

MELBOURNE WINTER MASTERPIECES

# TUTANKHAMUN

AND THE GOLDEN AGE OF THE PHARAOHS



AN EXHIBITION FROM  
**NATIONAL  
GEOGRAPHIC**

Image: Canopic Coffinette of Tutankhamun

**EDUCATION KIT**

## Exhibition Overview

The following overview is based on Field Museum Educator guide.  
Weblinks by Melbourne Museum education team.

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The exhibition is organised by the National Geographic Society, Arts and Exhibitions International and IMG, with cooperation from the Egyptian Supreme Council of Antiquities



### Exhibition Overview

More than 3,000 years after his reign, Tutankhamun, the celebrated “boy king,” became a cultural phenomenon in the United States and around the world. Now, Tutankhamun comes to Melbourne in a spectacular new exhibition: *Tutankhamun and the Golden Age of the Pharaohs*.

The world has long marveled at the spectacular accomplishments and monuments of the civilization of ancient Egypt. This worldwide fascination intensified after the exploration of Egypt by scientists and artists traveling with Napoleon in 1798. Twentieth century discoveries, such as the well-preserved tomb of Tutankhamun's great-great grandparents Yuya and Tyuya in the Valley of the Kings in 1904, brought more of Egypt's treasures to the public eye. However, nothing has ever matched the 1922 discovery of the largely intact tomb of Tutankhamun. Its unparalleled treasures had remained untouched and wonderfully intact for over three millennia.

This exhibition examines Tutankhamun's royal predecessors, his family, the officials of the court, his lifestyle, and his burial. The objects illustrate both life in the 18th Dynasty and Egyptian funerary practices, both royal and nonroyal. It was a golden age: art, architecture, and literature flourished; the land was prosperous; and Egypt's armies had successful campaigns on its borders. But toward the end of the dynasty, a radical political and religious ideology brought cultural upheaval. Tutankhamun ascended to the throne while still a child and he inherited a kingdom in crisis.

You will see 130 dazzling Egyptian treasures from the tombs of Tutankhamun and his royal relatives, many of which have never before traveled outside Egypt. Visitors to this exhibition will view stunning artefacts that portray the splendors of life and death in the 18th Dynasty, the “golden age of the pharaohs,” in which Tutankhamun and his family ruled.

All art and artefacts in the exhibition are on loan from the Supreme Council of Antiquities of Egypt, the government body that oversees the preservation of these treasures. The objects will return to the Egyptian Museum in Cairo after the exhibition tour in Melbourne. Proceeds from the exhibition tour will help fund a future new building for the Egyptian Museum in Cairo.





## Overview of Exhibition Sections and Highlights



### Section 1: The Discovery of the Tomb of Tutankhamun

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### Section 2: Egypt before Tutankhamun

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### Section 3: Traditional Religion

© Kenneth Garrett, National Geographic Society 2005



### Section 4: Death, Burial and the Afterlife in the 18th Dynasty

© Andreas Voegelin, Antikenmuseum Basel und Sammlung Ludwig



### Section 5: The Religious Revolution of Akhenaten

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### Section 6: Tutankhamun, the Boy King

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### Section 7: Tutankhamun, King Egypt

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### Section 8: Causing His Name to Live

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### Section 9: Daily Life in Tutankhamun's World

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### Section 10: Tutankhamun's Tomb

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### Section 11: Scientific Study of Tut's Mummy

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### Part Two: Teacher and Student Resources

### Part Three: Fun Facts



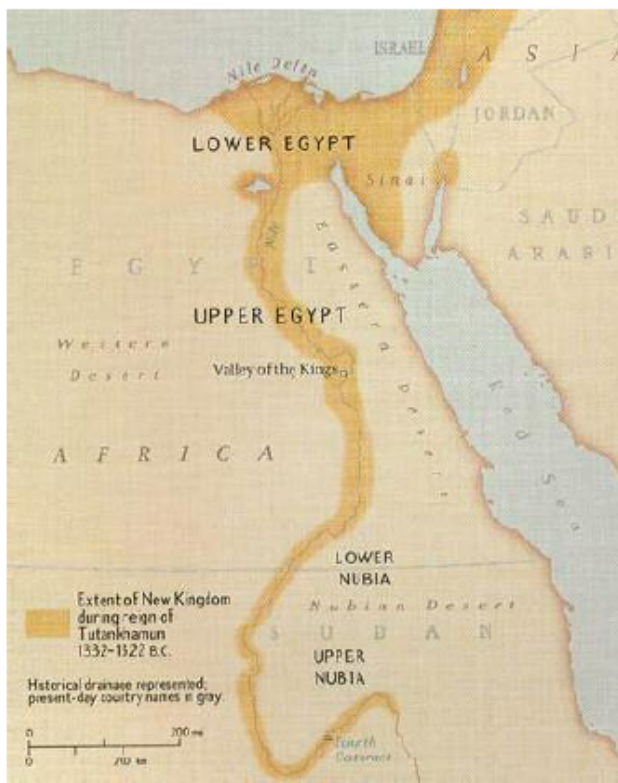


## *Tutankhamun and the Golden Age of the Pharaohs* Opens 8 April 2011

The Melbourne Winter Masterpieces exhibition *Tutankhamun and the Golden Age of the Pharaohs* consists of eleven galleries. Before you visit the exhibition, we recommend that you spend some time viewing the King Tut website to view other resources [www.kingtutmelbourne.com.au](http://www.kingtutmelbourne.com.au)

The field museum website [www.fieldmuseum.org/tut/educational](http://www.fieldmuseum.org/tut/educational) also provides fascinating information on Egypt. (Please note that the thematic sections of this Web site do not exactly match the layout of the exhibition galleries at Melbourne Museum.)

The exhibition walkthrough has been provided to give you an overview of the exhibition.



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Canopic Coffinette of Tutankhamun © Andreas F. Voegelin



### Exhibition Walkthrough



© Griffiths Institute, Oxford

#### Discovery of the Tomb of Tutankhamun

If you and your school group will be using an audio tour, you will be outfitted with audio tour equipment in this area. Audio tours are available in English (narrated by Omar Sharif). When you first enter the first exhibition gallery, you will view a short video about Tutankhamun. You will then see the first object of the exhibition: a stone sculpture of the young Tutankhamun.



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#### Egypt before Tutankhamun

Tutankhamun was one of the last in a brilliant line of kings of the 18<sup>th</sup> Dynasty. Learn about Egyptian history and the royal family that preceded Tutankhamun. In this gallery, see many splendid objects created for Tut's illustrious relatives, such as a sculpted portrait of Nefertiti, one of Egypt's most famous queens and Tut's probable mother-in-law.



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#### Traditional Religion

Egyptians of the 18<sup>th</sup> Dynasty worshipped many gods, who could take both human and animal forms. Come face to face with members of the Egyptian pantheon whose statues guarded tombs of Tut's relatives. Of the many beautiful depictions of gods and goddesses, you will see a painted wooden figure of the goddess Weret-Hekau, a winged serpent with a woman's head. You will also see Sekhmet, the fierce lion goddess.



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### Death, Burial, and the Afterlife

Explore the traditional funerary practices of the ancient Egyptians and examine their concept of the afterlife. View coffins, amulets, and photos of tombs decorated with magical scenes and spells that protect a mummy as it enters “the Fields of the Blessed”. Be sure to see the inscrutably smiling and beautiful portrait of Tyuya, Tut’s great-grandmother, in the golden mask that once lay over her mummy.



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### Religious Revolution of Akhenaten

Tutankhamun’s father was likely the “heretic pharaoh” Akhenaten, who introduced to Egypt the monotheistic worship of the god Aten. Akhenaten’s radical ideas inspired an era of great artistic masterpieces, but also created strife among his people. Restoring Egypt’s orthodox belief system would fall to young Tutankhamun and his advisors. In this gallery, you will see an imposing, colossal head of Akhenaten.



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### Tutankhamun, King of Egypt

Tutankhamun’s treasures represented his status as ruler over Egypt, but they also helped him attain divine immortality. In this large gallery, view splendid objects that portray the young king’s roles as head of state and church. When you first enter, you will encounter two golden statues, depicting Tut as the ruler of the Upper Kingdom and Lower Kingdom of Egypt. Highlights in the gallery also include a small ebony and ivory chair that Tut used as a child and that he probably used during royal ritual responsibilities. You will also see Tut’s official crook and flail, the emblems of Egyptian kingship for thousands of years.



© Andreas Voegelin, Antikemuseum Basel und Sammlung Ludwig

### Causing His Name to Live

View Tut’s gold “canopic coffinettes,” a vessel that held the mummified remains of Tutankhamun’s liver. You can get a close-up view of both the inside and outside of this object in the large high-resolution plasma screens in this room. The gold vessel is exquisitely inlaid with carnelian, obsidian, rock crystal, and glass.



## Tutankhamun and the Golden Age of the Pharaohs



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### Daily Life in Tutankhamun's World

Discover what daily life was like in Tutankhamun's day. Take a look at everyday items and personal objects such as cosmetics containers, a board game, and drinking cups—all buried with Tut for his use in the afterlife. Don't miss Tut's golden mirror in the shape of an ankh, the symbol of life, as well as beautifully decorated jewellery.



© Kenneth Garrett, National Geographic Society

### Tutankhamun's Tomb

In this gallery, you will gain an understanding of how the four shrines, the sarcophagus, and three coffins encased the mummy of Tutankhamun. You will see large photo-projections of the mummy as it was unwrapped for study in the 1920s. (The mummy itself cannot leave Egypt, and is not part of this exhibition.) View here a number of stunning objects that were wrapped up in the linens of Tut's mummy. You will see the golden pectoral in the shape of a falcon that was placed upon his chest, the golden dagger that was wrapped up on his thigh, and most extraordinary of all, the golden crown that Tut wore on his head, in life and in burial.



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### National Geographic Gallery

Take a look at the CT scans of Tutankhamun's body, a project sponsored by the National Geographic Society. Was Tutankhamun murdered? The CT scans gave a probable answer to this question. You will also see images from past X-ray projects of the mummy, from the 1960s and the 1970s. Based on imaging from the 2005 CT scans, a specially trained forensic sculptor has created a portrait bust of Tut. The National Geographic Gallery is located outside the main exhibition, on the lower ground floor of Melbourne Museum





### Section 1: The Discovery of the Tomb of Tutankhamun



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When he died at the approximate age of nineteen Tutankhamun was buried in a tomb in Egypt's Valley of the Kings. Egyptian history records that thieves invaded Tutankhamun's tomb fairly soon after his burial, but they were caught in the act. Official inspectors hastily reorganised the contents and then resealed the tomb. Shortly thereafter, workmen constructing the nearby tomb of another pharaoh built their huts over the young king's place of burial, thus obscuring it. Later flooding in the area erased any evidence of its existence. Tutankhamun's tomb would remain hidden for more than 3,000 years.

The first historical record of burial discoveries in the Valley of the Kings comes from a Jesuit priest, who found ten royal tombs already open in 1708. Napoleon's expedition to Egypt in 1799 recorded the wall paintings and reliefs found in these tombs. With the cracking of the hieroglyphic code in 1822 by Jean-François Champollion, the field of modern Egyptology was born. In 1871, an Egyptian stumbled across a hidden cache that contained many of the most famous kings of the New Kingdom. A second cache found in 1898 held the mummies of many 18th Dynasty pharaohs, including Amenhotep II, likely Tutankhamun's great-great-grandfather.

In 1914, an Englishman named Howard Carter and his patron Lord Carnarvon began digging sites in the Valley of the Kings. Digging went on for eight years with no success, until, on the morning of 4 November 1922, a young boy carrying water jars for workers arrived at the site where Howard Carter began digging. As the boy cleared a space for the jars, he found the top of a step cut into the bedrock. Carter directed his men to clear away the sand, uncovering 11 more steps leading to a doorway blocked with stones and plaster.

Two weeks later, joined by Lord Carnarvon, Carter made a hole in the doorway. Probing carefully with an iron rod, Carter found empty space beyond and lit a candle to check for noxious gases. Carter later recounted his astounded first impression of the tomb:

*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...I was struck dumb with amazement, and when Lord Carnarvon, unable to stand the suspense any longer, inquired anxiously, "Can you see anything?" It was all I could do to get out the words: "Yes wonderful things."*



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### Section 2: Egypt before Tutankhamun



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The unified kingdom of ancient Egypt began shortly before 3000 BCE. Its long history is divided into 31 dynasties, roughly equivalent to family groupings of rulers. Egypt rapidly became a world power in the ancient near east, and by the time Tutankhamun came to the throne in 1332 BCE, the three great Giza pyramids were already more than 1,000 years old.

The young pharaoh Tutankhamun was one of the last of an illustrious line of rulers of the 18th Dynasty (1539 to 1292 BCE). Under this dynasty, Egypt reached the summit of its military dominance and artistic achievement. Under the long and prosperous reign of Tutankhamun's probable grandfather, Amenhotep III, Egypt's literary and artistic production reached its highest level and vast quantities of gold poured into the country.

After a 38-year reign, Amenhotep III passed away and his son Amenhotep IV took over the throne. This controversial pharaoh created great upheaval by promoting a revolutionary religious philosophy of a monotheistic worship of the sun-disc god Aten. In honor of this new god, Amenhotep IV changed his name to Akhenaten, and built a new capital city christened in Amarna.

Akhenaten died after a 17-year rule. Exactly what happened immediately afterwards is still a matter of debate. Some believe his famously beautiful wife Nefertiti ruled for a while on her own. Others believe Tutankhamun's brother held the throne for a short time.

In the end, Tutankhamun—probably Akhenaten's ten-year-old son by a lesser wife named Kiya—came into power. At home, the boy king faced profoundly hostile reactions to Akhenaten's religious revolution. This young, untried child now had to lead his nation through religious and political turmoil. He ruled a vast empire that stretched from modern-day Sudan to Syria.



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#### Highlights in this Gallery

- Stone sculpture of Nefertiti
- Granite statue of Thutmose IV and his mother
- Model boat from the Tomb of Amenhotep III



### Section 3: Traditional Religion



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Religion in ancient Egypt was more than a belief system—it was a way of life, permeating every aspect of existence. The fundamental principle governing this system was *maat*, an abstract concept often translated as truth or justice and represented by the goddess Maat. To maintain *maat*—order in the universe—the living constantly had to pacify the many deities and spirits in the afterworld. In traditional Egyptian belief, the pantheon was composed of many gods and goddesses, such as Osiris, Re, Ptah, and Amun. Often they were arranged in family groups of three consisting of father, mother, and child. The gods could be represented in art as human, animal, or a combination of the two. Each was linked to one or more sites where enormous temples were erected to house their images.

Considered semi-divine, the pharaoh acted as an intermediary between mortals and gods during his lifetime. He was responsible for the establishment and maintenance of *maat* and stood against the powers of chaos that threatened Egypt's stability. In temple art, it was always the pharaoh who was shown performing the cult rituals and thus eternally caring for the gods and goddesses.

The 18th Dynasty was a time of profound religious innovation. Theologians composed new texts, including the Book of the Dead, a book of collected prayers to be used in burials. In the powerful religious center of Thebes, the temples of Karnak and Luxor were greatly expanded. The kings of the 18th Dynasty embellished these temples with an unprecedented number of statues.

#### Highlights in this Gallery

- Statue of the lioness goddess Sekhmet
- Painted wood figure of the Weret-Hekau, a winged serpent goddess with a woman's head
- *Shabtis*, funerary figurines that would act as servants for the deceased



### Section 4: Death, Burial, and the Afterlife in the 18th Dynasty



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For the ancient Egyptians, death meant the end of earthly existence, but it also represented the transition to the eternal world of the gods. The dead traveled to this realm as a *ba*, a spiritual element of the personality. Capable of movement, the *ba* was depicted as a human-headed bird. Since it needed to return to the mummy every night, the integrity of the body had to be ensured. Thus, the Egyptians invested heavily in preparations to preserve and protect the deceased.

Royalty and wealthy private citizens alike mummified the dead, a process that mirrored the myth of the underworld god Osiris, whose body had been dismembered, reassembled, and reanimated. Gilded masks and coffins, covered with magical scenes and spells, protected the mummy. Burials included coffin sets, “canopic jars”, and chests to hold organs taken out of the body and separately mummified. Tombs were also filled with all kinds of furniture, clothing, cosmetics, games, and other personal effects that would be useful in the afterlife. From the 18th century onward, tombs also

contained many *shabti* figurines, who came to life and acted as servants for the deceased. However, attaining an afterlife with the gods required more than only mummification and a well-prepared tomb. After an earthly death, the deceased faced dangers and demons in the underworld, as well as a trial during which the heart was placed on a scale for final judgment for acceptance or rejection into eternity.

#### Highlights in this Gallery

- Golden Funerary Mask of Tyuya
- Canopic Jar of Tyuya
- Golden Coffin of Tyuya
- Inlaid Chest given to Yuya and Tyuya



© Kenneth Garrett, National Geographic Society 2005.



### Section 5: The Religious Revolution of Akhenaten



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In the fifth year of his reign, Amenhotep IV—Tut's father—shocked his subjects by decreeing that there was only one god: Aten, the sun disc.

Amenhotep IV changed his name to Akhenaten (“The One Who is Effective for the Aten”) and he moved the empire's capital from Thebes to a new city on virgin soil, untainted by other gods. To implement this radical new religion, agents of the “heretic pharaoh” Akhenaten traveled throughout Egypt, destroying the names and images of other deities. Officially, the one god Aten could now be worshipped only through representations of the royal family, who were portrayed in a visual style quite different from traditional Egyptian art. The ignoring of other gods, as well as the aesthetic innovations of the period, became unacceptable to most Egyptians.

During Akhenaten's reign, artisans created a distinctive artistic style unique to this period in Egyptian history. In the "Amarna style" (named after the new capital city), human figures in sculpture and reliefs were characterized by elongated limbs, wide hips and thighs, narrow almond-shaped eyes, and exaggeratedly extended faces.

Ultimately, the job of restoring the traditional religious orthodoxy fell to the young Tutankhamun and his advisors. As king of Egypt, Lord of the Two Lands, Tutankhamun was also high priest of all the gods. One of Tutankhamun's first acts of restoration included fashioning images of Amun, Ptah, and the other gods out of precious materials. He rebuilt their temples and made offerings to them, paying for it all out of the royal treasury.

After Tutankhamun’s untimely death, his elderly successor Aye, who reigned for less than four years, continued his policies of reconciliation. Horemheb took the throne after Aye’s death and reigned for 13 years. Taking credit for many of the policies initiated under Tutankhamun, Horemheb began the process of erasing the memory of the Amarna Period by claiming to be the direct successor of Amenhotep III. He died without an heir, and with his death the 18th Dynasty came to an end.

#### Highlights in this Gallery

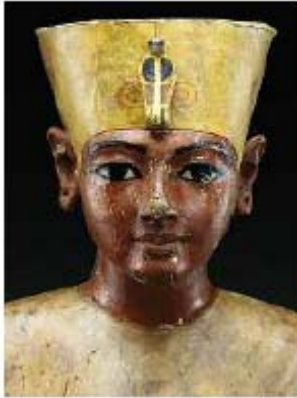
- Colossal stone head of Akhenaten
- Balustrade with carved relief depicting Akhenaten, Nefertiti and child

#### Online Highlights

- Religious Revolution
- Restoration



### Section 6: Tutankhamun, the Boy King



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Tutankhamun began life with the name Tutankhaten (“Living Image of the Aten”).

Near the time of his father’s death, Tutankhaten married Ankhsenpaaten —probably the daughter of Akhenaten by the powerful and beautiful Queen Nefertiti, and therefore Tut’s half-sister. Sometime soon after Akhenaten’s passing, the ten-year-old Tutankhaten ascended the throne of Egypt.

One of Tutankhaten’s first actions as pharaoh was to move away from the monotheistic Amarna religion of his father. Tutankhaten quickly re-established the orthodox belief in the pantheon of the gods, and reopened and restored their temples. By his second year, King Tutankhaten and his queen changed their names to Tutankhamun and Ankhsenamun.

Members of the royal family re-established the old capitals and spent most of their time at the traditional administrative center of Memphis.

Because he was still a child, Tutankhamun was particularly dependent on his advisors. The man closest to Tutankhamun seems to have been the Commander in Chief of the Army and Overseer of All Works, General Horemheb. Another key figure was an elderly advisor named Aye, who was Commander of the Horses and who may have been Nefertiti’s father. Aye and Horemheb most likely took principal responsibility for major decisions during Tutankhamun’s childhood.

#### Highlights in this Gallery

- Wooden mannequin with portrait of Tut



### Section 7: Tutankhamun, King of Egypt



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Tutankhamun was the last of a line of kings founded by warrior rulers. He ruled as pharaoh over a wide-flung region spreading from present-day Sudan to Syria. The two golden statues in this gallery depict him wearing the crowns of Upper and Lower Egypt.

During Tut's reign however, border problems with the neighboring Hittites threatened the kingdom, and the pharaoh traditionally would have led the army in battle. Some scholars have suggested that perhaps Tutankhamun was not physically strong enough to perform his duties. He was buried with 130 walking sticks and staffs of various sorts, and he is also shown sitting while engaged in activities such as hunting, where normally he should be standing.

The treasures found in Tutankhamun's tomb represent the height of luxury and craftsmanship. For the young king, however, the riches surrounding him represented a means of attaining divine immortality. Gold connected Tutankhamun with the sun god Re and his eternal journey through the heavens. Lapis lazuli represented longevity and the blue skin of the god Osiris. Ebony was associated with endurance and the fertile black earth of Egypt. Silver symbolized the moon, night, and old age, all components of the cycle of death and rebirth.



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#### Highlights in this Gallery

- Golden statues portraying Tut as ruler of Upper and Lower Egypt
- Inlaid pectoral in the shape of a scarab
- Throne used by Tut as a child
- Tut's royal crook and flail
- Golden fan that once held ostrich plumes
- Inlaid stool
- Golden shrine for statue



## Section 8: Causing His Name to Live



The ancient Egyptians held ceremonies to sustain the deceased and to ensure that those in the afterlife would continue to exist in the minds of the living. Offerings were made and magical rituals enacted. In theory, a pharaoh's successor was supposed to keep his father's name alive by giving offerings and holding rituals, but these efforts were actually often enacted by priests. It was believed that anyone who uttered the name of the dead would aid in this process.

In this gallery, you will view an 18-inch vessel, shaped like a mini-coffin, that held the preserved remains of Tutankhamun's liver. This canopic coffinette, one of four, was placed inside a golden shrine in the tomb. Large plasma screens will help you get an up-close view of the extraordinary detail and craftsmanship in this object

### Highlights in this Gallery

- Canopic coffinette of Tutankhamun
- Large screens showing slow pans over coffinette



## Section 9: Daily Life in Tutankhamun's World



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During his short lifetime, Tutankhamun ordered the creation of temple statues depicting him as a virile young king. He also commissioned many statues of divinities and ordered that they bear his own facial features. These images thus reinforced the association of the young pharaoh with gods being worshipped.

Tut's tomb included many objects the young king used in his private life. He probably enjoyed playing the board game senet that is on view in this gallery. Many vessels contained lotions and other cosmetics for his personal use, and many chests and beautifully decorated boxes held his clothing and jewelry. Inlaid necklaces that Tut wore on state occasions are on view, as well as a golden mirror in the shape of ankh to view himself.

More than 400 shabti figurines were buried with Tutankhamun to act as his servants in the afterlife. Wooden models of boats would be used in the afterlife for Tut to travel along the river of the heavens.

### Highlights in this Gallery

- Statue of the god Amun with the features of Tutankhamun
- Drinking vessels
- Golden mirror in the shape of an *ankh*
- Senet board game



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### Section 10: Tutankhamun's Tomb



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Tutankhamun ruled for about ten years and was approximately twenty years old when he died. His burial in a small tomb near the floor of the Valley of the Kings, with an atypical, non-royal plan, suggests that the tomb originally planned for him was not completed before he died, and that he died unexpectedly. However, Tut's body received a traditional and complete mummification treatment. Applications of salts dried out the body, and resins protected the body's skin. The brain was removed through the nostrils with a long metal hook, and the limbs were wrapped in the finest linen bandages. Hundreds of luminous amulets and pieces of jewelry were placed between the layers of cloth that wrapped the body. Golden cylinders covered each of Tut's fingers and toes, and his death mask was inlaid with semiprecious stones and colored glass.

In this room, large-scale photographs of Tut's mummy are projected onto a horizontal area, and marks on the gallery floor suggest the nested shrines and coffins in which Tut's mummy was encased. The photographs of the mummy were taken by Harry Burton—a photographer from the Metropolitan Museum of New York—in the 1920s as Howard Carter and his team uncovered successive layers of the mummy. Tut's mummy was originally encased inside four gilded shrines, one stone sarcophagus, three anthropoid coffins, and one golden mask. These protective layers added up to nine layers—a number ancient Egyptians associated with "infinity."

As the unwrapping of the mummy is depicted in photographs, different objects that were wrapped up in the linens will be revealed in their display cases. At his thigh was placed a golden dagger to ward off dangers during his travels in the underworld. Placed around his neck was a pectoral of a golden falcon, representing the protective god Horus. Encircling his head was a golden diadem—or crown—with the emblems of the cobra and the vulture. This type of diadem with both the cobra and the vulture was unique to Tutankhamun.



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#### Highlights in this Gallery

- Computer-generated animation depicting the shrines, sarcophagus, and coffins that encased Tut's mummy in its tomb.
- 1920 photography of Tut's mummy as it is unwrapped
- Tut's golden dagger
- Tut's royal diadem



### Section 11: Scientific Study of Tut's Mummy



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The cause of Tutankhamun's death remains uncertain. A 1968 X-ray suggested damage to the base of the skull, and for decades scholars and the public discussed murder as the cause of Tut's death. Recent examination showed a compound fracture on the left thigh but some specialists have argued that improper handling by archaeologists caused the break. However, if Tutankhamun sustained such an injury, he could have quickly died of infection. The soft tissue of the mummy is too damaged to provide conclusive proof.

In 2005, the National Geographic Society worked with the Supreme Council of Antiquities of Egypt to create high-resolution images of Tut's mummy. Tutankhamun's mummy left the tomb for the first time in almost 80 years. The boy king was carried to a waiting CT machine for scanning from head to toe. The procedure was part of a landmark, five-year Egyptian research and conservation project that will CT-scan many of the ancient mummies of Egypt.

To create a portrait of King Tutankhamun from the new CT scan data, National Geographic turned to two teams of specialists. The first team included a forensic anthropologist who measured Tutankhamun's cranial features to calculate the tissue depth of his cheeks, nose, chin, and lips. Using these calculations, a cast was made of the skull and turned over to a paleo-artist, who used clay to flesh out the features before building a latex model. This sculpture's skin color was based on the middle range of contemporary North Africans. The makeup was modeled on two statues found in Tut's tomb and a limestone bust of Queen Nefertiti.

To confirm the accuracy of the reconstruction, the CT scan data and three-dimensional skull cast were given to a forensic team from Yale University. However, this team worked "blind" with no information as to the age, gender, or race of their subject. Although such information is typically important for accurate reconstruction and the team could only extrapolate from skull measurements, the results were quite similar.



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#### Highlights in This Gallery

- Video of the 2005 CT scan process
- Image of X-rays from 1968 & 1978
- Portrait bust created by using 2006CT scan data





## Mummy's Curse? Facts to Disprove the Curse of King Tut

- Only eight people died out of a possible 54 in the ten years after they were exposed to Tut's body.
- Howard Carter, the archaeologist who led the dig, died at age 66 of natural causes.
- A rumor was started that a curse was printed over the entrance to Tutankhamun's tomb, but the only graphics around the entrance were his royal seal and his name.
- Lord Carnarvon, the financier for Carter's dig, died in Egypt soon after he cut open an insect bite on his cheek while shaving. It was rumored that all the lights in Cairo went out at the moment of Lord Carnarvon's death, and that his dog back in England howled inconsolably. However, only the lights in the hospital went out—a regular occurrence in Cairo in those days.
- A possible cause of death or sickness among people working on the dig could have been exposure to mould growing on the body of King Tut, although none of them were proven fatal.
- Another cause of death or sickness could have been the mold growing on the food left for Tut to take with him in the afterlife.



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## Carter's Diaries

- Howard Carter was digging for other tombs when he stumbled upon King Tut's.
- Carter found Tutankhamun's tomb under debris from the excavation of Ramses IV.
- During the first two days of the dig, Carter did not know whose tomb he had discovered.
- For the first twenty days, Howard Carter didn't dig past the entrance because he was waiting for his financier, Lord Carnarvon, to arrive before going any deeper.
- Carter could tell the tomb had been broken into at least twice because the seal on the front entrance was visibly broken and resealed. He also found many of Tut's belongings broken near the entrance after getting inside the tomb.
- Howard Carter broke through three sealed entrances in order to enter Tut's tomb: the front entrance, the door to the treasure chamber, and the door to the burial room.



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### Resources

#### Recommended Books for Educators

- Brier, Bob. 1999. *Murder of Tutankhamen*. Berkeley Trade Edition.
- Carter, Howard. 1972. *The Tomb of Tutankhamen*. E. P. Dutton.
- Carter, Howard. 1998. *Tutankhamen. The Politics of Discovery*. Libri.
- El-Mahdy, Christine. 2001. *Tutankhamen: The Life and Death of a Boy King*. St. Martin's Press.
- Forbes, Dennis. 1998. *Tombs. Treasures. Mummies. Seven Great Discoveries of Egyptian Archeology*. KMT Communications.
- Green, Robert. 1996. *Tutankhamun*. Franklin Watts.
- Gros de Beler, Aude. 2001. *Tutankhamun*. Moliere.
- Haag, Michael. 2005. *The Rough Guide to Tutankhamun: The King, The Treasure, The Dynasty*. Rough Guides, Limited.
- Hawass, Zahi. 2005. *Tutankhamun and the Golden Age of Pharaohs*. National Geographic Society.
- James, T.G. 2000. *Howard Carter: The Path to Tutankhamun*. I.B. Tauris & Company, Limited.
- James, T.G.H. 2000. *Tutankhamun*. Friedman/Fairfax.
- Reeves, C.N. and Reeves, Nicholas. 2000. *Ancient Egypt: The Great Discoveries*.
- Reeves, Nicholas. 1990. *The Complete Tutankhamun*. Thames and Hudson.
- Reeves, Nicholas and Froman, Nan. 1992. *Into the Mummy's Tomb: The Real-Life Discovery of Tutankhamun's Treasures*.



#### Recommended Web sites

A wealth of information exists on the web. Links to some of the most useful sites for school groups are listed in the following pages. Each of these sites has been visited and reviewed for suitability for education audience. They have been classified into topics of interest and subject disciplines. The list is by no means exhaustive but provides a representative sample of what is available on the web for classroom usage.

##### Ancient Egypt

- BBC: Ancient History in depth Egyptians  
<http://www.bbc.co.uk/history/ancient/egyptians/>  
Comprehensive site produced by the BBC with information on pyramids, mummification, daily life, Pharaohs, Gods, beliefs and hieroglyphs.
- The British Museum: Explore World Cultures: Ancient Egypt  
[http://www.britishmuseum.org/explore/world\\_cultures/africa/ancient\\_egypt.aspx](http://www.britishmuseum.org/explore/world_cultures/africa/ancient_egypt.aspx)  
Information and online tours including information and images of artefacts.
- The British Museum: Ancient Egypt  
<http://www.ancientegypt.co.uk/menu.html>  
Interactive website designed for students including information about geography, mummification and religious beliefs.
- Egypt's Golden Empire  
<http://www.pbs.org/empires/egypt/index.html>  
Produced by the US Public Broadcasting Service, this is an interactive site developed for students. Information on the New Kingdom, Egyptian Society and natural resources.



## Tutankhamun and the Golden Age of the Pharaohs

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- National Geographic Egypt File

<http://ngm.nationalgeographic.com/ngm/egypt/egyptfile.html>

Links to information produced by National Geographic on Ancient Egypt.

- National Geographic: Ancient Egypt Hub

<http://ngm.nationalgeographic.com/egypt/egypt-hub>

Links to recent information produced by National Geographic on Ancient Egypt.

- Ancient Egypt from Minnesota University Emuseum

<http://www.mnsu.edu/emuseum/prehistory/egypt/maps/mainmap.html>

Excellent site with information on archaeology, religion, history, daily life and hieroglyphics.

- Supreme Council of Antiquities

<http://www.sca-egypt.org/eng/main.htm>

Information about the SCA which seeks to protect and promote the cultural heritage of Egypt, both independently and in cooperation with national and international organizations

- Wikipedia Ancient Egypt:

[http://en.wikipedia.org/wiki/Ancient\\_Egypt](http://en.wikipedia.org/wiki/Ancient_Egypt)

Information about Ancient Egyptian society.

- Egyptian Museum: Discover Egypt

<http://www.egyptianmuseum.org/discoveregypt>

A series of facts sheets about gods and goddesses, mummies and the Rosetta Stone. This site also has an excellent timeline interactive timeline

- Official Web Site of Zahi Hawass

<http://www.drhawass.com/blog/press-release-identifying-hatshepsuts-mummy>

Information from the famous archaeologist and egyptologist, including news of recent discoveries and research.

- List of rulers of Ancient Egypt and Nubia

[http://www.metmuseum.org/toah/hd/phar/hd\\_phar.htm](http://www.metmuseum.org/toah/hd/phar/hd_phar.htm)

A comprehensive list of rulers from Ancient Egypt, including information and images.

- BBC Ancient Studies and Archaeology Message Board

<http://www.bbc.co.uk/dna/mbhistory/NF2233812>

An online forum to discuss ideas and questions relating to Ancient Egypt.

- The Australian Centre for Egyptology

<http://www.egyptology.mq.edu.au/egyptology/index.html>

- The global Egyptian Museum

<http://www.globalegyptianmuseum.org/>

A site that seeks to display artefacts from Ancient Egypt from various international collections. Has a 400 term glossary.

- Egyptology in Australia

<http://www.zeta.org.au/~ksowada/>

A site with Egyptology links to Australian universities and organisations.



### Geography of Ancient Egypt

- The British Museum: Ancient Egypt- Geography section  
<http://www.ancientegypt.co.uk/geography/home.html>  
Online interactive site including maps and geographic information.
- The British Museum: Ancient Egypt- Maps of Ancient Egypt  
<http://www.ancientegypt.co.uk/geography/explore/obj.html>  
A series of maps of different features of Ancient Egypt (terrain, modern political and other geographical)
- National Geographic: Map  
<http://maps.nationalgeographic.com/maps>  
World map that can be zoomed in on to view geographic features.
- Theban Mapping Project  
<http://www.thebanmappingproject.com/>  
Dynamic atlases of the valley of the Kings and the Theban Necropolis.
- National Geographic: Xpedition Atlas  
<http://www.nationalgeographic.com/xpeditions/atlas/index.html?Parent=africa&Rootmap=egypt&Mode=b&SubMode=w>  
Maps of the world that can be downloaded and printed.
- Eternal Egypt: Interactive Map  
[http://www.eternalegypt.org/EternalEgyptWebsiteWeb/HomeServlet?ee\\_website\\_action\\_key=action.display.map&language\\_id=1&ee\\_messages=0001.flashrequired.text](http://www.eternalegypt.org/EternalEgyptWebsiteWeb/HomeServlet?ee_website_action_key=action.display.map&language_id=1&ee_messages=0001.flashrequired.text)  
Dynamic map that allows you navigate geographically among the artefacts, characters, and places.
- Minnesota State University: Ancient Egypt  
<http://www.mnsu.edu/emuseum/prehistory/egypt/maps/mainmap.html>  
Map of Ancient Egypt

### King Tutankhamun

- The Griffith Institute: Tutankhamun: Anatomy of Excavation  
<http://www.griffith.ox.ac.uk/gri/4tut.html>  
A complete data base for all items found in Tutankhamun' tomb including notes take by Howard Carter and ninety three pages of images taken by Harry Burton.
- National Geographic: King Tut's family secrets  
<http://ngm.nationalgeographic.com/2010/09/tut-dna/hawass-text>  
Link to article written by Zahi Hawass about what DNA evidence has revealed about Tutankhamun's family line. Links to a photo gallery.
- National Geographic: Interactive Tut's family tree  
<http://ngm.nationalgeographic.com/2010/09/tut-dna/tut-family-tree>  
Interactive diagram of the latest findings relating to Tutankhamun's paternity.
- National Geographic: Unravelling the mysteries of King Tutankhamun  
<http://ngm.nationalgeographic.com/ngm/tut/>  
Site with links to information about Tutankhamun



## Tutankhamun and the Golden Age of the Pharaohs

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- Field Museum: The story of King Tut  
[http://www.fieldmuseum.org/tut/interactive/tut\\_content.html](http://www.fieldmuseum.org/tut/interactive/tut_content.html)
- Interactive site with maps and information about historic tombs in the Valley of the Kings.  
Science Museum (UK): Tutankhamun beneath the mask  
<http://www.sciencemuseum.org.uk/antenna/tutankhamun/index.asp>  
Information about Tutankhamun including a reconstruction of his face.
- King Tut one  
<http://www.kingtutone.com/>  
Information about Tutankhamun, some advertising on site.
- Secrets of the Pharaohs  
<http://www.pbs.org/wnet/pharaohs/>

### Lesson Plans and education kit

- National Geographic Lesson plans:  
<http://www.nationalgeographic.com/xpeditions/lessons/17/g68/kingtut.htm>
- National Geographic: King Tut's Treasures  
<http://www.nationalgeographic.com/xpeditions/lessons/06/gk2/kingtut.html>  
Lesson plan for primary school students.
- National Geographic: Tut Technology  
<http://www.nationalgeographic.com/xpeditions/lessons/17/g912/kingtut.html>  
Lesson plan for secondary students.
- Using geography to learn about history  
<http://www.nationalgeographic.com/xpeditions/lessons/17/g912/greece.html>  
Lesson plan for secondary students.
- The Michael C. Carlos Museum of Emory University:  
[http://www.carlos.emory.edu/PDF/Classroom%20Tutorial\\_Mummification.pdf](http://www.carlos.emory.edu/PDF/Classroom%20Tutorial_Mummification.pdf)  
Classroom Tutorials: Information about Mummification in Ancient Egypt.





### Pyramids

- National Geographic: Secrets of an ancient world. Explore the pyramids  
<http://www.nationalgeographic.com/pyramids/pyramids.html>  
Interactive website designed for students about the pyramids.
- Public Broadcasting Service (US) :The Pyramids  
<http://www.pbs.org/wgbh/nova/pyramid/explore/>  
Interactive website with information about the origin of the pyramids.

### The Nile

- Tour Egypt: the Nile  
<http://www.touregypt.net/egypt-info/magazine-mag05012001-magf4a.htm>  
Article about the Nile, by Marie Parsons.
- BBC: Ancient History in depth: The Story of the Nile  
[http://www.bbc.co.uk/history/ancient/egyptians/nile\\_01.shtml](http://www.bbc.co.uk/history/ancient/egyptians/nile_01.shtml)  
Article about the Nile by John Baines
- Wikipedia: The Nile  
<http://en.wikipedia.org/wiki/Nile>  
Information about the Nile

### Timelines:

- British Museum: World time lines  
<http://www.worldtimelines.org.uk/>  
Interactive timeline of world history of different regions.
- Public Broadcasting Service (US): Timeline  
<http://www.pbs.org/empires/egypt/special/timeline/prenewkingdom.html>  
Timeline of Ancient Egyptian Civilisation.
- National Geographic: Timeline of Ancient Egypt  
<http://www.nationalgeographic.com/pyramids/timeline.html>  
Simplified timeline of Ancient Egypt.



### Other resources

- Ancient Egyptian Scroll interactive activity  
[http://interactives.mped.org/view\\_interactive.aspx?id=691&t](http://interactives.mped.org/view_interactive.aspx?id=691&t)

### Tutankhamun and the Golden Age of the Pharaohs:

- Tutankhamun and the Golden Age of the Pharaohs  
<http://www.kingtutmelbourne.com.au/>  
Official website of the Melbourne Exhibition
- Tutankhamun and the Golden Age of the Pharaohs  
<http://www.facebook.com/KingTutExhibitMelbourne>  
Official facebook page of the Melbourne Exhibition

### Museums

- Melbourne Museum  
<http://museumvictoria.com.au/melbournemuseum>  
Official venue website of Melbourne exhibition
- The Michael C. Carlos Museum of Emory University  
<http://www.carlos.emory.edu/egyptian-nubian>

### Videos and other multimedia

- Discovery Channel: King Tut unwrapped  
<http://dsc.discovery.com/videos/king-tut-unwrapped/>  
A series of videos that reveal information about King Tut's parents and lineage using DNA testing and forensic analysis.
- National Geographic: King Tut and the lost dynasty  
<http://channel.nationalgeographic.com/episode/king-tut-and-the-lost-dynasty-3813/Overview>  
Video showing the first-ever CT scan performed on two royal mummies.
- National Geographic: Tut's treasures  
<http://www.youtube.com/user/NationalGeographic#p/search/6/LjEZ2JpiFIE>  
Short video from National Geographic's YouTube channel. Many other videos from ancient Egypt can be found here.
- Theban Mapping Project.  
<http://www.thebanmappingproject.com/>  
Click on the 'Atlas of the Valley of the Kings' for an informative video about the Valley of the Kings.

