between them!



CMC ECD98-004 #2

2. Why do you think the sphinx has an animal body and a human face?



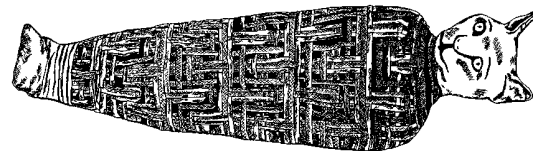
CMC ECD98-004 #9

3. What do you know about the mysterious death of the boy king Tutankhamun?



CMC ECD98-010 #26

4. Why do you think the Egyptians mummified people and animals?



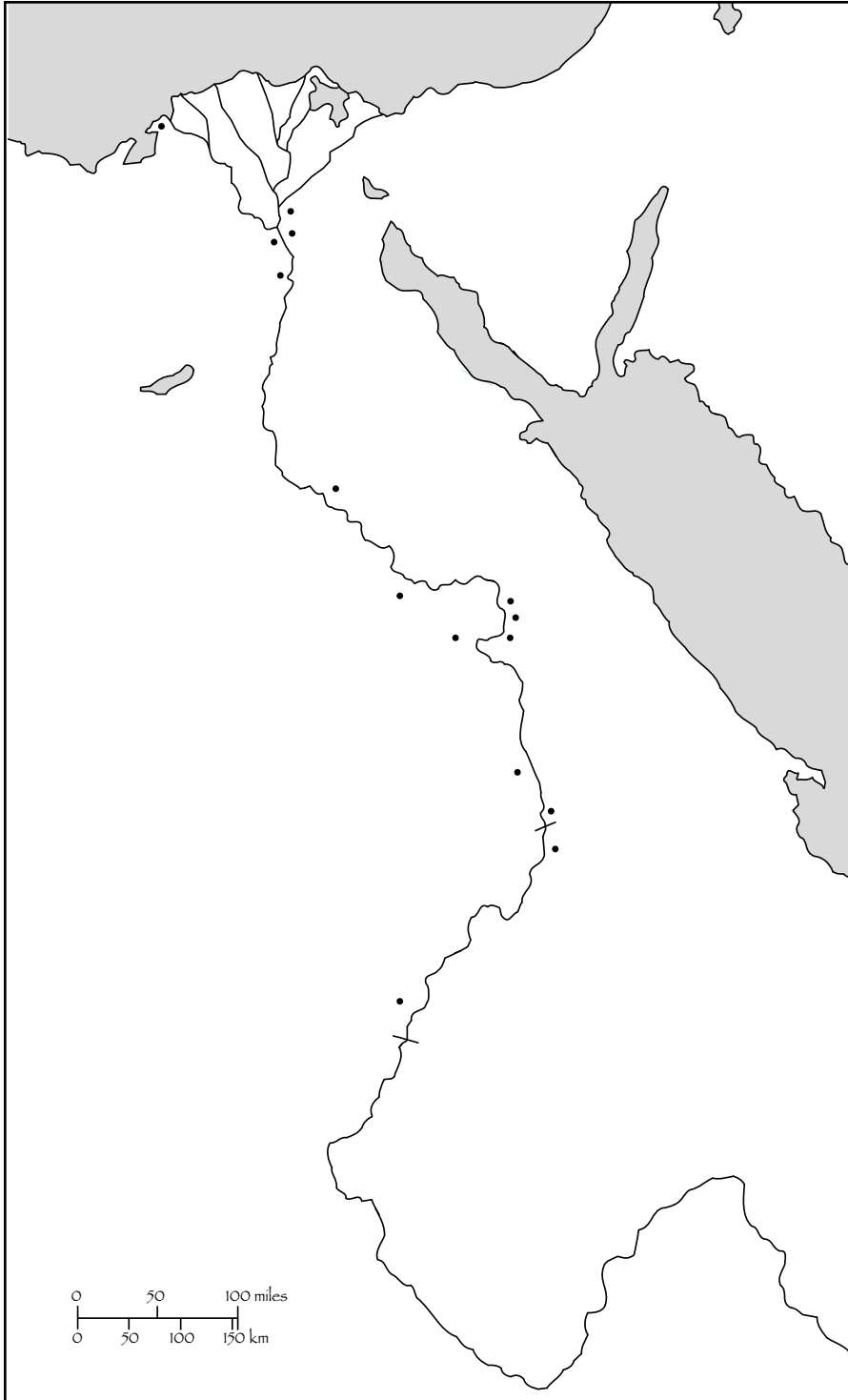
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ACTIVITY SHEET 2

Map of Ancient Egypt

Add the geographic features and the names of the principal cities, temples and pyramids to the map of Egypt.











Clues

- Nile River
- Mediterranean Sea
- Alexandria (city)
- Giza (city)
- Memphis (city)
- Abydos (temple)
- Valley of the Kings (tombs)
- Edfu (temple)
- First Cataract
- Abu Simbel (temple)
- Lower Egypt
- Upper Egypt
- Nubia (country to the south)
- Western Desert
- Eastern Desert
- Red Sea
- Sinai Peninsula
- Suez (city)
- Heliopolis (city near Cairo)
- Tell el-Amarna (city)
- Thebes (city)
- Luxor and Karnak (temples)
- Aswan (city)
- Philae (temple)
- Second Cataract



ACTIVITY SHEET 3 Animals of Ancient Egypt

Many animals were used to represent the deities of ancient Egypt. Name the animals below and describe the characteristics that may explain why they were chosen to represent gods. You can make up your own characteristics or use the clues below.

Animal	Name	Characteristics
1. 		
2. 		
3. 		
4. 		
5. 		
6. 		
7. 		
8. 		

Clues

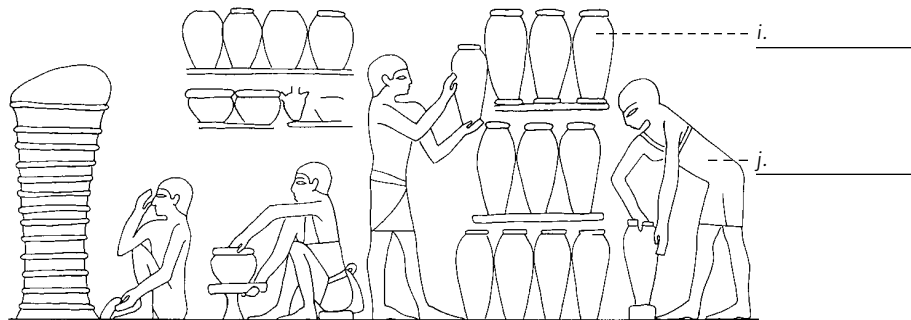
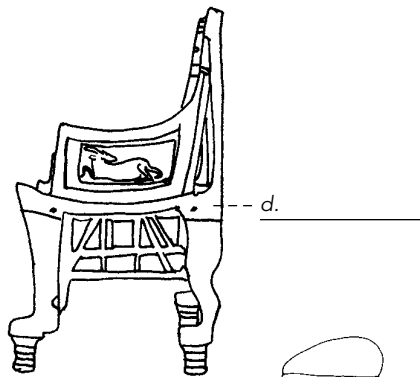
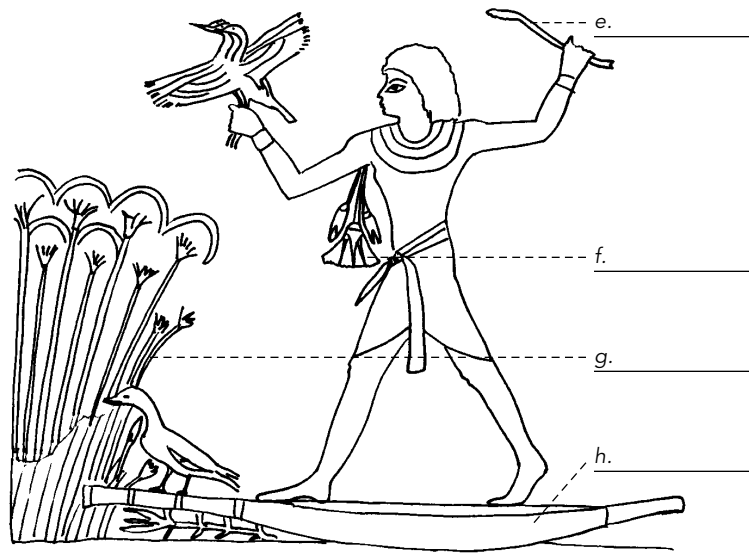
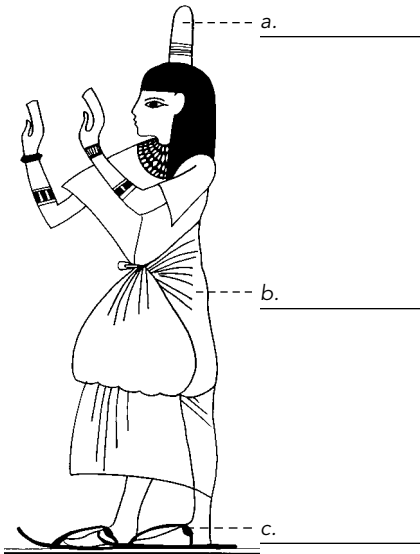
Animals: a. jackal; b. lion; c. crocodile; d. hippopotamus; e. falcon; f. scarab; g. scorpion; h. cobra

Characteristics: dangerous, fierce, hunter, swift, poisonous, pushes a ball of dung, fighter, sharp eyes, powerful, etc.



ACTIVITY SHEET 4 Plants of Ancient Egypt

1. Plants and other materials were used to make things used in daily activities. Identify the plants shown, as well as the plant or material used to make the objects in the drawings. Next to each letter, write the number corresponding to the correct description.








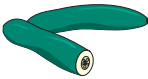



Clues

1. Nile mud
2. papyrus

3. flax (linen)
4. animal fats and perfume (water lilies)

5. wood
6. lotus flowers

2. Match the drawings with the grains, vegetables and fruits that were eaten by the ancient Egyptians.

1.		a. wheat
2.		b. lentils
3.		c. beans
4.		d. cucumbers
5.		e. figs and dates
6.		f. grapes
7.		g. pomegranates
8.		h. onions
9.		i. tomatoes

3. Here is a recipe²⁰ for a type of cake enjoyed by the ancient Egyptians. Try it out to see how good it tastes!

Honey Date Cake

175 mL (3/4 c.) whole wheat flour

5 mL (1 tsp.) cinnamon

15 mL (1 tbsp.) cooking oil

125 mL (1/2 c.) honey

1 egg

50 mL (1/4 c.) pitted dates

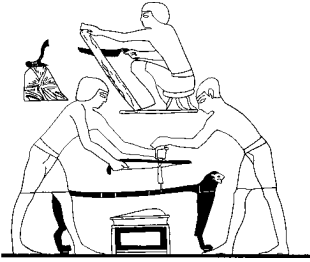
Preheat oven to 200 °C (400 °F). Sift flour and cinnamon into a mixing bowl. In a small saucepan, heat oil and honey over very low heat. Stir until honey melts, watching carefully to prevent honey from burning. Remove from heat. Beat egg. Add honey mixture and egg to flour. Beat together. Chop dates and blend into mixture. Shape mixture into 6 or 8 cakes and place on greased baking sheet. Bake for 20 to 30 minutes.



ACTIVITY SHEET 5 Characteristics of a Civilization

The ancient Egyptians created one of the world's first great civilizations. Several characteristics must be present before a people or a nation can be considered a civilization. To prove that ancient Egypt was a civilization, next to each letter write the number corresponding to the characteristic.

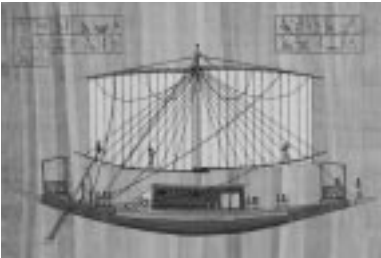
a. _____



e. _____



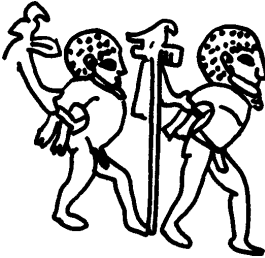
b. _____



f. _____



c. _____



g. _____



d. _____



h. _____



Characteristics

- | | | |
|--|--------------------------------------|---|
| 1. religion | 4. communication (system of writing) | 7. high artistic achievement (artisans) |
| 2. leader and government | 5. trade (travel on the Nile) | 8. organized labour |
| 3. monumental architecture (large buildings) | 6. defence (warfare) | |



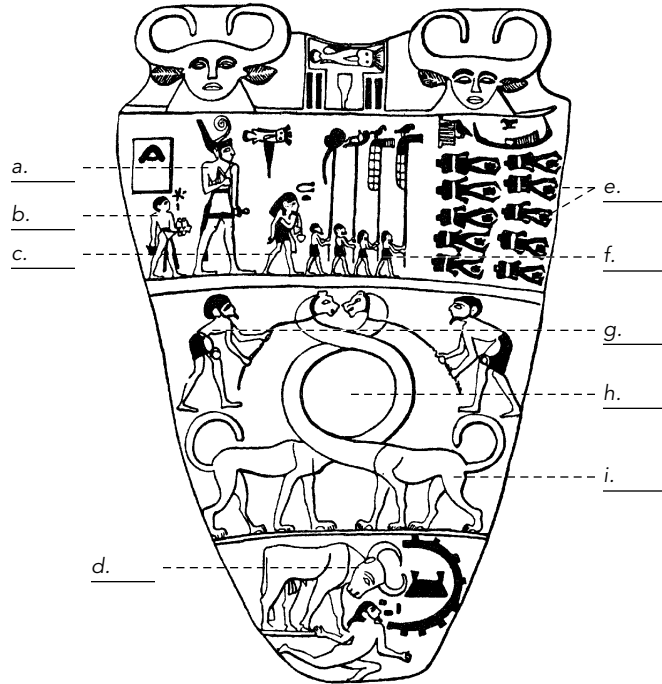
ACTIVITY SHEET 6 Narmer's Palette

The Narmer palette is the earliest artifact depicting an Egyptian king wearing the crowns of both Upper and Lower Egypt. It commemorates King Narmer's victory over Lower Egypt and the subsequent union of Upper and Lower Egypt in the late Pre-dynastic Period (3000 B.C.).

Label the drawings of the two sides of the palette. Next to each letter, write the number that corresponds to the description.

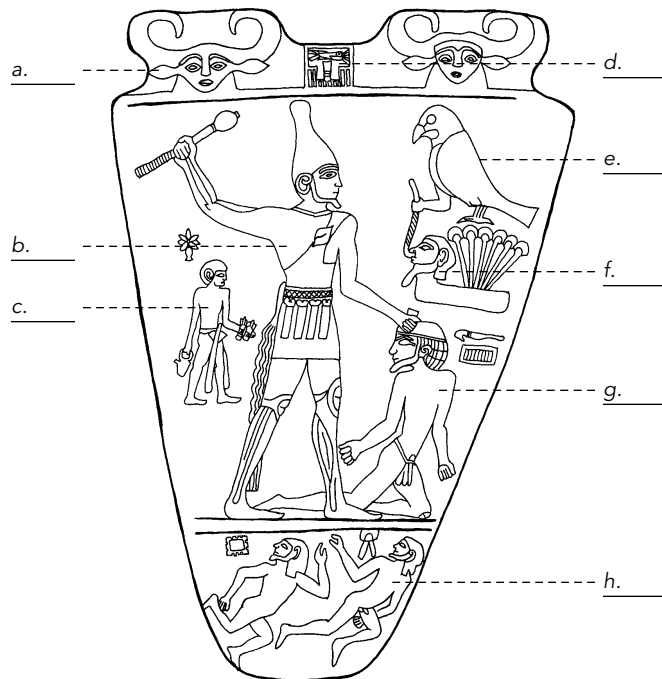
Side 1

1. mythical lions with elongated heads
2. a circular scoop for grinding make-up
3. King Narmer wearing the red crown of Lower Egypt
4. decapitated enemies on the battle-field
5. flag bearers
6. two men holding the lions on leashes
7. a scribe in front of the pharaoh
8. a sandal bearer behind the pharaoh
9. the pharaoh represented as a bull breaking down a town wall and trampling an enemy



Side 2

1. King Narmer wearing the white crown of Upper Egypt
2. an enemy about to be struck with a mace
3. a *serekh* containing King Narmer's name (at top of palette)
4. two dead enemies
5. Horus (a falcon above the marshes)
6. a captive being led by the nose
7. a man carrying a jar
8. a cow's head with horns





ACTIVITY SHEET 7 The Creation of the World

1. Label this drawing of Atum, the primeval god who created the cosmic gods of the universe. Next to each letter, write the number that corresponds to the description.



Clues

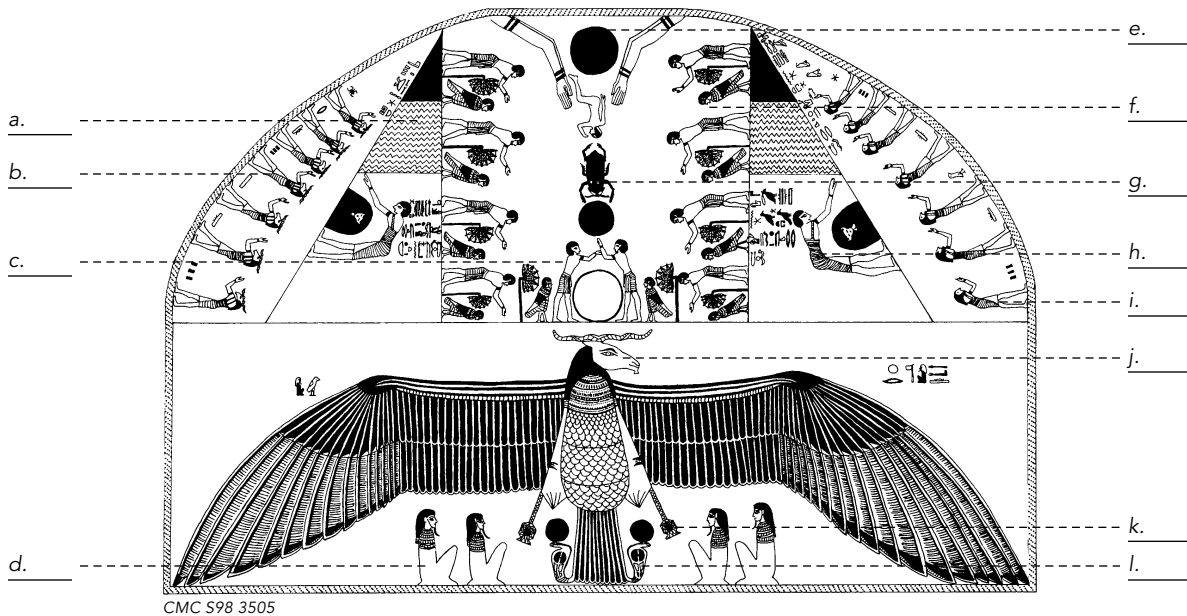
- | | | |
|-------------------------|------------------------------|-----------------------|
| 1. Shu, the god of air | 3. Geb, the earth god | 5. hieroglyphic texts |
| 2. Nut, the sky goddess | 4. Khnum, the ram-headed god | |

2. Make your own drawing of the creation of the world.



ACTIVITY SHEET 8 The Path of the Sun God

1. This drawing shows a scene taken from a wall painting in the tomb of the pharaoh Merenptah and Queen Tawosret (New Kingdom). Next to each letter, write the number that corresponds to the description. On another sheet of paper, make your own drawing of the path of the sun during the day and at night.



Clues

1. cobras wearing sun disks
2. sun disk
3. seated gods
4. band of water (represents the underworld)
5. ram-headed gods
6. falcon-headed gods
7. ram-headed falcon
8. man praising the sun god
9. *ba* bird (represents the soul)
10. *shen* rings (represent eternity)
11. sun god (scarab)
12. god bending over a mound

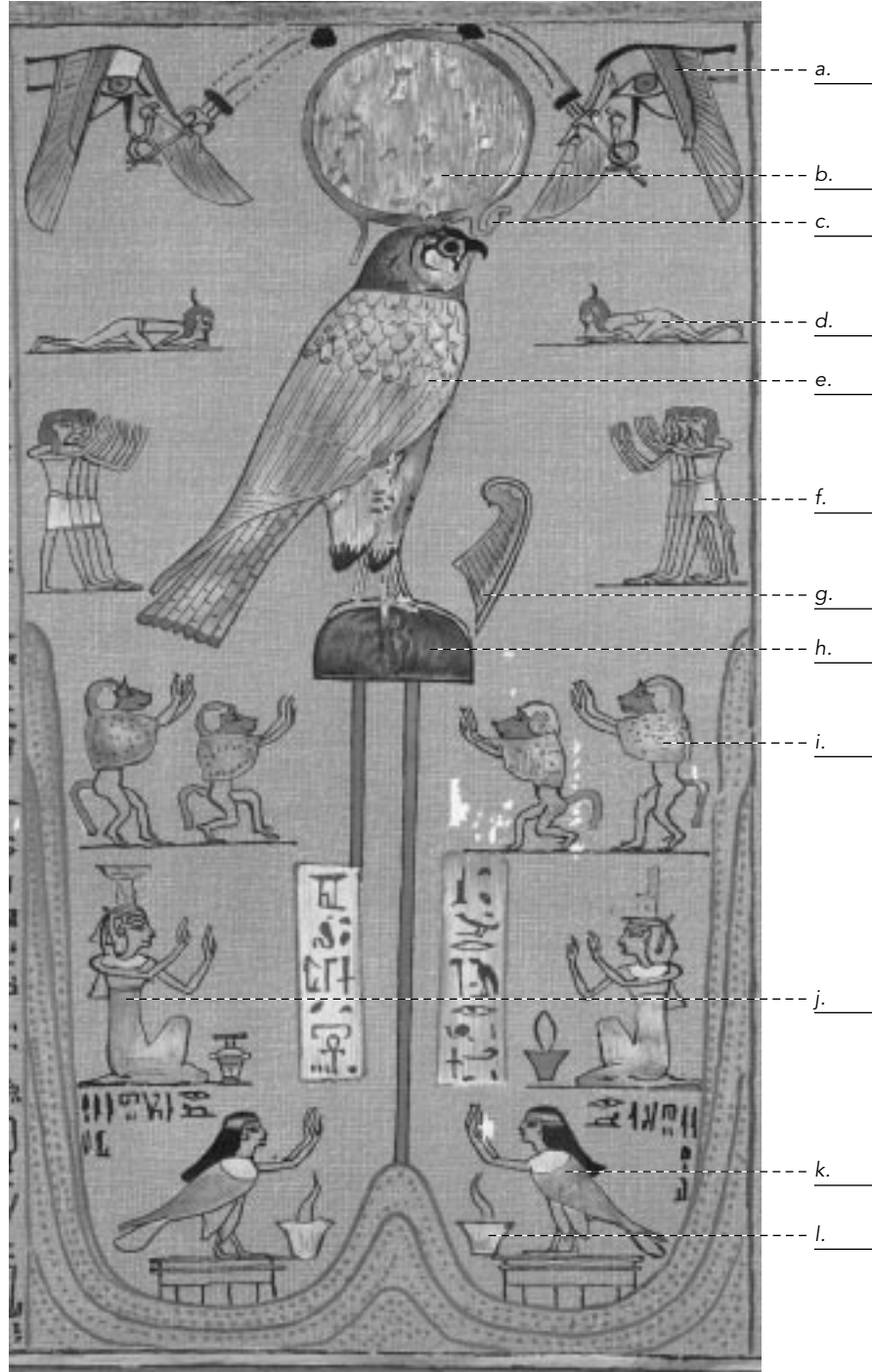


ACTIVITY SHEET 9 The Sun God

Label this drawing depicting the sun god in the form of a falcon. Next to each letter, write the number that corresponds to the description.

Clues











1. falcon
(represents the sun god)
2. feather
(represents justice)
3. burning incense
4. dancing baboons
(represent Thoth, god of wisdom and writing)
5. *ba* birds
(represent the soul of the deceased)
6. Isis and Nephthys
7. cobra
8. winged *wedjats*
(eyes of Re/Horus)
9. men praising the sun god
10. sun disk
11. worshippers on bended knees
12. hieroglyph for "west" and "death" (the falcon is standing on it)





ACTIVITY SHEET 10 Cosmic and Earthly Deities










Match the deities with what they are associated with.

Deities		What they are associated with
1. Atum		a. moon
2. Hapi		b. dry air
3. Shu		c. First Cataract of the Nile
4. Tefnut		d. protector of Lower Egypt
5. Geb		e. sun
6. Nut		f. Nile River
7. Khnum		g. sky
8. Khonsu		h. protector of Upper Egypt
9. Nekhbet		i. moist air
10. Wadjet		j. earth



ACTIVITY SHEET 11 The Divine Family

Match the deities with the role each played in the myth of the divine family.

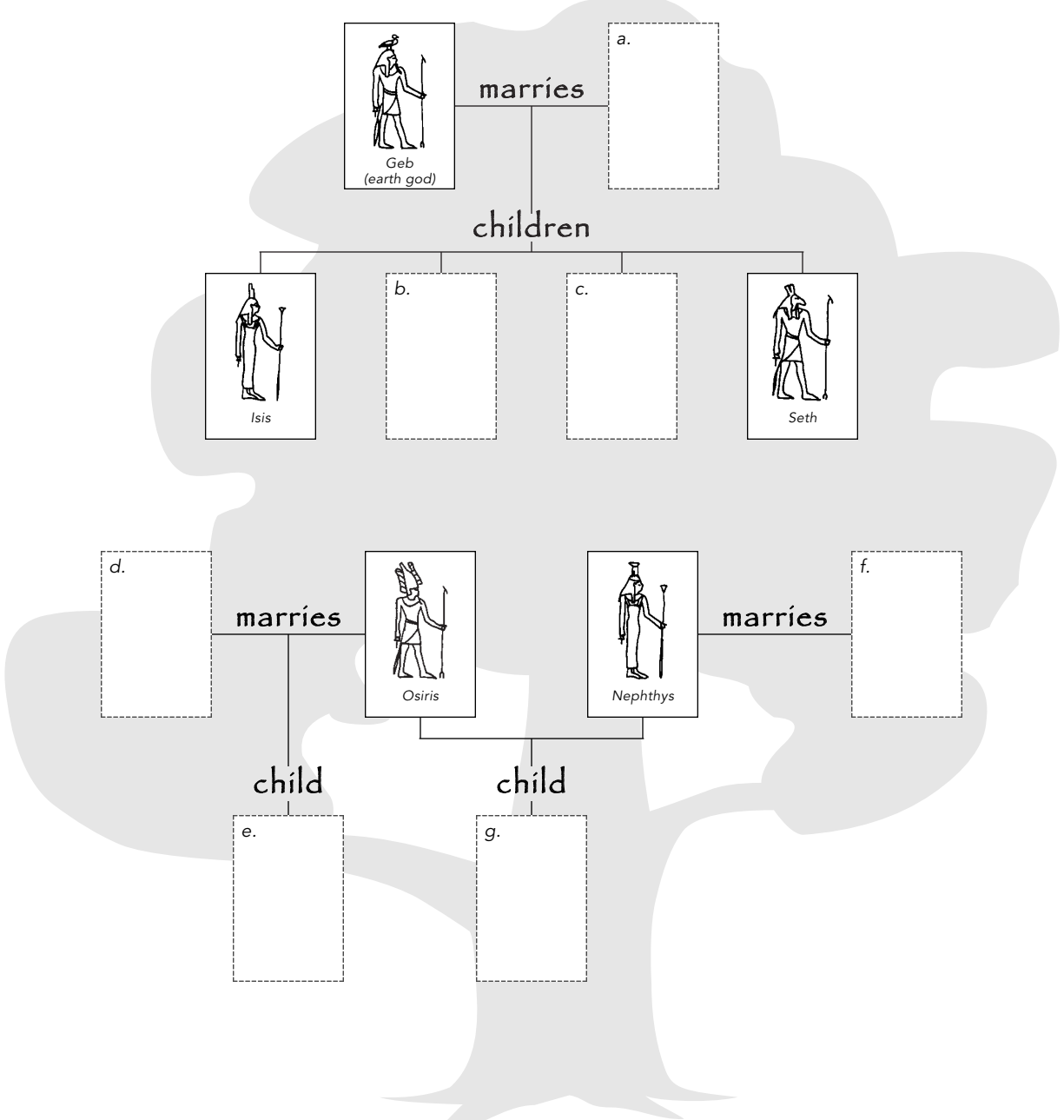
Deities	Roles
1. Osiris 	a. Made her husband furious
2. Horus the child 	b. Fought a battle against his uncle
3. Horus (adult) 	c. Advised Isis to hide her son
4. Isis 	d. Was bitten by a snake
5. Seth 	e. Became Lord of the Dead
6. Nephthys 	f. Is the son of Nephthys and Osiris
7. Thoth 	g. Murdered his brother
8. Re 	h. Mummified her husband
9. Anubis 	i. Grew up in the marshes




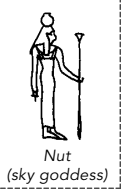
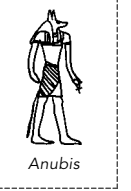




ACTIVITY SHEET 12

The Divine Family Tree

Cut out the drawings of the deities at the bottom of the page and paste them in their proper place on the family tree.










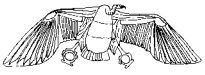




- 
Nephthys
- 
Isis
- 
Seth
- 
Nut (sky goddess)
- 
Anubis
- 
Osiris
- 
Horus



ACTIVITY SHEET 13

Deities and the Creatures that Represent Them

Name the deities and the creatures that represent them.

Deities	
a. 	_____
b. 	_____
c. 	_____
d. 	_____
e. 	_____
f. 	_____
g. 	_____
h. 	_____
i. 	_____
j. 	_____
k. 	_____
l. 	_____











Clues

- | | | |
|----------------------|------------------------------------|----------------------------|
| 1. Sobek (crocodile) | 5. Bastet (cat) | 9. Anubis (jackal) |
| 2. Khnum (ram) | 6. Nekhbet (vulture) | 10. Sekhmet (lioness) |
| 3. Horus (falcon) | 7. Amemet (hippopotamus-crocodile) | 11. Thoth (ibis) |
| 4. Hathor (cow) | 8. Wadjet (cobra) | 12. Taweret (hippopotamus) |



ACTIVITY SHEET 14 The Symbolic Meaning of the Deities

Match the deities with their symbolic meaning. Create your own symbol with the same meaning.

Deities	Symbolic Meaning	Your Symbol
a. Atum 	_____	<input type="text"/>
b. Maat 	_____	<input type="text"/>
c. Neith 	_____	<input type="text"/>
d. Min 	_____	<input type="text"/>
e. Sekhmet 	_____	<input type="text"/>
f. Hapi 	_____	<input type="text"/>
g. Bastet 	_____	<input type="text"/>
h. Horus 	_____	<input type="text"/>
i. Hathor 	_____	<input type="text"/>
j. Wadjet 	_____	<input type="text"/>

Clues

- | | | | | |
|--------------|---------------------|-------------|---------------|--------------|
| 1. war | 2. royal protection | 3. justice | 4. creation | 5. fertility |
| 6. abundance | 7. motherhood | 8. kingship | 9. aggression | 10. music |



ACTIVITY SHEET 15

Pairs of Deities

Draw a line between these pairs of deities and their symbolic meaning.

Deities	Symbolic Meaning
1. Geb and Nut	a. protective and destructive female forces
2. Horus and Seth	b. pregnancy and childbirth
3. Bastet and Sekhmet	c. earth and sky
4. Isis and Nephthys	d. mummified men
5. Khnum and Atum	e. protectors of Upper and Lower Egypt
6. Sobek and Taweret	f. order and destruction
7. Nekhbet and Wadjet	g. creators of humans
8. Re and Khonsu	h. sun and moon
9. Osiris and Ptah	i. protectors of the dead

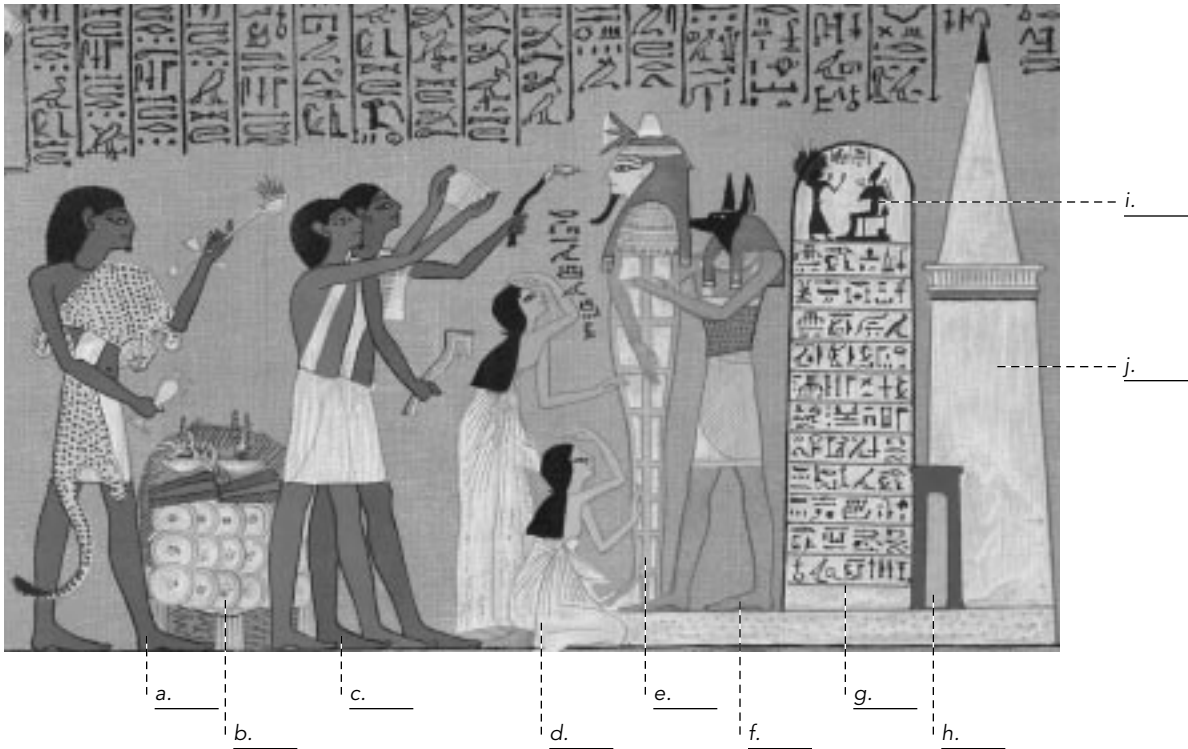


ACTIVITY SHEET 16 “Opening of the Mouth” Ceremony

The “opening of the mouth” ceremony was performed on mummified bodies or on coffins to restore the senses of the deceased. The ancient Egyptians believed that this ceremony made the deceased come alive in the afterworld.

1. What senses were restored to the deceased in the “opening of the mouth” ceremony?

2. Label the drawing of the “opening of the mouth” ceremony. Next to each letter, write the number that corresponds to the description.



CMC S98 3573

Clues

- | | |
|---|---|
| 1. Anubis | 6. obelisk |
| 2. <i>sem</i> -priest holding an incense burner | 7. false door leading to the afterworld |
| 3. prayers for the dead | 8. the deceased |
| 4. priests holding tools for opening the mouth | 9. Osiris |
| 5. mourners | 10. offering table |

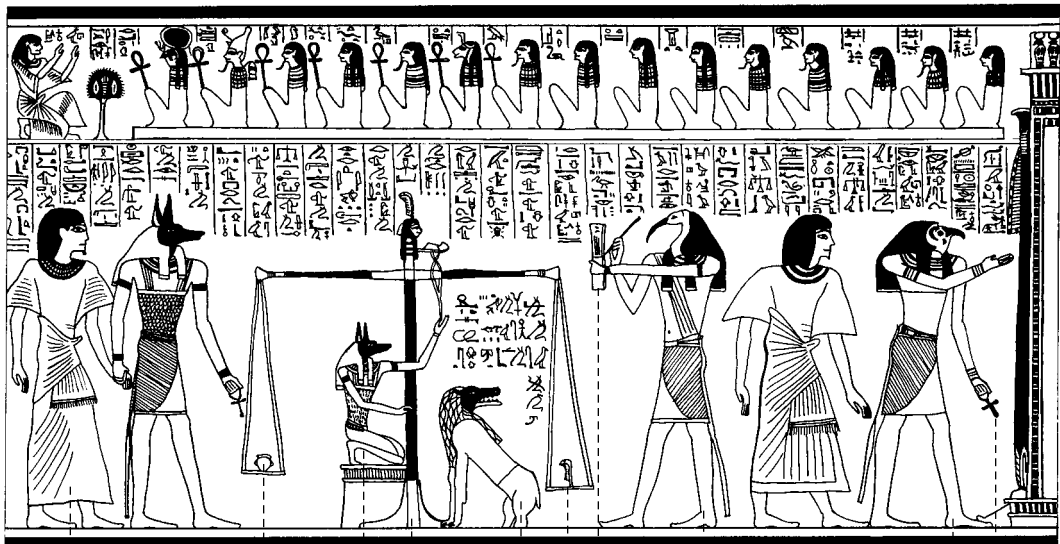


ACTIVITY SHEET 17 “Weighing of the Heart” Ceremony

Before the deceased could proceed to the afterworld, their heart was weighed on a scale to see if it was light (good) or heavy (bad). If it was as light as a feather, the person went to paradise. If it was heavier, it was devoured by the crocodile-headed goddess Amemet.

1. What characteristics do you think would have been considered when determining whether a person had lived a good and proper life?

2. Label the drawing of the “weighing of the heart” ceremony. Next to each letter, write the number that corresponds to the description.



CMC S98 3508

- a. _____
b. _____
c. _____
d. _____
e. _____
f. _____
g. _____
h. _____
i. _____
j. _____

Clues

1. Maat and the scales of justice
2. heart of the deceased
3. feather of justice
4. Thoth, who records the results
5. Amemet, the devourer
6. the deceased, being led by the god Anubis
7. Horus, leading the deceased to meet Osiris
8. Anubis, checking the scales
9. scribe's palette
10. *ankh* (symbol of life)



ACTIVITY SHEET 18 Identifying Royal Symbols

The royals were portrayed surrounded by symbols representing their station in life. The deities also used many of the same symbols.

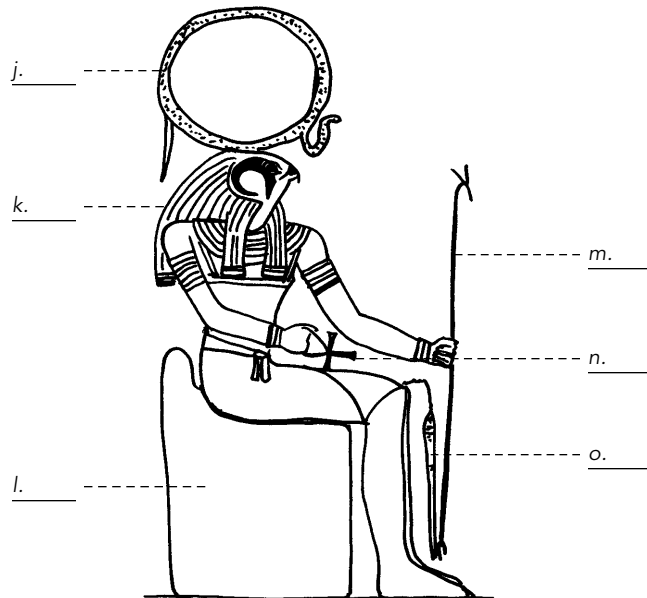
Label the royal symbols in the drawings. Next to each one, write the number that corresponds to its description.



Pharaoh Ahmose makes an offering to his grandmother, Tetisheri

Clues

1. *ankh*
2. throne
3. sceptre
4. tail of war
5. uraeus (cobra)
6. lotus flower
7. vulture headdress
8. mace
9. white crown of Upper Egypt
10. *atef* (double-feather) crown
11. sun disk
12. *nemes* headcloth



Re-Horakhty, one form of the sun god

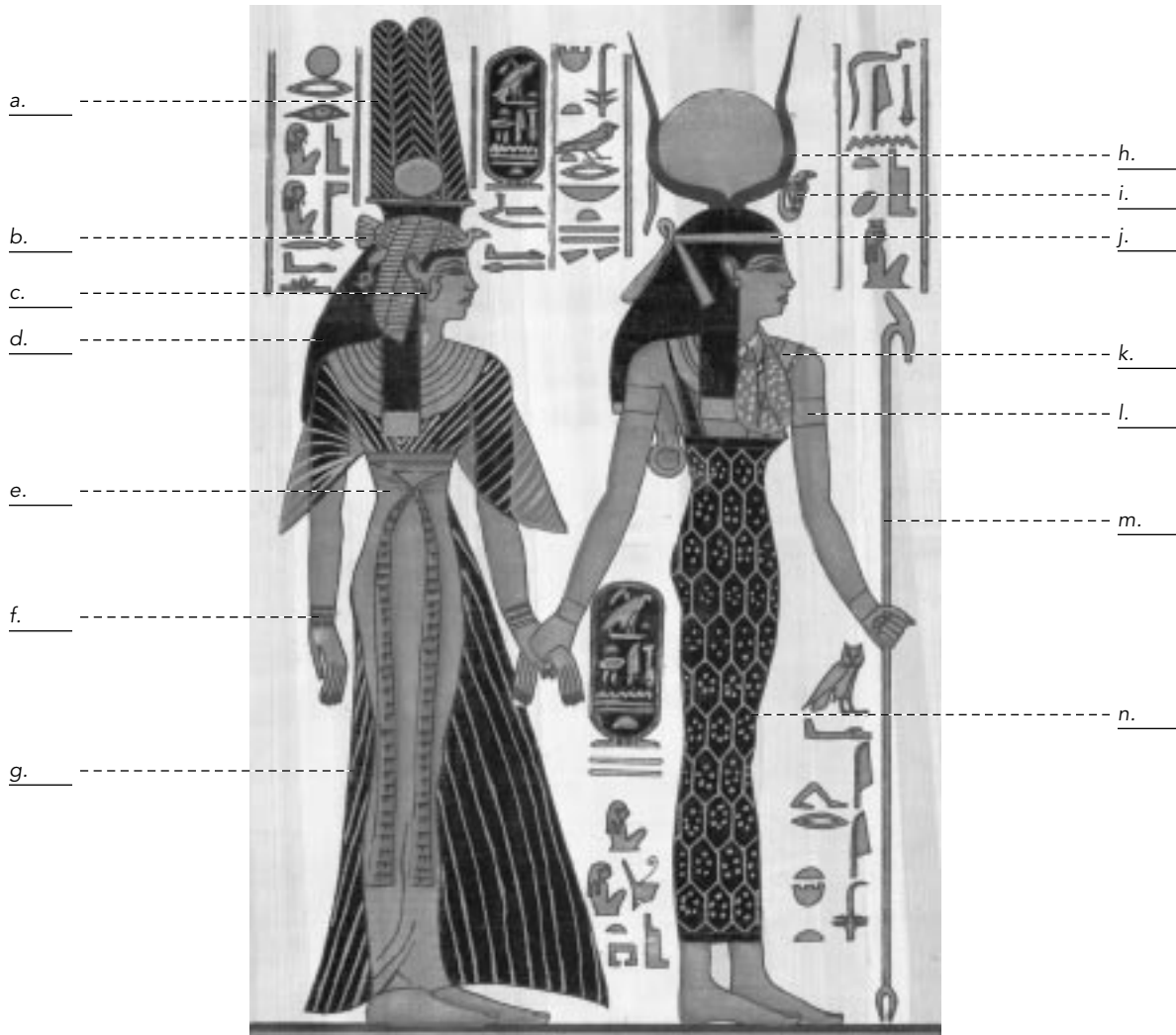


ACTIVITY SHEET 19

Fashion: Royal Women and Goddesses

The clothing worn by elite women and goddesses illustrates the Egyptians' sense of fashion. Their hairstyles, jewellery and make-up contributed to their attractive appearance and reinforced their position in society.

Label the drawing. Next to each letter, write the number that corresponds to the description.



Queen Nefertari, the favourite wife of Ramses II, and the goddess Isis
CMC S98 3534

Clues

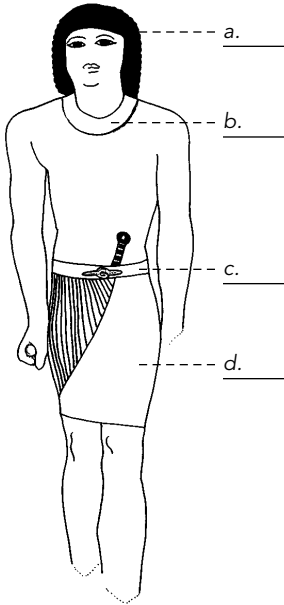
- | | | |
|----------------------|--------------------------------|-------------------------------------|
| 1. vulture headdress | 6. wig | 11. uraeus (cobra) |
| 2. sheath dress | 7. wraparound dress | 12. headband |
| 3. armband | 8. belt | 13. was sceptre |
| 4. bracelet | 9. atef (double-feather) crown | 14. cow horn and sun disk headdress |
| 5. necklace | 10. earrings | |



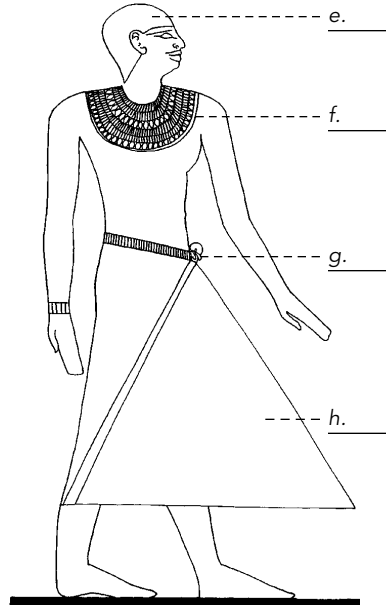
ACTIVITY SHEET 20 Fashion: Royal Men and Gods

The clothing worn by elite men and gods illustrates the Egyptians' sense of fashion. Their hairstyles, jewellery and make-up contributed to their attractive appearance and reinforced their position in society.

Label the drawings. Next to each letter, write the number that corresponds to the description.



Nobleman
(Old Kingdom)



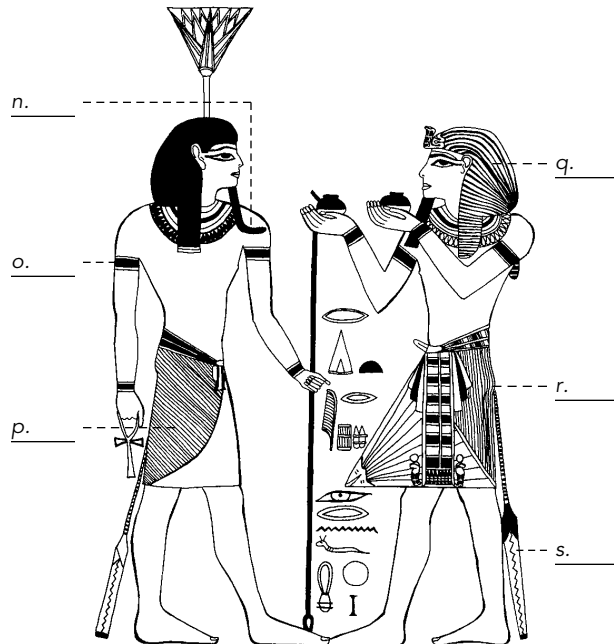
Official
(Middle Kingdom)



Pharaoh Seti I
(New Kingdom)

Clues

- | | |
|--|-----------------------------------|
| 1. short pleated kilt | 7. blue crown |
| 2. belt | 8. scarf |
| 3. necklace | 9. bracelet |
| 4. wig | 10. nemes headcloth |
| 5. mid-calf kilt with large apron (stiffened to maintain its triangular shape) | 11. beard |
| 6. long see-through kilt | 12. tail of war |
| | 13. armband |
| | 14. short pleated kilt with apron |



Pharaoh Ramses I (New Kingdom) and the god Nefertem
CMC S98 3509



ACTIVITY SHEET 21 Headgear, Hairstyles and Make-up

Royal men and women wore jewellery, make-up and various types of headgear. Label the drawings. Next to each letter, write the number that corresponds to the description. Write the number that corresponds to each person's name beside his or her picture.

Figure 1

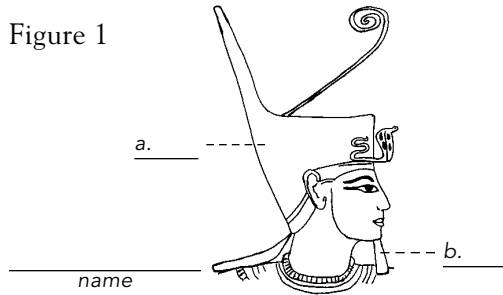


Figure 4



Figure 2

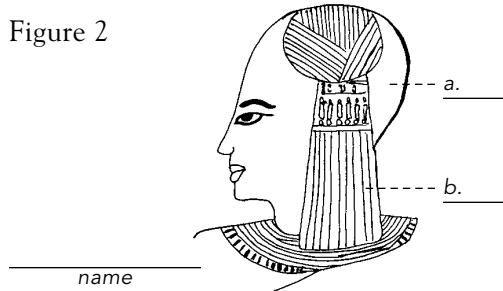


Figure 5

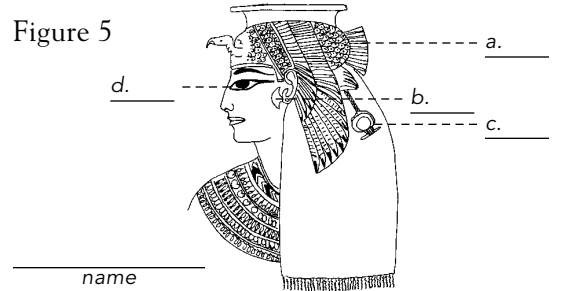


Figure 3

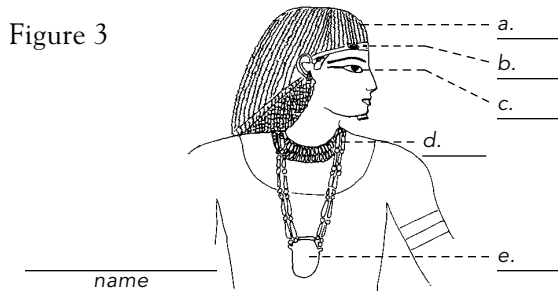
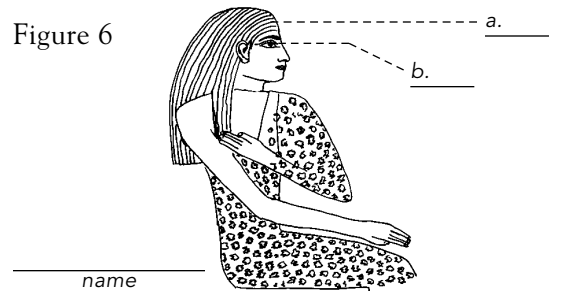


Figure 6



Clues

1. *nemes* headcloth
2. sidelock of youth
3. necklace
4. pharaoh's beard
5. two-tiered wig
6. headband
7. heart amulet
8. red crown of Lower Egypt
9. *shen* ring (symbol of eternity)
10. single-length wig
11. *sekhem* sceptre
12. vulture headdress
13. earrings
14. kohl
15. shaved head

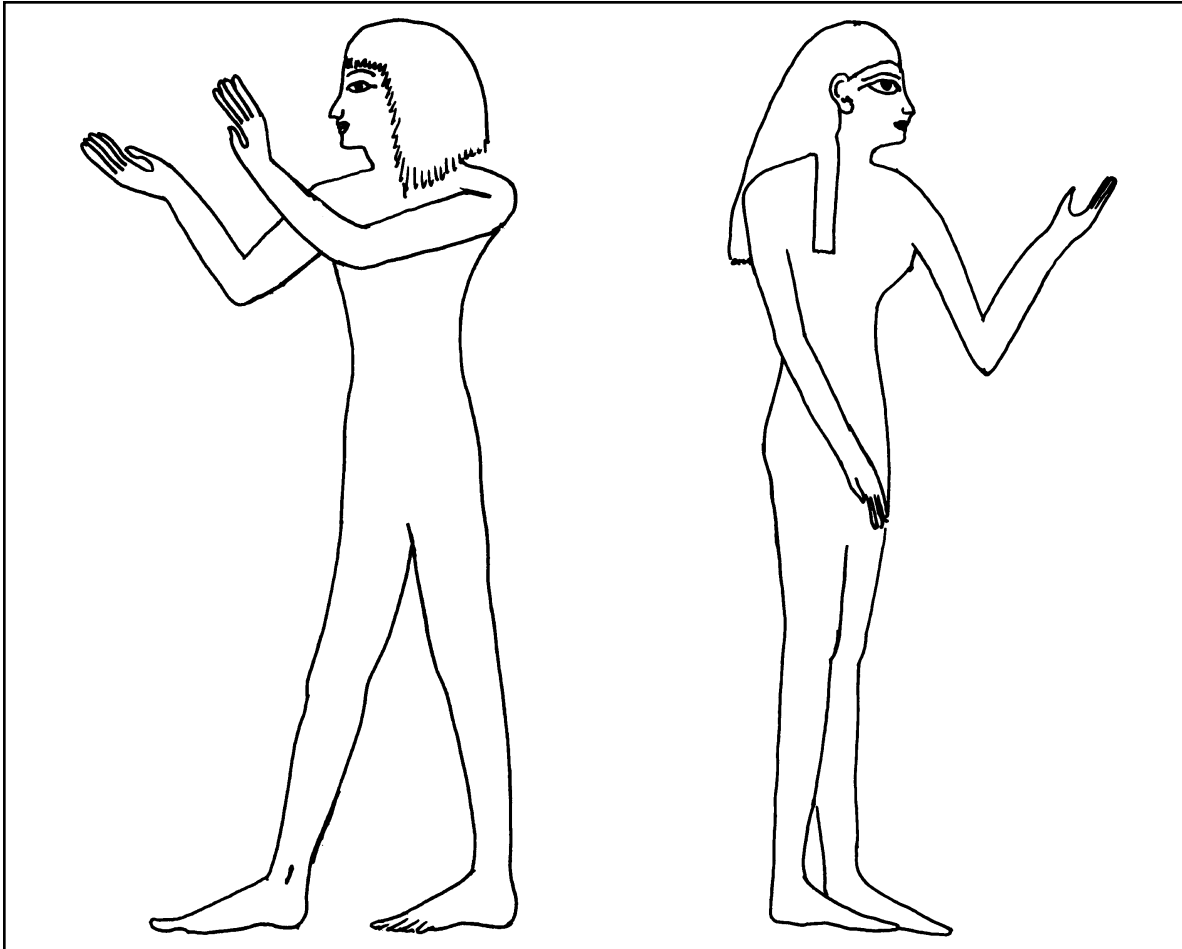
The royals pictured here:

1. Vizier Ramose:
"I am wearing my heart on my heart."
2. Pharaoh Seti I:
"I am holding a symbol of power."
3. Pharaoh Ramses III:
"I am wearing something to frighten you."
4. Prince Khaemuset:
"I am keeping cool."
5. Queen Nefertari:
"I feel like flying."
6. Princess Nefertiabet:
"You can spot me a mile away."



ACTIVITY SHEET 22 Clothing and Personal Adornment

Dress an Egyptian man and woman by adding clothing and jewellery (necklaces, bracelets, earrings, belt buckles, pendants, hair bands, perfumed cones).

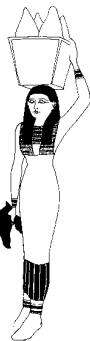


These drawings show styles of clothing that were popular among servants and the upper class in ancient Egypt. You can use them to help you dress the Egyptian man and woman.

Old Kingdom

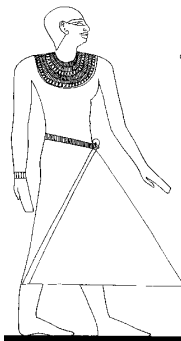


Nobleman

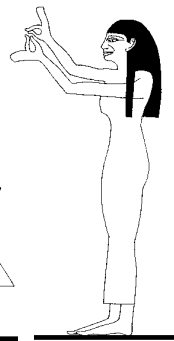


Female Servant

Middle Kingdom



Official



Female Servant

New Kingdom



Nobleman



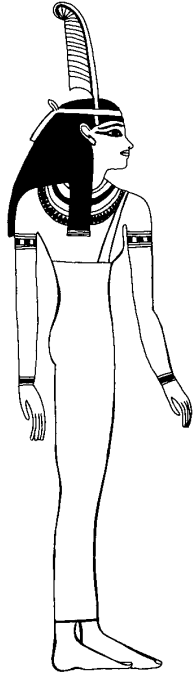
Noblewoman



ACTIVITY SHEET 23

Drawing the Human Figure

Ancient Egyptian artists followed a formula that made figures look stiff. They sketched figures according to a predetermined pattern and made no attempt to show perspective. Label the drawings by indicating the perspective shown: a) in profile or b) from the front.



Maat, goddess of justice

1. eye _____
2. face _____
3. shoulders _____
4. arms _____
5. torso _____
6. legs and feet _____



Hunefer, a nobleman

1. eye _____
2. face _____
3. shoulders _____
4. arms _____
5. torso _____
6. legs and feet _____

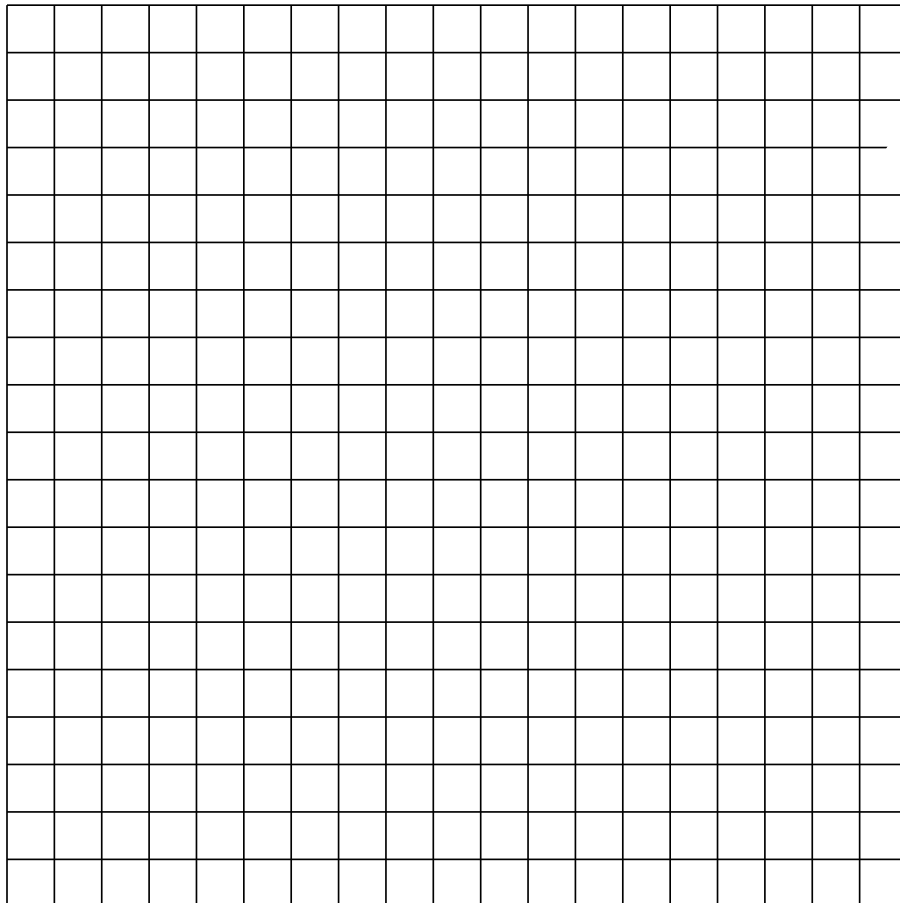
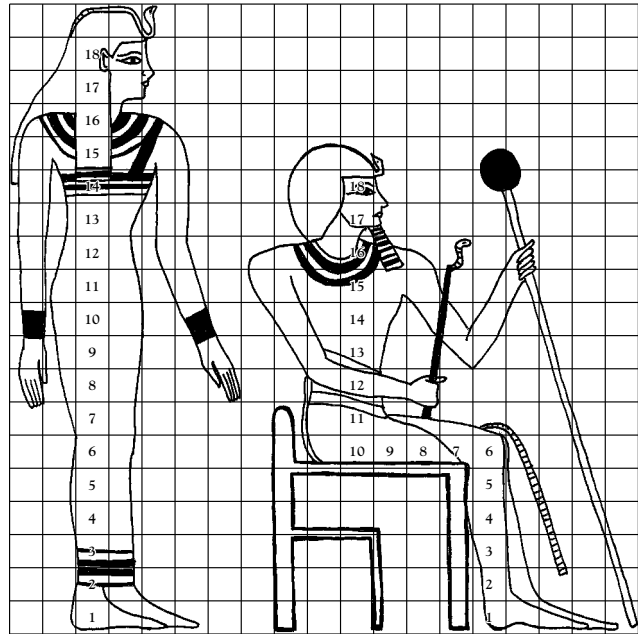


ACTIVITY SHEET 24 Drawing with a Grid

Ancient Egyptian artists sketched figures according to a predetermined pattern, using an 18-square grid. Draw these two figures on the blank grid by following the pattern shown. Before beginning your drawing, count the squares that are needed for each part of the body.

Number of squares needed to draw:

	woman	man
1. lower leg	=	___
2. knees to waist	=	___
3. waist to shoulders	=	___
4. neck to top of head	=	___
5. width of shoulders	=	___
6. width of hips	=	___





ACTIVITY SHEET 25 Pyramids

One of the oldest mysteries surrounding ancient Egypt concerns the building of the pyramids.

1. What kinds of tools do you think were used to cut the stone blocks for the pyramids?

2. Why do you think the ancient Egyptians built pyramids?

3. These three drawings show a progression in the building of pyramids, from the earliest style to the geometrically accurate pyramid. Write the name of each pyramid below its description.



CMC ECD98-025 #65

- a) This early pyramid was designed to look like a stairway to heaven. Its name begins with “s” and has four letters.



CMC ECD98-025 #61

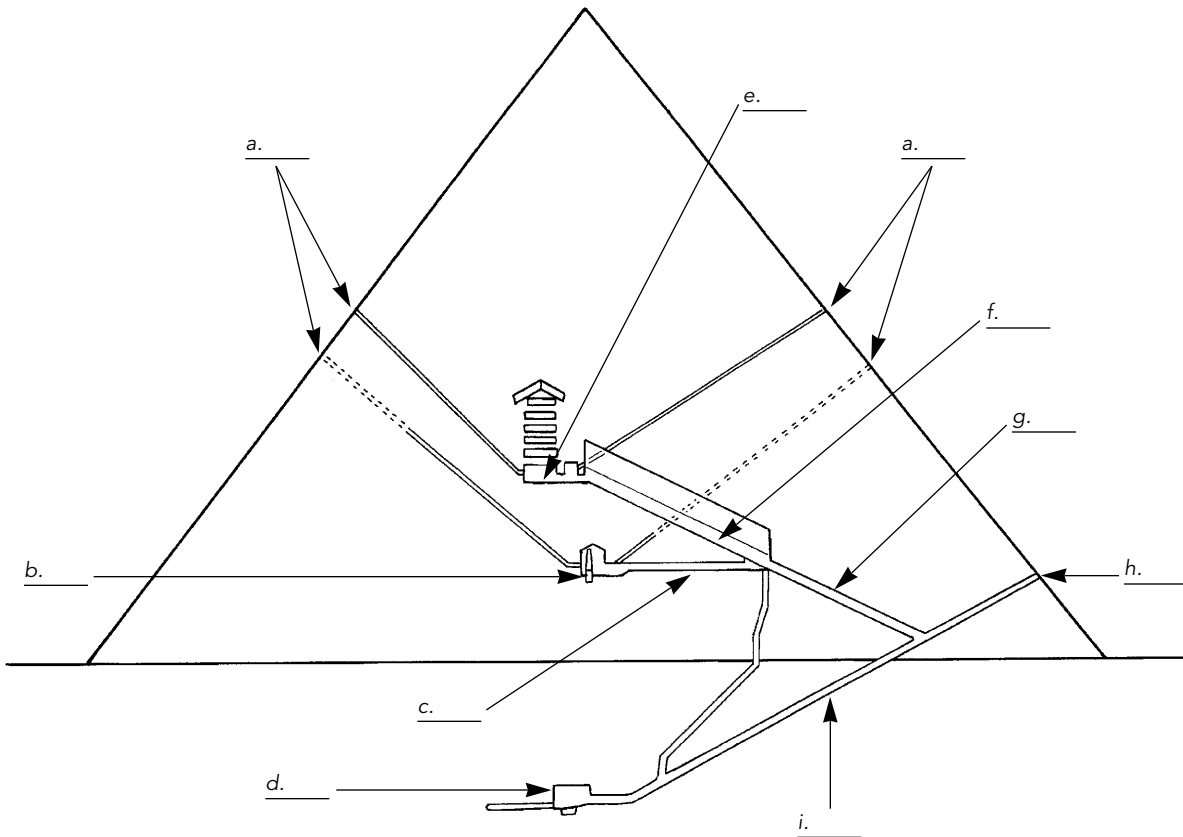
- b) The upper part of this pyramid was bent to prevent the structure from collapsing. Its name begins with “b” and has four letters.



CMC ECD98-015 #100

- c) The biggest pyramid of all, its popular name begins with “g” and has five letters.

4. When completed, the largest pyramid at Giza stood 146.6 metres (481 feet) tall, which is approximately the height of a 50-storey building. Label the drawing of its interior. Next to each letter, write the number that corresponds to the description.



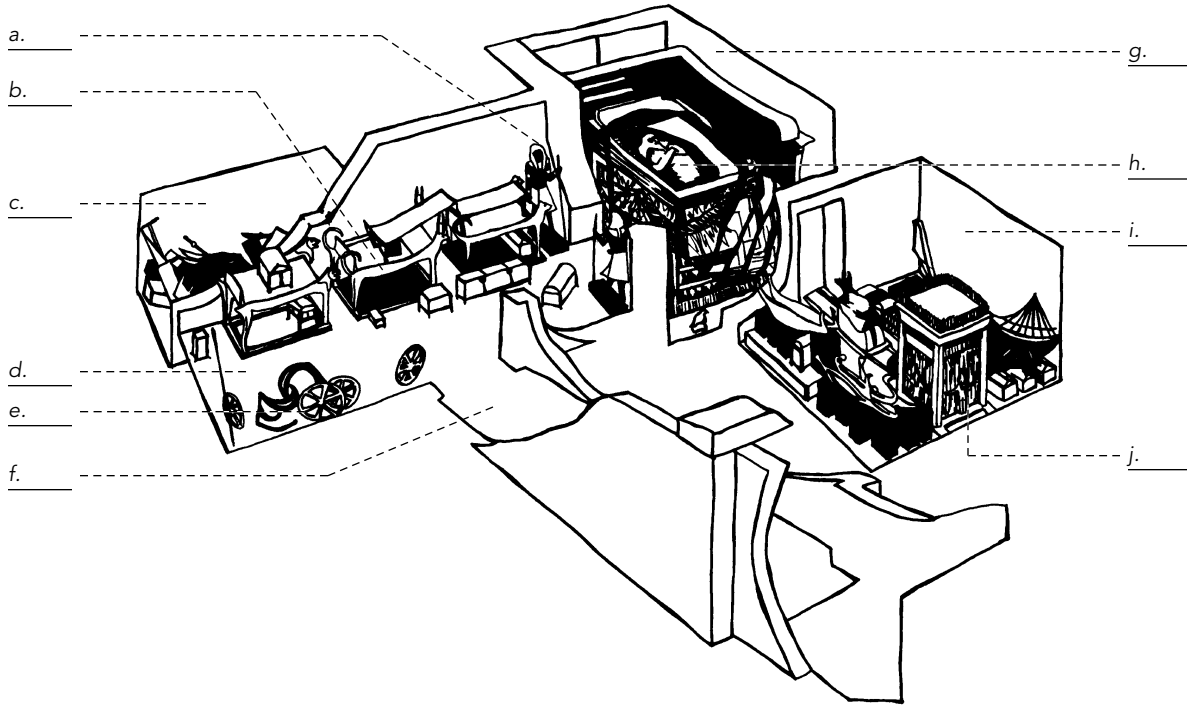
Clues

- | | |
|--|--|
| 1. ascending passage | 7. entrance (just above the base of the pyramid) |
| 2. "Queen's Chamber" (the middle room) | 8. horizontal passage |
| 3. subterranean chamber | 9. king's burial chamber (the upper room with relieving chambers above to keep the roof from collapsing) |
| 4. "air shafts" (narrow openings for ventilation) | |
| 5. descending passage | |
| 6. Grand Gallery (passage with a high ceiling leading to the king's chamber) | |



ACTIVITY SHEET 26 Tutankhamun's Tomb

1. Label the drawing of Tutankhamun's tomb. Next to each letter, write the number that corresponds to the description.



Clues

- | | | |
|-------------------------------|------------------------|---|
| 1. entrance passage | 4. burial chamber | 8. royal bed |
| 2. antechamber (largest room) | 5. treasury room | 9. chariot wheels |
| 3. annex (smallest room) | 6. Tutankhamun's mummy | 10. shrine (largest box in the treasury room) |
| | 7. sentinel figures | |

2. Pretend you are an Egyptian pharaoh or queen. What would you want to have put in your tomb for your afterlife?



ACTIVITY SHEET 27 Tutankhamun's Treasures

Pretend you are preparing an exhibit on Tutankhamun's treasures and other ancient Egyptian artifacts. Write labels for the treasures below. Your label should say what the object is and what it is made of, and include a bit of information on it.

a.



CMC S98 3497

a.

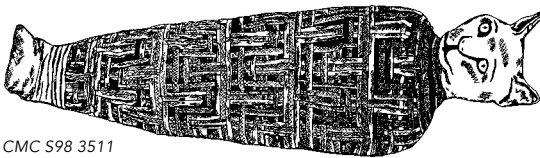
b.

c.

d.

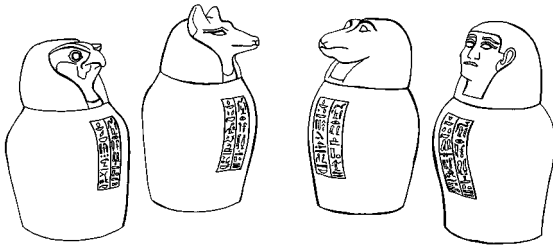
e.

b.



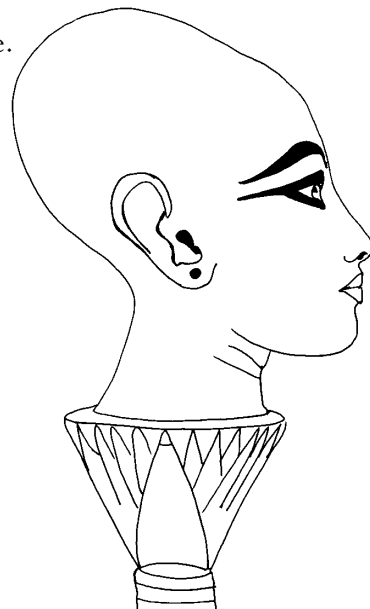
CMC S98 3511

c.

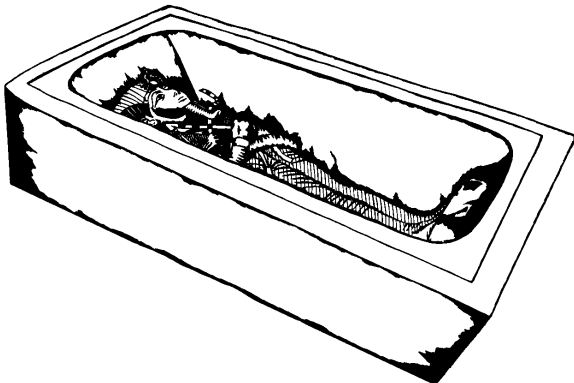


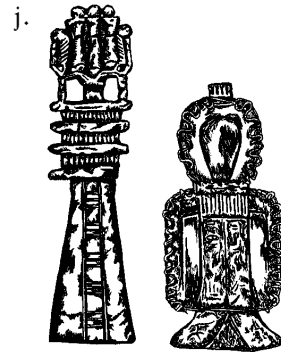
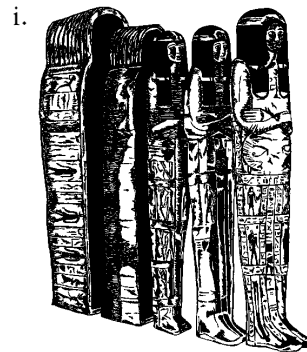
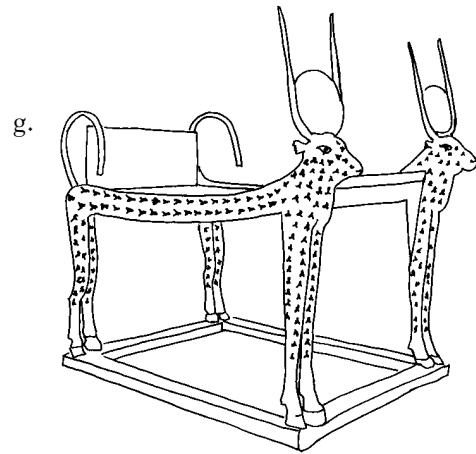
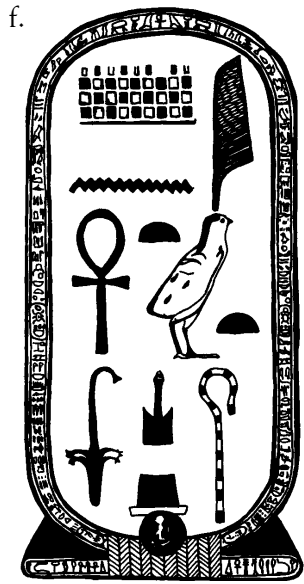
CMC S98 3516

e.



d.





CMC S98 3510

CMC S98 3514

f. _____

g. _____

h. _____

i. _____

j. _____

Clues

- | | | |
|---|-----------------|-------------------------|
| 1. Tutankhamun's gold mask | 4. model boat | 8. nesting coffins |
| 2. Tutankhamun's mummy in a sarcophagus | 5. amulets | 9. royal bed |
| 3. box with Tutankhamun's cartouche | 6. canopic jars | 10. bust of Tutankhamun |
| | 7. cat mummy | |



ACTIVITY SHEET 28 Tutankhamun's Life and Death

There are many mysteries surrounding the life and death of Tutankhamun.

1. What important event happened when he was 9 years old?

2. What do you know about his death?

3. These paintings from Tutankhamun's tomb tell us about his life and his journey to the afterworld. Next to each letter, write the number that corresponds to the description. Then write a sentence describing what is happening in the painting.

A. Tutankhamun and his wife Ankhesenamun hunting birds

CMC S98 3529

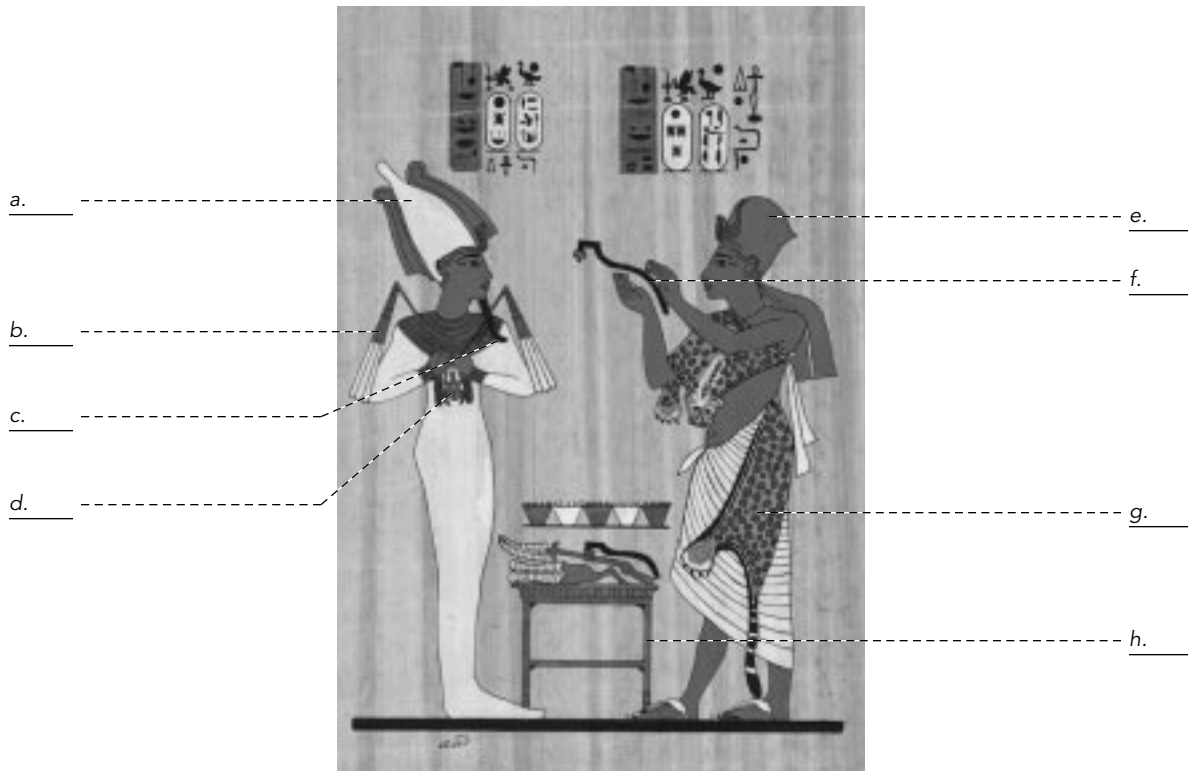


Clues

- | | | | |
|------------------|----------------------------|---------------------|------------------------|
| 1. birds | 5. vulture | 8. kilt | 11. folding stool |
| 2. quiver | 6. Tutankhamun's cartouche | 9. wraparound dress | 12. papyrus thicket |
| 3. bow and arrow | 7. sidelock of youth | 10. sandals | 13. double-cobra crown |

B. Tutankhamun and Ay (his successor), who is performing the “opening of the mouth” ceremony

CMC S98 3522



Clues

- | | | |
|---------------------------------|--------------------|---------------------------------------|
| 1. leopard skin | 4. scarab pendant | 7. <i>atef</i> (double-feather) crown |
| 2. tool for “opening the mouth” | 5. pharaoh’s beard | 8. blue crown |
| 3. flail | 6. offering table | |



ACTIVITY SHEET 29

Men's Work

We can learn about the daily life of the ancient Egyptians by looking at these tomb paintings. Next to each letter, write the number that corresponds to the description. On another sheet of paper, write a sentence to describe what the men in each painting are doing or what their role is.

a.



e.



b.



f.



c.



g.



d.



h.



Drawings by Winnifred Needler, courtesy of the Royal Ontario Museum

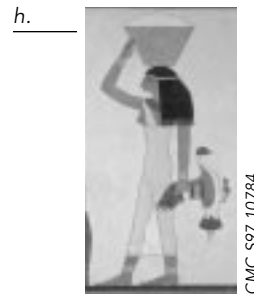
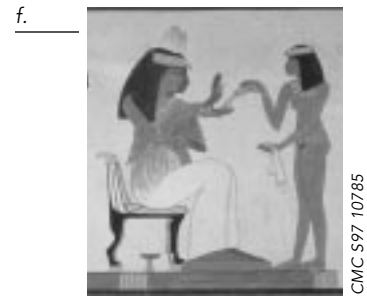
Clues

- | | | | |
|---------------------|---------------------|----------------|----------------------|
| 1. crushing grapes | 3. ploughing fields | 5. beadwork | 7. craftsmen |
| 2. harvesting wheat | 4. carpenters | 6. brickmaking | 8. irrigating fields |



ACTIVITY SHEET 30 Women's Work and Leisure

We can learn about the daily life of the ancient Egyptians by looking at tomb paintings. Next to each letter, write the number that corresponds to the description. On another piece of paper, write a sentence to describe what the women in each painting are doing or what their role is.



Drawings by Winnifred Needler, courtesy of the Royal Ontario Museum

Clues













- | | | | |
|--------------|------------------|-------------------|-------------------------|
| 1. musicians | 3. spinning flax | 5. weaving | 7. maid delivering food |
| 2. dancers | 4. child care | 6. receiving wine | 8. receiving perfume |



ACTIVITY SHEET 31 Reading Hieroglyphs

There are three major types of signs in hieroglyphic writing: 1) logograms, which represent words; 2) phonograms, which represent sounds; and 3) determinatives, which help to indicate the precise meaning of words.









1. Write the meaning of each logogram.

a.  _____	d.  _____	g.  _____	j.  _____
b.  _____	e.  _____	h.  _____	k.  _____
c.  _____	f.  _____	i.  _____	l.  _____

Clues

- | | | | |
|------------|------------|--------------|--------------|
| 1. sun | 4. face | 7. woman | 10. plant |
| 2. to come | 5. horizon | 8. man | 11. to break |
| 3. house | 6. to cut | 9. to strike | 12. gold |


2. Write the sound that corresponds to these phonograms.

a.  _____	c.  _____	e.  _____	g.  _____
b.  _____	d.  _____	f.  _____	h.  _____

Clues

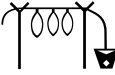







- | | |
|---|---|
| 1. <i>bit</i> (looks like it could sting you) | 5. <i>hr</i> (looks like a man) |
| 2. <i>ir</i> (looks like it could see you) | 6. <i>ms</i> (looks like three fox tails) |
| 3. <i>stp</i> (looks like a hammer) | 7. <i>mr</i> (looks like a plough) |
| 4. <i>sw</i> (looks like a blade of grass) | 8. <i>hpr</i> (crawls) |

Determinatives were derived from logograms. They were placed at the end of a set of hieroglyphs to clarify the meaning of the word. Here are two examples:

When a logogram of a scribe's palette  is followed by the determinative depicting a man , the word means "scribe". When it is followed by a scroll , it means "to write".



3. Identify the meaning of these determinatives.

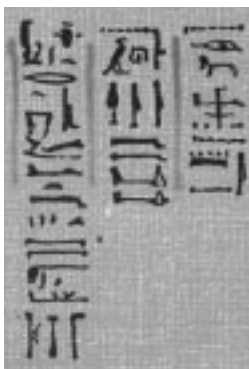
- a.  _____ c.  _____ e.  _____ g.  _____
- b.  _____ d.  _____ f.  _____ h.  _____

Clues

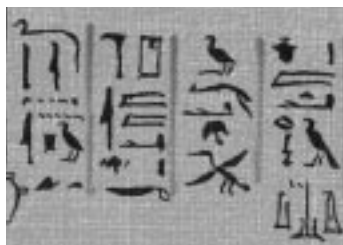
- | | | | |
|-------------------|----------|-----------------|----------------|
| 1. horse | 3. god | 5. enemy | 7. small, weak |
| 2. vine or garden | 4. child | 6. tree or wood | 8. dancing man |

4. Hieroglyphic inscriptions are written in horizontal lines or vertical columns, and usually read from top to bottom. The faces of the hieroglyphic signs representing people or animals are always turned towards the beginning of the text. In these four examples from the *Book of the Dead*, indicate where you would begin reading the text and where you would finish.

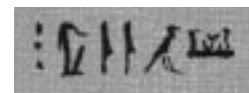
A



B



C



D

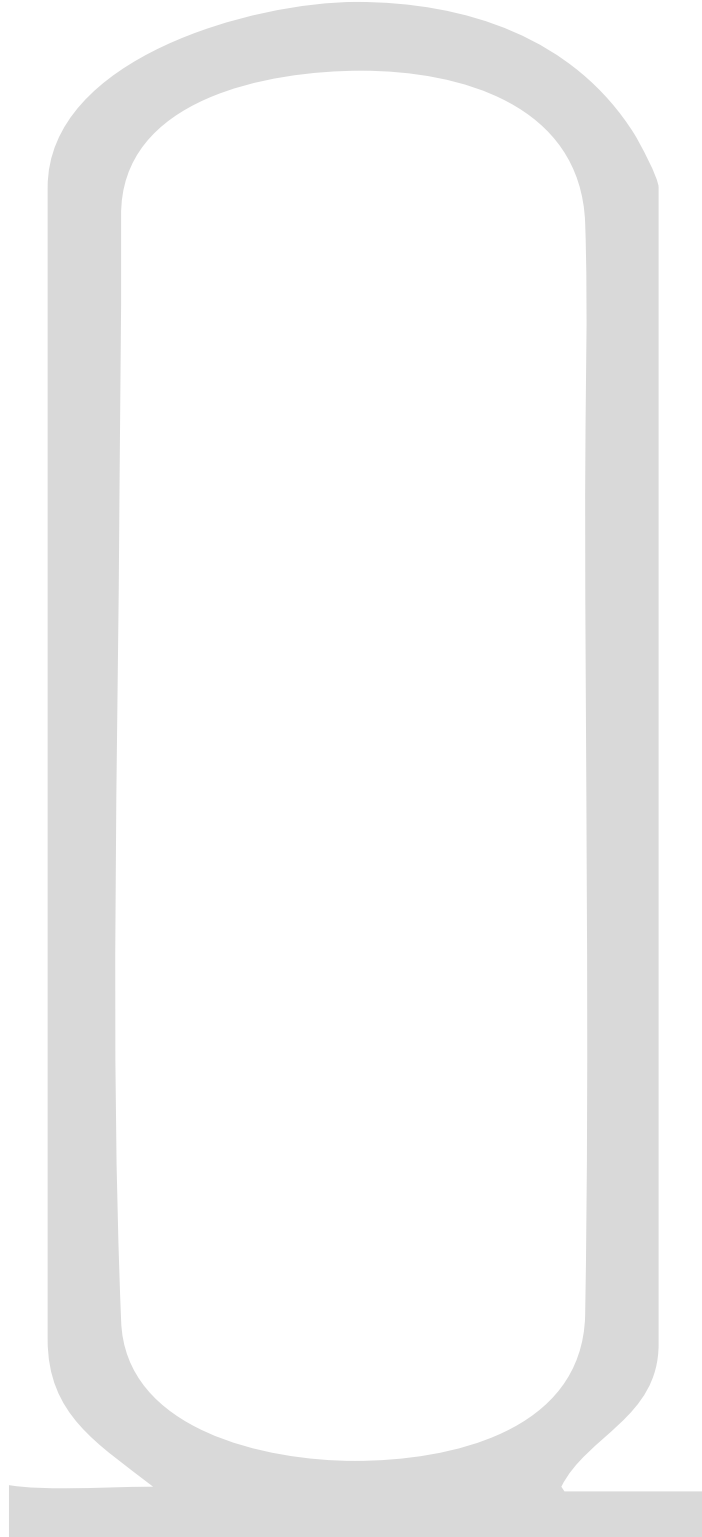


	START		FINISH
A	_____		
B	_____		
C	_____		
D	_____		





























ACTIVITY SHEET 32 Make Your Own Cartouche

1. The names of pharaohs and royals were written inside cartouches. Use the hieroglyphic alphabet to write your name inside the cartouche provided.



2. Beside each hieroglyphic symbol, write what you think the symbol represents.

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

Clues

- | | | | |
|-----------------------------|-------------------|---------------|----------------------|
| 1. water | 6. hand | 12. reed leaf | 18. folded cloth |
| 2. foot | 7. horned snake | 13. lion | 19. two reed leaves |
| 3. stool | 8. lasso | 14. vulture | 20. chequered basket |
| 4. plain basket with handle | 9. cobra | 15. mat | 21. door bolt |
| 5. baby quail | 10. loaf of bread | 16. courtyard | 22. mouth |
| | 11. hillside | 17. owl | |



ACTIVITY SHEET 33

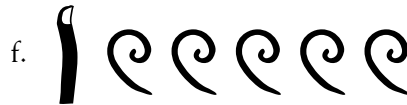
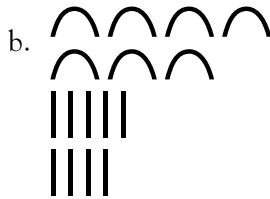
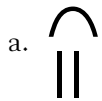
Mathematics

The standard unit of linear measure used in ancient Egypt was the royal cubit, equivalent to 52.3 cm (20.6 in.). It represented the length of the pharaoh's forearm, from the elbow to the tip of the thumb. Measure the length of your forearm, from your elbow to the tip of your thumb. How much longer was the Egyptian pharaoh's forearm? _____

Use the table below to read and write numbers in hieroglyphs. The higher numbers are usually written in front of the lower ones. When there is more than one row of numbers, start at the top and read down.

 1	 10	 100	 1,000	 10,000	 100,000	 1,000,000
---	--	---	---	--	--	---

1. What numbers do the following hieroglyphs represent?



2. Write the following numbers in hieroglyphs.

a. 19 _____

e. 3,134 _____

b. 56 _____

f. 1,400 _____

c. 374 _____

g. 10,738 _____

d. 547 _____

h. 1,400,225 _____

3. Make up your own numbers and write them in hieroglyphs.

Appendix 2

Glossary

archetype — a model or pattern that influences human attitudes, beliefs and behaviour

Book of the Dead — Egyptian funerary texts consisting of about 200 spells to assist the deceased in the afterlife. Over half the spells were derived from the earlier Pyramid Texts and Coffin Texts.

burial chamber — the room in which coffins were placed in a tomb

cartouche — an elliptical outline representing a length of rope that encloses the names of royal persons in hieroglyphs

cataract — rapids or a rocky area on the Nile River

Coffin Texts — funerary texts that were inscribed inside the coffins of Middle Kingdom high officials. See also **Book of the Dead**.

cosmic gods — gods who represent the forces of the universe: the sky, sun, moon, earth, water and air

cult centres — towns where local gods and goddesses were worshipped

Duat — the ancient Egyptian word for the place where humans live after they die. Other names used were netherworld, afterworld, underworld, sky world and Land of the Gods.

dynasty — a succession of rulers of the same line of descent

Ennead — the nine gods of the Heliopolitan creation myth

funerary texts — spells to assist the deceased in the afterlife. See also **Book of the Dead**.

hieroglyphs — an early form of writing using phonograms, logograms and determinatives arranged in horizontal and vertical lines

khol — a mixture of ground galena (a black mineral), sulphur and animal fat that was used as eye make-up. It also alleviated eye inflammations and protected the eyes from the glare of the sun.



khôl stick — a short stone stick used to apply khol around the eyes

Land of the Gods — see Duat

mummification — the preservation of the physical body after death

obelisk — a needle-like stone monument, the tip of which is shaped like a pyramidion

Ogdoad — a group of eight deities that the priests at Hermopolis (cult centre of Thoth) identified as the primeval actors in the creation myth

opening of the mouth — a ceremony performed on a mummified body to restore the senses

papyrus — an aquatic plant that grows in marshes along the Nile. The species of papyrus grown during pharaonic times is now extinct.

pharaoh — name given to the kings of ancient Egypt

pharaonic period — the period during which Egypt was ruled by pharaohs (3000 B.C.–A.D. 395)

phoenix — a mythical bird that dies and is reborn. The heron is similar in form to the phoenix.

priests and priestesses — in the Old and Middle kingdoms, lay men and women who served in the temples, worshipping and caring for the deities. By the New Kingdom, the priesthood was a separate class of officials comprised exclusively of men. Priests were not necessarily well versed in religious doctrine, nor did they always work full-time in a temple.

Pyramid Texts — hieroglyphic texts written on the inner passages of pyramids and the walls of the pharaoh's burial chamber. They were intended to help the pharaoh travel through the afterworld, to secure the regeneration and eternal life of the king.

pyramidion — the capstone of a pyramid or obelisk

sarcophagus — a stone container encasing one or more coffins (derived from a Greek word for “flesh-eating”)

scribe — a person who writes documents. Clerks, copyists and learned men who held positions in the bureaucracy were scribes.

serekh — a *serekh* is a hieroglyphic symbol of a “palace façade” and consists of a rectangular frame surmounted by the Horus falcon. Within the rectangle is the king's “Horus name”.

sky world — see Duat

sun disk — a circular form representing the sun, worn on the heads of deities and often encircled by a snake

underworld — see Duat

vizier — the executive head of the Egyptian bureaucracy; represented the pharaoh in most matters, except in military and religious pursuits

weighing of the heart — a ceremony performed in the Land of the Gods to determine if a deceased person would enjoy eternal life

Appendix 3

Suggested Reading

Books in English (Children's books are marked with an asterisk.)

- **Ancient Egypt*. Eyewitness Books. London: Stoddard, 1990. ISBN 0-7737-2412-5.
- Baines, John, and Jaromir Malek. *Atlas of Ancient Egypt*. Abingdon, England: Andromeda Oxford, 1980. ISBN 1-871869-80-3.
- *Barnett, Mary. *Gods and Myths of Ancient Egypt*. New York: Smithmark, 1996. ISBN 0-7651-9902-5.
- Berman, Lawrence M., and Bernadette Letellier. *Pharaohs: Treasures of Egyptian Art from the Louvre*. Cleveland, Ohio: The Cleveland Museum of Art in association with Oxford University Press, 1996. ISBN 0-19-521235-5.
- Clayton, Peter. *Chronicle of the Pharaohs*. London: Thames and Hudson, 1994. ISBN 0-500-05074-0.
- Egypt: Land of the Pharaohs*. Richmond, Virginia: Time-Life Books, 1992. ISBN 0809498502.
- **The Egyptian News*. Cambridge, Massachusetts: Candlewick Press. ISBN 1-56402-873-9.
- Forty, Jo. *Ancient Egyptian Mythology*. London: Promotional Reprint Company Ltd., 1996. ISBN 1 85648 397 5.
- Freeman, Charles. *The Legacy of Ancient Egypt*. Abingdon, England: Andromeda Oxford, 1977. ISBN 0-8160-3656-X.
- Harris, Geraldine. *Gods and Pharaohs from Egyptian Mythology*. Peter Lowe, 1982. ISBN 0-85654-043-9.
- *Haslam, Andrew. *Ancient Egypt: Make It Work*. Chicago: World Book, 1997. ISBN 0-7166-4604-8.

- Hart, George. *Egyptian Myths*. Austin, Texas: British Museum Publications, 1995.
ISBN 0-292-72076-9
- Hobson, Christine. *The World of the Pharaohs: A Complete Guide to Ancient Egypt*. New York: Thames and Hudson, 1987. ISBN 0-500-27560-2.
- Houlihan, Patrick. *The Animal World of the Pharaohs*. London: Thames and Hudson, 1996.
ISBN 0-500-01731-X .
- Lehner, Mark. *The Complete Pyramids*. London: Thames and Hudson, 1990.
ISBN 0-500-05084-8.
- *Macdonald, Fiona. *The World in the Time of Tutankhamen*. Parsippany, New Jersey: Dillon Press, 1997. ISBN 0-382-39746-0.
- *Mann, Elizabeth. *The Great Pyramid*. New York: Mikaya Press, 1996. ISBN 0-9650493-1-0.
- Martin, Geoffrey. *The Hidden Tombs of Memphis*. London: Thames and Hudson, 1991.
ISBN 0-500-27666-8.
- *Patrick, Richard. *All Colour Book of Egyptian Mythology*. London: Octopus Books, 1992.
ISBN 7064 0076 3.
- Pipe, Jim. *Mystery History of a Pharaoh's Tomb*. London: Copper Beech Books, 1996.
ISBN 0-7613-0591-2.
- Putnam, James. *Egyptology: An Introduction to the History, Culture and Art of Ancient Egypt*. London: Shooting Star Press, 1990. ISBN 1-57335-307-8.
- *Putnam, James. *Mummy*. Eyewitness Books. London: Darling Kindersley Books, 1993.
ISBN 0-7737-2666-5.
- **Pyramids*. Eyewitness Books. New York: Alfred A. Knopf, 1994. ISBN 0-679-86170-X.
- Reeves, Nicholas. *The Complete Tutankhamun*. London: Thames and Hudson, 1990.
ISBN 0-500-05058-9.
- Reeves, Nicholas, and John Taylor. *Howard Carter before Tutankhamun*. London: British Museum Press, 1992. ISBN 0-7141-0952-5.
- Reeves, Nicholas, and Richard H. Wilkinson. *The Complete Valley of the Kings*. London: Thames and Hudson, 1996. ISBN 0-500-05080-5.
- Shaw, Ian, and Paul Nicholson. *British Museum Dictionary of Ancient Egypt*. London: British Museum Press, 1996. ISBN 0-7141-0982-7.
- Siliotti, Alberto. *Egypt: Splendours of an Ancient Civilization*. London: Thames and Hudson, 1994. ISBN 0-500-01647-X.
- Siliotti, Alberto. *The Pyramids*. London: Weidenfeld and Nicolson, 1997.
ISBN 0-297-82291-8.
- Silverman, David. *Masterpieces of Tutankhamun*. New York: Abbevielle Press, 1979.
ISBN 0-89659-002-4.
- Sullivan, Karen. *Glorious Treasure: Ancient Egypt*. London: Brockhampton Press, 1997.
ISBN 1-86019-564-4.

- Watterson, Barbara. *Gods of Ancient Egypt*. Gloucestershire, England: Sutton Publishing, 1996. ISBN 0 7509 1329 0.
- Wilkinson, Richard H. *Reading Egyptian Art*. London: Thames and Hudson, 1992. ISBN 0-500-27751-6.
- Wilson, Hilary. *Understanding Hieroglyphs*. Lincolnwood (Chicago), Illinois: Passport Books, 1993. ISBN 0-8442-4604-2.

Books in French (Children's books are marked with an asterisk.)

- Andreu, Guillemette. *Égypte au temps des pharaons*. Hachette, 1992. ISBN 2.01.012719.6.
- Aufrère, S., J-Cl. Golvin, and J-Cl. Goyon. *L'Égypte restituée*. Paris: Éditions Errance, 1991. ISBN 2-87772-063-2.
- Clayton, Peter. *Chronique des pharaons*. Casterman. ISBN 2-203-23304-4.
- Delacampagne, C., and E. Lessing. *Immortelle Égypte*. Paris: Éditions de la Martinière, 1990. ISBN 2 73 242077 8.
- Égypte*. Paris: Gallimard, 1996. ISBN 2-7424-0349-3.
- *Fauchet, Françoise. *L'Égypte ancienne*. Paris: Éditions Nathan, 1996. ISBN 2 09 277 200-7.
- *Ganeri, Anita. *L'Égypte au temps des pharaons*. Éditions Nathan, 1997. ISBN 2-09-240371-0.
- *Hart, George. *Mémoire de l'Égypte*. London: Gallimard, 1990. ISBN 2-07-056519-X.
- Hery, François-Xavier, and Thierry Enel. *Le secret d'Abou Simbel*. C.L.É.S., 1996. ISBN 2-226-08835-0.
- Jacq, Christian. *La Vallée des Rois, images et mystères*. Perrin, 1993. ISBN 2-262-00996-1.
- Jacq, Christian. *Les pharaons*. Perrin, 1996. ISBN 2-262-01 103-6.
- Kanawaty, Monique. *Jean-François Champollion et les hiéroglyphes*. Paris: Éditions du Sorbier, 1997. ISBN 2-7320-3458-4.
- *Kerr, Daisy. *Les Égyptiens*. Éditions Epigones, 1996. ISBN 2-7366-4810-2.
- Lacarrière, Jacques. *L'Égypte, au pays d'Hérodote*. Paris: Éditions Ramsay, 1992. 9 782841 142279.
- Minvielle, Pierre. *Aimer l'Égypte*. Paris: Larousse-Bordas, 1997. ISBN 2-03-514012-9.
- *Morley, Jacqueline. *Je découvre les Égyptiens*. Paris: Delagrave, 1997. ISBN 2-206-00840-8.
- **Les pyramides de l'Égypte ancienne*. Les Éditions Héritage, 1992. ISBN 2-7625-7211-8.
- Siliotti, Alberto. *La Vallée des Rois, guide des meilleurs sites*. Éditions Gründ, 1993. ISBN 2-7000-3412-0.
- Siliotti, Alberto. *Égypte, terre des pharaons*. Éditions Gründ, 1994. ISBN 2-7000-2117-7.
- Siliotti, Alberto. *Pyramides, guide des meilleurs sites*. Paris: Éditions Gründ, 1994. ISBN 2-7000-3419-8.

- Silverman, David. *Au cœur de l'Égypte ancienne*. Paris: Larousse-Bordas, 1997.
ISBN 2-03505501-6.
- Splendeurs de l'Égypte*. Paris: Molière, 1990. ISBN 2.907670.03.
- *Steele, Philip. *L'Égypte ancienne, à quoi l'Égypte devait-elle sa puissance?* Larousse, 1994.
ISBN 2 09 278 146-4.
- Stierlin, Henri. *Les pharaons bâtisseurs*. Paris: Terrail, 1992. ISBN 2-87939-062-1.
- Stierlin, Henri. *Trésors de l'art en Égypte*. Paris: La Bibliothèque des Arts, 1997.
ISBN 2-85047-252-2.
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ISBN 3-8228-8363-8.

Notes

1. John Bright, *A History of Israel* (Philadelphia: The Westminster Press), 26.
2. Sir Alan Gardiner, *Egypt of the Pharaohs* (Oxford: Oxford University Press, 1961), 37.
3. Ian Shaw and Paul Nicholson, *British Museum Dictionary of Ancient Egypt* (London: British Museum Press, 1996), 202.
4. Nicholas Reeves and Richard H. Wilkinson, *The Complete Valley of the Kings* (London: Thames and Hudson, 1996), 9.
5. Peter A. Clayton, *Chronicle of the Pharaohs* (London: Thames and Hudson, 1994), 173.
6. Robert A. Johnson, *We: Understanding the Psychology of Romantic Love* (New York: Harper & Row, 1983), 2.
7. Siegfried Morenz, *Egyptian Religion* (Ithaca, New York: Cornell University Press, 1994), 13.
8. *Ibid.*, 16–17.
9. The information on the creation myth and the divine family was derived from several sources, including: Veronica Ions, *Egyptian Mythology* (New York: Peter Bedrick Books, 1982); Mary Barnett, *Gods and Myths of Ancient Egypt* (New York: Smithmark, 1996); and Barbara Watterson, *Gods of Ancient Egypt* (Gloucestershire, England: Sutton Publishing, 1996).
10. See Note 9.
11. Stephen Quirke, *Ancient Egyptian Religion* (New York: Dover Publications, 1992), 57.
12. Sir Alan Gardiner, *Egypt of the Pharaohs* (Oxford: Oxford University Press, 1961), 106.
13. *Ibid.*



14. The information on royal symbols was drawn from several sources that vary in their interpretation. They include: Ian Shaw and Paul Nicholson, *British Museum Dictionary of Ancient Egypt* (London: British Museum Press, 1996); Christine Hobson, *The World of the Pharaohs* (New York: Thames and Hudson, 1987); Richard H. Wilkinson, *Reading Egyptian Art* (London: Thames and Hudson, 1992); and Alberto Siliotti, *Egypt, Splendours of an Ancient Civilization* (London: Thames and Hudson, 1994).
15. Thomas Hoving, *Tutankhamun, the Untold Story* (New York: Simon and Schuster, 1978), 87-88.
16. *Ibid.*, 88.
17. *Ibid.*, 82.
18. *Ibid.*
19. Immanuel Velikovsky, *Oedipus and Akhnaton: Myth and History* (Garden City, New York: Doubleday & Company, Inc., 1960), 82.
20. Recipe provided by Kimberly Grey, Indianapolis Museum of Art.