SLINKY® EXPERIMENT #154:
OUR AMAZING MUMMIES™

CREATE YOUR OWN
ROYAL MUMMY
in 4 easy Steps!

fun & fact manual

WARNING:
CHOKING HAZARD - Small Parts. Not for Children under 3 years.
The greatest desert in the world stretches all the way across North Africa. It rolls on, mile after waterless mile - a seemingly endless expanse of barren stones, sand, and rock.

Yet in one place, the desert is forced to yield. Flowing up from the south is the longest river in the world, the mighty Nile. Where it slips through the desert, it has carved a narrow, fertile, green valley into the desert rock.

In this valley, more than 5,000 years ago, there grew up the greatest and most enduring civilization of the ancient world - the Land of Egypt.

The ancient civilization of Egypt lasted more than 3,000 years, and it has fascinated people ever since. Just about everybody has heard something about the pyramids of Egypt, King Tut, Egyptian picture writing, Moses and Pharaoh, gods with the heads of animals, Queen Cleopatra...

And mummies.
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what is a mummy?

Deep inside an ancient Egyptian tomb, the professor examines the picture writing on the walls. It seems to be...a spell of some sort. Slowly the professor says the words aloud.

Behind him, in the coffin, something begins to stir. Dripping bandages and ghastly bits of dried flesh, the hideous creature rises from its four-thousand-year-old resting place. The reading of the ancient Egyptian spell has brought it back from the dead - and it is in a truly rotten mood. Its arms reach out for the neck of the unsuspecting professor...

This scene—or something very like it—has been played out over and over, in horror movies, comedies, advertisements, cartoons, and Saturday morning kids’ TV. Very few people have actually seen a real mummy, but nearly everyone has seen some version of the professor and the mummy brought back to life.

what is a mummy, really?

Any body that is kept from decay for a long time is a mummy (unless it’s still alive). A mummy doesn’t have to come from Egypt. People have found mummified bodies in dry desert sands, in soggy bogs, and in the ice of mountain glaciers. In these environments, the germs that cause decay cannot survive.

However, mummies found in desert sand, or ice, or bogs, are accidents. Nobody set out to make the body into a mummy, but more than five thousand years ago, about 3,000 BC, people in Egypt learned how to make mummies by a process called embalming. The Egyptians believed that a person could have a spirit life after death—but only if his or her body was preserved as a mummy. A body in good condition was a necessary after death as it was before. If the body decayed, the afterlife faded and was gone forever.

At first, only kings, nobles, and high officials were embalmed. Later, ordinary people were mummified too. A whole enormous mummy industry sprang up. The Egyptians enjoyed life, and wanted it to go on as long as possible. Everyone who could afford it did whatever he or she could to ensure a comfortable and enjoyable spirit life after death.

And so, for more than 3,500 years, Ancient Egypt was gripped by a mummy cult. It started to fade after AD 300, when many Egyptians began converting to the Christian religion. Finally, around AD 500, the old Egyptian religion was outlawed. Soon after that, the Egyptians stopped mummifying their dead.
Mummifying a King

The most famous Egyptian mummies belong to kings. The death of a king involved thousands and thousands of workers. Embalmers mummified the king’s body with chemicals. They sweetened it with perfumes and spices, and they wrapped the mummy in miles of linen bandages. They covered the head of the king with a mask of gold and precious stones and laid his body inside a gold coffin. Then they placed that coffin inside another, larger coffin—and that one inside still a larger coffin. The all three coffins went inside a stone box (called a sarcophagus), and several wooden shrines were erected around that.. And, of course, everything was covered with gold.

For years before the king’s death, workers had been preparing his tomb. One kind of tomb was carved into desert rock, and a stone pyramid that soared hundreds of feet high into the sky was built on top of it. Another kind was sunk hundreds of feet deep into a solid cliff. In effect, it was complete underground palace. Some royal tombs contained miles of corridors, passages, and storage rooms, as well as the burial room for the king’s mummy.

Near the tomb, the builders built one or more special temples. These were places where priests could bring offerings, and reverent visitors could be in the presence of the king’s spirit.

Painters covered the rooms of the tomb and temples with paintings. Scribes, professionals who knew how to read and write, wrote prayers and magic spells all over the walls to protect the king from dangers in the afterlife. Sculptors carved statue after statue of the king and of his wives.

The king’s tomb was not empty. With the king’s mummy were his personal possessions, even including some of his childhood toys. There was golden furniture for the king’s comfort. His family placed jewels and magic amulets in his coffin. Jars of wine, sweet-smelling oils, and perfumes filled the storerooms.

In life, the king was surrounded by servants. After death, his spirit needed servants, too-forever. Generations of priests spent their entire adult lives maintaining the king’s temple, saying prayers, and bringing food offerings. The food wasn’t wasted, however; after the king’s spirit had eaten its fill, the priests ate the actual food. Entire villages worked full-time growing food for the workers who built the tombs, for the priests who maintained them, and for the spirit of the dead king.

All this was for just one kingly mummy. And during three thousand years, there were lots and lots of kings.

Nobles and high officials didn’t get that kind of royal treatment. But they too went for the biggest tombs and coffins they could afford. Much of what we know about Ancient Egypt comes from the tombs of these nobles and officials.
WHY DID THE EGYPTIANS MAKE MUMMIES?

The reason was simple. The Egyptians believed that after death, a person could be born again in spirit form. He or she would live in the Underworld. Life there would be just like a wonderful life on earth, except there would be no sickness, no old age, no cares, no sorrows. And it would go on forever.

However, this delightful life was only possible if the person’s body was made into a mummy. If the body decayed, the spirit would die, too—this time, forever.

The Ba, the Ka, the Akh, and the Mummy

Today, we speak of a person’s “spirit”, but this is not really accurate when we are talking about the ancient Egyptians. For the Egyptians believed that a person had several spirits:

- The ba was the person’s personality. It was the spirit of everything that made him or her an individual. Pictures show the ba as a human-headed bird, sometimes with human arms.

- The ka was the person’s life force and spiritual power. The Egyptians thought of it as sort of an invisible “double” of the person. The king’s ka was his power to protect all Egypt. In tomb paintings, the ka was depicted as a person with two upraised arms, bent at the elbows, on top of its head. The written sign for the ka was the two bent arms alone.

When someone died, his or her ba and ka “died” with them. The purpose of making a mummy, and of all the ceremonies that went along with it, was to bring the ba and the ka back to life again. When this happened, the dead person was also restored to life—but not into the life of this world. Instead, the person was reborn into a glorified, spirit form that existed in the Other World of the Afterlife.
- The akh (say it like the composer Bach without the B) was this Other-World ghost of the person, brought back to life.

The mummy, then, was more than just a body preserved from decay and wrapped in bandages. It was a body changed and restored to another life through magic and the process of mummification. In that other life, the ba, ka, and akh would live happily ever after—and they would also be available to help family and friends in the world of the living. A king’s spirits were maintained by religious ceremonies and regular offerings of food in a royal temple. In return, the dead king used his spiritual power to protect the Land of Egypt.

The ka (headdress with arms upraised) of the dead king Tutankhamun (see p. 22) brings the akh of the king (striped headdress) to greet the mummy god Osiris.
THE JOURNEY OF THE MUMMY TO THE TOMB

Embalming

When a person died, his or her body was taken to the embalmers to be made into a mummy.

First the embalmers cut a slit in the side of the body and removed the main organs—the liver, lungs, stomach, and intestines. These were the parts of the body that would decay fastest. The embalmers dried each one separately and placed it in a special jar whose top was often shaped with the head of a protective god. The jars were often placed in a chest carved with the images of four protective winged goddesses. At the time of the burial, the chest was placed in the tomb along with the coffin.

The embalmers often left the heart in the body. The Egyptians thought the heart, not the brain, was the seat of the mind. And the dead person needed his or her heart at the Judgement of the Heart—a ritual that took place in the Underworld at the start of the afterlife—because the heart contained the record of everything its owner ever said or did.

After they removed the organs, the embalmers overed the body and packed the inside with a kind of salt called natron. Natron is a natural mixture of three salts you can find today in a supermarket—ordinary table salt, baking soda, and washing soda (the last is a little harder to find.) The Egyptians gathered natron from sites in the western desert. The natron drew moisture from the body. Drying the body protected it from decay, because decay bacteria needs moisture to live. But since the human body is almost three-quarters water, a dried out mummy is very thin and light.

An embalmer wearing a mask representing Anubis, god of mummification, completes the final steps in making a mummy.
After 40 days the body was dry enough. The embalmers removed it from the salt and rubbed it with sweet-smelling spices and plant gums. They rubbed the skin with oil to make it soft. Then they coated the entire body inside and out with plant substances called resins—plant gums that dry hard, like varnish or shellac. The hardened resins made the body waterproof, so no moisture could get in.

Unfortunately the resins and oils sometimes destroyed the body instead of preserving it. The famous mummy of King Tut was little more than skin-covered bones because the embalmers had coated it with too much resin. Apparently, the resins reacted chemically with the body in a way that “burned” the body almost as if it had been in a fire.

Wrapping the Mummy

Next came the bandaging. The embalmers wrote the name of the dead person on the ends of long strips of linen. They wrapped each finger and toe separately with very thin strips. Then they wrapped the entire body, covering it with layer after layer of linen strips. Into these bandages the embalmers ticked jewelry and protective charms called amulets. After every few layers of bandages they also applied a coating of hot, melted resin that hardened and kept the bandages in place. A great king might have as many as 80 layers of resin-coated bandages, though between 10 and 20 was more usual.

Resins start out a yellowish-brown color but over time they can turn black. The Arabs, who came to Egypt long after the time of the pharaohs, didn’t know the secrets of Egyptian embalming. They thought that the embalmers had coated the bodies with asphalt—the black tar that we use today for paving roads and parking lots.

the Arabic word for asphalt is mumiyah. And that is where our word mummy comes from.

The Coffin

Next came the coffin. Craftsmen made it ahead of time, long before the king’s death. An ancient Egyptian coffin was a work of art. It was usually shaped like a mummy, and it was covered with carved or brightly-painted symbols and spells to protect the person in the Other World.

Royalty might have gold or silver coffins. Less important folk were buried in coffins made of wood or cartonnage (it rhymes with garage). This was a kind of papier-maché made from papyrus (Egyptian paper) and linen stuck together with resin and plaster. Rulers, nobles, and rich people were often buried in several coffins, one stacked inside another.
The Sarcophagus

The coffins of royalty and really important people might be placed in a carved stone box called a sarcophagus. An Egyptian sarcophagus is huge. It weighs several tons. Workers had to place it in the tomb ahead of time, where it waited to receive its owner’s coffin.

The Opening of the Mouth

Finally it was time to take the mummy to the tomb. A line of servants, weeping relatives, sacred dancers, and other mourners went along with the coffin and the mummy to its everlasting new home in the desert cliffs.

The ceremony of the Opening of the Mouth. As two professional female mourners wail, priests magically restore senses to the mummy, which is held upright by a priest wearing the mask of the god Anubis. Another priest dressed in a leopard skin prepares to “feed” the mummy.
Outside the tomb, the most important ceremony of all took place. It was called “The Opening of the Mouth”, even though the mummy’s mouth remained covered with bandages. A priest representing Anubis, the god of mummification, stood the coffin upright and opened the lid. In tomb pictures of the ceremony, this priest is easy to identify. The Egyptians believed that Anubis had the head of a jackal (a wild desert dog, something like a coyote), so the priest wore a jackal-head mask. Other priests-without masks-then touched magically blessed wands of different shapes to the mummy’s eyes, ears and mouth while chanting prayers and spells. A high priest, wearing a leopard skin, directed the ceremony.

The Opening of the Mouth ceremony, the Egyptians believed, restored the dead person’s senses and brought back the life that death had taken away. The dead person’s ba and ka came alive again, and the mummy was restored to life as an akh. All three of the dead person’s spirits took part in a funeral feast before the tomb, along with everybody else who was present. The the coffin was closed, the mummy was taken inside the tomb-its house for eternity-and the tomb was sealed forever.
THE JOURNEY THROUGH THE UNDERWORLD

In the tomb, far from any eyes that could see, the $akh$ began its real journey—or so the Egyptians believed. For the $akh$ had to make its way through the perils of the Underworld, which the Egyptians called the $Duat$, to the dreaded place where its heart would be weighed and judged.

The $akh$ began its journey through the $Duat$ as the sun set. All through the night, demons and dangerous animals—snakes and crocodiles—tried to catch and eat it. The $akh$ had to pass through mysterious doors and hallways. For example, one door frame had a top whose secret name was “Scale pan of wine,” and the door was bolted with a bolt named “Toe of his mother.” Even the parts of the $akh$’s body had secret names that had to be announced. For example, “Who enters before the god Min” was the name of one of the $akh$’s feet.

No one—human or $akh$—could hope to survive the dangers of this night without the aid of magic charms and magic spells. This is why the body of the mummy had been loaded with amulets—the magical protective objects that served to ward off many of the dangers of the $Duat$.

As for spells, the dead person didn’t have to memorize them. The tomb was loaded with them. Spells—including all necessary secret names—often covered the walls of the tomb. Other spells were carved or painted on the coffin and on the sarcophagus, both inside and out. Hundreds of spells were written on papyrus scrolls stored in the tomb—the so-called Books of the Dead.

It was these spells that gave the $akh$ the power to repel the Snakes of Darkness and the crocodiles and demons that lurked in the Underworld. They gave the $akh$ the ability to breathe and the power to find food. There were even special spells that gave the $akh$ the magic power to change its shape and form.

The final danger that the $akh$ had to face was a river that only the Boatman of the Underworld could cross. To get the Boatman to ferry it across, the $akh$ had to name the parts of the boat. These were not ordinary names, like oar and stern—they were secret, magical, nonsensical names. No one could possibly know them or name them without—you guessed it—the proper answers in the form of the proper magic spells.

If the $akh$ could name the parts of the boat, the Boatman had to take it to the opposite shore, which is the most feared place of all.
THE WEIGHING OF THE HEART

At the far side of the river of the Underworld, the falcon-headed god Horus stood waiting. The grim Boatman of the Underworld guided his boat to the shore. The akh stepped out and Horus brought it to the hall where the gods themselves passed judgement on the dead. In this place, the akh had to undergo one final, fatal test. If it passed the test, it would either fade from existence or become a tormented, evil spirit for all eternity.

In the middle of the hall stood an enormous set of balance scales. As the akh waited, the jackal-headed god Anubis checked the scales. Nearby waiting to record the results, stood Thoth, the scribe of the gods, who had the head of an ibis (a tall skinny water bird, something like a heron.) And near the scales, in the darkness, crouched a monster with the head of a crocodile, the forequarters of a lion or leopard, and the hindquarters of a hippo. This was Ammit the Gobbler, eater of the hearts of the wicked.

The judge of the akh’s worthiness was...a feather, belonging to the goddess Maat. Maat represented truth, justice—all the forces that maintain order and goodness in the universe.

The akh’s heart would be weighed in the scales against her feather.

First the akh had to swear a magical oath that, when alive, he or she had done no evil act or had committed none of the 42 sins that could condemn the akh forever. Then the gods placed the heart in one pan of the scale and the Feather of Maat in the other pan.

If the akh had led a just life and had sworn truly, the heart and the Feather of Maat would balance. All would be well.
But if the heart was heavy with bad deeds, the pan on that side would go down. And Ammit and the Gobbler would lunge...

![Image of weighing of the heart]

_The weighing of the heart. The god Anubis leads the akh to judgement and balances the scales as the heart is weighed against the feather of the goddess Maat. The god Thoth records the results while the monster Ammit the Gobbler snarls in frustration._

**The Heart Scarab**

Nobody’s perfect.

The ancient Egyptians knew that as well as you do. What would save them from the dreadful crocodile jaws of the Gobbler?

As usual, spells and magic. One of the many Egyptian tomb spells begged the owner’s heart not to betray it: “O heart which I got from my mother! Do not stand as a witness against me. Do not make my name stink to the gods. See, you will be chosen to stay alive!”

The strongest heart magic was-a beetle. Not just any beetle, but a particular kind of large beetle called a **scarab**. And not a real scarab beetle, but a stone carving of one, called a **heart scarab**, that the priests placed over the heart when they were wrapping the mummy.

To the Egyptians, scarab beetles were sacred. These beetles lay their eggs in cow dung, which they first roll into a ball. The Egyptians saw in this ball-rolling a symbol of the power that every morning rolls the reborn sun up from the horizon and into the sky.
And so the beetle stood for rebirth, and the heart scarab amulet became the protector of the heart that wished to be reborn. Just to make sure, on the underside of the heart scarab, the maker carved spells like the one you read above.

If the *akh* had led a just life—and if the spells and magic did their job—all would be well. The scales would balance, and the *akh* would be welcomed by the mummy god Osiris, Lord of the Underworld. It would live a blessed life in the Underworld forever. At the same time, it would return to the tomb to receive offerings, food, and to use its powers to protect the family it had left behind.
THE BURIAL OF KINGS

A king’s destiny was very different. In the first place, his tomb and everything in it were far beyond what an ordinary man could afford. But then, the king was no ordinary man. He was a god. According to Egyptian myth, the god Osiris himself was the first king of Egypt. After he was killed by his wicked brother Set, he became Lord of the Underworld. Osiris’ son Horus defeated Set and became King of Egypt after his father. Since then, the Egyptians believed, every one of their kings was also in some way the god of Horus. When a king died, he joined with Osiris, and the new king became the new Horus.

At the same time, the king was the son of the sun-god Ra or Re, and after he died, he journeyed every day with Ra across the sky in the god’s sun-boat. Egyptian beliefs sometimes seemed to contradict each other. They also changed over time, but none of this bothered the Egyptians. In the world of the gods, many different things could be true at the same time, and religious truths could change over time while remaining true.

The dead king also lived in the sky, among the northern stars that never set. He became the constellation we call Orion, the brightest of all the constellations in the sky. At the same time, the king’s ka stayed on Earth, in his tomb and temple, protecting the land of Egypt.

Pyramids

Between 3,000 BC and 2,630 BC, the mummies of the kings of Egypt were buried at the bottom of deep shafts under large, square, solid buildings made of sun-dried mud bricks.

Then, around 2,630 BC, a builder named Imhotep came up with a number of genius ideas for his king’s tomb. First, Imhotep built in stone, not mud brick. Second, he made the underground tomb hugely complicated. Under his direction, the king’s workers cut more than 3 1/2 miles (5.6 km) of rooms and passages out of the solid rock. Third, and most important, he changed the shape of the building on top of the tomb. Instead of just one building, he made an immense stack of size buildings, each one slightly smaller than the one below it. The first pyramid, the Step Pyramid, was born.
A couple of generations later, another king built a step pyramid, changed his mind, and had the whole thing covered over so that its sides were perfectly smooth and the top came to a point. The traditional pyramid was born.

For the next 800 years, royal mummies were buried under pyramids or inside them. Many of these pyramids were truly huge. The 481-ft-tall (147 m) Great Pyramid of King Khufu held the record for being the tallest structure in the world until 1889, when the Eiffel Tower was built in Paris, France. Even today, it is probably the heaviest building ever built, since it is practically solid stone.

In the tombs under the pyramids, the Egyptians placed the mummies of the kings-along with unbelievable amounts of gold and other riches. But if you want to hide the treasury of a king where robbers can’t find it, a 200-to 500-foot high building at the edge of a desert cliff doesn’t exactly make a great hiding place. Pyramid tombs were regularly robbed of their entire contents-including the scarab mummy of the king. No royal mummy has ever been found inside a pyramid tomb. The earliest surviving royal mummy is that of a king named Tao II, who lived a thousand years after King Khufu built his Great Pyramid.

Nevertheless, the kings of Egypt built about 90 pyramids, until some king came along who was bright enough to realize the pyramids made great monuments but terrible safes. The kings needed a new type of tomb.

**The Valley of the Kings**

The new tombs were located several hundred miles south of the pyramids. Starting about 1,500 BC, they were carved deep into the rock sides of a desert valley that has come to be known as the Valley of the Kings. After the burial of a king, workers filled the tomb entrances with stones and sealed the opening. Guards kept watch over the valley so that no one could enter it.
There are about 80 tombs in the valley, and in spite of all precautions, robbers regularly robbed them, just as earlier robbers had cleaned out the pyramid tombs. The robbers were often the very workers who built the tombs. High officials, like heads of organized crime, made sure they got their share of the loot.

Finally the high priests of the great god Amon, the “hidden god” of the city of Thebes, got into a lotting business. They opened up the tombs, took just about everything that the robbers hadn’t already taken, and reburied all the kings’ mummies in just two underground tombs. Everything went to pay for their attempts to grab power from the rightful kings, and the treasures of the Valley of the Kings were lost forever.

But occasionally, the robbers and the priests missed a tomb, and a fortunate modern archeologist would find it.
THE TOMB OF TUTANKHAMUN

Archeology is the study of what people of the past have left behind. Today it is a science. In the past it was closer to treasure-hunting. In 1922 a lucky archeologist named Howard Carter made one of the greatest archeological finds in history in the Valley of the Kings.

Under the remains of an ancient workmen’s camp, Carter found the forgotten tomb of a king named Tutankhamun-whom newspaper reporters soon nicknamed “King Tut”.

The tomb itself was surprisingly small. But the immense riches inside astounded the world. It took Carter years to uncover all the treasures in the tomb, list them, and fix them up after 3,500 years underground.

Here are just a few of the treasures found in Tutankhamun’s tomb:

- A gold mask in the shape of the king’s face—the most beautiful such mask ever found. It is almost two feet wide and weighs 23 lb (10 kg). Precious stones form the outlines of the king’s eyes and eyebrows.

- A 243-lb (110-kg), solid gold inner coffin, modeled to look like Tutankhamun, and holding his mummy.

- 170 amulets made of gold and precious stones, all wrapped in the bandages of the king’s mummy.

- Two more coffins, made of wood covered with gold.

- A huge, richly carved stone sarcophagus.

- Two thrones, both covered in gold.

- A gold crown covered with precious stones.

- Gold bracelets on the king’s mummy.

- Dozens of pieces of jewelry, with carvings made from precious stones set in gold.

- Four gold-covered statues of the four goddesses that protect the dead.

- Gold-covered statues of the king.

- A dagger with a gold blade and a sheath made of gold.
- Beautifully carved and decorated chests made of ivory.

- A large shrine covered with gold.

- A small shrine covered with gold.

- A unique painted chest showing the king in battle.

The list goes on and on. The amazing thing about the contents of the tomb is not just the gold. Everything is a work of art, carved or painted, covered with images of the gods or of the king with his young wife, set with beautiful stones in red and blue and orange, and surrounded by the beautiful Egyptian picture-writing, called hieroglyphics.

The one disappointment was the mummy of the king. The embalmers had botched the job. They had used too much resin and oil. These had reacted chemically with the body of the king. As a result, Tutankhamun’s body was little more than a skeleton.

You might think all this was for one of the great kings of Egypt. Not at all. Tutankhamun was a boy king, who ruled for only 9 years and was probably only about 17 or 18 when he died. He did absolutely nothing important during his short life. His name doesn’t even appear in the official lists of Egyptian kins.

*Now think of what the tombs of Egypt’s truly great kings must have been like.*
Timeline of Mummies and Tombs of Ancient Egypt

- **TODAY**
  - Howard Carter finds Tutankhamun's tomb (1923)
  - U.S. Declaration of Independence (1776)
  - European Discovery of America (1492)

- **AD 1000**
  - Cleopatra, last independent ruler of Ancient Egypt (after her, the Romans took over)

- **AD**
  - King Psusennes I

- **BC 1000**
  - Great Tomb Robberies in the Valley of the Kings
  - King Rameses III
  - King Siptah
  - King Seti
  - King Horemheb
  - King Tutankhamun (King Tut)
  - King Akhenaten

- **BC 2000**
  - King Tao II—oldest royal mummy
  - Bad times in Egypt—no pyramids built

- **BC 3000**
  - PYRAMIDS BUILT AGAIN (1991 BC-1745 BC)

- **BC 2630**
  - KING’S MUMMIES PLACED IN OR UNDER PYRAMIDS (2630 BC-2152 BC)
  - Great Pyramid of King Khufu
  - Step Pyramid

EGYPTIANS START TO MUMMIFY THEIR DEAD

EGYPTIANS STOP MUMMIFYING THEIR DEAD

NO PYRAMIDS—MUMMIES IN THE VALLEY OF THE KINGS

Bad times in Egypt—no pyramids built
THE MUMMY’S CURSE

“Death comes on swift wings to he who dares enter the tomb of a pharaoh!”

These words, or something like them, were supposed to have been found in King Tut’s tomb.

In reality they were the work of a British writer of horror novels named Marie Corelli. Four months after the opening of the tomb, she wrote a letter to The Times of London. The letter quoted the saying and predicted the death of everyone involved with Tut’s tomb.

Probably no one would have paid much attention. But Lord Carnarvon, the man who had paid for the expedition that discovered the tomb, suddenly died from an infected mosquito bite. The famous author Arthur Conan Doyle, creator of the Sherlock Holmes stories, then gave his opinion that Carnarvon’s death was indeed due to the Mummy’s Curse.

That did it. The Curse became headline news. As the years passed, people connected the Curse to any unpleasant event that could possibly be related to the opening of King Tut’s tomb, no matter how unlikely. For example: in 1972, the mask of King tut was flown to England for a special museum exhibition. Two years later the pilot of the plane got a divorce. He blamed the Curse.

But somehow Howard Carter, who actually opened the tomb, seemed immune. He died in his mid-sixties in 1939, seventeen years after his great discovery. Death did indeed come to him, but certainly not on “swift wings”.

Was there actually a mummy’s curse? Yes, Several. Some of the spells in Egyptian tombs were intended to protect the dead from robbers and impure people. “Let the crocodile be against him on water, let the snake be against him on land.” goes one such curse from the time of the Pyramids, more than a thousand years before King Tut.

Another curse comes from the tomb of a priest, who refers to himself as “an excellent akh” (an akh, you remember, is the spirit of the dead person that lives in the Other World).

“As for anything you might do against this tomb of mine, the same shall be done against your property. I am an excellent priest, exceedingly knowledgeable in spells and all magic. As for any person who does not purify himself for an excellent akh, I shall seize him by the neck like a goose. I shall place fear in him at seeing ghosts upon earth...”

But most rich tombs, filled with similar curses, were regularly robbed. The Mummy’s Curse, unfortunately, were not very effective.
MUMMY MOVES

The discovery of King Tutankhamun’s tomb was the spark that set off an explosion of Mummy movies. Remember, Carter was working in the tomb over a period of several years. That kept interest in King Tut high. And nearly everyone had heard of the Mummy’s Curse that was supposed to claim the lives of those who had dared to rob the King’s tomb.

In 1932, ten years after the opening of King tut’s tomb, Hollywood brought out The Mummy. It was a horror film starring Boris Karloff, Karloff is a mummified Frankenstein’s Monster in several movies. In The Mummy, Karloff is a mummified priest of Egypt named Imhotep, brought back to life by the reading of a tomb spell. Imhotep soon sheds his wrappings for more modern dress. He immediately meets a young woman in whose body dwells the spirit of his beloved, the Princess Ananka. Ever faithful, ever murderous, he spends the rest of the movie scheming to kill the young woman. This will free his beloved’s spirit so it can rejoin her mummy and bring it to life, too.

Karloff’s mummy makeup was a lot more realistic then the rest of the movie, since it was based on the actual mummy of a famous pharaoh named Rameses III—the last of the really great kings of Egypt. Rameses’s mummy is one of only two royal mummies that were not damaged by tomb robbers or the high priests of Amon.

There have been many remakes and revivals of the old mummy movies. In the 1940’s, the Mummy appeared in an Abbott and Costello comedy movie. The British horror actor Christopher Lee starred in a 1959 version of The Mummy. In the 1980’s, the mummy Mum-Ra was a Saturday morning cartoon villian, and more recently there has been an entire cartoon show featuring mummies. But the Mummy as a horror figure has faded somewhat in popularity compared to two other living dead creatures—the zombie and the vampire. The vampire is active and hideously attractive. The zombie is hideous and unstoppable. Compared to them, the movie mummy is little more than yards and yards of bandage wrapped around the myth of the Mummy’s Curse and the glamour of Ancient Egypt.

King Rameses III—the model for the mummy in many horror movies.
Imagine that you are living three thousand years ago, in a village near the Valley of the Kings. You are an artist, like most of the villagers. Your job is to paint pictures on the walls of the royal tombs.

And then, one afternoon, your life changes.

Your brother Kar bursts into your hut. Without any greeting, he drops to the floor and starts scratching marks in the dust. "You can read better than me," he says. "What does this mean? Does it say what I think it says?"

You look down at what he has drawn. It looks like this:

```
\[\text{Circle with a dot}\] 
\[\text{Horizontal line}\] 
\[\text{Vertical line}\] 
\[\text{Oval design}\]
```

"Even you can read that," you say. "Circle with a dot—that’s the sun, or the sun-god Ra. The other three signs mean ‘pleased.’ The whole things says ‘Ra is pleased.’ The oval design around the word tells you that this is the name of a king. King Ra-Hotep. Everyone in our family knows that."

"I had to be sure," says your brother heavily. "It’s a disaster. I saw this on the back of an amulet. Some men were passing it around while they were drinking beer. They were drunk and laughing, or they never would have let anyone see it."

You are silent while the news sinks in. "King Ra-Hotep," you say. "They’ve found his tomb. They’re robbing it."

This is terrible news for you. For your family has a secret.

You are all of royal blood. You are descended from King Ra-Hotep.

Ra-Hotep is an almost forgotten figure. Three hundred years before your time, he tried to break the power of the priests of the god Amon by seizing their lands and by declaring this sun-god Ra to be the supreme god of all Egypt.

But Ra-Hotep ruled for only four years. A few years after his burial in the Valley of the Kings, the priests of Amon took revenge. They chiseled the king’s name off all his stone monuments. They smashed all his statues. They erased his name from their lists of kings.
His family had to flee. Eventually the location of his tomb was forgotten—except by his family.

Your family.

Now someone has found the King’s tomb and is robbing it. If his body is harmed, your ancestor’s akh will die.

You cannot allow this to happen. You have to move fast. You call your family together. Your brother Kar is there, and your big cousin Ruta, who is one of the police guards who protect the Valley.

Your uncle is the head of the family, and he makes his decision. “Ruta”, he says, “In the night, take your two cousins and go to our ancestor’s tomb. See what damage has been done. You are a guard. You can move freely in the Valley, and no one will question you. Your cousins must disguise themselves. Let them wrap cloths around their faces so no one will recognize them.”

Ruta nods. Before the sun falls the three of you are traveling over the hills to the hidden tomb at the end of the Valley. You and your brother are disguised as guards and armed with swords that you don’t really know how to use.

You have arrived just in time. The robbers are at the tomb, dragging brushwood inside. They intend to burn everything. The fire will destroy all the contents of the tomb except the gold. The gold will melt and then cool down into lumps that the robbers can easily recover from the ashes.

“That’s them!” your brother whispers. “The ones I saw with the amulet!”

Ruta moves boldly—too boldly. “Surrender now!” he barks. “Lay down your knives. Do it!”

The robbers drop the brushwood and spin around to face you. You recognize them. They are stonechoppers, the hardest-working of the village laborers—men who actually carve the tombs out of the rock.

The lead robber is a brutal-looking man, almost as big as your cousin. He grips his knife. “Surrender? There are only three of you. There are seven of us.” He motions to the others to spread out so they can attack your little group from all sides.

A fight is the last thing you want. These men are desperate. They know the slow, hideous death that awaits captured robbers. And they outnumber you.
Then inspiration strikes. “Fool!” you hiss. “Do you think we came here alone? This whole area is ringed with guards. You can’t escape. The game is over. You lost.”

The robber turns his hate-filled gaze on you. “Then we die here. At least it’s quick, and we’ll take a few of your guards with us.” But before he can say anything more, you raise your sword and point it at him.

“You don’t have to die,” you say. “We are merciful. We will let you live. Go back to the village. No one will stop you. Take everything you have hidden there. The Great Nile River will take you away before we return.”

The robber hesitates, then lets his knife hand fall to his side. “Why? Why would you do this? Why would we trust you?”

“Because we have our own work to do,” you reply. “Let’s just say—we have to clean up the mess you’ve made.”

An evil smile slowly creeps over the robber’s face. “Clever. you guards are clever. We flee in the night with trinkets. And you say behind, melt down the gold coffin for your selves, and say that we stole it”.

Your brother speaks up. “You’re clever yourself, stonechopper. Let your cleverness save you. Leave with what you have. Or stay and die.”

The robber looks around at his men. It is clear they have no stomach for a fight. After a pause, he nods and puts away his knife. “Fair enough. Death is delightful only to those who lie in these great tombs. For us poor folk, it is a grim and fearful prospect.” He motions to his companions. “Farewell, guards. I hope they find you out and do to you what you would have done to us” The robbers slink away over the hills towards the village.

You breathe a sigh of relief. Then, Cautiously, you enter your ancestor’s tomb. The robbers have been careful. The entrance is tiny, barely large enough for a man to fit through. Place a large stone over it, and no one would ever see it.

But inside the tomb, it is almost as bad as you feared.

Ra-Hotep’s tomb has been ransacked. His mummy has been unwrapped and tossed into a corner of the burial chamber. The gold mask, with its red and blue precious stones, is gone. The jewels have been picked off the great gold coffin. To protect themselves, the robbers have chiseled the magical images off the stone sarcophagus...
MUMMY ACTIVITIES

Activity 1 - CASTING THE MUMMIES

BE SURE TO READ ALL DIRECTIONS HERE AND IN APPENDIX A BEFORE STARTING!

WARNING! BE SURE TO DISPOSE OF PLASTER IN THE TRASH. DO NOT POUR PLASTER DOWN THE DRAIN!

A. POURING AND SETTING

You need from your kit: plaster compound, mummy mold, 8 craft sticks, 3-4 rubber bands, sandpaper

You need from home: 1 or 2 measuring cups, 2-3 plastic spoons, water, 1 disposable drinking cup, a clean, hard surface to work on, newspaper to cover your work surface, a dull butter knife or safety scissors.

1. Lay out lots of newspaper on the surface you will be working on. This will allow for an easier clean up when you are finished.

2. First you need to tear open the sealed base of your mold halves, under the mummy’s feet. Use scissors to start the cut then gently pull the half-moon shaped tab of plastic off the mold, as shown in figure 1. Repeat with the other mold half. Use your sandpaper to smooth any rough edges.

3. Measure out a little 1/4 cup of water into your measuring cup. Pour the water into a disposable cup and set the measuring cup aside. If you only have one measuring cup, make sure it is completely dry before using it for the next step.

4. Use a dry plastic spoon to add exactly 3/4 cup of plaster compound to your dry measuring cup. Level the plaster by tapping the cup gently against the table a couple of times.

5. Carefully scoop the 3/4 cup plaster compound a little at a time into the disposable cup containing the water.

CAUTION! IT IS VERY IMPORTANT TO ADD THE PLASTER COMPOUND TO THE WATER AND NOT THE OTHER WAY AROUND!

Stir gently with a second plastic spoon, not the one you are using to scoop plaster. The mixture should have the consistency of melted ice cream. If it is still too thick, add more water, a little bit at a time. Tap your cup of plaster against a hard surface to knock out any air bubbles.
6. After the plaster compound is mixed, work quickly so your plaster does not set before you are done. Use a paint brush or your finger to apply a thin layer of plaster to both halves of the mold. Try to get the plaster into all of the small areas where it won’t flow easily. Be sure to fill in the nose and chin!

7. Next you must spoon the mixture into the two halves of the mummy mold (see fig. 2a and 2b.) Do not fill in the feet-save this for later (Step 11). Add plaster until there is a little run-off on each side—but not too much! Avoid getting plaster on the sides of the mold, or in the grooves where the halves snap together.

8. Now we need to strengthen the thinner sections of the mummy. Add a craft stick to each leg and the neck in the mold half the mummy’s back. Use the spoon to push the craft sticks into the mixture. Add a little more of the plaster mixture if necessary.

9. Wait about two minutes, or until the mixture had thickened to the consistency of cream cheese. Snap the mold halves together (see fig. 3). Press the grooves that run around the mold halves together until they are tightly sealed. Do not wait too long to put the halves together. If you wait too long, the plaster will be too hard to flow together, and instead of one whole mummy, you will have two mummy halves.

10. Secure rubber bands around the mold at the head, chest, and legs.

11. Now you need to fill in the mummy’s feet. Hold the mold with the feet up and spoon in some of your leftover plaster mixture until the feet are level! Scrape off any excess with the plastic spoon.
12. Pick a safe place to prop up the mummy (feet up) where it won’t be knocked over. You will need to lean it against something sturdy like a wall (see fig. 5).

13. Let the mummy set in its mold for about 12 hours.

14. After the plaster has set, you are ready to remove the mummy from its mold. Remove the rubber bands, and pull the edges of the two halves apart. Be careful not to bend the mold too much—you will need to use it again! Pick one side off the mold and pull it off the mummy. The mummy will be stuck inside the remaining mold half. Try to push the mummy out by pushing in gently from the outside of the mold.

15. Once you have released the mummy from the mold, set it aside to dry further. As mentioned in Appendix A, the plaster won’t be fully hard for a couple of days.

16. While you are waiting for the first mummy to dry, let’s make another mummy! Scrape out all the plaster residue from the mold and from the grooves use to close the mold. Then repeat steps 1 through 15. If you have a little liquid plaster mixture left over when you finish casting the second mummy, use it to carefully fill in any holes or air bubbles in your first mummy.

B. FINISHING AND SANDING

1. You can finish and sand your mummies while you wait for them to fully dry. Just remember to be careful when you handle them! Use the end of a dull butter knife or safety scissors to gently tap or scrape off any excess plaster hanging off the sides of the mummy. Then remove any plaster that has collected in the space between his legs.

2. Once you are finished removing the larger pieces of excess plaster, use the sandpaper to remove any remaining rough edges. DO NOT sand the front or back of the mummy! Sand the sides of the mummy (where his “seam” is), the feet, and the inner legs. Fold the sandpaper in half to reach the smaller areas. Sand gently but firmly until the rough edges are smoothed away.

Activity 2 - PAINT THE MUMMIES

You found the mummy of your ancestor, King Ra-Hotep, in a corner of his tomb. His wrappings have been undone by the robbers in their greedy search for the small gold amulets and jewelry slipped into the folds of the wrappings. In their clumsy treasure hunt, you fear that they may have scraped off some of the resins painted over the mummy by the embalmers.

Your first task in restoring Ra-Hotep’s mummy and saving his akh is to restore that protective layer of resin, so that no moisture can get in.
You’ll be using modern acrylic paints rather than messy plant gums. Pick a place where there’s plenty of room, and where it doesn’t matter if you spill some water or make a mess. Cover your work surface with newspaper to make cleanup easier. Painting near a sink is a good idea, but remember, your mummy castings are even more vulnerable to water than a real mummy—don’t let them get wet!

**IMPORTANT NOTE:** Read Appendix B: TIPS ON PAINTING before beginning this or any other painting activity.

**You need from your kit:** paints, paintbrush, the two mummy castings you made in Activity 1, painting guide.

**You need from home:** items listed in Appendix B under “Preparations.”

1. When your castings are completely hardened, you can begin painting. Pick the mummy casting that you like best. This will be the one you will paint for display. The other one will be used for wrapping.

2. On your palette, mix equal parts of brown and white with a touch of red. Remember, whenever you mix colors, mix a very small amount (two or three brushfuls) at a time. Add water to this mixture until it is very liquid but not watery. Paint the entire mummy and let this first coat dry overnight. While you wait, paint the second mummy the same way.

3. After the first coat is completely dry you are ready to add a “finish coat”. Use the regular brown with just a little water—much less liquid than your first coat. Paint the entire mummy again. Don’t worry about getting it just right, just slap the paint on. Once you have the paint on, use a paper towel to blot the paint off again while it’s still wet. No need to press hard—you aren’t trying to get every drop off. You want to leave your finish coat stuck in the cracks and corners of your mummy, giving him a nice aged look. Look at the painting guide for an idea of how your mummy should look. When you’ve finished your first mummy, paint the other one the same way.

**Activity 3 - PREPARE THE MUMMY WRAPPINGS**

Ra-Hotep’s wrappings have been shredded by the tomb robbers, and are useless. While you have been applying resins to the mummy, your brother Kar has been back to the village to get a supply of linen. It is now up to you to make new wrappings for your glorious ancestors. As the most literate family present you must also be the one to scribe Ra-Hotep’s name onto each strip!

Nor will you be making only bandages. Once wrapped, the mummy must be placed in a bag, and then wrapped yet again. So you will be making a new bag, as well. It is a good thing that Kar brought back a great deal of linen...
You need from your kit: muslin

You need from home: white glue, pencil, ruler, scissors

A. PREPARE THE MUMMY BAG

1. First, prepare the bag in which you will put your wrapped mummy. Measure out a piece of muslin 13 inches (33cm) long. Mark that spot with a pencil mark and then cut that piece off.

2. You now have a strip of muslin 13 inches (33cm) long and 5 inches (12.5 cm) wide. Cut a 1.5 inch (3.75 cm) wide piece off the width of the strip and put it aside—leaving you with a strip that is 3.5 inches (9 cm) wide and 13 inches (33 cm) long. Use the leftover strip later to make extra wrapping strips.

3. Fold the strip in half across its long side (fig. 6). Folded, your piece is about 3.5 inches (9 cm) by 6.5 inches (16.5 cm). This will become your mummy bag. Lay your mummy on top of the piece to check the fit. The mummy should fit onto it with plenty of room around the sides for you to glue the bag together. The bag won't cover your mummy’s head—it should come up about to his neck. Don't worry, that’s how the Egyptians did it.

4. Lay down a line of white glue on either side of the folder piece of muslin, about 1/8 inch (3mm) from the edges (fig. 7). Be sure to leave the top open! Remember, you want the mummy to fit snugly inside—but if the bag is too narrow, he won’t fit inside.

B. PREPARE THE MUMMY WRAPPING STRIPS

1. From the remaining big strip of muslin, cut 12 strips down the length of the material. You want to make eight strips about one-half inch (1.25cm) wide, and four strips about one-quarter inch (.64 cm) wide (see fig. 8.)

2. Ra-Hotep’s name must be written at the ends of each of your 12 strips. Examine the drawing on page 27 and copy it into your strips. To make things easier, you may wish to sketch the name on only one end, not both. Ra-Hotep would understand.
C. DYEING THE MUMMY WRAPPING STRIPS (OPTIONAL)

You need from your kit: muslin strips, 2-4 rubber bands (optional)

You need from home: disposable cup or mug, spoon, cold coffee or tea, newspaper

1. After you have cut your muslin into strips, you can give it an aged look by staining it a dark brown. Remember to put down lots of newspaper on your work surface before beginning.

2. Ask an adult for some cold coffee or tea. They may have to make it for you and wait for it to cool. Be sure it is not hot so that you don't burn yourself! Fill a cup or mug up about a quarter to halfway. If you want to work faster, use two or three cups so that you can work on several batches at once.

3. Crumble a few strips into a small ball and drop it into the mug. Use your spoon to dunk the ball so that your “dye” will soak all of it. Optional: Wrap a rubber band loosely around the crumpled up muslin strip(s) before dropping into your “dye”. This will give the muslin an uneven look.

4. Allow the ball of muslin to sit in the liquid for at least 20 minutes. The longer it soaks, the darker and older the muslin will look. Also, the liquid you use will determine how the muslin stains. Coffee or very dark teas will stain the darkest. Ordinary tea bags will create a rosy or rusty-looking stain.

5. Take the ball out of the cup and squeeze the strips out over a sink. Do not wash them!

6. Spread each strip out on the newspaper to dry. Wait until the strips have dried before wrapping your mummy!

7. Repeat steps 3-6 as needed to stain the remaining strips.

Activity 4- WRAP THE MUMMY

The sun is setting once again. Cousin Ruta tells you that it does not look as if the robbers will return. They believed your clever lies and have fled for good. That is well, but you have much to do before you can rest. If the spirits of Ra-Hotep are to continue protecting and helping your family, you must not fail here. It is time to wrap the mummy.

You need from your kit: the Mummy Bag and Mummy Wrapping Strips you made in Activity 3, one mummy casting (pick the one you like less for wrapping, and keep one you like better for display), painting guide

You need from home: white glue, spices or fragrances (optional), disposable cup or plate (optional)

A. OPTIONAL STEPS

1. As you have learned, the embalmers rubbed the mummy with more than just plant resins. They also added sweet spices and fragrances. If you wish to do that, you can use household spices such as cinnamon or clove, or any bath oils or similar fragrances you may have in your home. Be sure to
get permission first! When you have selected your fragrances, rub a little on the mummy and his bandages to provide a pleasant aroma. Be careful not to overdo it.

2. You do not have a protective charm or amulet to enclose in Ra-Hotep’s wrappings. If you would like to make one, draw your own version of a heart scarab, using the picture on page 17 and fig. 9 as guides. Don’t make your scarab charm too big, or it won’t fit under the wrappings. On the other side of your picture, create your own protective spell, using the ones in this book as guides.

3. The regular wrapping method described below in section B will allow you to unwrap the mummy again (with some effort), if you choose. If you wish to wrap Ra-Hotep more accurately, but permanently, you can do the following. In a disposable cup or plate, make up a mixture that is half white glue and half water. Soak each strip briefly in your glue and water mixture as you go through the wrapping steps. You want the strips wet, but not soaking. Rather than being glued only at the ends, each strip will be glued everywhere.

B. APPLYING THE WRAPPING STRIPS

1. To begin, take one of the half-inch (1.25 cm) strips and use a dab of glue to affix the end of the strip to the soles of the mummy’s feet. Fold it up and over his toes to cover them. Then wind the fabric around the feet until they are completely covered, and move up to the ankles. As you wind the fabric, overlap each new layer slightly over the one before it. When you reach the end of a strip, use a small dab of glue to hold it in place.

2. Start a new strip where the last strip ended. Continue to wind the fabric around and up the mummy’s legs, criss-crossing occasionally. Repeat as needed (see fig. 10) On some strips, you may wish to keep the end where you have written Ra-Hotep’s name exposed.

3. With the mummy’s legs wrapped, you can move on to wrapping his body and arms using the same technique. If you made a heart scarab, place it on the mummy’s chest before you begin wrapping. Once his torso is completely covered, use any leftover half inch (1.25 cm) strips of muslin to make a criss-cross pattern over his torso. Begin by securing a strip below one elbow. Go up that arm, over the opposite shoulder and then diagonally across the back. Then wrap the strip around the waist, cross over the other arm, and over the opposite shoulder. Cross over the back, so that you have an X shape on both the front and the back (see fig. 11 or painting guide). Repeat this step until you run out of the wider muslin strips. Again, you may wish to leave Ra-Hotep’s name exposed on some of the wrappings.
4. Use the narrower strips of muslin to wrap the mummy’s head. Start at the neck and use any pattern of winding until his head is completely covered.

C. APPLYING THE MUMMY BAG

1. When the glue on the Mummy Bag dried, slide your newly wrapped mummy inside, feet-first (see fig.12).

2. Now, you can tie the bag. We will use rubber bands, because they are easy to work with and easy to remove later, if you want to show off your mummy. First, stretch one band the entire length of his body, from head to toe.

3. Next, apply rubber bands in each of the following places. Loop each rubber band around the mummy as many times as it takes to hold the mummy tightly (see fig. 13.)
   - one around his neck
   - one around his ankles
   - one around his knees
   - one around his waist
   - two diagonally across his body (under his elbow and over the opposite shoulder) - one in each direction, making an X pattern.

Activity 5 - CUT OUT AND PAINT THE MUMMY MASK

The thieves have stolen the jewels from the gold mask of Ra-Hotep. You will have to replace them. Hopefully, the glorious akh of your ancestor does not mind a bit of creativity in substituting paint for gems.

You need from your kit: mummy mask, paints, paintbrush, painting guide

You need from home: scissors, palette, water, disposable cup

Before you begin, read over Appendix B: TIPS ON PAINTING, at the end of this book.

1. Using a pair of scissors, carefully cut out the golden mummy mask. Follow the outline of the head dress around to the chest plate.

2. The painting guide shows how the mask will look if you follow these instructions. Feel free to be creative, if you would like to use different colors.
COLOR MIXING KEY:
When mixing the colors, remember to mix only a small amount (a couple of brushfuls at a time, so as not to waste paint.

Turquoise: blue + white + small amount of yellow
Dark Blue: blue + small amount of brown
Red: red + little bit of brown
Black: blue + brown

The directions that follow guide you through each color that appears on the mask. When painting each color, let the paint dry completely before moving on to the next one. That will help you avoid smudging the colors.

White
a: Face:
   Use the white paint to paint both eyes.

Turquoise
a: Face and head dress:
   Paint the beard and the decoration piece in the middle of the head dress.
b: Collar:
   Paint the bands which are shown as turquoise on the painting guide (this includes the bottom band, which is a mixture of this color and dark red). Before the paint dries, wipe it off with a piece of tissue. This will leave paint in the ridges of the chest plate, giving it an aged look.

Dark Blue
a: Head Dress:
   Paint every other band of the head dress. Let dry.
b: Collar:
   Paint every other band of the chest plate, starting with the second band from the bottom and continuing up to the bands on either side of the beard. Use the same method of wiping off the paint before it dries.

Red
a: Face:
   Paint the very tip of the beard.
b: Collar:
   Paint the bands which are shown as dark red on the painting guide (this includes the bottom band of the chest plate, which has already been painted with the turquoise color). Once again, wipe the paint off before it dries.

Black
a: Face:
   Paint eyebrows, the outlines around the eyes, and the iris of each eye.
ACTIVITY 6 - PAINTING THE COFFIN

A mixed blessing is upon you, to be sure. Ra-Hotep’s great gold coffin is not in such bad shape. Your family stopped the thieves before they were able to melt the coffin. With a little paint, it will look almost like new.

You need from your kit: paints, paintbrush, painting guide

You need from home: palette, water, disposable cup

A. PAINTING THE COFFIN LID

COLOR KEY:
When mixing the colors, remember to mix only a small amount (a couple of brushfuls) at a time, so as not to waste paint.

Turquoise Blue: blue + white + small amount of yellow
Dark Blue: blue + small amount of brown
Red: red + little bit of brown
Black: blue + brown

The directions that follow guide you through each color that appears on the coffin. When painting each color, let the paint dry completely before moving on to the next one. That will help you to avoid smudging the colors.

White
a: Face:
   Use the white paint to paint both eyes.

b: Flail:
   Note: The flail is the object with tassels hanging off of the handle. The significance of the flail is explained further on page 44. Paint the bands on the tassels which are shown as white on the painting guide.

Turquoise:
a: Head dress:
   Paint the decoration in the middle of the head dress as shown on the painting guide.

b: Flail:
   Paint the bands on the tassels which are shown as turquoise on the painting guide.

Dark Red
a: Head dress:
   Paint the decoration in the middle of the head dress.

b: Flail:
   Paint the bands on the tassels which are dark red on the painting guide.
Black

a: Face and head dress:
   Paint the eyebrows, the outlines around the eyes, the irises of the eyes, and the decoration in the middle of the head dress.

b: Flail:
   Paint every other band on the handle.

c: Crook:
   Note: the crook is the object in the other hand, shaped like a cane. The significance of the crook is explained later, on page 43.
   Paint every other band on the handle.

B. PAINTING THE COFFIN BOTTOM

1. You can make the bottom black or a stony grey. For a dull black color, mix equal parts of brown and blue on your palette. Mixing equal parts of brown, blue, and white will give you a good grey color. Water down your paints a little if you begin to run out. Whichever color you choose, paint all of the visible parts of the bottom, including the interior where the mummy will rest.

ACTIVITY 7 - ASSEMBLE THE SARCOPHAGUS

The mammoth stone sarcophagus is in good shape. After all, there was nothing of value on it to steal. However, the bandits did manage to shove the lid off and slide the base around as they tried to get at the gold inside. An impressive feat, given that the sarcophagus weighs several tons. Stonechoppers are strong-especially when they have gold and jewels to inspire them. You’ll have straighten up after them, but after what you’ve already done, moving a few tons of stone doesn’t seem so bad.

You need from your kit: sarcophagus top and bottom

You need from home: tape

Okay, so we won’t really ask you to move around a few tons of stone. Instead, you will use a much lighter cardboard sarcophagus that looks like stone.

1. The lid comes already folded in several places. Your first step is to sharpen and deepen all of those creases, making it easier to put together. Anywhere the lid is already creased, fold in towards the inside of the lid. Pinch the seam between your thumb and index finger, or use any other comfortable way of putting pressure on it. Repeat with each crease.

2. Find the two long corner tabs and fold them in towards the inside of the lid. Then fold up the two long sides of the lid and hold them so that they are standing up. They should be leaning towards the inside lid, but not actually folded flat. You may wish to slip a rubber band around the lid to hold these long side flaps tightly in place while you work.

3. Now take one of the shorter ends flaps and fold it up and over the long corner tabs (see fig. 14). The long corner tabs should be as completely inside the end flaps as possible. The short curved tabs on this end flap will have to bend to fit.
You should see a curved notch on each long side that the tab will fit into. Tuck the curved tabs into the curved notches until they snap into place (see fig. 15).

4. Repeat step 3 with the other end of the lid. Take off your rubber band when you are done.

5. Have someone help you by holding the four sides of the sarcophagus bottom upright while you lower the lid onto it. Check the fit of your lid. The lid should fit snugly. If it is too tight or too loose, check your folds and flaps to make sure that they are secure.

6. You have several choices of how to use the sarcophagus lid, the four side walls of the bottom part fall down, revealing the coffin from all angles. You can use a little tape-preferably on the inside of the sarcophagus-to keep the walls from falling down. You also might want to use a little tape if you find that the lid is not snug enough to keep the walls pressed tightly together at the corners. (Note: don’t put any tape where the lid fits onto the box-the lid might snag on the tape!)

Here are a couple of possibilities:
- Use some tape to hold two adjacent corners together, and only one side of the box will fall open:

- Tape all four corners of the bottom together so that no walls will fail. If you do this, you may wish to have some way for people to look inside. You can just rest the lid on top at an angle, so that it doesn’t fit on—the classic horror movie look. Or you can lay two pieces of wood (or something similar) across the width of the box like the rungs of a ladder. Rest the lid on top of those, leaving a gap for people to look in through.
ACTIVITY 8 - THE OPENING OF THE MOUTH

All of the hard work you and your family have done in the service of Ra-Hotep will soon be rewarded. The damage done by the tomb robbers has been repaired. Soon Ra-Hotep’s spirits will rest easy and once again be able to concentrate on protecting your people.

Cousin Ruta shakes his head thoughtfully and says “I still think that we should ask the priests to perform the Ceremony of the Opening of the Mouth.”

“Ruta, the family has discussed this. The priests do not perform that ceremony again when a mummy has been robbed. Usually they just come and take the mummy away.” Your brother Kar replies.

You join the debate, and your voice echoes in the stone chamber as you begin to speak more loudly. “You are a guard, Ruta. You yourself have told me the stories of the ancient mummies piled high in storerooms like papyrus scrolls. Safekeeping-hah! They would only wish to keep Ra-Hotep’s gold safe, and for their own use at that.”

“Well,” Ruta says slowly, “Can we at least ask uncle for permission to have our own ceremony? We can do without the priests. We’ll say a few words, and put out a feast for his spirits.”

It seems like the right thing to do. Somehow, you feel that Ra-Hotep would approve of this plan. You nod, and Kar runs off to see your uncle.

You need from your kit: assembled sarcophagus top and bottom, painted coffin top and bottom, painted mummy mask, wrapped mummy

You need from home: tape, food for a feast (optional)

1. Place the mummy mask over your wrapped mummy. It should be a good fit. If you like, you can secure the mask in place with a small piece of tape.

2. Place the mummy in his gold coffin and close the lid.

3. Place the gold coffin into the sarcophagus and close the lid.

4. (Optional) Put out some food for a feast. Say a few words about the great Ra-Hotep. Maybe his akh will be watching you.
MORE ABOUT THE ITEMS IN YOUR MUMMY KIT

King Ra-Hotep is imaginary, but the story of his struggle against the priests of the god Amon is based on real events. These events took place when the man who was probably King Tut’s father, King Akhenaten, was ruler of Egypt. Like the imaginary Ra-Hotep, Akenaten defied the priests of Amon. He demanded that all worship be paid to a new sun-god, whom he called the Aten. He seems to have been one of the first people in history to worship a single God, and the story of his life continues to fascinate students of Ancient Egypt. In addition, art historians consider the period to be one of the high points of world art.

-The body of Ra-Hotep’s mummy is modeled after several well-preserved mummies from the Valley of the Kings. (Akhenaten’s mummy is not among them, for it has never been found.)

- The head and face of Ra-Hotep are based on the mummy of King Seti I. Seti was one of the more vigorous and energetic rulers in Egyptian history. If you are familiar with movie versions of the Moses story you have seen him on the screen. Seti is the king who was Moses’ foster father. The head of his mummy is one of the best-preserved ever found.

- King Ra-Hotep’s funeral mask is based on the mask found on the mummy of the boy-king Tutankhamun-by far the most beautiful such mask ever found. The features of Ra-Hotep’s mask are based on the more mature features of the gold mask of a later monarch, King Psusennes I-the only other royal mask ever found that even comes close to King Tut’s in beauty. King Tut’s mask (and Ra-Hotep’s) is inlaid with opaque colored glass and semiprecious stones-reddish carnelian, light blue-green amazonite, dark blue lapis-lazuli. The eyes are a whitish form of the common mineral quartz, with pupils made of a black volcanic glass called obsidian.

- The top of Ra-Hotep’s coffin contains a mixture of features and decoration from the three coffins of King Tutankhamun. In one hand the king holds a shepherd’s crook, the symbol of his role as protector and guide of his people. The other hand holds a flail, an instrument used by farmers to beat piles of grain in order to loosen the papery (and inedible) husk. In the hands of the king, the flail is a symbol of his right to punish evildoers and enemies of the kingdom. The crossed wings are symbols of protection. They belong to the goddess Isis, queen of the underworld and mistress of protective magic.

King Seti I, the model for your mummy of King Ra-Hotep.
Ra-Hotep’s sarcophagus is largely modeled on that of a king named Horemheb. Horemheb was a general under Akhenaten and Tutankhamun. He made himself king only a few years after Tutankhamun’s death. He ruled for 28 years, during which time he restored the power of the priests of Amon.

At the corners of the sarcophagus, spreading their protective wings, stand four goddesses. They can be distinguished by their headdresses. Isis, the wife of Osiris, lord of the Underworld, and the mother of Horus, god of kingship, is the goddess whose headdress that looks like a stand with a flattened offering bowl on top. Neith, goddess of wisdom and battle, has a headdress made of two crossed bows. Finally, the goddess Selket (or Serkis), whose magic protects against creatures with poisonous bites and stings, has a scorpion headdress.

On the sides of the sarcophagus are figures of the king himself and of the jackal-headed (or dog headed) god Anubis. At the top of one panel are the magical, protective eyes of the god Horus, which may also permit the spirit of the mummy inside the coffin to look out. According to Egyptian myth, one or both eyes were torn out during Horus’s struggle with the evil god Set. Through the magic of Horus’s mother Isis (or of the god Thoth, or of the goddess Hathor, depending on which version you read), Horus regained his sight. But ever after, the eye (or eyes) that he lost became a symbol of protection and healing. Horus was usually shown with the head of a falcon (see his picture on p. 16), and the lines under the eyes represent the markings on a falcon’s head. Below the eyes is a magical door through which the spirit of the king may pass in and out of the sarcophagus.

The top of Ra-Hotep’s sarcophagus is modeled after that of King Siptah (whose mummy is pictured at the beginning of this book.) It shows the pharaoh as the mummy-god Osiris, with a crown made of two feathers and a sun-disk. At Ra-Hotep’s feet is his name in Egyptian writing, inside the oval symbol (called a cartouche, pronounced car-TOOSH) that always surrounds the name of a king.
APPENDIX A: TIPS ON CASTING

What is Plaster?

Plaster is a dried, ground-up rock. Most of it is a mineral gypsum. In its natural state, gypsum rock contains water as a part of its chemical structure. When ground up and heated so that this water is driven off, it becomes casting plaster—the casting compound in your kit. Add water, and it turns to rock again.

Plaster has been used for a long time. The Egyptians used it to cover the stone walls of their tombs and temples. The famous and beautiful tomb paintings of Egypt were done on plaster walls.

Plaster is an unusual substance. If you haven’t used it before, you need to know what to expect when you cast your mummies.

Mixing, Pouring, Setting, and Drying

When you add powdered plaster to water, the mixture is like cream. After several minutes it starts to thicken. You must get it into a mold before it becomes too thick to pour. Shortly after, it becomes solid. This process is called setting.

Although the casting is solid, it is not dry and it is not strong either—it is weak and crumbly. This is because the plaster still contains the same amount of water that it did when it was like cream. Only about 1/5 of the water has gone into the structure of the rock itself. The rest is just extra. It needs to dry out, and that can take a day or two.

Dry plaster is more than 7 times harder and stronger than plaster that has just set. But it doesn’t start to gain strength until it is more than 90% dry. Plaster that is only 80% dry is almost as weak as plaster that has just set.

So in general, be very careful when you handle your still-wet plaster casts.

How can you tell when plaster is dry? It will feel hard, and it will feel damp. Plaster that is not fully dry feels slightly damp and cooler than room temperature.

Preparations

The best place to make a casting is a kitchen or laundry room counter, near a sink. Before you start to cast anything in your kit, you need to get together the following things:

- Newspapers. Spread several thicknesses of newspaper where you are going to work. Plaster casting is messy. Make sure any spills get on the newspaper, not on the floor, or on a rug, or on furniture.
- Water from the sink
- A mixing bowl. You’ll use it to mix the plaster and water. You can use a cereal bowl, a plastic container, or anything similar.
- Kitchen measuring spoons. They should include a tablespoon and a teaspoon.
- Metal measuring cups. The 1/2 cup size is most useful.
- A tablespoon (one you eat with, not a measuring spoon.) You’ll use it to mix the plaster and water. You’ll also use it to spoon the plaster into your molds.
- A sheet of writing paper. You’ll measure out the correct amount of plaster onto the sheet. Then you’ll fold the sheet and pour the plaster into the water.
- Paper towels. You’ll use them to clean up any spills and messes. You’ll also use them to wipe out your mixing bowl after you have made a casting.
- A trash can with a liner.

Mixing and Casting Plaster

When you mix plaster, follow these rules:
- Pour the correct amount of water into the mixing bowl.
- Measure out the correct amount of plaster onto the sheet of paper. Then crease the paper and slowly pour the plaster into the water.
- Always pour the plaster into the water, not vice versa.
- Pour slowly and evenly. Don’t just dump all the plaster into the water.
- Mix by stirring with your tablespoon as you pour.
- Mix well. Don’t leave lumps or dry clumps of powder. But don’t mix too long, or the plaster will start to set.
- Pour or spoon the plaster into the mold while it is still runny.
- Make sure the plaster fills all parts of the mold. It tends to pull away from mold corners and edges, so smooth or spoon plaster into these areas.
- Let the plaster set overnight before you remove it from the mold.
- When you remove the casting from the mold; don’t be rough. If the casting doesn’t come out easily, stretching the plastic around the edges of the mold will help loosen it. If you’re careful, you won’t damage the mold. But if all else fails, make a cut in the mold and tear it apart.
- Set the casting in a warm place to dry.

Cleanup

- Clean up immediately after you have poured the plaster into the mold.
  - Do not pour the remaining plaster down the drain! It might clog the drain pipes! Use paper towels to wipe as much plaster as you can from your spoon and from out of the casting bowl. Throw the towels in the trash.
- Wash the remaining plaster from the spoon and the bowl. Use plenty of water, so the plaster doesn’t clog the drain.
APPENDIX B: TIPS ON PAINTING

Preparations

Before you start to paint the items in your mummy kit, you need to get together the following things:
- **Newspapers.** Spread several thicknesses of newspaper where you are going to work. Painting is messy. Make sure any spills get on the newspaper, not on the floor, or on a rug, or on furniture.
- **A cup of water.** A disposable paper cup is good. Fill it half full with water. You’ll use it to clean your brushes. Change the water often.
- **Paper towels.** You’ll use them to wipe your brushes on. You’ll also use them when you paint your mummies.
- **Something to mix paint on.** This can be a flat piece of plastic, a stiff piece of cardboard covered with aluminum foil, or something similar that doesn’t absorb water. This is called a *palette*.

Paints

The paints that come with your kit are the kind called **acrylics.** They can be thinned with water. They dry fast. When they are fully dry, water won’t wash them off.

The tops and bottoms of your paint pots are connected by strips of plastic. We suggest that you cut the plastic strips that connect the tops. Then you can open and close your paints one at a time.

All colors you need can be mixed with the paints in your kit. The directions below and on the Painting Guide will tell you what to do.

Color Mixing

You will have to mix paints to get most of the colors you need. The directions in each Activity and on the Painting Guide will tell you which paints to mix. Use the brush to transfer paint from the paint pots to the palette.

Use the Painting Guide to guide you in mixing and in painting your mummy, mask, and mummy coffin.

Making Sure You Have Enough Paint

**You must conserve your paint if you are to have enough!**
- Mix paint a little at a time. If you mix too much, it will dry on your palette.
- When you mix paint, always take the light-color paint out of the pots first.
- Mix a little water with the paint—but not too much, or the paint will get streaky.
If you need more paints, you can find them at an art store. Take your old paints to the store so you can get the correct colors:

- Snow (white)
- Red
- Yellow
- Royal Blue
- Burnt Amber (brown)

**Erasing Mistakes**

To remove small painting mistakes on plastic, like the mask and coffin, use your fingernail, or a wet toothpick, or a cotton swab. You can remove the paint even after it has dried-if you don’t wait too long.

To remove small painting mistakes on plaster, like your mummy casting, just let the paint dry, and paint over your mistakes.

**Keeping Your Paintbrush Clean**

Acrylic paints dry fast. But when they are dry, it’s hard to get them off your paintbrush. So be sure to rinse your brush well and often! Rinse it immediately after each use, before the paint has a chance to dry. Be especially careful to get the paint out of the base of the brush, near the handle. Keep the brush clean whenever you are not using it.