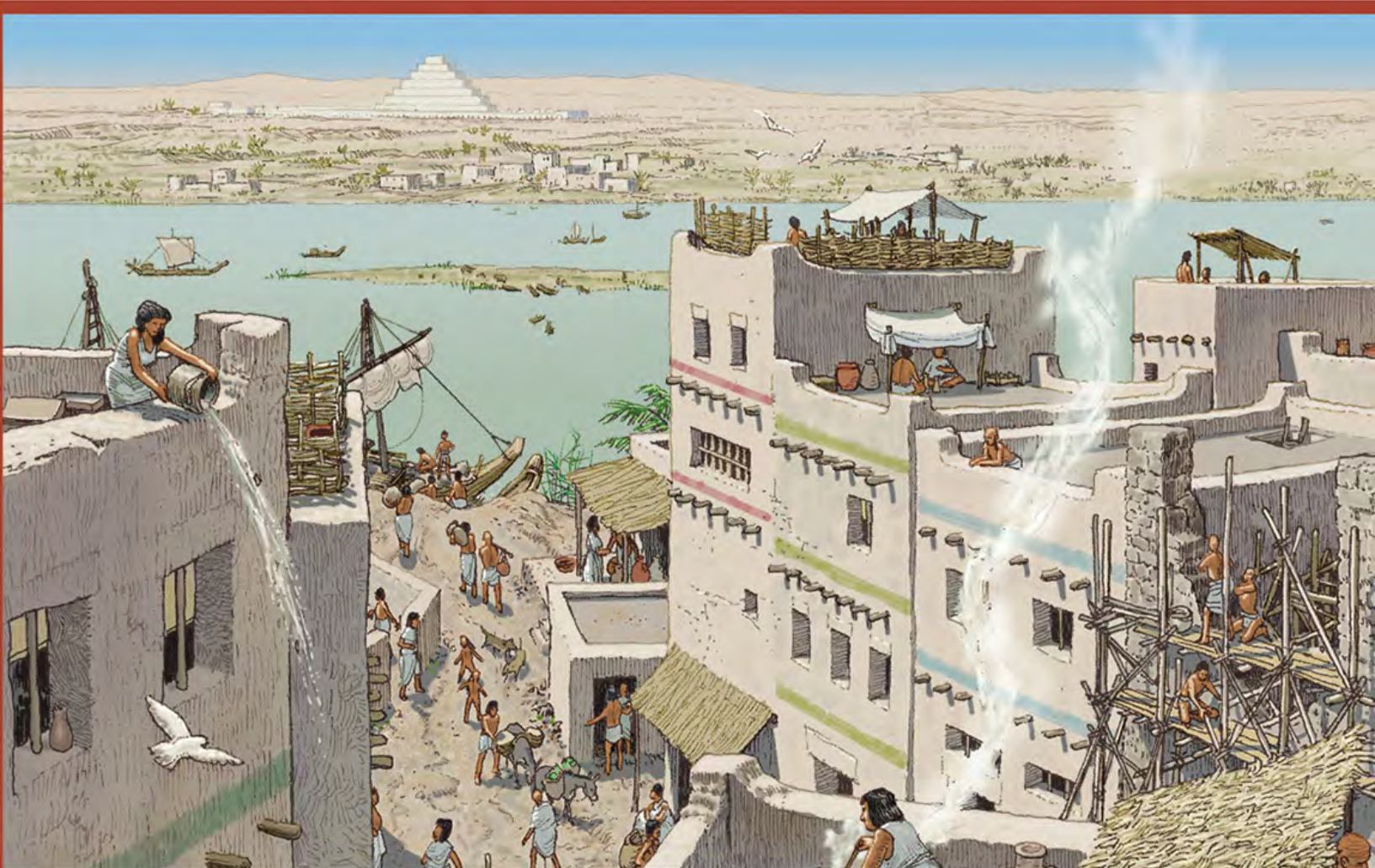


LIVING IN THE



ANCIENT WORLD

# LIVING IN ANCIENT EGYPT



Series Consultant Editor: **Norman Bancroft Hunt**

# LIVING IN... **ANCIENT EGYPT**





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 **CHELSEA HOUSE**  
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## LIVING IN ANCIENT EGYPT

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# Place in History





## More Than Pyramids and Sphinxes

The great temples, pyramids, and sphinxes are only the most obvious creations of a civilization that lasted for more than 3000 years—longer than any other. While it is difficult to separate ancient Egypt from the grandeur of its monuments and the god-king pharaohs, it was the ordinary people of Egypt—constant and almost unchanging—who were the lifeblood of this great culture. By their efforts, Egypt became a land of plenty, justly and wisely governed. It was a society that allowed even the lowliest peasant to achieve status if he or she were smart enough. Perhaps most importantly, of all the ancient cultures, Egyptians were the most fun, as their numerous wall paintings show.

## Landscape and Climate

Fourteen thousand years ago, the rains which had made the tableland of northeast Africa lush failed. Animals became scarce, forcing the prehistoric Egyptians to leave the plains and descend into the lower Nile river valley. They abandoned the nomadic life of the hunter and settled down to farming.

Ancient Egyptians are members of the African or “Hamitic” branch of the Mediterranean race. The national character of the Egyptian has been dominated by the wide, placid Nile. Egypt is one of the strangest countries in the world. It’s almost 800 miles long from the last of the great cataracts, or waterfalls, of the Nubian frontier in the south to the Mediterranean, and yet nowhere is the fertile land more than five miles wide, except at the Delta. The length and narrowness of this strip should make it easy to attack and vulnerable to enemies, but Egypt is well protected by the awesome deserts on either side, which deter most invaders.

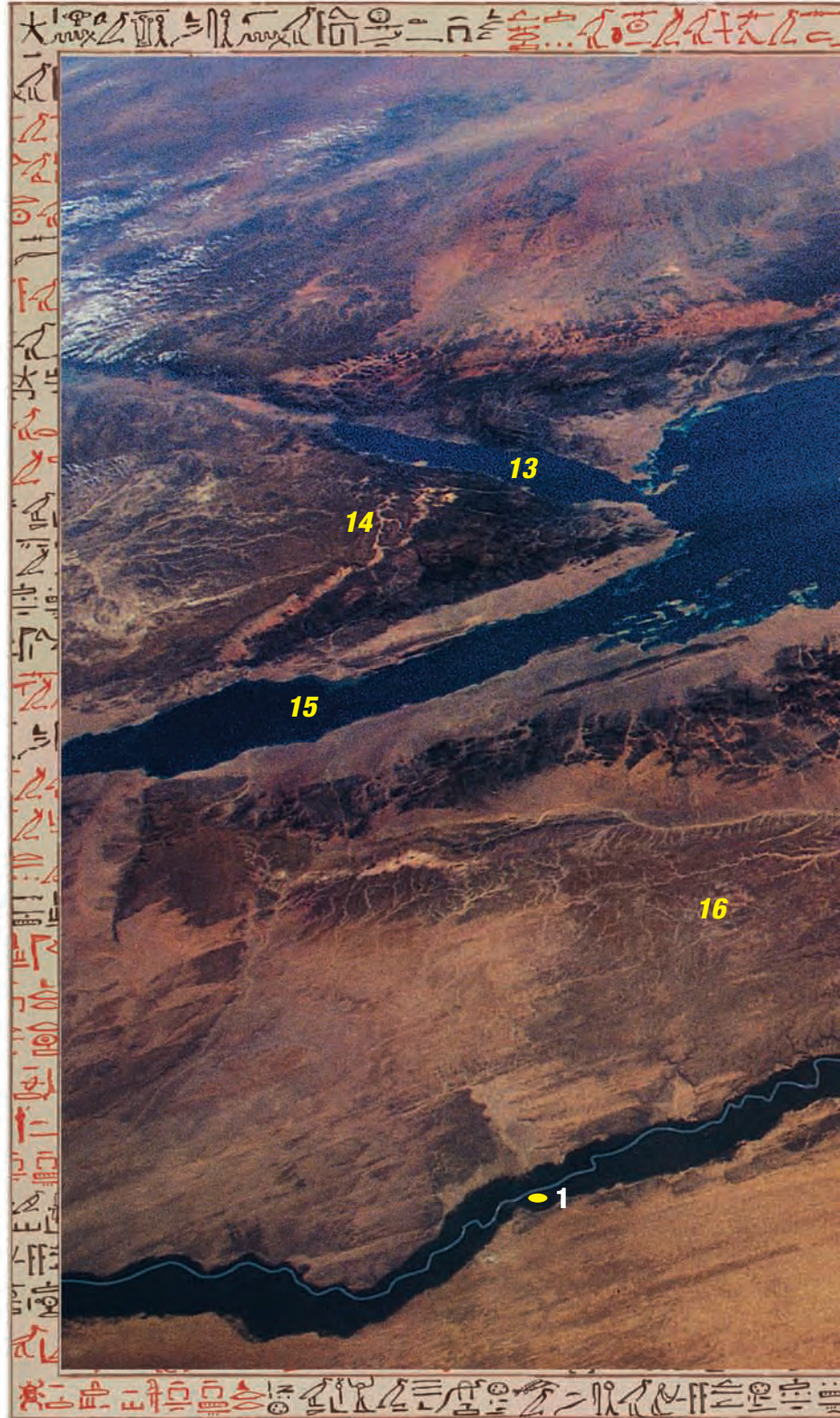
### The essential Nile

The country’s dimensions should also make it hard for the people to farm and raise crops to survive, but again the Egyptians know they are a special people, favorites of the gods. Every year the waters of the Nile flood the land between the hills on either side of the valley, leaving behind a rich silt that makes a paradise of the desert fringes.

In a land where rain almost never falls, the Nile is Egypt’s most important resource. It provides fish, waterfowl, mud for making bricks, reeds for building and making papyrus paper, and a central highway for the transport of goods and people from one end of the land to the other.

All this the gods provide, but they have made even the apparently barren desert a source of wealth. Stone for great buildings, precious stones for jewelry, gold, and copper—all come from the desert. In only one respect is Egypt lacking: there are few trees to provide good quality timber, so the Egyptians use reeds, stone, and brick.

An ancient oracle of the god Amun declares, “Egypt is the land watered by the Nile in its course; and those who dwell below the city of Elephantine and drink that river’s water are Egyptians.”

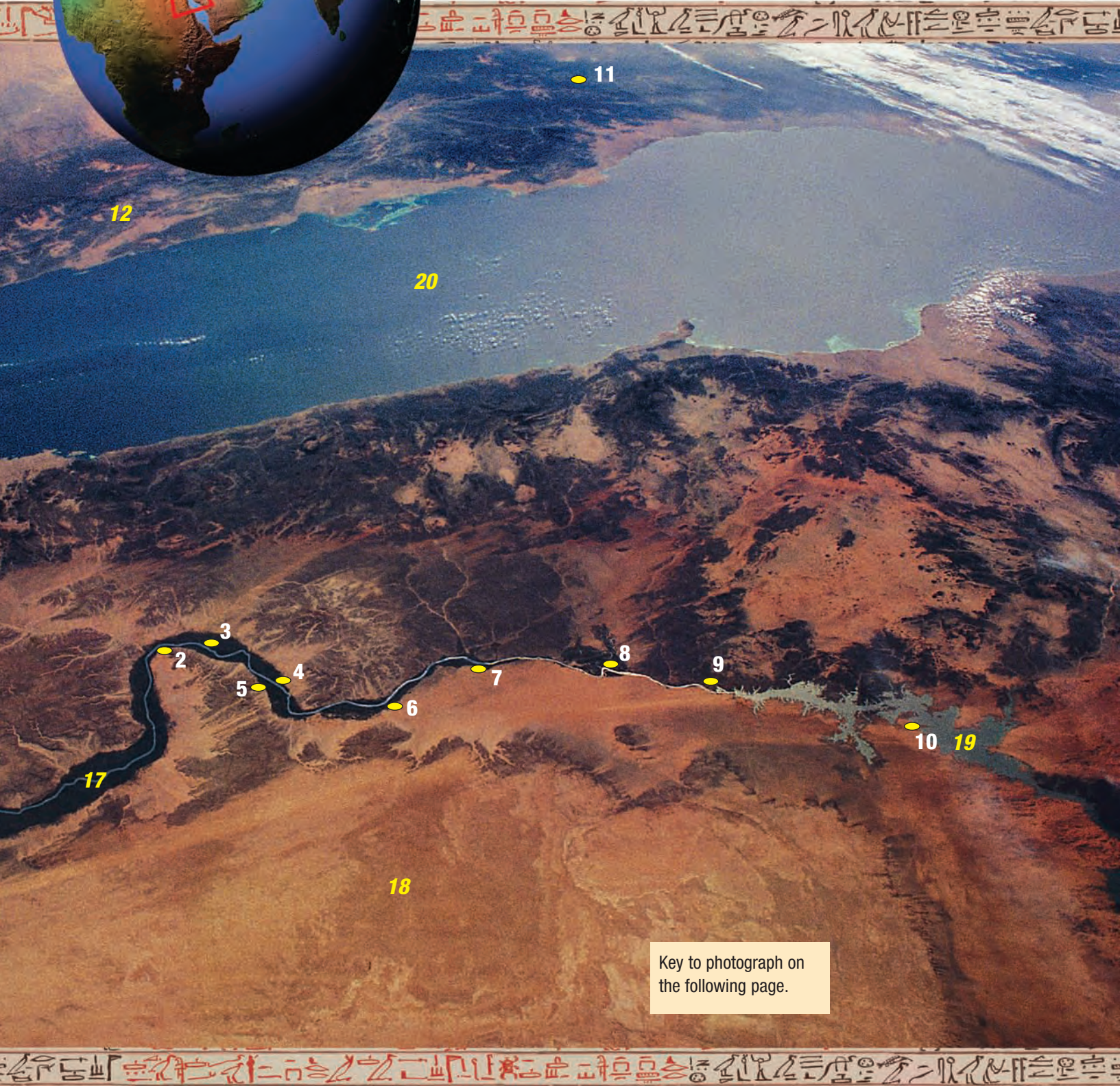
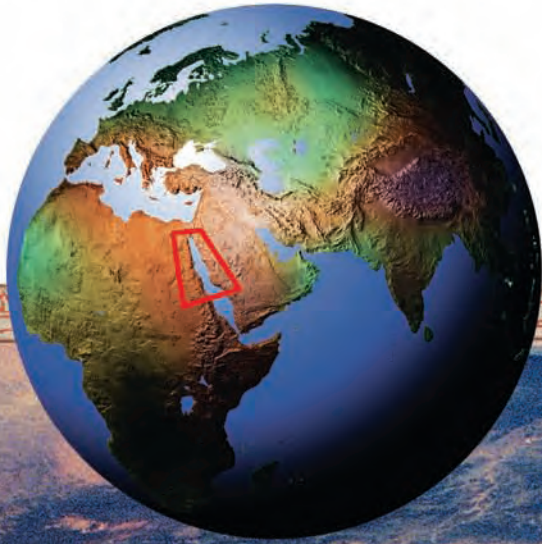


## INTRODUCTION

This photograph taken from space shows Upper Egypt, the Sinai Peninsula, and the Red Sea. The River Nile is marked by the dark

strip of vegetation as it flows from the south (right) to the north (right) to the north. Modern Lake Nasser can be seen at the far right of the picture.

In the picture's center the Nile makes a tight half-loop, where lies Thebes, once capital of the kingdom and site of the Valley of the Kings.



Key to photograph on the following page.

# A Brief History of Egypt, 3800–30 BCE

Ancient Egyptians are characterized by the virtues of gentleness and devotion to family, friends, king, and gods. Men born peasants could raise themselves to the highest offices in the land by their own efforts. And with an absolute belief that death was a better form of life, they were a cheerful people.

## Photograph key #1

1. Asyut
2. Dendera
3. Coptos (Qift)
4. Thebes (Luxor)
5. West Thebes (Necropolis and Valley of the Kings)
6. Esna
7. Edfu
8. Kom Ombo
9. Aswan and Philae
10. Abu Simbel
11. Medina

The period between 5000 and 3100 BCE is known as the Predynastic Period of Egypt. In this time three cultures evolved, one after the other, known by the names of the sites where they were first discovered: Badarian, Amratian (or Naqada I), and Gerzean (or Naqada II).

## Creation of the kingdom

By 3800 BCE decorated pottery was produced and the art of spinning and weaving linen cloth mastered. In the next 600 years metal tools and weapons of copper and then bronze came into widespread use. The 40 independent districts (*nomes*, governed by *nomarchs*) united into two

distinct states—the Kingdom of Upper Egypt (the Nile Valley) and the Kingdom of Lower Egypt (the Delta region).

Between 3200 and about 3100 the two kingdoms fought for control of the whole country. Ultimate victory went to Upper Egypt and led to unification of the two kingdoms under Menes, the first true Egyptian king, or pharaoh.

## Dynastic Egypt

From this point on Egypt's history is largely measured by the 31 dynasties of pharaohs who followed Menes, which are grouped into nine periods. Thanks to the Egyptian pictographic writing system known as

### The Egyptian pharaohs

Thanks to hieroglyphic inscriptions, archaeologists have managed to date most reigns. Some pharaohs ruled at the same time, some are known by the names the Greeks gave them, shown in brackets. The symbol † means a queen reigning as a king. All dates are BCE and follow those of Dr. William J. Murnane (1983). Even so, they are only approximate until 1570.

#### Archaic Period (3100–2686)

##### DYNASTY 1

7 or 8 kings starting with **Menes** (or Narmer, or “Scorpion King”)

##### DYNASTY 2

6 kings ending with Khasekhemwy

#### Old Kingdom (2686–2184)

##### DYNASTY 3

Sanakhte	2686–2668
Djoser	2668–2649
Sekhemkhet	2649–2643
Khaba	2643–2637
Huni	2637–2613

##### DYNASTY 4

Snefru	2613–2589
Khufu ( <i>Cheops</i> )	2589–2566
Djedefre	2566–2558
Khafre ( <i>Chephren</i> )	2558–2532
Menkaure ( <i>Mycerinus</i> )	2532–2504
Shepseskaf	2504–2500

##### DYNASTY 5

Userkaf	2498–2491
Sahure	2491–2477
Neferirkare	2477–2467
Shepseskare	2467–2460
Neferefre	2460–2453
Neuserre	2453–2422
Menkauhor	2422–2414
Djedkare	2414–2375
Unas	2375–2345

##### DYNASTY 6

Teti	2345–2333
Pepi I	2332–2283
Merenre	2283–2278
Pepi II	2278–2184
Nitocris †	2184–2182

#### First Intermediate Period

##### (2181–2040)

##### DYNASTIES 7 AND 8 (2181–2160)

Many kings who ruled only for short periods

##### DYNASTIES 9 AND 10 (2160–2040)

Herakleopolitan kings

#### Middle Kingdom (2040–1782)

An independent line of kings reigning at Thebes at the same time as the Herakleopolitan kings; later became rulers of all Egypt.

##### DYNASTY 11

Intef I, II, and III	2134–2060
Mentuhotep I	2060–2010
Mentuhotep II	2010–1998
Mentuhotep III	1998–1991

##### DYNASTY 12

Amenemhet I	1991–1962
Senusret I	1971–1926
Amenemhet II	1929–1895
Senusret II	1897–1878
Senusret III	1878–1841
Amenemhet III	1842–1797
Amenemhet IV	1798–1786
Sobeknefru †	1785–1782

#### Second Intermediate Period

##### (1782–1570)

##### DYNASTY 13 (1782–1650)

Some 70 “governors,” short reigns

##### DYNASTY 14

Breakaway kings ruling the Delta at the same time as Dynasty 13

##### DYNASTY 15 (1663–1555)

Hyksos kings including **Apophis** (Apepi I, 1585–1542)

##### DYNASTY 16 (1663–1555)

Minor Hyksos kings ruling at the same time as Dynasty 15

##### DYNASTY 17 (1663–1570)

15 Theban kings including Tao I, Tao II and Kamose (1573–1570)

#### New Kingdom (1570–1070)

##### DYNASTY 18

Ahmosé	1570–1546
Amenhotep I	1551–1524
Tuthmosis I	1524–1518
Tuthmosis II	1518–1504
Tuthmosis III	1504–1450
Hatshepsut †	1498–1483
Amenhotep II	1453–1419
Tuthmosis IV	1419–1386

hieroglyphic, we know the reigns of most pharaohs (though there is considerable disagreement between authorities). However, the Egyptians did not use vowels, which makes the modern spelling of names very variable (see page 56, “How hieroglyphs work”).

**The Hyksos**

For over 100 years, between 1663–1555 BCE, Egypt was invaded by the Hyksos. Little is known about the origins of these mysterious people, who made their capital at Avaris (Tell-el-Dab’a, in the northeast of the Delta). They were an Indo-European Semitic race who might even have been Hurrians. Eventually the Theban pharaohs drove them out, but after their expulsion Egypt was a far stronger country than it had been. Previously, isolation had discouraged cultural and technological development. Hyksos contributions included advanced bronze-working—especially in weaponry—new fruits and vegetables, and improvements in

pottery and linen arising from the introduction of the potter’s wheel and the vertical loom.

**The coming of the horse**

Above all, the Hyksos introduced Egypt to the horse and the horse-drawn chariot, an advance that allowed the army to range far and wide, eventually conquering much of Canaan, Israel, and Phoenicia in the period of the New Kingdom. At the battle of Kadesh (1275 BCE), this expansion was halted by the Hittites.




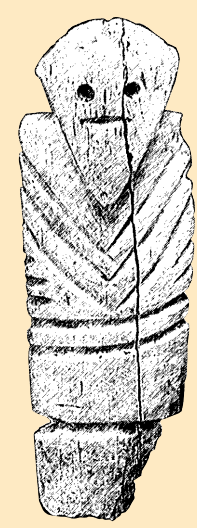
Egypt suffered further invasions by the Assyrians (680–27 BCE) and the Persians (525–404 and 343–323 BCE). Persian-ruled Egypt fell to Alexander the Great in 332. After his death his generals fought each other, and in 305 BCE his half-brother Ptolemy Lagus seized Egypt and founded his own dynasty. The Ptolemies ruled Egypt from their capital of Alexandria until the Romans annexed the country in 30 BCE.

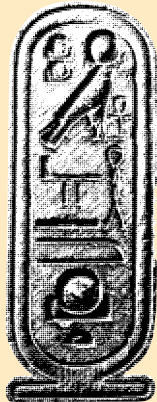
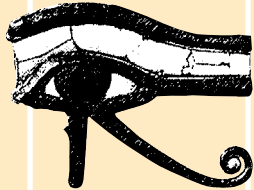
**Photograph key #2**

- 12. Hijaz coast of Arabia
- 13. Gulf of Aqaba
- 14. Sinai peninsula
- 15. Gulf of Suez
- 16. Eastern Desert
- 17. Fertile Nile valley (the river has been enhanced to make its course clearer).
- 18. Western Desert (Sahara Desert)
- 19. Lake Nasser
- 20. Red Sea

Amenhotep III	1386–1349	<b>Third Intermediate Period</b>	<b>DYNASTY 25 (NUBIAN KINGS)</b>	<b>DYNASTY 30</b>
Amenhotep IV (Akhenaten)	1350–1334	<b>(1069–525)</b>	Piankhi (Piye)	Nakhtnebef (Nectanebo I)
		<b>DYNASTY 21 (RULING AT TANIS)</b>	747–716	380–362
Smenkhkare	1336–1334	Smendes I	716–702	Djedhor (Teos)
Tutankhamun	1334–1325	1069–1043	702–690	362–360
Ay	1325–1321	Amenemnisu	690–664	Nakhtnebef (Nectanebo II)
Horemheb	1321–1293	1043–1039	664–656	360–343
		Psusennes I	<b>DYNASTY 26 (SAITE KINGS)</b>	<b>DYNASTY 31 (SECOND PERSIAN PERIOD)</b>
<b>DYNASTY 19</b>		993–984	Tanut-Amun (Tantamani)	Artaxerxes
Ramesses I	1293–1291	Amenemope	664–656	343–336
Seti I	1291–1278	Osorkon (the Elder)	664–610	336–332
Ramesses II	1279–1212	984–978	610–595	
Merenptah	1212–1202	Siamun	595–589	<b>Greek kings (332–30)</b>
Amenmesses	1202–1199	978–959	589–570	Alexander the Great
Seti II	1199–1193	959–945	570–526	332–323
Siptah	1193–1187	945–924	526–525	Philip Arrhidaeus
Twosret †	1187–1185	924–889		323–316
		Shoshenq I ( <i>Shishak I</i> )	<b>DYNASTY 27 (525–404)</b>	Alexander IV
<b>DYNASTY 20</b>		889–874	Persian kings including <b>Cambyses</b>	316–305
Setnakhte	1185–1182	874–850	(525–522), <b>Darius I</b> (521–486),	Ptolemy I
Ramesses III	1182–1151	850–825	and <b>Xerxes</b> (485–465)	305–284
Ramesses IV	1151–1145	825–773	<b>DYNASTY 28</b>	Ptolemy II
Ramesses V	1145–1141	773–749	Amyrtaeus	284–246
Ramesses VI	1141–1133	749–730	404–399	Ptolemy III
Ramesses VII	1133–1126	730–715	<b>DYNASTY 29</b>	246–222
Ramesses VIII	1133–1126	<b>DYNASTY 23 (RULING WITH 22)</b>	Nepherites I	Ptolemy IV
Ramesses IX	1126–1108	<b>DYNASTY 24 (RULING AT SAIS)</b>	399–393	222–205
Ramesses X	1108–1098	(RULING AT SAME TIME AS 22 AND 23)	Hakor (Achoris)	Ptolemy V
Ramesses XI	1098–1070	Tefnakht I	393–380	205–180
		727–720	380–379	Ptolemy VI
		Bakenrenef (Bocchoris)	379–370	180–164; 163–145
		720–715	370–360	Ptolemy VII
			360–350	145
			350–340	Ptolemy VIII
			340–330	170–163; 145–116
			330–320	Cleopatra III & Ptolemy IX
			320–310	116–107
			310–300	Cleopatra III & Ptolemy X
			300–290	107–88
			290–280	Ptolemy XI
			280–270	80
			270–260	Ptolemy XII
			260–250	80–58; 55–51
			250–240	Berenice IV
			240–230	58–55
			230–220	Cleopatra VII
			220–210	51–30

# Table of Major Dates

All dates BCE	5000	3100	3050	2575	2150
<p><b>PEOPLE AND CULTURE</b></p>	<ul style="list-style-type: none"> <li>• Three cultures dominate Upper Egypt—Badarian began c.5000; Amratian (Naqada I) began c.4000; Gerzean (Naqada II) began c.3500</li> <li>• Decorated pottery and crude figurines begin to appear, along with copper then bronze weapons and tools</li> </ul>	<ul style="list-style-type: none"> <li>• Earliest known hieroglyphic writing</li> </ul>  <p><i>Ka-aper, a high priest of Saqqara, c.2475.</i></p>	<ul style="list-style-type: none"> <li>• Foundation of Memphis in Lower Egypt as capital by first pharaoh of the 1st Dynasty, Hor-Aha, c.3050</li> <li>• First pyramid is built, the Step Pyramid of Djoser at Saqqara, c.2660</li> </ul>	<ul style="list-style-type: none"> <li>• Great pyramids are built at Meydum (c.2630) and Dashur (c.2600), culminating in those at Giza (c.2580–2500)</li> <li>• Tombs of the elite include the first extensive inscriptions</li> </ul>	<ul style="list-style-type: none"> <li>• A series of poor Nile floods leads to widespread famine that adds to the general chaos of this period</li> </ul> <p><i>A mummified crocodile.</i></p> 
<p><b>PERIODS AND DYNASTIES</b></p>	<p>PREDYNASTIC</p>  <p><i>Naqda decorated pottery jug, c.3450</i></p>		<p>EARLY DYNASTIC Dynasties 1–2</p>	<p>OLD KINGDOM Dynasties 3–6</p>	<p>1st INTERMEDIATE PERIOD Dynasties 7–10</p>
<p><b>MILITARY AND POLITICS</b></p>	 <p><i>Carved ivory cult figurine, Late Naqda, c.3750.</i></p>	<ul style="list-style-type: none"> <li>• Unification of Upper and Lower Egypt under King Menes or King Narmer (possibly the same person), 3100</li> </ul>	<ul style="list-style-type: none"> <li>• Via the Nile Delta region, cultural contact with Palestine is established</li> </ul> 	<ul style="list-style-type: none"> <li>• Decentralization of power puts power in hands of local governors during the 6th to 8th Dynasties, leading to anarchy and dissolution</li> </ul> <p><i>The “Narmer Palette” shows the king smiting his enemies, flanked above by two heads of the cow-goddess Hathor. On this face of the palette he wears the hedjet, or White Crown of Upper Egypt; on the other side he is shown wearing the deshret, or Red Crown of Lower Egypt, indicating that he is king of both countries.</i></p>	<ul style="list-style-type: none"> <li>• Egypt is divided into two smaller states ruled from Memphis in Lower Egypt and Thebes in Upper Egypt</li> <li>• The 4th pharaoh of the 11th Dynasty, Mentuhotep I reunites the two halves of Egypt, c.2040</li> </ul>

2040	1690	1570	1070	525	332	30
<ul style="list-style-type: none"> <li>• Mentuhotep I builds his great funerary temple complex on the west bank of the Nile at Thebes, c.2030 (later dwarfed by that of Hatshepsut)</li> <li>• Amenemhet I founds a new palace 20 miles south of Memphis</li> <li>• Classical Period of art and writing</li> </ul>	<ul style="list-style-type: none"> <li>• Hyksos introduce the horse and chariot to Egypt, as well as advanced bronze working and a range of new fruits and vegetables</li> </ul>	<ul style="list-style-type: none"> <li>• Thebes becomes capital of Egypt, 1570</li> <li>• Elaborate tombs are constructed in the Valley of the Kings</li> <li>• Akhenaten founds new capital of Akhetaten, destroyed after his death, 1334</li> <li>• Ramesses II builds more temples and monuments than any other pharaoh</li> </ul>	<ul style="list-style-type: none"> <li>• Homer extols wealth of the priests of Amun at Thebes in his <i>Iliad</i></li> </ul> 	<ul style="list-style-type: none"> <li>• Persian kings claim the Egyptian throne—Cambyses II, the would-be conquerors of Greece, Darius I and Xerxes, Artaxerxes I, Darius II, and Artaxerxes II</li> <li>• Darius I builds new temples and repairs older ones, c.490</li> </ul> <p><i>Cartouche of Akhenaten (Amenhotep IV).</i></p>	<ul style="list-style-type: none"> <li>• The new city of Alexandria is founded by Alexander the Great to be the capital of Egypt, 332</li> <li>• Ptolemy III begins construction of the Temple of Horus at Edfu, 237</li> <li>• Rosetta Stone is inscribed in three scripts (hieroglyphs, demotic, Greek), 196</li> <li>• Temple at Edfu is completed by Ptolemy XII, 58</li> </ul>	
<b>MIDDLE KINGDOM</b> Dynasties 11–12	<b>2nd INTERMEDIATE PERIOD</b> Dynasties 13–17 <b>Hyksos</b> 1663–1555	<b>NEW KINGDOM</b> Dynasties 18–20	<b>3rd INTERMEDIATE PERIOD</b> Dynasties 21–26	<b>LATE PERIOD</b> Dynasties 27–31 <b>Persians I &amp; 2</b> 525–404, 343–332	<b>GREEK PTOLEMAIC DYNASTY</b>	
<ul style="list-style-type: none"> <li>• Egypt conquers Lower Nubia under Senusret I and III, c.1950 and 1890</li> <li>• Senusret III leads an expedition against Syria for plunder rather than conquest, c.1860–50</li> </ul> <p><i>Magical properties—the Eye of Horus, also known as the Eye of Osiris.</i></p> 	<ul style="list-style-type: none"> <li>• Middle Kingdom breaks up as a Semitic people called the Hyksos invades Lower Egypt (15th and 16th Dynasties). The 17th Dynasty rules from Thebes in Upper Egypt, with all dynasties overlapping</li> <li>• Kamose of Thebes marches south to attack the Hyksos, 1572; his son Ahmose I succeeds in driving the invaders from Egypt and reuniting the entire country</li> </ul>	<ul style="list-style-type: none"> <li>• Egyptian empire in the Middle East, as Thutmosis III conquers Palestine, Lebanon, and much of Syria, battling against Canaanites and Mitanni, 1504–1450</li> <li>• Akhenaten introduces monotheistic religion, 1350–34</li> <li>• Ramesses II wars against the Hittites at the battle of Kadesh, 1275. Both sides claim victory</li> <li>• Ramesses III destroys the invading Sea People, c.1160s</li> </ul>	<ul style="list-style-type: none"> <li>• High priests of Thebes evict the Ramessides and forge a ruling elite, 1080</li> <li>• Dynasty 21 rules in the north from Tanis, dividing Egypt again, 1069</li> <li>• Libyans take control of Lower Egypt under first of the 22nd Dynasty, Shoshenq I, 945</li> <li>• Shoshenq conquers kingdoms of Israel and Judah, 925</li> <li>• Nubians conquer Upper Egypt (Dynasty 25), 747–656</li> <li>• Assyria conquers Egypt, 671–64</li> </ul>	<ul style="list-style-type: none"> <li>• Achaemenid Persians conquer Egypt under Cambyses II, 525</li> <li>• Egypt regains independence, 359, but loses again to the Persians under Artaxerxes III, 343</li> <li>• Alexander the Great of Macedon attacks the Persian Empire and “liberates” Egypt, claiming the pharaoh’s throne for himself and his successors, 332</li> </ul>	<ul style="list-style-type: none"> <li>• Alexander’s general Ptolemy raises himself to the Egyptian throne as Ptolemy I Soter, 305</li> <li>• Dynastic struggles result in Ptolemy XII fleeing to Rome for protection, 58</li> <li>• Rome’s Pompey the Great restores Ptolemy XII, 55</li> <li>• His daughter Cleopatra comes to the throne, 51</li> <li>• After an affair with Julius Caesar, Cleopatra sides with Marc Antony; they lose the battle of Actium (31) to Octavian (Augustus) and Egypt becomes a Roman province, 30</li> </ul>	

## CHAPTER 1

# Nile—Giver of Life

## Hapi and the Waters of Life

Depending on where you live along the Nile, between June and September the river rises and floods the land—the inundation. This is a sign of the gods' favor, especially of Hapi who causes the annual flood. Without Hapi Egypt would die.

Two figures of Hapi at Elephantine, seen symbolically joining Upper and Lower Egypt and giving both the inundation. As the primary god of fertility because of the annual flood, Hapi is always depicted as having female breasts.

Hapi, also written Hep, or Hapr, lives in a cavern under the First Cataract (great waterfall) close to modern Aswan. This is the point at which the Nile rises out of the ground after flowing through the land of the dead and the heavens. It emerges between two mountains that lie between the islands of Abu (Elephantine) and Iat-Rek (Philae).

Hapi is a god of fertility—he provides water and the yearly inundation of the Nile. He is also Lord of the Fishes and Birds of the Marshes, which he provides to the Egyptians along with the Nile itself. The inundation is first seen at Elephantine by the end of June and it reaches its fullest swelling at Memphis and Heliopolis (now a suburb of Cairo) by September.

The Egyptians call the season of the inundation *akhet*, which is signified by the appearance above the night horizon of the star Sirius, representing the goddess Sopdet (or Sothis). When the priests see her they know that the gods Khnemu, Anqet, and Satet—guardians of the Nile's source—are measuring out the correct amount of life-bringing silt into the water, ready for Khnum, the ram-headed god of inundation, to release the flood into Hapi's care.

During the inundation, Egyptians throw offerings into the Nile at those places sacred to Hapi, who appears with his retinue of crocodile gods and frog goddesses. The people make their sacrifices in the hope that the inundation will not be too high nor too low. Too high and homes will be destroyed; too low and there will not be enough water for the fields, and famine will surely follow.

### Measuring the inundation

So important is this annual flood that priests of the temples along the river have developed a means of measuring the gradual rise to predict what kind of a year it will be, and the Nile's maximum height. There are three types of Nileometer—a series of steps (or sloping ramp of stone), a pillar, or a well. Nileometers are built on the side of temples facing the river, and are calibrated in cubits (see "Fact box").

The Nileometer that is held in supreme importance is sited on Elephantine Island near the First Cataract, which is also the home of Khnum. This is the place where the flood is first visible, and so its priests are the first to know the extent of the flood, and the first to know when it is slowing.

And so the Nile is the giver of life to Egypt and its people, and its annual inundation is the start of the new farming year.



**The margin of disaster**

To the ancient Egyptians, Hapi gives them the inundation, but the annual event is really due to the melting snow and heavy rains in the Ethiopian highlands, far to the south of Egypt. Huge quantities of water are sent down the river until it spills over its natural banks.

The water at Aswan usually rises 16.6 cubits (25 feet). A rise of only 2 cubits less brings hardship, and 3.3 cubits less (a total rise of 20 feet) means famine. A rise of 17.3 cubits (26 feet) will damage the irrigation canals, while one of 19.3 cubits (29 feet) can drown villages.

Nileometers, some of them covered, are essential at every temple and their indicator lines are regularly checked as the river rises, cubit by cubit.



**Fact box**

The Egyptian cubit is the length of a man's forearm, measured from the tip of the longest finger to the bent elbow, which is standardized at about 18 inches. A royal cubit is longer at 20.6 inches.

The Nile valley near Thebes, seen in the summer months (**top**) and during the inundation (**bottom**).



## The Farming Year—Akhet, the Inundation

Since the majority of Egyptians work on the land as farmers, the Nile is the most important feature in ordinary people's lives. And because everyone in the country, from low- to high-born, depends on the food the farmers grow, every Egyptian relies on the annual inundation of the Nile.



When the Aswan High Dam went into operation in 1971, it stopped the annual inundation of the Nile and transformed the character of Egypt forever. This photograph was taken in 1950, and shows what it must have been like for the ancient Egyptians when the Nile waters covered the land of the valley.

The ancient Egyptian calendar is slightly out of step with the solar and lunar year, and so over time the Nile's flooding may not actually take place during the season of *akhet*. This is why Sopdet, the star Sirius, is so important—her appearance heralds the flood more accurately than the official Egyptian seasons.

The time between mid-July and late-September when the Nile floods the land is the inundation season. It is followed by *peret*, the growing season, which lasts from mid-November to mid-March when the waters retreat and leave rich soil to allow farming. March and April are the two months of *shemu*, the harvesting season, and lead to the summer that brings extreme, dry heat.

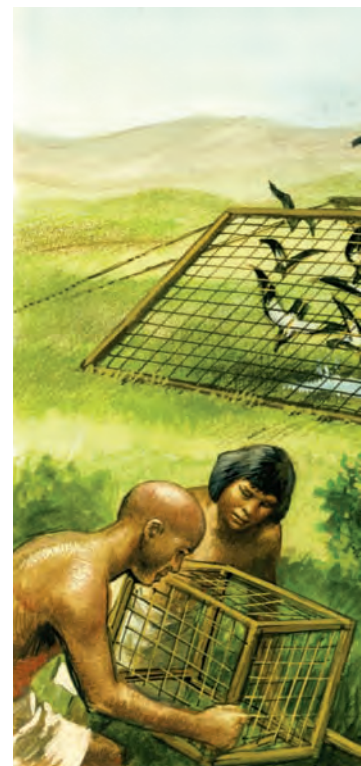
These and the following six pages show what a farming family's life is like in these different times of the year.

### The inundation season

In July the waters of the Nile rise until all the land beside the river is covered, so the farmers are unable to work in the fields. Wealthier landowners can afford to relax now, but for most Egyptians, the inundation is the time to do other tasks. Some must mend their agricultural tools or make new ones to replace those that have worn out.

Others go out to catch wildfowl in the marshes enlarged by the flood or go fishing to feed their families. If they catch more than they can eat, they sell the surplus in a local market.

But most have been called up to work on a royal building project or to help with mining or stone quarrying (see pages 62–63). These workers are not treated as slaves, but receive a fair wage for their labor in the form of clothing and food.



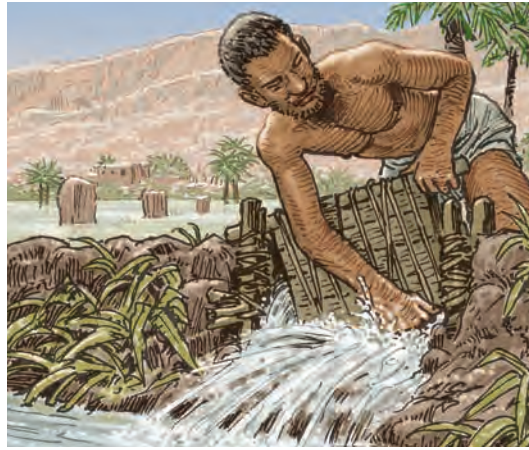
### No stealing land

The farmland bordering the Nile is neatly parceled out, with boundaries marked by special, tall stones. During the inundation, when the land is hidden beneath the waters, these marker stones stick up above the flood level and help to identify the borders of each farmer's field. A dishonest farmer might try to cheat by sneaking out to move the stones and steal some land from his neighbor. But this is considered one of the worst sins an Egyptian can commit, and should he be caught his punishment will be very severe; he might even be executed.

### Maintaining the dikes

At the height of the floods, usually about mid-August, each farmer paddles a rowboat around his land and closes the vents in the surrounding dikes. This prevents the floodwater from receding too fast and sweeping away the precious, fertile silt that has been deposited. During late October, the vents are opened again to let the remaining water—which by now has turned brackish through evaporation—escape into the river.

The farmer's first task on the sodden land is to repair any flood damage to the dikes and irrigation canals. Soon, the land will be ready for the growing season.



A farmer opens the vents around his field to let out the brackish water. The stones marking the edge of his field are behind him.

**Below:** A relief shows a man fishing with a net as a boat passes by. Behind him, another fisherman's line has several hooks.



**Left:** Fowlers operate a “clap-net” in the marshes. Two halves of the net are spread out on either side of a small pool, which has been baited. Their bases are hinged by staples pushed into the ground. Five men hold the draw rope and squat down out of sight. A look-out wearing a cap shaped like a duck warns when the birds land. The men pull on the rope and snap the wings of the net shut over the trapped birds.

## The Farming Year—Peret, the Growing Season

The conservatism and lack of inventiveness of the ancient Egyptian is well illustrated in his continued use of the crude agricultural and irrigation implements of his remote ancestors.

Once the river water has completely drained away and the ground is firm enough to walk over, the farmers start plowing the fields. First, peasants armed with digging sticks break up the larger clods of earth, then oxen or long-horned African cows are used to pull the plow.

### Plowing and sowing

Thanks to the inundation, the ground is usually soft and easily plowed, but the farmer does the job twice to make sure all the valuable flood-silt is well mixed into the previous year's soil. The heavy hooves of the draft animals are as important in this

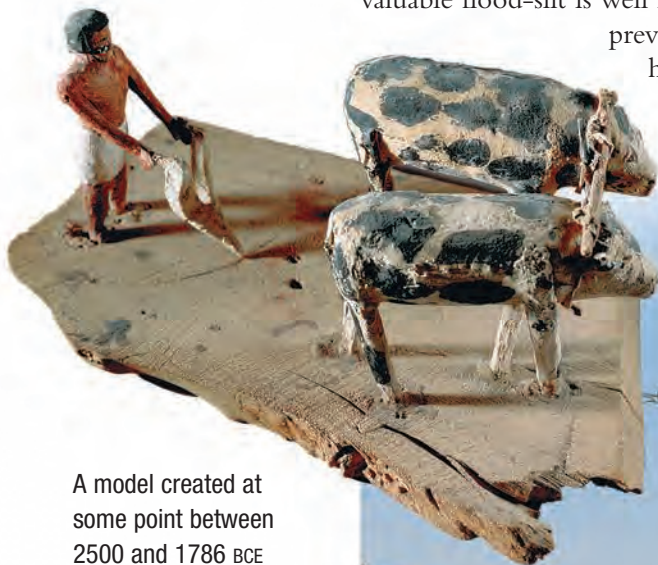
operation as the plows themselves.

Sowers scattering seed by hand from reed baskets follow the plow. Lured on from in front by a handful of grain and urged on from behind by the twisted rope whips of the herdsman, sheep or goats are made to follow the sowers and tread the seeds into the soil with their hooves.

In the warmth of *akhet* season and the well watered earth, the green shoots spring up quickly. But with the sowing over, there is no rest for the farmers. During the growing season the fields need constant weeding with hoes. They must also protect the crops first from birds and then the larger plants from wandering cattle and even the occasional hungry hippopotamus.

### Watering the fields

The farmer's most important task, however, is to ensure a constant supply of water through irrigation. This is done using small canals set at right-angles to the Nile and fed by its waters. In turn these canals link to



A model created at some point between 2500 and 1786 BCE shows a man plowing with his two oxen.

Planting is a communal effort along the banks of the Nile, involving all ages. Note how the vegetation quickly dies away from the river edges.





smaller channels from which the water runs onto the fields through small vents, or sluice gates. When the land is much higher than the water level, the farmers use a Mesopotamian invention, the *shaduf* or well-sweep, to lift the water onto the field.

Fields used to raise vegetable crops rather than cereal grain are often split into smaller rectangular compartments, or basins, divided by low dikes. The basins and dikes help to control the flow of water taken from an irrigation canal. Water is allowed to flow

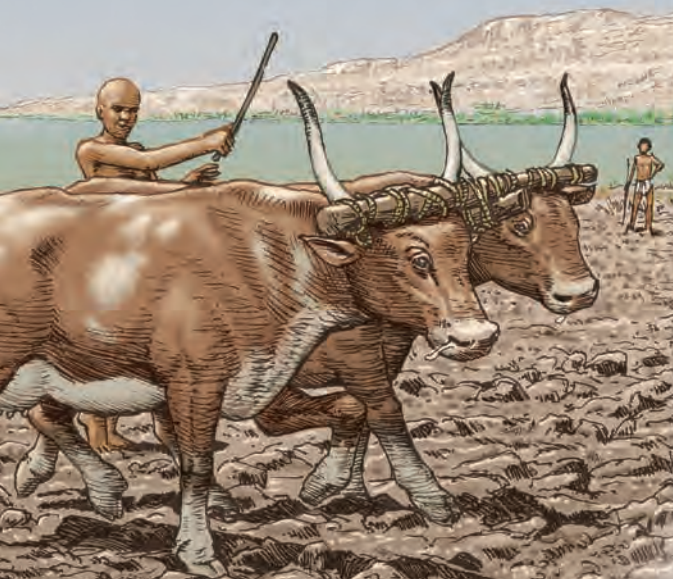
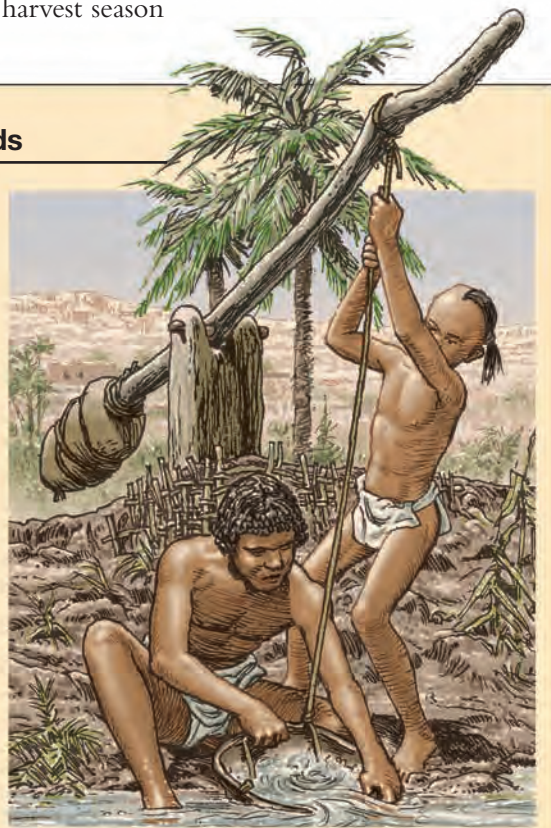
from one basin to another by making a breach in the dike, and then filling it in again when sufficient water has passed through to the next basin. In this way, various crops can be differently watered according to need.

As soon as the crops have ripened, in about mid-March, the harvest season begins.

Tomb wall paintings show laborers working in a field. Two men use sharpened digging sticks to loosen the soil, while a third follows, scattering seed from his basket.

### Irrigating the fields

The *shaduf* is a long wooden pole balanced on a crossbeam, with a rope and leather bucket at one end, and a heavy counterweight at the other. The farmer pulls down on the rope, lowering the bucket into the water until it fills, and then the counterweight raises the full bucket until the water can be emptied into a gully at the edge of the field.





## The Farming Year—Shemu, the Harvest Season

The harvest season is a short period of only two months from about March to the end of April. It is also the time for scribes to calculate the farmers' tax payments. The functions of a scribe are described on pages 54–55.

Although Egyptian farmers grow a variety of vegetables in small plots—onions, leeks, garlic, lettuce, radishes, cabbages, asparagus, cucumbers, lentils, peas, and beans—the main crop is grain. They raise three kinds of wheat, barley, and flax, a source of textile fiber and linseed oil. Because farmers pay part of their taxes in grain, they have to face the dreaded visit of the taxmen before they can begin harvesting their crops.

These officials calculate the probable yield of the crops and set the amount that has to be handed over. Government officials called scribes will have made copious notes at the time of planting, so the taxmen already know exactly what each farmer has grown, and what the yield from every field ought to be.

### The plentiful bounty

When the assessment is completed, the harvest begins. Some peasants cut the grain stalks just below the ear, using sickles with flint blades, while others gather the cut grain into reed baskets and carry them to specially prepared pans of hardened mud.

Here, cattle are driven over the ears of corn to separate the grain from the stalks, a process known as threshing. Women then winnow the corn, using wooden paddles to toss the grain into the air so that the husks (also called chaff) blow away.

Women and children bring food and drink out to the harvesters, and then pick up any ears of grain that have been missed by the men.



Tomb paintings of laborers in the field show cattle being used to thresh the grain and **(middle)** winnowing of the grain to remove the unwanted chaff. The stalks left in the fields and from the threshing floor will not be wasted. What is not used for animal feed goes to the mud fields, where it is used as a strengthening agent in making bricks (see page 28).



**Below:** A granary can store different varieties of grain in separate containers, or silos. The hatch at the bottom is slid up to give access to the grain. Scribes record the amount of grain harvested for taxation purposes.



### Giving thanks for the harvest

The harvest is a communal effort, both in the fields and at the threshing floor, and some landowners even hire musicians to play flutes in the fields while the peasants work. When all the grain has been brought in, the taxmen return to collect their due. What they leave is then carefully stored in beehive-shaped silos or smaller granaries.

A granary can store different varieties of grain in separate containers, each of which has a sliding hatch at the bottom. With silos, there are separate ones for each of the different types of grain.

At last, all the hard work in the hot sun is done, and even the lowliest peasant is allowed to relax for a few days while all of Egypt celebrates a festival in honor of Renenutet, the goddess of the harvest. Renenutet appears as a cobra, and her gaze can wither her enemies, but she also grants abundance to crops and livestock. And so the best yields of the harvest are dedicated to her.



### Food for the dead

One important form of tax on the harvest is the annual funerary banquet for a deceased master, a member of the governing elite (see pages 34–35).

A procession of the dead man's servants take the "raw materials" to his tomb in the cemetery, where a scribe notes down the items brought to the tomb chapel. These might include fresh beef, game, water fowls, vegetables, fruit, bread, beer, and flowers.

The mortuary priest accepts the servants' offerings and disposes of them. A small part is left in the tomb, the rest goes to the local temple, where priests consume some of the offerings and give out the remainder to the poor and needy.

## The Farming Year—the Hot Season

Toward the end of April, the desert heat becomes too extreme for work. So at the end of the harvest there is much to do in the fields before the soil grows too hard to dig.



The first task is to look after the vital irrigation channels. Any damage is repaired and new ones are dug. The main canals leading off the Nile will have become choked with weeds, and these need cleaning out to prevent the canals from clogging up.

Everyone has to pay a “labor tax” to the pharaoh, and for peasants the hot season work in the fields is considered to be a part of the tax. Wealthy Egyptians—like rich people in all societies—can hire peasants to do the labor for them.

### Repairs and relaxation

The *nomarch*, or governor of the district, sends out his official surveyors to check the correct position of the marker stones and field boundaries that may have been damaged or moved out of position. In the growing heat, tempers can fray and disputes over boundaries are common. If the surveyor is unable to satisfy both parties, he refers the

### Raising livestock

As the Nile reaches the Mediterranean Sea, it branches into numerous smaller channels, where various streams have cut their way through the deposit of silt that makes up the Delta region. The broad expanse of the Nile Delta in Lower Egypt makes excellent grazing land for cows.

Egyptians keep cattle to pull plows and sleds and for their meat, milk, and hides, which are prepared as leather. There are several different breeds—short horns, African long horns, hornless, and the humped-back zebu, which the Hyksos brought with them from Syria.

In Upper Egypt grazing is scarce, as all the fertile land is required for growing crops, and so cattle are raised and fed in pens. This fattens them up for the table and sacrificial offerings. Some are fattened up so much that they can hardly walk and have to

be transported on wheeled platforms to the temple precinct for ritual sacrifice.

Sheep and goats graze in Upper Egypt on the stubble of harvested fields and along the scrub of the desert fringes. They provide wool and hair for stuffing furnishing, as well as meat, milk, and hides. The sheep have curly horns, this imported variety has replaced the native straight-horned sheep.

Pork is considered to be an unclean meat, and it is forbidden to eat its flesh—a law the priests keep, but Egyptians enjoy the taste and many pigs are reared, especially in the Delta where there is more room for them to root about (see “The pork taboo” on page 25).

Every year herdsmen bring in the cattle to pens, where their lord’s scribes record how much his stock is worth.



matter to the law court (*see pages 38–39*).

When the temperature grows too hot for work in the open, the farmers enjoy a brief rest before the inundation season begins. Animal herders are an exception and they have to work all the time.

The hot season is also when peasants and farmers can make repairs to their homes. As soon as the inundation starts, they will almost certainly be called up for royal service to work on the pharaoh's tomb or temples and be away from their homes until the next growing season.

During the hot weeks of high summer, the laborers have time to themselves. Some need to repair their houses, for others it is a time to sit back and relax.

### Preparing for the inundation

As the end of June comes, the priests at Elephantine begin scanning the night skies for the first sighting of Sopdet, herald of the rising waters. As the inundation starts the priests take daily readings to determine how high the Nile will rise. Messengers are sent downriver with the prediction.

The pharaoh must now decide either to release grain or ration it, depending on the prediction. If it looks as though the Nile is going to rise too high, the people must be warned and given time to make arrangements to protect or flee from their homes. As soon as the priests in the religious precincts nearest to the river bank notice the Nile's water level rising against their Nileometers, everyone knows that the new Egyptian year has begun.



## What the Egyptians Eat

The fertile bounty that the Nile brings to the soil means that Egyptians have a rich and varied diet. In fact, from peasant to lord, the Egyptians eat better than any other ancient society.

Wheat grown in high quantities makes bread the main food in the Egyptian diet—even the wealthiest families consider a meal incomplete without it. There are more than 40 varieties of bread and pastries available, depending on the type of flour used and other ingredients added. Grinding the corn is hard work, usually done by women using two stones called saddle querns.

Since the grinding is done outside, grit and other foreign bodies find their way into the bread. These impurities can cause severe abrasion of the teeth—even the pharaoh suffers from this problem.

### Baking bread

Dough is usually cooked in the shape of a pancake, but long or round rolls are also popular, and bread in the shape of a figure is often baked for ceremonial purposes. Sometimes thick loaves are made with a hollow center that is then filled with beans or vegetables, and a flat bread might have raised edges in order to hold eggs or other fillings.

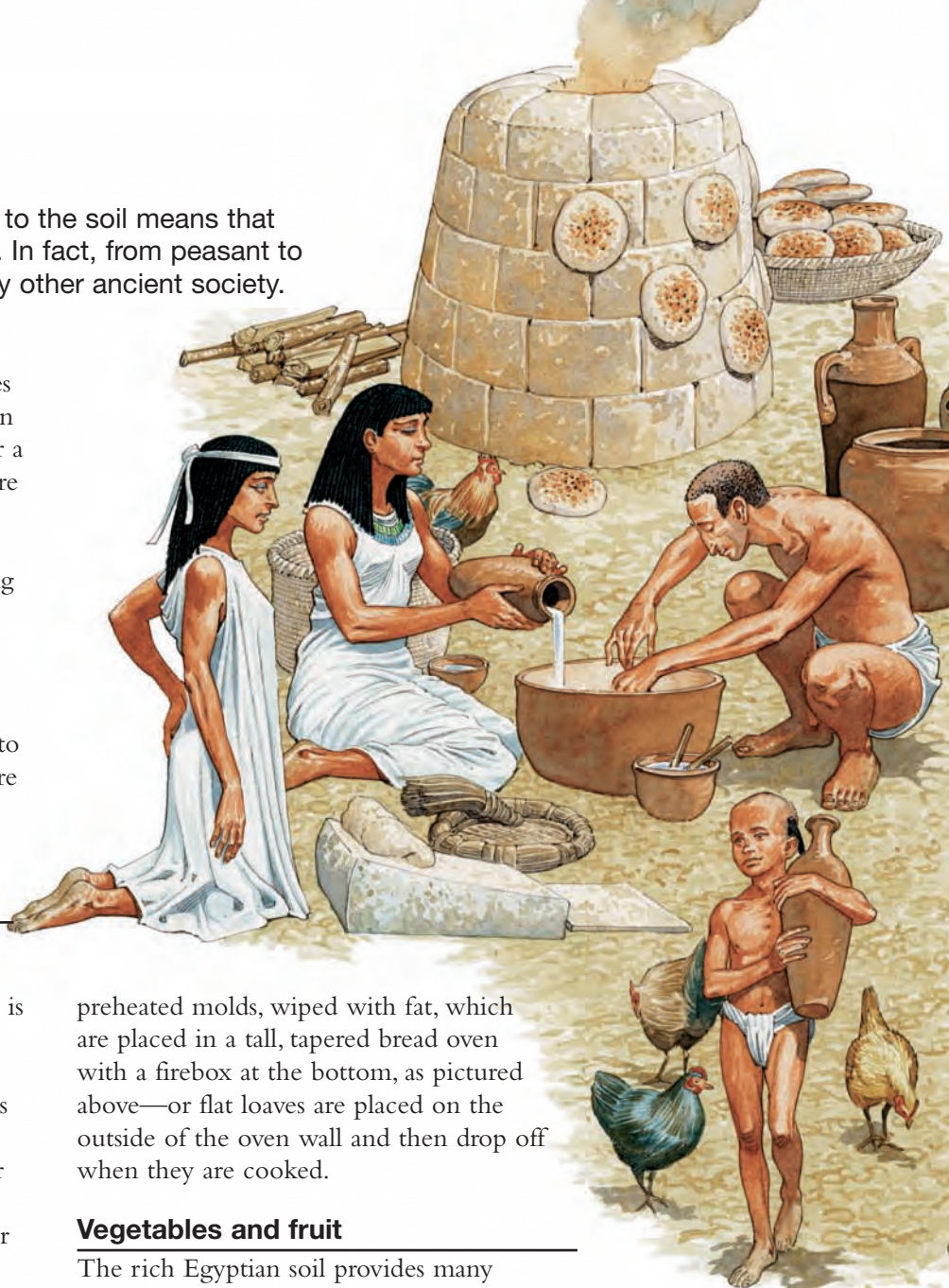
Many ingredients are employed to flavor the bread, such as butter, oil, and eggs, or coriander seeds, honey, various herbs, and fruits such as dates. Grape yeast is added to some recipes to make the dough rise (leaven), but unleavened bread is more common.

After the dough has been kneaded it is placed in a baking mold and cooked over an open fire. More sophisticated homes use

preheated molds, wiped with fat, which are placed in a tall, tapered bread oven with a firebox at the bottom, as pictured above—or flat loaves are placed on the outside of the oven wall and then drop off when they are cooked.

### Vegetables and fruit

The rich Egyptian soil provides many vegetables for poor and rich alike. Meals can include legumes—beans, chickpeas, lentils, peas—onions, garlic, celery, leeks, lettuce, radishes, and cucumbers. Grapes and dates are eaten fresh or dried. Then there are figs, pomegranates, watermelons, and the gingery-flavored fruit of the dôm palm.



**Right:** Tomb painting of a flock of geese being herded into pens.



**Far right:** Loaves of mummified bread found at Deir el Medina in the tomb of royal architect Kha from the 18th Dynasty.





### The “kitchen” in operation

Food is prepared by baking, boiling, stewing, frying, grilling, or roasting. Most cooking is done in earthenware pots or pans, which stand on a tripod over a brazier, fueled by wood. The fire is lit using a fire-drill that creates heat through friction.

Egyptians cook in the open air to avoid smoke and cooking smells inside the house and the risk of starting a fire. Some cook on the roof of their house.

### Meat, fish, and poultry

The Nile teems with fish, which the Egyptians enjoy fresh, dried, or salted, and they are cheap enough for all to eat regularly. The poor can also sometimes afford wildfowl—geese, ducks, quails, and cranes being most popular, as well as domesticated poultry. However, because of its cost, meat appears mostly on the tables of the rich. Common people usually only have meat during a festival, when a sheep or goat might be slaughtered.

For those who can afford it, beef is the most popular meat, followed by wild game such as antelope, ibex, gazelle, and deer.

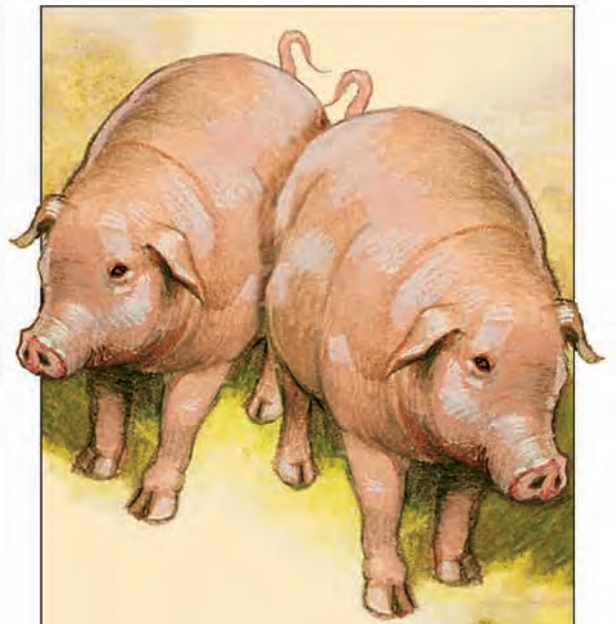
### Dairy products, fats, and oils

Milk, cheese, and butter are not everyday products, but all are sometimes used to make soups and sauces. There are a number of different oils and fats used in cooking—beef and goat fats, and oils obtained from horse-radish, safflower, and castor-oil plants, and sesame, flax, and radish seeds. Oil and fat is mostly used for frying meat and vegetables, though food is also cooked in milk or butter.

### Seasonings and sweeteners

Egyptians do not use sea salt, because of its connection to the evil god Seth (see “*The pork taboo*”), but salt from the Siwa Oasis is available to add to cooking or for salting fish and some meats. Spices used include aniseed, cinnamon, coriander, cumin, dill, fennel, fenugreek, marjoram, mustard, thyme, and parsley. Olives, introduced by the Hyksos, are rarely used in cooking.

Honey is used to sweeten food—at least by the rich, since it is too expensive for the poor, who rely on various fruits as sweeteners, the most popular being dates.



### The pork taboo

The pig was a beast of the god Seth, the evil brother of Osiris (see page 75), and therefore considered unclean in Upper Egypt. Written evidence suggests that pork was popular in Lower Egypt, but when the two kingdoms were united by the kings of Upper Egypt, the ban on eating pork was enforced throughout the land, and was only relaxed much later.

A similar taboo was enforced on eating bottom-feeding fish, which have something in common with pigs—both creatures fed on muck and human waste, either in the farmyard or on the river-bed, the Nile being Egypt’s main sewer. Perhaps this led to a natural revulsion for the meat, but if so, it was not an aversion held by everyone all the time.

It has been a long-held belief that uncured pork meat spoils more quickly than any other in hot conditions. In pre-refrigeration times, most cultures avoided eating fresh pork during the summer, since it was thought to cause stomach upsets. So the ancient Egyptian’s avoidance of pork probably had a practical purpose.

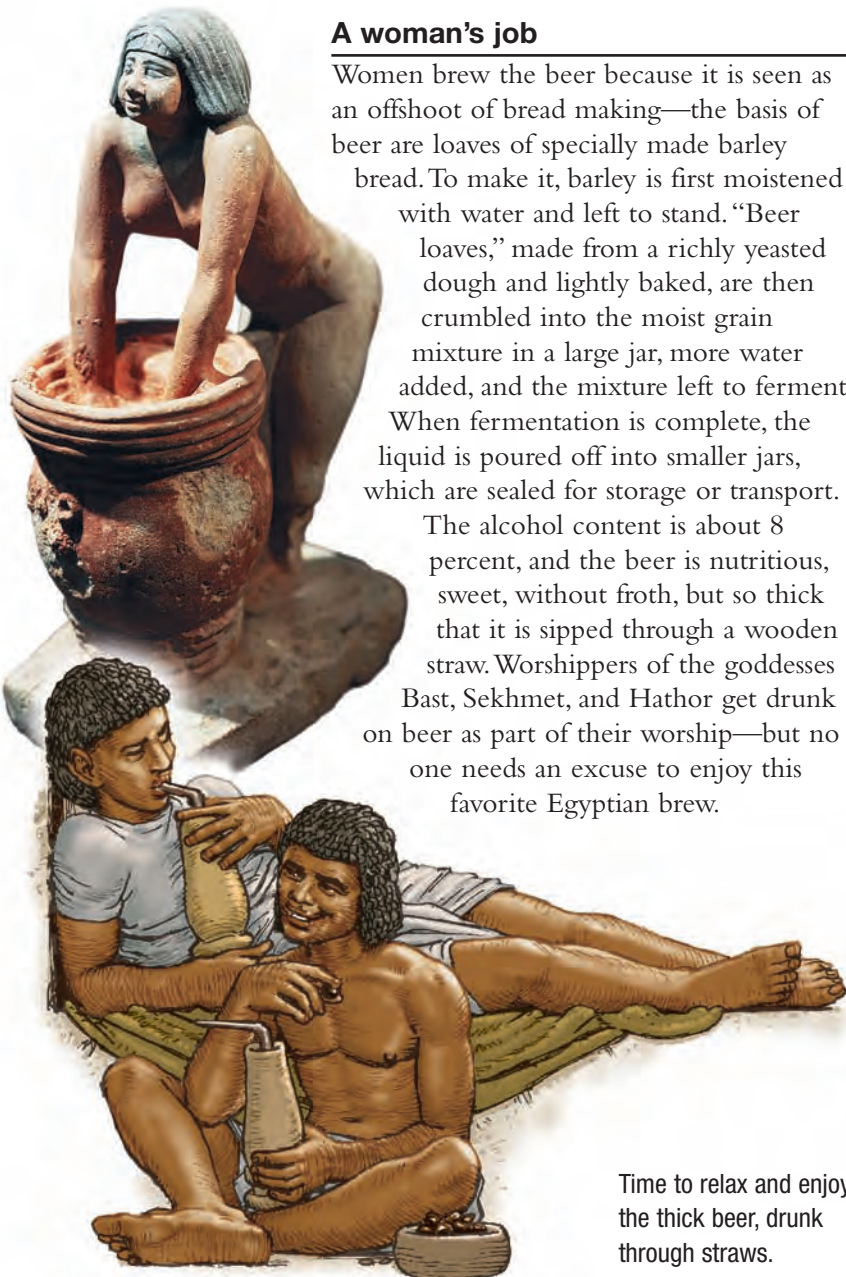
Images of pigs are rare in Egyptian art, but they were sacrificed to the moon and the burnt flesh eaten by the priests. Despite the modern Islamic prohibition on pork, pigs are still raised in the Nile Delta for consumption.



## What the Egyptians Drink

The Egyptians like beer and wine and, being the cheerful people they are, often drink it to excess, especially during religious festivals, for both forms of alcohol are acceptable offerings to the gods.

Brewing beer is a woman's job. This model made in about 2300 BCE shows a girl mixing "beer loaves" with water in a fermentation jar.



Much of the barley grown in Egypt is used to make beer, since its flour is not an acceptable ingredient in bread for eating. Beer is drunk by every class of society, by adults and children alike. Workmen on sacred and royal building programs are given beer three times a day as part of their pay, while a jar of beer and some bread is a customary homecoming for a schoolboy.

### A woman's job

Women brew the beer because it is seen as an offshoot of bread making—the basis of beer are loaves of specially made barley bread. To make it, barley is first moistened with water and left to stand. "Beer loaves," made from a richly yeasted dough and lightly baked, are then crumbled into the moist grain mixture in a large jar, more water added, and the mixture left to ferment. When fermentation is complete, the liquid is poured off into smaller jars, which are sealed for storage or transport. The alcohol content is about 8 percent, and the beer is nutritious, sweet, without froth, but so thick that it is sipped through a wooden straw. Worshippers of the goddesses Bast, Sekhmet, and Hathor get drunk on beer as part of their worship—but no one needs an excuse to enjoy this favorite Egyptian brew.

Time to relax and enjoy the thick beer, drunk through straws.

### A fine vintage

By contrast to beer, Egyptian wine is expensive and a rich person's drink. Wine is also offered to the gods and the deceased. The resurrected pharaoh is sometimes referred to as "one of the four gods...who live on figs and who drink wine."

The best vineyards are in the Delta region and the wine of Mareotis (the lake behind the site of modern Alexandria) is considered to be the best. Egyptians make a variety of wines, sweet and dry, and both red and white. The first pressing, by foot, produces the best wine. The second pressing is made by wrapping the remaining grapes, pits, and stems inside cloths attached to poles and twisting to extract a lower quality juice.

### The Egyptians overindulge

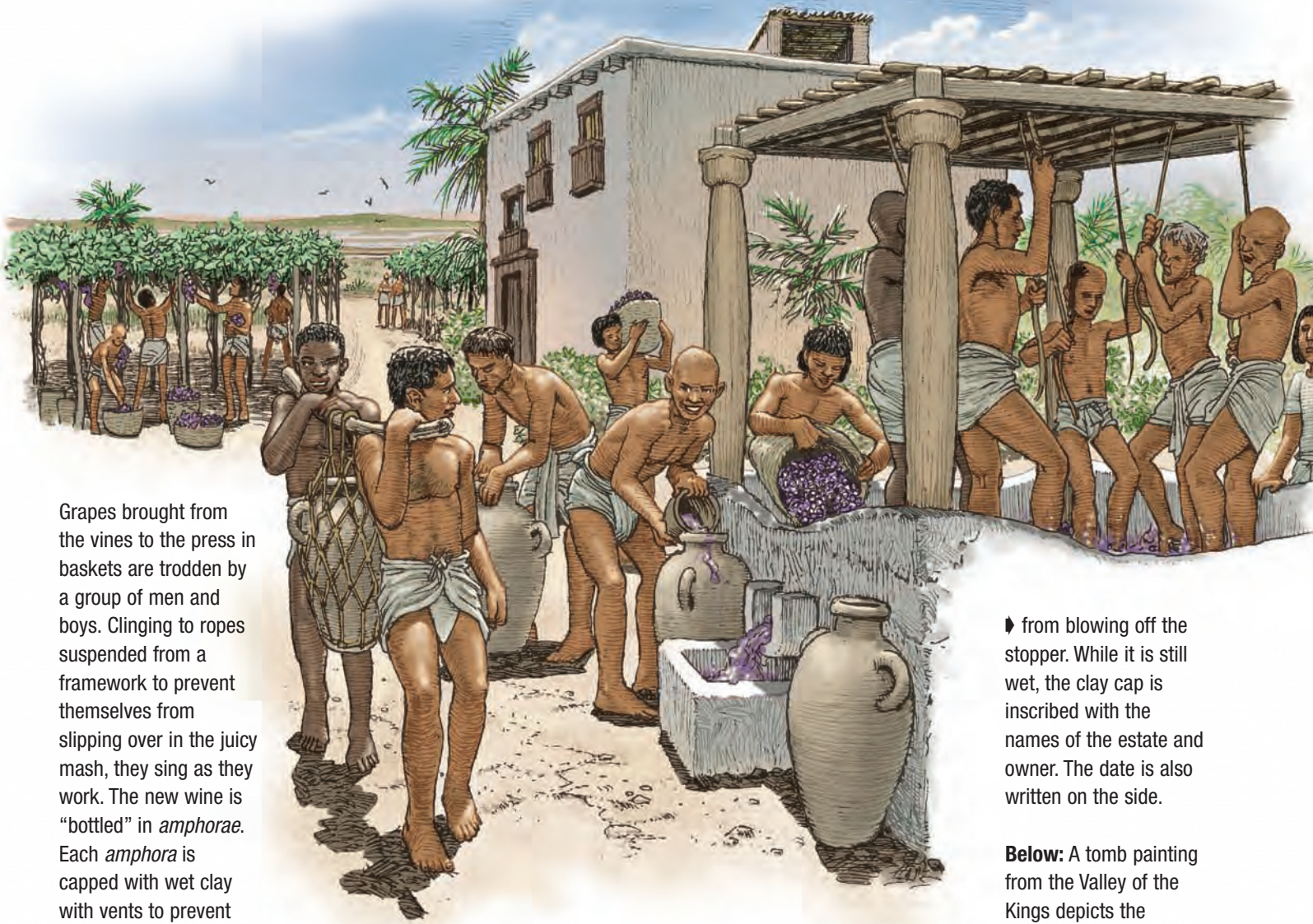
The juices of the various pressings are captured in open jars and allowed to ferment. The jars are closed with a wad of leaves plastered over with mud, with a small hole left in the stopper to release the gasses of secondary fermentation, then that too is sealed. The jars are labeled with details of the year, the name of the vineyard and person in charge, and the wine's type and quality.

The wine is aged in these earthenware jars, which have to be broken at the neck when it is time to decant the contents into smaller pottery jars for pouring. Wine is served in shallow vessels with a short stem.

Those who can afford to buy wine relish it greatly and drink it undiluted. A lot of wine is consumed at banquets and the incapable guests frequently end up being carried home by their servants.

### Other varieties of wine

Wine is also made from dates, palm sap, and pomegranates, especially further south in Upper Egypt, where grapes do not flourish as well as in the Delta. Although it is even more expensive, many enjoy wine imported from Asia.



Grapes brought from the vines to the press in baskets are trodden by a group of men and boys. Clinging to ropes suspended from a framework to prevent themselves from slipping over in the juicy mash, they sing as they work. The new wine is “bottled” in *amphorae*. Each *amphora* is capped with wet clay with vents to prevent the fermenting wine ▶

▶ from blowing off the stopper. While it is still wet, the clay cap is inscribed with the names of the estate and owner. The date is also written on the side.

**Below:** A tomb painting from the Valley of the Kings depicts the process of wine-making.



## From Mud to Bricks

The mud brought down by the Nile not only fertilizes the fields during the inundation, it also provides the Egyptians with their basic building material. Bricks are made by a method that remains unaltered since the dawn of time.

Egyptian houses are built from the simplest materials. Stone is reserved for temples and tombs—buildings intended to last for eternity—but mud bricks are used for every other type of construction: peasant huts, homes of the wealthy, temple and city walls, forts, storehouses, even royal palaces.

### Making bricks

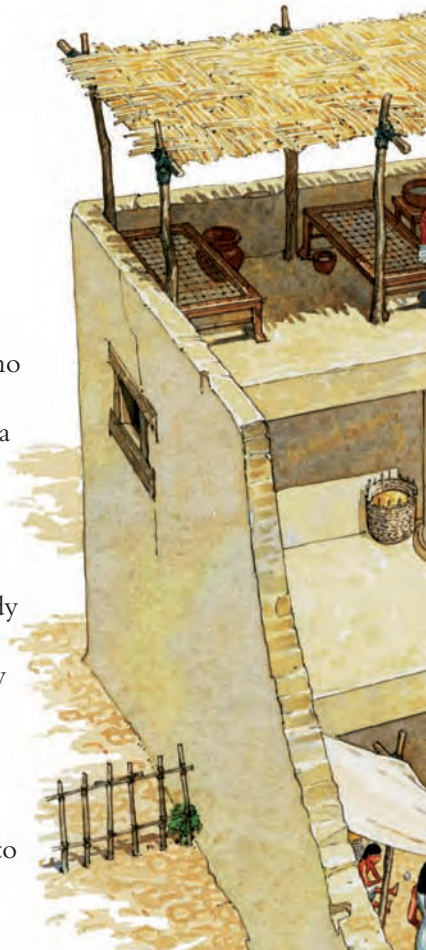
The dark gray mud of the Nile has always been used for making bricks, mixed with sand or chopped barley straw, and kneaded with water into a thick paste. The straw is a useful binding and drying agent, especially if the clay content of the mud is low, but it is not essential. Many excellent bricks are made with only sand as a binder or, if the clay

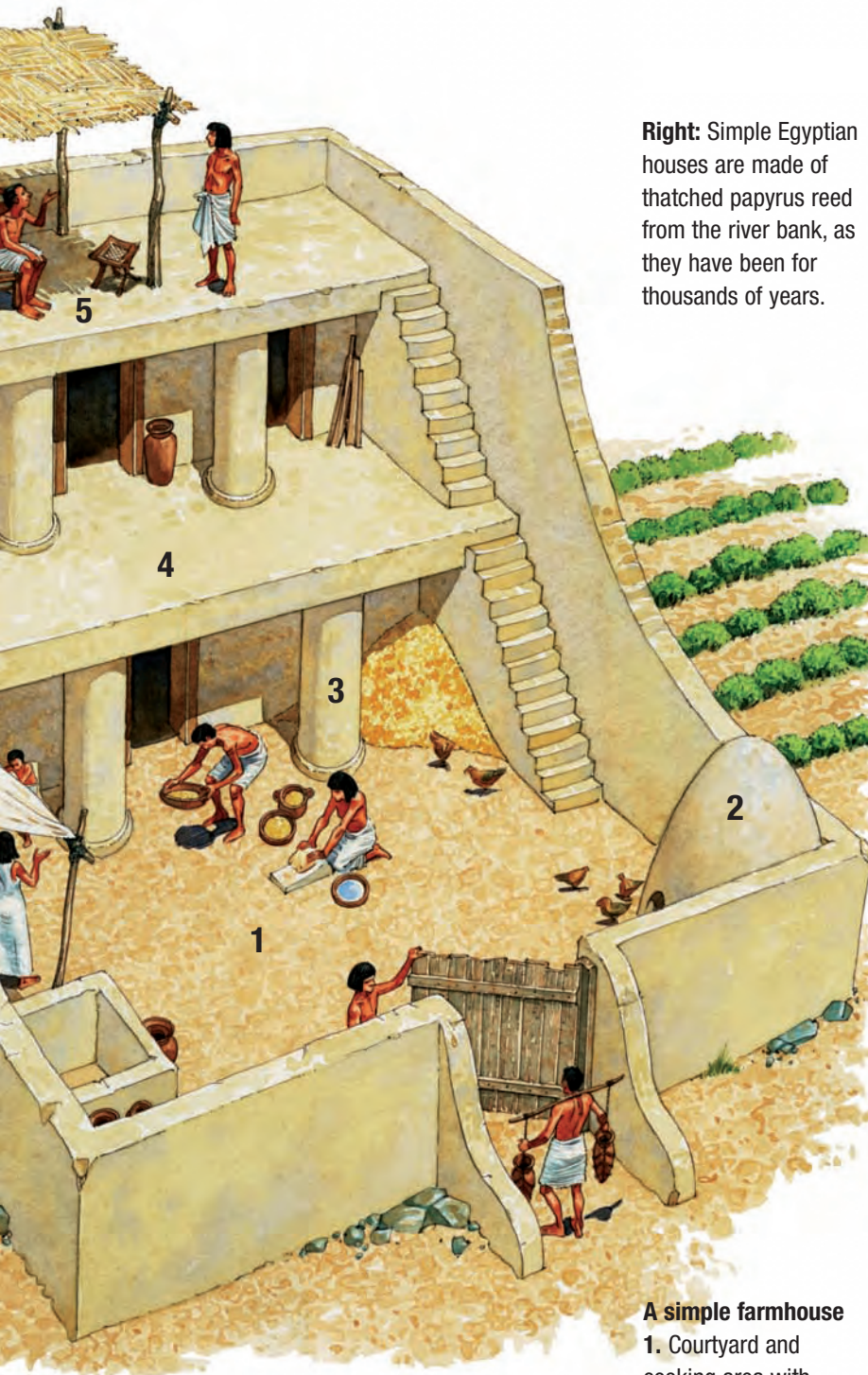
content of the mud is high enough, with no binder at all.

The prepared mud paste is pushed into a standard-sized wooden form, or mold, and left for a short time to let the edges dry. Then it is “struck,” turned out on the ground to bake under the hot sun. When bricks have hardened, they are stacked ready to be taken to a building site.

The dimensions of the molds are strictly controlled to ensure uniformity of bricks throughout the kingdom. They are quite large—14 by 7 by 4.5 inches.

Bricks are made by Egyptian workmen, either for pay or as part of their labor tax to the pharaoh. Slaves are also used when available to speed up production.





**Right:** Simple Egyptian houses are made of thatched papyrus reed from the river bank, as they have been for thousands of years.

### Housing for ordinary people

The simplest form of Egyptian house is made from papyrus reeds—an inexpensive style that has remained unchanged for hundreds of centuries. More permanent homes are built of mud brick, and for the better off the exterior walls are plastered and painted with a pale color to reflect the harsh sunlight. For the same reason, only small windows, usually at ceiling height, are let into the walls, keeping the interior cool.



Houses in country areas are usually of one or two stories, but in towns they sometimes rise to three or even four (*see pages 40–41*). Since good quality timber is scarce in Egypt, those who can afford it use cedar imported from Phoenicia for pillars and doors, and stone for steps and door jambs. Other people must use local palm timber, an inferior building material, and make pillars from bundles of reeds plastered with mud.

Stairs lead up to a vent in the flat roof and, like the Sumerians, Egyptians often sleep up there. However, a peasant's house may not even have a roof—it hardly ever rains in Upper Egypt—or in wetter Lower Egypt only a simple reed thatch covering.

In the poorest homes, the floor is simply stamped earth, while a wealthier man might have this smoothed out with mud plaster. The richest people usually have the plastered walls painted, or even covered with glazed tiles. Lighting also reflects the home-owner's status, from simple, shallow pottery bowls with wicks floating in oil to beautiful alabaster vessels.

The average worker's house measures approximately 14 by 40 feet, with two to four rooms, an enclosed yard, a kitchen area at the back, and an underground cellar for storage. Niches in the walls hold religious objects. Apart from simple beds and small chests for clothes, there is little furniture. There is no running water—sometimes a single well serves an entire village.

#### A simple farmhouse

1. Courtyard and cooking area with stamped earth floor.
2. Grain silo.
3. Pillars of reeds and mud plaster covering.
4. Open veranda and balcony, with small rooms behind.
5. Sleeping area on the roof for the family in the hot summer months.

**Left:** This tomb painting shows dark-skinned Nubians—a people from the region south of Egypt—making bricks. At the left, cut grain stalks from the threshing floor are mixed with mud which is then pressed into the wooden forms (top center) while a scribe records how many are being made. After a short drying period, the form is removed and the brick allowed to bake hard in the hot sun. At the right of the picture, the sun-baked bricks are carried off to be used. In the lower center, a surveyor marks out the next site to be built on.



## Transport and Travel

Nearly everyone in Egypt lives close to the great Nile, and since it connects the furthest parts of the very long kingdom, boats are the quickest and most efficient means of transport.

Egypt is blessed by the Nile, which flows from the south to the north, and by a prevailing wind, which blows from the north to the south. Boats, therefore, can drift downriver with the current and sail against the slow but steady current up the river. In fact the hieroglyph for traveling south is of a boat with a raised sail and that for traveling north is of a boat with a furled sail.

### Reed boats

From the earliest times, Egyptians made boats from papyrus reeds bound together. Reed boats are still widely used because they are quick to build and cheap to replace. But they are not suitable for long-distance travel and rarely have a sail. Reed boats are mostly used for fishing and for ferrying people from one bank of the Nile to the other.

### Wooden boats

Wooden boats are expensive because so much of the timber used in their construction is cedar imported from Phoenicia. Local palm wood is only suitable for some internal use, such as planking, rails, superstructures, or easily replaced rudder paddles.

The Egyptians use a variety of boats for different purposes—fishing, trading and cargo carrying, pleasure boats for the rich, and barques for funerary purposes. These, the most elegant of all the Nile boats, take a long

time to build. They are used to transport the bodies of royal or wealthy people to their tombs, and are usually buried with them for use in the afterlife. The most celebrated barque is that of Khufu. Made from 1200 pieces of cedar, it is 141 feet long and lies in a special chamber next to his great pyramid at Giza (*see page 88*).

### Land travel

Although boats are the best way to travel in Egypt, sometimes it is necessary to travel overland. However, this is not easy, because there are no roads, for three good reasons. First, the farming land is too precious to waste on roads. Second, roads get washed away too easily during the annual flood. Also, Egypt is so long that traveling any distance overland is too tiring.

Land journeys, then, are usually only for short distances between nearby villages, generally to carry goods, or whenever it is necessary to cross the Eastern Desert to the Red Sea, where many mines are situated.

Nobles who don't like to walk instead travel in chairs slung between donkeys or carried by slaves. Sometimes they use horse-drawn chariots. Because of the lack of proper roads, wheeled traffic is almost non-existent, and heavy goods are carried by mules or donkeys whatever the distance.

### The sailing sun

The most senior of Egyptian gods, Re (or Ra) appears in several different forms. One of the most important is Re-Harakhty, depicted with the sun-disk on his head, sailing on his solar boat. The Egyptians believe that he travels across the sky in the boat each day, giving light, and sails through the Underworld at night. The path of the sun, of course, crosses that of the Nile as it flows south. The symbolism of the sun riding a Nile boat on its daily course ties together the two most important aspects of Egyptian reality—the life source of light and the life-giving waters of the great river.



#### The river highway

In the foreground, a noble alights from a carrying chair slung between donkeys as he prepares to cross the Nile to Memphis on a small wooden ferry boat, while men fish from reed boats. Beyond, sailing ships take advantage of a rare downriver wind to speed past a barge bearing two granite obelisks from the Aswan quarries. The barge is towed by up to 20 smaller boats, each manned by 30 oarsmen. The Nile's current helps them on the downriver journey, but life is much tougher rowing back to Upper Egypt against the current.



## CHAPTER 2

# Government and Society

## The Pharaoh's Role

The pharaoh has absolute power. He owns the whole land, commands the army, and heads the administration and the religious cults of all the gods. He stands between Heaven and Earth.



### The Nemes Crown

This head-dress is famously depicted on the gold mask of Tutankhamun. A striped cloth, pulled tight over the forehead and tied behind, leaves two flaps to hang over the shoulders. The brow is decorated with the uraeus snake Wadjet and the vulture Nekhbet.

The pharaoh is no ordinary human. Egypt's first kings are believed to be the sun god Re (or Ra) and his descendants Shu, Geb, Osiris, and Horus (see pages 74–75). In time, the gods passed kingship to humans, but the king is still considered to be unique, and at least semi-divine.

Egyptians believe that when the king sits on his throne arrayed in all his ceremonial garments, crowns, and scepters, the spirit of Horus enters his soul and he becomes a god on Earth. His pronouncements have all the force of divine law.

### Many wives and children

His immediate family shares in some of this divine power, for instance the queen has a similar relationship with the goddess Hathor, the wife of Horus. It is important to keep the king's divine blood pure, so he prefers to marry within the royal family.

The king has many wives and concubines (see "*Ramesses the Great*"), but usually only one queen. Known as the Royal Heiress, she is the eldest daughter of the previous king and queen. The king may nominate any of his sons to be his successor, but tradition suggests he should choose one of his queen's sons, rather than the son of a concubine.

In order to become the next pharaoh, the chosen boy must marry the next Royal Heiress, who is the queen's eldest daughter—and therefore either his sister or half-sister.

### The royal task

Along with such power come many responsibilities. The king's first task is to rule justly and maintain *ma'at*, the harmony of the universe. This is done through high ceremonies at the major temples—especially at Karnak (see pages 80–83)—to mediate with the gods on behalf of the people.

One of the most important of the king's acts is to perform a ritual to ensure that the gods will look favorably on the New Year and make the inundation a proper one for the fields. Through this ceremony the people believe he can influence the weather and keep plants and animals fertile.

Command of the army, administration of the law, the government, trade, and foreign policy (see "*Royal letters*") are tasks the king must undertake when he is not mediating between Heaven and Earth, although even these jobs require continual consultation with the gods.



### Royal letters

A great deal of correspondence between the pharaohs of Egypt and the kings of Asia Minor and Mesopotamia exists. Sometimes the tone is annoyed—the Kassite king of Babylon, Kurigalzu I (c.1400–1375 BCE), complains to Amenhotep III that the pharaoh has refused his daughter in marriage: “Why are you telling me such things? You are the king. You may do as you wish. If you wanted to give me your daughter in marriage who could say you nay?”

A little later King Burnaburiash of Babylonia (c.1375–37 BCE) writes to Akhenaten complaining of how his merchants have been robbed while in Egyptian territory: “Canaan is your country and...in your country I was robbed. Bind them and return the money they robbed. And the men who murdered my slaves, kill them...because if you do not kill these men, they will again murder my caravans and even my ambassadors.”

But many of the letters are happier, such as the opening of this one (*shown above*) sent to Akhenaten by Tushratta, king of the Mitanni, whose daughter Tadukhipa was married to the pharaoh: “To my brother, my son-in-law, who loves me and whom I love...may you be well. Your houses, your mother, my daughter, your other wives, your sons, your noblemen, your chariots, your horses, your soldiers, your country and everything belonging to you, may they all enjoy excellent health.”

The king is moderator between his people and the gods, and head of all the religious cults.



The king—responsible for the harvest’s success—makes the first ceremonial dig into the newly watered earth.



#### The White Crown

The crown of Upper Egypt is a tall, white conical headpiece, called the *Hedjet*.



#### The Red Crown

The crown of Lower Egypt is chair-shaped, with a low front and tall back, from which protrudes a coil. It is called the *Deshret*.



#### The Double Crown

The crown of unified Upper and Lower Egypt combines the Red and White crowns, known as *Pschent*, the Two Mighty Ones.



#### The Blue Crown

This is the War Crown, called *Khepresh*. The tall flanged helmet, adorned with golden discs, has the *uraeus* and vulture on the brow.

### Ramesses the Great

Ramesses II (also spelled Ramses or Rameses) came to the throne in 1279 BCE when he was 20 and ruled for 67 years. In that time he had eight queens or principal wives. The names of 79 of his sons and 31 of his daughters survives, but the ancient inscriptions give no clue as to how many other wives and children he had—almost certainly many, many more. Ramesses himself boasted that there were over a hundred of his lesser offspring.



**Left:** Ramesses III, wearing the Blue Crown, makes an offering to Re.

## Egyptian Administration

The pharaoh is head of the government and he decides on all policy. However, in practice he delegates the daily management of affairs to departments of state which are controlled by his officials.



The pharaoh, seated on his throne at Thebes, hands down his commands to the vizier of Upper Egypt. Most of the court dignitaries are members of his family.

Every senior or middle-ranking official uses the title of *imy-ra*, or overseer. The two most senior of the king's officials are called the *tjaty*, or viziers. One at Thebes is in charge of Upper Egypt, the other, in charge of Lower Egypt, is based either at Memphis or Lisht. The viziers are usually the pharaoh's sons, or related to him by marriage, and the same is true of the most important state officials and local governors.

### The busy viziers

While they manage the affairs of the senior officials, the viziers are also responsible for the recording of all the people and their property for tax purposes. They supervise and record various transactions, especially those involving land, and as "seal-bearers of the king" they have the authority to certify the deals. The viziers also supervise the census of raw materials, cattle, and produce that takes place every other year, which is called the "following of Horus."

In his own region, the vizier is responsible for civil order, the assessment and collection of taxes, the maintenance of archives and the organization of their retrieval for consultation. He also organizes the

mobilization of troops, appointment and supervision of officials, inspection and overseeing of provincial governments, monitoring of the inundation and other natural events, and the exercise of the law over civil cases.

### Overseers for all departments

Egypt is divided into rural districts, or *nomes*, controlled by governors, or *nomarchs*, and towns, controlled by mayors. Each vizier, governor, and mayor has a staff of officials, scribes (see pages 54–57), and couriers. There are 22 *nomes* in Upper Egypt and 20 in Lower Egypt.

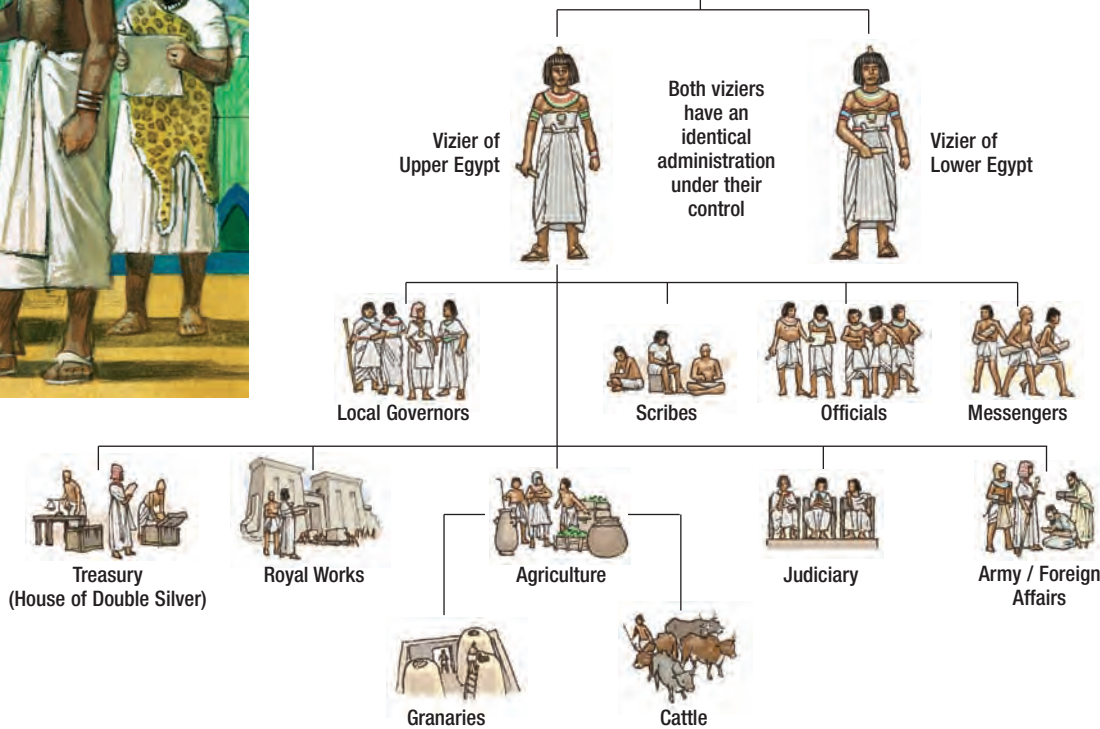
The key areas of administration are the Treasury, the Department of Agriculture, the Ministry of Royal Works, the Judiciary, and the army. The man in charge of the Treasury is known as the Overseer of the House of Double Silver, while the Ministry of Works is lead by the Overseer of the King's House, since all public works and buildings belong to the pharaoh.

The Department of Agriculture is further divided between overseers of granaries and cattle. The archives are the most important feature of Egyptian government. Everything

The organization of Egyptian government



The Pharaoh



The classes

Egyptian society is divided into eight classes of people, with the pharaoh—more of a god than a person—at the top and slaves—not really considered to be people—at the bottom.

- Pharaoh ●
- Viziers ●
- High Priests, Nobles ●
- Priests, Engineers, Doctors ●
- Scribes ●
- Craftsmen ●
- Soldiers, Farmers, Tomb-builders ●
- Slaves ●

is recorded—wills, title deeds, census lists, conscription lists, orders, memos, tax lists, letters, journals, inventories, regulations, and trial transcripts.

**A chance for every deserving person**

The elite ruling class is called *paat*, while the rest of the people are called *rekhyt*. The officials of every administrative department are very proud of their position. They display their high social standing by prefixing their names with strings of titles that indicate their functions and achievements.

But the greatest privilege enjoyed by the *paat* is that the pharaoh grants them the right to build their tombs in one of the royal cemeteries. This ensures that the deceased will enjoy all the privileges in the afterlife

that he enjoyed while living, and that after every harvest his household servants will honor him with offerings of food for a banquet in Heaven (see illustration, page 21).

Compared with most other cultures of the period, Egypt’s society is more liberal, and not all high-ranking officials come from the noble class. Even a man of low birth can rise to a great position. One inscription warns those who hold office not to look down on one who has risen through the ranks on his own merit:

“Do not recall if he too once was poor, do not be arrogant toward him for knowing his former state; respect him for what he has achieved by his own efforts, for wealth does not come by itself.”

## Taxation in Egypt

In a barter economy, the simplest way to exact taxes is by claiming part of a person's produce, merchandise, or property. In Egypt peasants are the highest and most consistently taxed section of the population.



A farmer is the easiest to tax—he cannot hide his field, and it can be measured, its harvest yield assessed, and the produce is difficult to hide because of its large bulk.

### Taxing the farmer

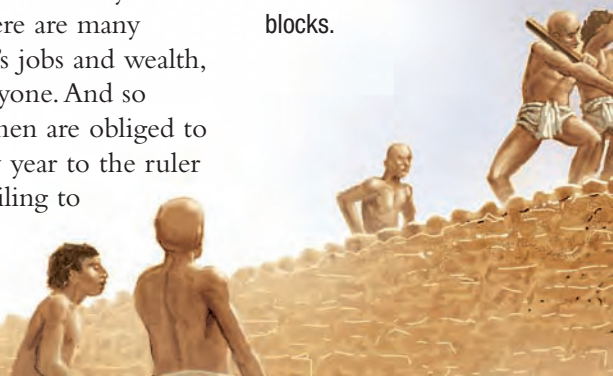
The vizier controls the taxation system through the departments of state. The departments report to him daily on the amount of stock available, and how much to expect in the future. The task of calculating the amount of produce due is the duty of scribes. They keep written records of title deeds, field sizes, and are capable of calculating field areas. They also assess a farmer's wealth by counting his cattle in the census called the "following of Horus."

Among the items taxed, the most important are grain, oil, livestock, and beer. A farmer who owes unpaid taxes is forced to hand over his arrears immediately or he will be hauled off to court.

### Taxing traders and officials

The rest of the population is less easy to assess for tax. Although there are many scribes monitoring people's jobs and wealth, it is hard to supervise everyone. And so hunters, fishers, and craftsmen are obliged to declare their income every year to the ruler of their district. Anyone failing to make a declaration or

**Below:** Peasant conscripts perform their labor tax for the pharaoh during the annual Nile flood. Some are so proud to serve their god-king that they carve their names into the massive stone blocks.



making a false statement is punishable by death.

These personal taxes, called *beku*, are collected by the chief treasurer. Local officials—mayors, district officials, district recorders, their scribes, and their field-scribes—are taxed on the income they receive through their office. This tax, called *apu*, is paid to the vizier.

### The labor tax

At least one person for every household has to pay the labor tax by doing public service for a few weeks every year, usually during the period of inundation when peasants can be spared from farm work. Repairing the canals and irrigation systems or mining are the most vital of these tasks. Qualified scribes are exempted from the labor tax, as are laborers who work permanently at temples and in the mines. A rich man can hire a poorer man to do his labor tax for him, and this custom extends to the dead by means of a *ushabti* (shown on the right).

### Left: Following Horus

This model from about 2000 BCE shows a local nomarch, or governor counting cattle. He sits in the shade of his porch watching the animals pass by as his scribes take notes and argue with the farmers over the number of cows to be taken in tax.



### Tributes and customs duty

There are two other important sources of taxation for the king. Conquered foreign states pay the king tribute, and tribute-bearers form a constant procession to the palace treasury with valuable goods, precious gems, gold, and silver sent by subject kings.

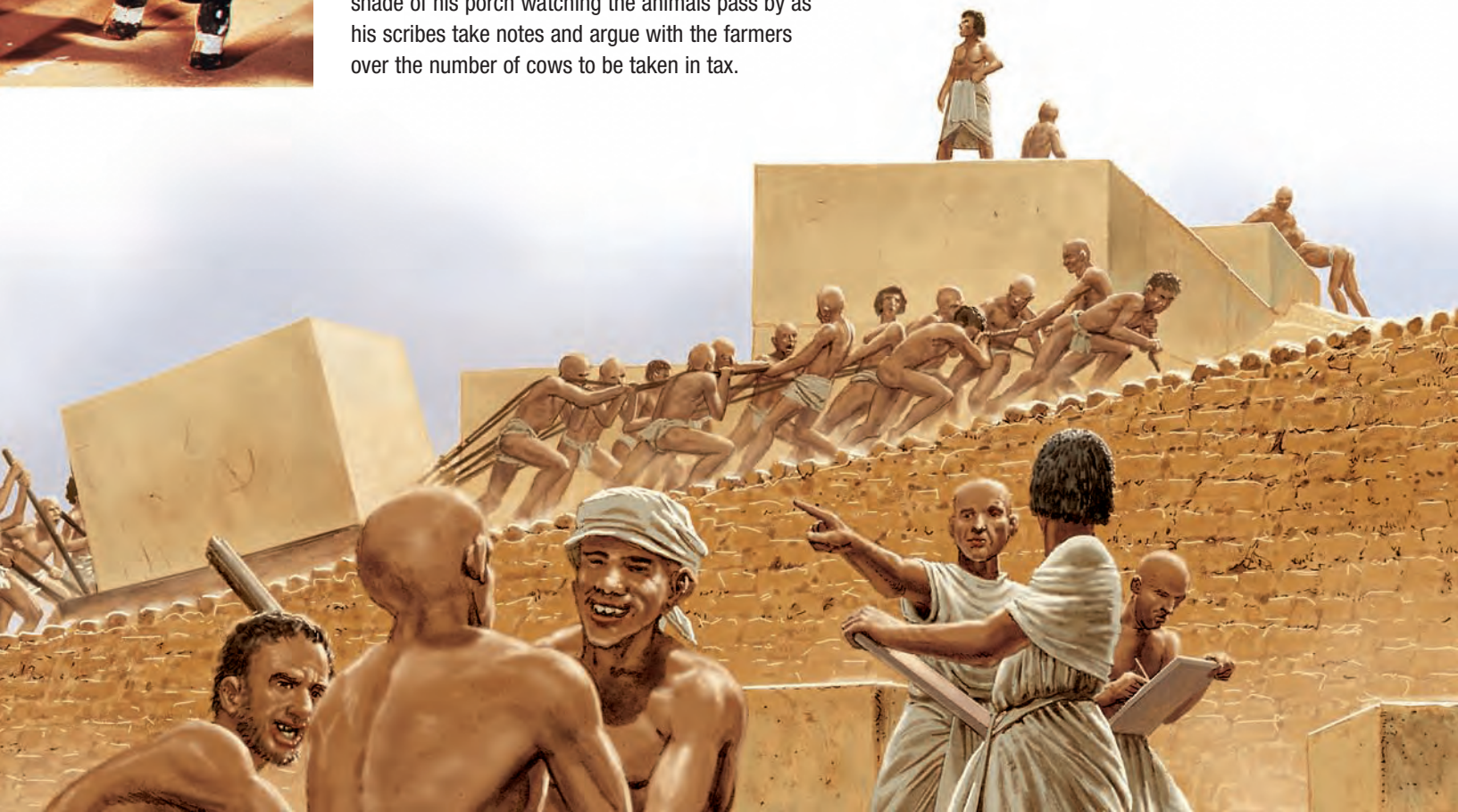
Then there is the customs duty payable by traders when they import or export goods. The amount of duty varies from time to time, but is usually set at one-tenth part of the goods' value. Duty is even levied on some goods between Upper and Lower Egypt.

In all these ways, Egyptians swell the royal treasury so that the pharaoh may glorify his reign by building great monuments, extending the size of the gods' temples, and building his great tomb, ready to rule in the afterlife.



### Everlasting work

Even in the afterworld a person is expected to perform labor tax, but by placing *ushabti*, or *shabati*—little figurines like this, representing the deceased—into his tomb and using the correct spells, they can do all his work for him.





## The Law

**An Egyptian court in session.** Judges hear a witness's oath before he is cross-examined. The accused (center) looks on with a worried frown. Bribery is illegal, but it does not stop people from slipping some gold or silver to an officiating scribe (left). The case being heard is obviously not a simple one, because out in the courtyard an oracle is being consulted for guidance over the decision.

Ordinary Egyptians are fond of litigation, and the enthusiasm with which they go to court to argue over the least infringement of their rights shows the faith they have in the legal system.

**M**a'at is the goddess of truth, order, balance, and justice. She is often shown in paintings and carvings standing behind the pharaoh, who is head of the legal system on earth. Judges often make up her retinue of priests.

The legal system is very fair to all people. Whether rich or poor, people have equal rights, and women can go to court on the same terms as men—only slaves are excluded from equality under the law. Favoritism and bribery are condemned, so that every person has a fair chance to present his or her case.

### Going to court

Each village and town of any size has its own court, called a *kenbet*. There are no attorneys or counsellors, so people have to speak for themselves. The plaintiff must make his case clearly and the defendant must answer it with evidence as solid as that presented against him.

The accused is presumed to be innocent until proven guilty. Witnesses take an oath in the name of the god Amun-Re and the pharaoh, and anyone thought to be lying or concealing information is liable to be beaten.

A panel of judges, chosen from among important local men, try the cases. They cross-examine the witnesses and read any documents entered into evidence. If a person is unhappy with the outcome of a case, there is a higher court—the Court of Listeners, presided over by the district governor—to which he can appeal. Above this, the two Great Courts are under the supervision of the two viziers, but to reach such busy men is not easy.

### The final appeal

The most important matters are reported to the king, who then decides the case and the proper justice. Sometimes the judges find it hard to make a final decision, in which case



the judgment is made by divine oracles rather than by human officials. For instance, when the two petitions are put on either side of a street near the chosen god's image, if a bird should land on the statue and then drop to the ground to peck around one of the documents, its author is declared the winner.

### **Crime and punishment**

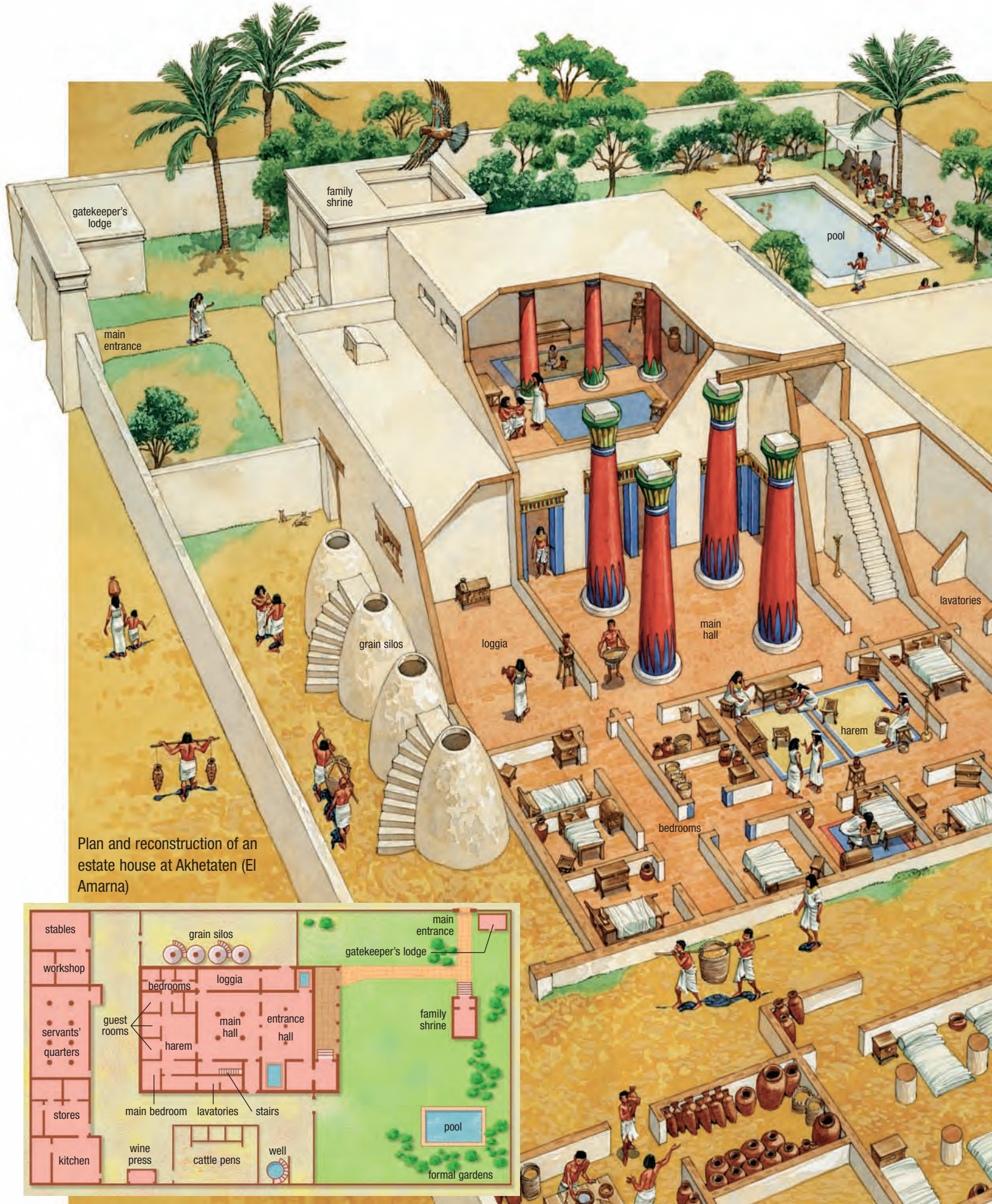
Punishments handed out to those found guilty of a crime include reprimands, returning stolen property plus several times its original value, floggings, and hard labor. For more serious offenses, judges can order exile to Nubia or the Western Oasis, or mutilation—cutting off a hand, tongue, nose, ears or blinding the criminal.

In extreme cases—grave-robbing, treason, or tax evasion—the guilty may be condemned to death by being impaled on a stake, burned alive, drowned, or beheaded. Because a guilty person has violated the balance of Ma'at, it is assumed that the individual will suffer—poverty, blindness, or deafness—with the final settlement awaiting him in the Court of Osiris once he is dead.

### **Keeping the peace**

Police work is carried out by the *medjay*. The Medjay was originally a Nubian tribe that came to Egypt as mercenary soldiers. Over time it turned into a peace-keeping force, and native Egyptians joined it. Now there are groups of *medjay* stationed all over Egypt. These men guard the frontiers and the cemeteries, and hunt down criminals with the help of tracker dogs. When they catch a suspect, he is held under guard, awaiting trial in a suitable granary or storeroom, for there are no prisons in Egypt.





Plan and reconstruction of an estate house at Akhetaten (El Amarna)



## A Rich House in the Country and Townhouses

The Egyptians lack good timber and stone is expensive, so the homes of rich and poor alike are built of mud bricks, but this does not mean luxury is absent.

Wealthier Egyptians may be lucky enough to have their own well, but most people get their water directly from the river. In either case, personal hygiene is important, and while the poor bathe daily in the river, the rich have basins for washing at home. Those who can afford it even have stone baths, with a pipe to carry the waste water out through the wall. Being a precious commodity in Egypt, this water is collected in a jar to be used for watering the garden.

The rich also have latrines—a wooden seat on brick supports, under which a pottery vessel is placed that a slave empties after use. In lesser homes people use a portable lavatory—a wooden stool with part of the seat cut away and a pottery vessel underneath.

### Luxury and comfort

These two reconstructions show a rich nobleman's country house and middle class townhouses. The villa is divided into three main areas. There is a reception at the front where the master of the house conducts his business, a hall in the center for entertaining visitors, and private quarters at the back where the family lives.

Townhouses, which often reach three or four stories, are packed together along the narrow, dusty, and busy streets. Water is supplied from public or private wells, but there is no sewage system. Each household has to dispose of its own waste—in pits, in the river, or sometimes even in the streets for scavenging dogs or pigs to eat.



## The Egyptian Family

The backbone of the nation is the large and, for the most part, well-to-do middle class citizens. Their home and family is everything they treasure most and forms the center of their lives.



The people of Egypt—from the poorest to the wealthiest—value family life highly. They love their children and regard them as a great blessing. The family is the core of Egyptian society—even the gods are arranged into family groupings. Egyptians have tremendous pride in their families and their forebears, and trace their ancestry back through both the mother and father’s lines.

### Respect for elders

Children’s respect for their parents is a cornerstone of society, and the most important duty of the eldest son is to care for his parents in their last days and to ensure that they receive a proper burial. This duty of care can lead to extended families of more than two generations living in the same home.

However, it is usually preferred that when a son marries he sets up his own home nearby—many texts warn of the problems of living with parents and in-laws. On the

death of their father and mother, sons inherit the family land, while daughters receive the household goods, such as furniture and jewelry. If a family has no sons, there is nothing to prevent a daughter from inheriting land.

In this charming scene, proud grandparents Inherka and his wife show off their grandchildren to guests. The children, boys and girls, wear no clothes and sport the shaved head and side-lock of childhood.



### Simple household goods

A wooden footstool with a woven seat, a straw whisk, and a woven basket lid, from the 18th Dynasty tomb of the royal architectural foreman Kha and his wife Meryt, at Deir al-Medina (see page 64).

## The wife's role

In contrast to Mesopotamian society, Egyptian women are equal to men in many ways. A wife, who is known as *nebet per* (“lady of the house”), may own land, have business dealings, and represent herself in court cases. Her right to start divorce proceedings is one of the ways in which a wife’s legal rights are most obvious (see following pages). Women can also serve on juries, testify in trials, and disinherit ungrateful children. If a woman is found guilty of a crime, she even faces the same penalties as a man.

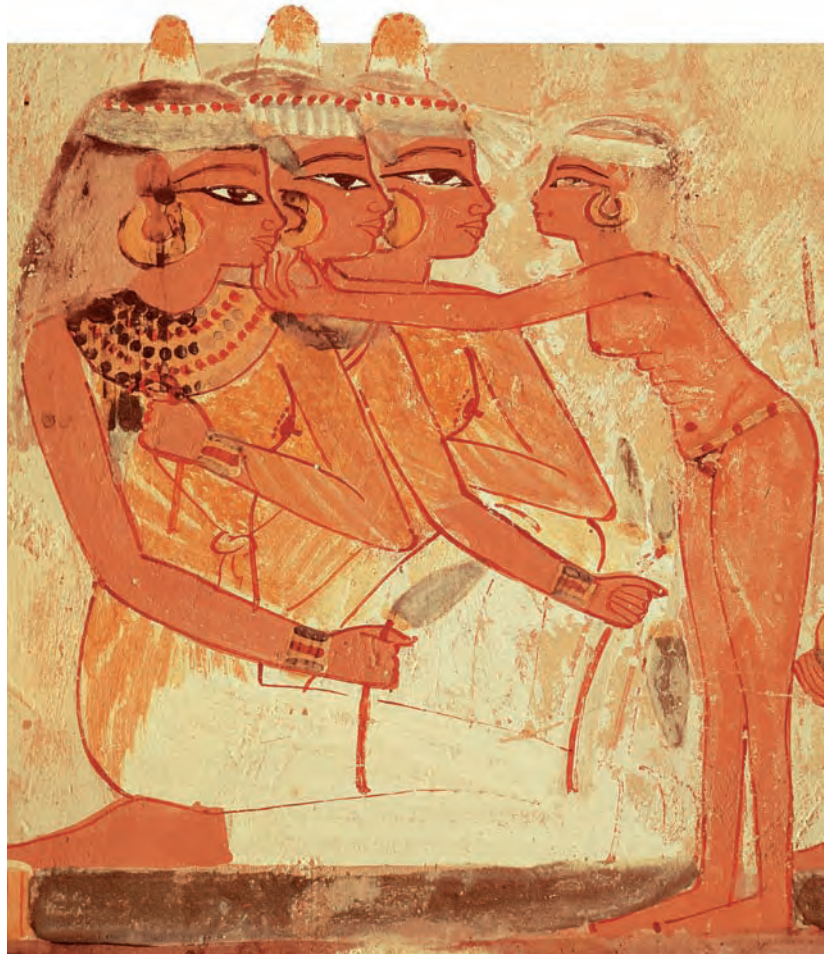
Peasant women commonly work alongside their husbands in the fields, but among the better off the wife will be found at home while her husband goes off to work and he is responsible for the family’s fortunes.

Upper-class men can become scribes or priests, middle-class men are often civil servants, small landowners, or craftsmen in high-priced trades, such as armor or jewelry. General craftsmen, potters, hunters, and peasant farmers make up the lower class.

## The career woman

The wife supervises the household, including servants, and is expected to care for her children’s upbringing. Despite this important family task, there are other jobs available to women, especially if the family is wealthy enough to hire a nanny to help with household chores and raising the children.

Women run farms and businesses in the absence of their husbands or sons. Many



women work as perfume-makers, and they are also employed in courts and temples as acrobats, dancers, singers, and musicians—all honorable jobs. Noblewomen can join the priesthood of a god or goddess, and women of any class can work as professional mourners or musicians.

**Above:** Seated ladies dressed by a servant, with perfume cones on their heads. **Below:** a wall relief showing acrobatic ladies dancing to the music of a harp.



## Marriage and Divorce

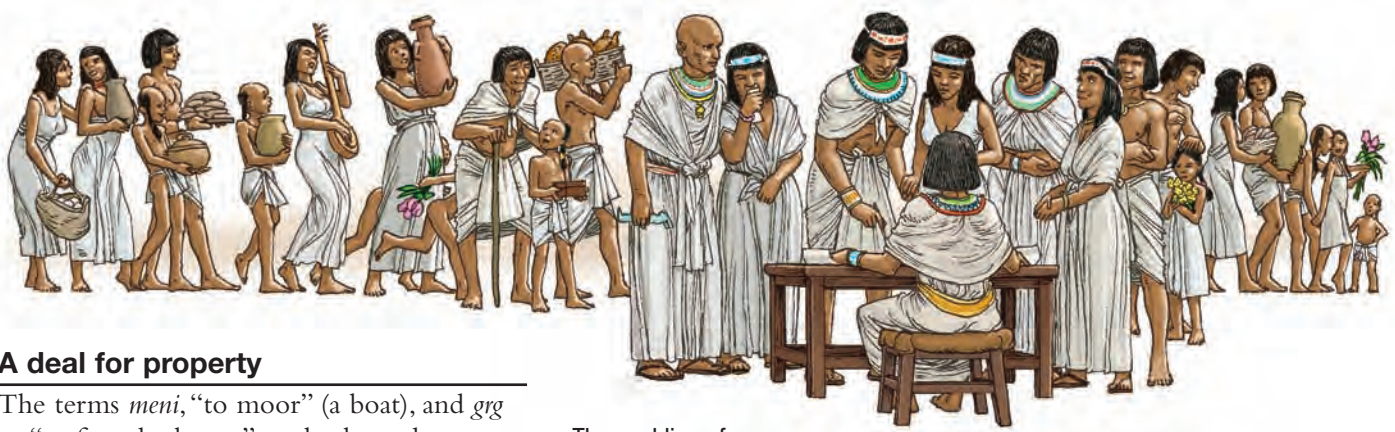
Fertility in crops, animals, and humans is a major theme of the Egyptian religion, so it is not surprising that Egyptians want to get married and start having children as soon as possible.

Girls from peasant families marry as early as 12, while those from richer families are a few years older when they wed. Boys are usually older still when they marry, perhaps 16 to 20 years of age, because they have to become established and be able to support a family. It is normal for the children's parents to arrange a marriage for them, although it is not unknown for young people to choose their own spouses.

### Man and wife

A lifesize portrait statue of Ka-aper (2475 BCE), a chief priest, and a bust of his wife; from the pyramid of Userkaf, Saqara.





### A deal for property

The terms *meni*, “to moor” (a boat), and *grg pr*, “to found a house” are both used to describe a marriage and suggest that the arrangement is about property. There are no religious or state ceremonies involved in a wedding and—strangely for a society obsessed with recording every detail of life—marriages are not registered by scribes.

### The wife’s rights

Even though marriages are not officially registered, it is normal for the fathers of the bride and groom to arrange a pre-nuptial contract between them. This lays down what allowance the wife is to receive from her husband and what presents he will give his wife and future in-laws.

In other societies it is customary for the bride’s father to give her future husband a “bride price,” or dowry, which is the husband’s to keep. But it is different in Egypt. The contract also states that any property or goods the wife brings with her will be hers to keep if the marriage should end for any reason. If this includes any land, it is kept separate from her husband’s, but she will usually let him administer it along with his own property.

The wedding of a wealthy bride and groom begins with a procession, followed by an exchange of vows, a banquet, and the giving of presents. For those who cannot afford a lavish ceremony, it is enough—after parental approval—that the two young people start living together for them to be considered married.

### The role of the concubine

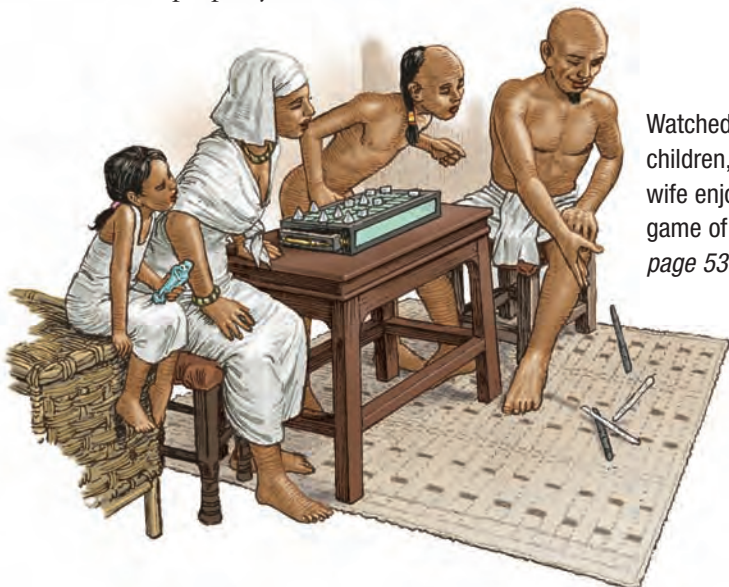
While the king can have several wives, for everyone else marriage is monogamous, which means the husband has only one wife at a time. However, it is considered legal, and even respectable, for a man to keep an official lover, or concubine, if he can afford one. This is another aspect of the Egyptian’s desire for many children to improve the family’s fortunes. Although the man’s wife and children must come first, he is expected to look after the concubine and her children.

### Getting divorced

Marriage is taken seriously, but if a wife is treated badly, she usually goes to her relatives for help. If they cannot persuade the husband to improve his behavior, the marriage may end in divorce. Getting divorced is a relatively simple matter, amounting to a simple statement in front of witnesses.

Either partner can start a divorce for fault (adultery, infertility, or abuse) or no fault (the two discover they aren’t compatible). Divorce may be a disappointment but it is certainly not a matter of disgrace, and it’s common for divorced people to remarry.

When a woman chooses to divorce, and her husband does not disagree, she can leave with what she brought into the marriage, plus a share of the joint property. But the circumstances are taken into account. When one woman abandoned her sick husband, a later judgment forced her to renounce all the joint property. If the husband leaves the marriage he is liable to make payment to support his ex-wife, and he may be forced to give up his share of the joint property. Generally, the wife is given custody of the children and is free to remarry.



Watched by their children, a husband and wife enjoy a relaxing game of *Senet* (see page 53) at home.

## Birth and Children

Egyptians long for children, not only for the happiness they bring but also because they are a form of insurance—they work for their parents and care for them in the infirmity of their old age.

As important as looking after their aging parents, children must give them a proper burial and make regular offerings at their tombs, ensuring a smooth passage into the afterlife and a contented eternity.

A couple without children can try a variety of remedies. They can pray to gods and goddesses, or place letters in the tombs of dead relatives, asking them to use their influence with the gods. Then there are fertility charms and magic spells, which are said to work sometimes. If these fail, they can adopt a child from a relative or from a young couple with more mouths to feed than they can afford.

### A dangerous early life

Once a child arrives, whether by natural means or adoption, the parents must guard it with magic amulets, prayers, and spells. The birth of a child is a time of great joy, but also of concern. The rate of infant death is high and there is the stress of childbirth on the mother. It is usual to hire a midwife to help with the birth.

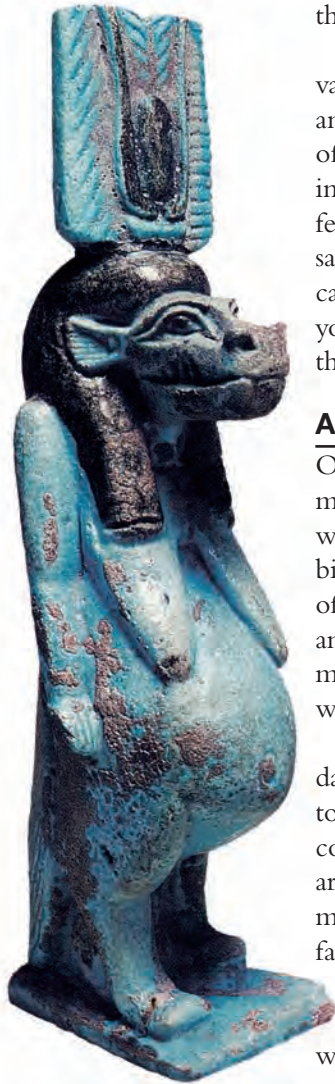
The first four years of life are the most dangerous, but Egyptian mothers know that to keep a baby healthy in the unsanitary conditions it is best to breast-feed. Babies are fed on their mother's milk for as much as three to four years, and families who can afford them hire a "wet nurse" to take over from the mother. The wet nurse is a woman who has just given birth, and so has milk to give, but whose own child has died.

Unfortunately, when children reach the age of four and start eating solid food, the death rate soars because many are unable to resist the bacteria in the new meals they are given to eat. Those who get past this stage and finish their fifth year can generally look forward to a full life (see "Life expectancy").

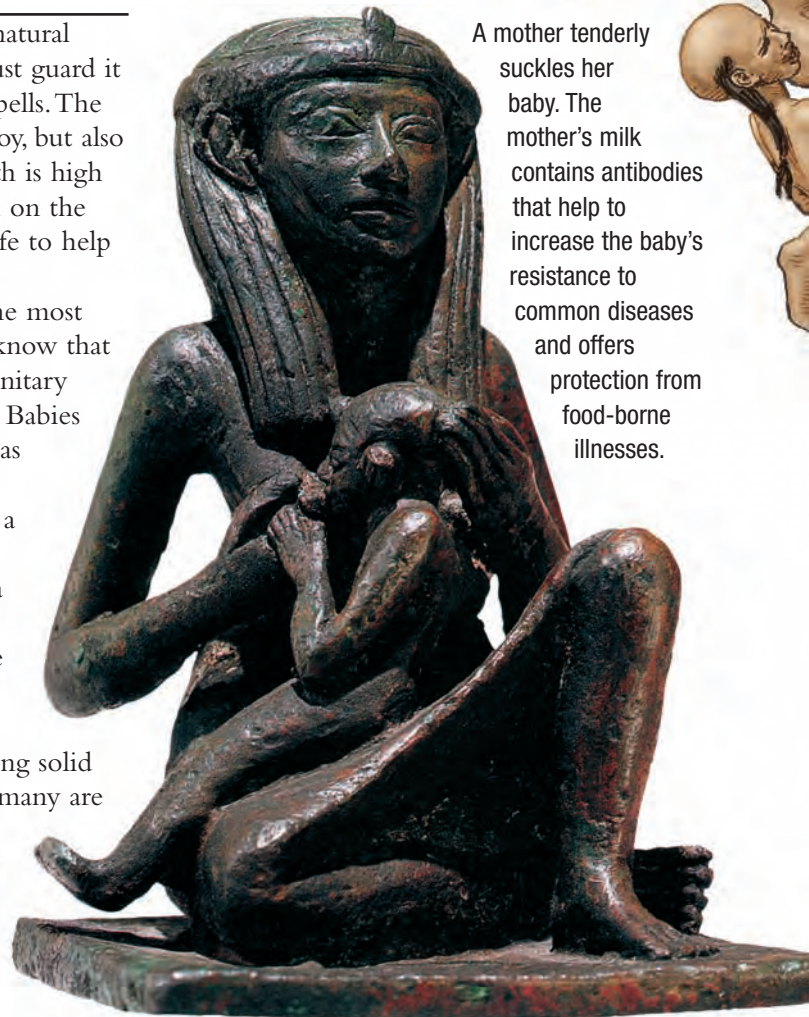


### Children having fun

Young girls play a game that involves throwing and catching a ball, and boys join in a lively game of swinging in a group.



The goddess Taweret is the guardian of pregnant women. She is usually depicted in a pregnant state, with the head of a hippo, legs and paws of a lion, and a crocodile tail head-dress—the fiercest elements of Nile life.



A mother tenderly suckles her baby. The mother's milk contains antibodies that help to increase the baby's resistance to common diseases and offers protection from food-borne illnesses.

### Growing up

Young boys and girls are given plenty of time for play, but once they are five they start training for adulthood. A boy is taught his father's trade and a girl helps her mother with household tasks or works with her in the fields.

Some boys are sent to school at the age of seven, if the family can afford it and if there are younger sons to take up the father's trade. An educated boy has a chance to get a better paid profession than his father's, which will raise the family to a higher social status later.

Both parents share the children's education about their world, reverence for the gods, morals and ethics, and correct

behavior toward others.

When a girl reaches puberty at about the age of 12, her father looks for a suitable husband for her—if one has not been found already and an arrangement with his father made. Boys enter manhood with a ceremony of ritual circumcision. He does not choose his career since he is expected to follow his father's trade and assist him in performing the elder's duties.

However, for the ambitious family, there are only two real routes forward for a boy to better his position—to join the army as an officer or, better still, to become a scribe. And that depends on what education he has received as a child and a youth.



Both boys and girls have their heads shaved clean except for a long lock of hair left on the side of the head, the side-lock of youth.

**Below:** On the left a young boy undergoes ritual circumcision, while a helper grasps him tightly. On the right a priest applies soothing ointment to another boy to relieve his pain.

### Life expectancy

Peasant men can expect to live for about 33 years, and 29 years for women. Upper-class males, who are generally better fed and do less hard labor, can expect to live well into their 60s and 70s—sometimes longer. Upper-class women also look forward to a longer life than women from the lower classes, but the task of bearing many children results in a lower life expectancy compared to their men.



## Education and Learning

Every Egyptian family, from the poorest to the richest, wants their son to attend a school with the aim of the boy becoming a scribe. But schooling is a hard task for the pupils, who suffer constant punishment for inattentiveness.



In the country, boys attend a small school in the open air run by the local priest. Their city counterparts are taught in the House of Life, a complex of temple buildings that houses religious texts.

In Egypt, education is the key. Although peasant sons are unlikely to receive any formal teaching, poor families make every effort to send their sons to school. They hope that it will make the boy's fortune, and in turn benefit the family. A peasant's son who is lucky enough to be sent to school is unlikely to reach the highest ranks of government—but his grandson might.

### Types of school

In a village the school is usually organized by the local priest, or by a scribe who adds to his income by teaching basic skills. Larger schools are most often a part of a state department's offices, or attached to a temple, and—at the highest level—part of the palace.

The school of Amun at Karnak offers teaching in very advanced subjects, and its graduates can expect to attain the highest posts in the government. In addition to public schooling, some nobles also hire private tutors to teach their children.

The main duty of the schoolteacher is to ensure the supply of future scribes. For this reason, teachers are drawn from the ranks of experienced scribes who have a gift for speaking and passing on knowledge to the young. Lessons take place in a formal schoolroom and, later, the teacher takes on apprentices in his office.

### A schoolboy's lessons

School, for boys only, starts at about seven years of age, and the discipline is harsh. The teachers must be stern, for the task of learning hundreds of hieroglyphs and their shorthand forms is boring. Lessons consist of endless copying and recitation of texts, in order to perfect spelling.

The boys write out their exercises on pieces of stone, broken pottery, or on wooden boards covered in wax that can be smoothed over and re-used. Advanced pupils may paint onto specially prepared boards covered with smooth plaster.

Once they have mastered reading and writing, pupils learn other skills, such as composing letters in the approved form, making up accounts, and drawing up legal documents. Able students whose parents can afford it continue to more advanced studies in preparation for the highest paid jobs, in the fields of mathematics, history, surveying, engineering, astronomy, medicine, geography, and foreign languages.

Pupils learn to write on wooden tablets like this one, inscribed with an exercise in black ink with *hieroglyphics*.



### A moral education

An important part of the learning process involves memorizing proverbs and myths. These are intended to educate the pupils in correct religious and social behavior. Many texts stress the nobility of scribes and the advantages of the profession—“Be a scribe for he is in control of everything; he who works in writing is not taxed, nor does he have to pay any dues.”

Some are simple words of wisdom: “You should only talk when you are sure you know your subject. Speaking is harder than any other task and only does credit to the man with perfect mastery.”

Others insist on the educated person being humble with lesser people—“Do not boast of your knowledge, but seek the advice of the untutored as much as the well-educated. Wise words are rarer than precious stones and may come even from slave-girls grinding the corn.”

One proverb points specifically to the obligations of the landowner—“Do not move the boundary-stone in the field nor shift the surveyor’s rope; do not covet a cubit of your neighbor’s land nor tamper with the widow’s land-bounds.”



*“The ear of a boy is in his back; he listens when he is beaten,”* is a warning to schoolboys in a papyrus document.

### A scribe’s advantages

The length of a boy’s schooling depends on his abilities and how hard he is prepared to work, as well as his parents’ wealth. The high priest Bekenkhonsu started school at five and attended four years, followed by 11 years’ apprenticeship in the stables of King Seti I. At about 20 he was appointed as a *wab* (a low level of priest).

With some education, a youth might decide to opt for the military, but many scribes consider this a poor decision. The scribe Khety paints a terrible picture of army life, of its brutal training, constant quarrels in camp, of the horrors of campaigning. By contrast, a scribe has a good, secure job, and one that offers opportunities for him to reach the top of the administration.



Older pupils become apprenticed to a government office to assist scribes and bureaucrats, and learn the skills of a scribe.

## Fashion and Style

Egyptians are particular about their appearance. Clothes, makeup, hairstyles, and jewelry are important, but in Egypt's hot, dry climate, clothing styles are designed for comfort more than style.

In Egypt's long history, clothing styles have changed very little. Nearly all clothes are made from flax linen, which comes in a range of qualities from an almost sack-like coarse material to a very fine, almost transparent fabric. Wool is not much used since it is too hot and considered impure.

### Clothing styles

For everyday use, men wear loincloths and kilts of various lengths, and women wear straight dresses, which are suspended by two straps and fall to just above the ankles.

For more formal occasions men wear a full pleated tunic over their kilt. The tunic is made from a folded length of cloth with openings for the head and arms, held in place by a broad sash tied around the waist.

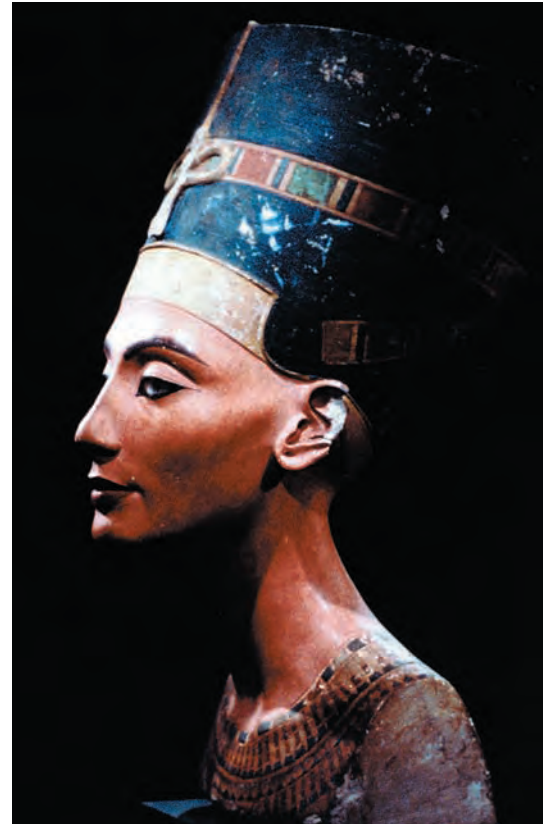
Women wear flowing pleated dresses, fastened by brightly colored ribbons, or a shawl. The shawl is a single piece of cloth folded around the body and knotted under the breasts. Noblewomen sometimes wear beaded dresses.

In the cooler winter months, especially in the Delta region, wraps and cloaks are worn. Most people go barefoot, but wear sandals made of reeds or leather with a strap between the toes on special occasions. The king is usually seen with elaborately decorated sandals, and sometimes with decorative gloves on his hands.

### Jewelry

From head to foot, Egyptians of both sexes are adorned with jewelry. For the rich there are fine pieces made of gold, silver, copper, or electrum (gold mixed with silver). Anklets, bracelets, and rings might be of plain metal or inlaid with semiprecious stones and richly colored enamels. The less well-off can find a great deal of cheaper jewelry made of copper or bands of pebbles, shells, and ivory. Faience—made by heating powdered quartz and applying it to metal or stone—is popular for decorating smaller items of jewelry.

Nefertiti, the chief wife of Amenhotep IV (also known as Akhenaten), adorned in a jeweled necklace and tall headdress, is fabled in Egyptian history for her beauty.



**Below:** A young girl serves guests seated at a banquet. They wear pleated, sheer kilts with intricate, jeweled tops and perfume cones on their heads to help keep them fresh and sweet smelling.



Merit, wife of the Deir el-Medina overseer, Kha, owned this beautifully decorated cosmetics box, with its alabaster and glass jars of face paint.

**Right:** Men sit and wait their turn on a barber's stool.



Both men and women paint around their eyes with kohl applied using little sticks. Kohl is made from malachite (copper ore) or galena (lead ore) ground to a fine powder, mixed with oil, and stored in small jars. Eye paint has a dual purpose—it makes the eyes look beautiful and it helps to ward off flies. Red ochre clay is ground and mixed with a little fat and water to make a rouge for the cheeks and lips.

### Hairstyles

Egyptian men typically wear their hair short, leaving their ears visible. However, at times it is common for both men and women to shave their heads and wear a wig when going out. The shaved head is cooler when the weather is particularly hot. Wigs are popular for use on formal occasions. Women's wigs are longer than those for men, but both have elaborate arrangements of plaits and curls.

Popular styles include gold tubes threaded on each tress, or inlaid gold rosettes strung between vertical ribs of small beads to form full head coverings. Natural hair as well as wigs are often dyed with henna leaves, which women also use to dye their palms and the soles of their feet.

Combs are used to keep both natural hair and wigs in good condition. These are either single- or double-sided combs made from wood or bone. Some are very finely made with a long grip. Poor Egyptians shave with a sharpened copper razor, while those who can afford them use better bronze razors.

### Cosmetics

Egyptians have no soap, but they clean their bodies with a combination of oil, lime juice, and perfume, which helps prevent the hot sun from drying and cracking the skin. There are tweezers for removing unwanted body hair and special preparations for curing spots and covering up unacceptable body odors.

Perfumes are made from flowers and aromatic woods soaked in oils. A good host ensures his guests' comfort at banquets by giving them cones of perfumed animal fat, which they place on their heads. As they melt, the mixture runs down the face and neck, providing a pleasant cooling effect and giving off a nice smell.





**Above:** Many varieties of watery fun—a family boating trip, hunting crocodiles, fishing, boating contests and trapping water fowl.

## Entertainment and Games

The daily preoccupation with death and the afterlife might imply that Egyptians are a sad and solemn people, but nothing could be further from the truth. They enjoy this life so much that they spend time preparing to enjoy eternity to the full.

In between education, official duties, and farm work, Egyptians fill their spare time with numerous pleasurable activities. Children have a number of dolls and toys. There are brightly colored balls for playing alone or in team games, model boats, slings, whips, and spinning tops. Some toys have moving parts, such as a row of figures made of ivory that dance when a handle is turned, or a wooden lion with snapping jaws.

### A day splashing about

For adults and children alike, the Nile is a vast playground, although some activities are very dangerous and not suitable for the whole family. Hunting crocodiles and hippopotamuses from reed boats is one

example. A team of men armed with spears, throwing harpoons, and nets hunt the marshy banks and try to capture the wild animals.

More relaxing water sports include a family outing on the river, fishing, or simply swimming to cool off in waters cleared of crocodiles. There are boating contests in which teams of men, armed with long poles, stand in boats that are rowed at high speed toward each other. Each team tries to knock the opposition into the water.

Hunting in the desert for gazelle, fox, hare, and hyena is another great pastime for nobles who can afford horses and chariots. Men of lower rank enjoy wrestling matches and fencing with wooden swords.



A leather-covered ball and a wooden horse on wheels are just two of the toys children play with.

### Indoor board games

Of course, people with gardens enjoy relaxing in them, and it is here or indoors that Egyptians enjoy the most popular entertainment of all—board games. In Hounds and Jackals, named after its stick counters topped with the heads of those animals, the game is played by moving the pieces about the board determined by the throw of marked sticks.

Then there are Twenty Squares, Tshau (“Robbers”), and the favorite game, Senet (see “Playing Senet”). Everyone has a Senet board—made of mud and reed for the poor, wood and faience for the better off, and of ebony, ivory, and gold for the rich.

### Parties and quiet relaxation

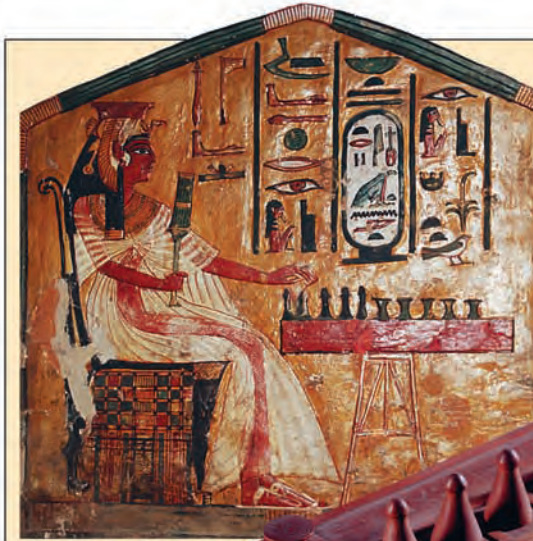
Wealthy Egyptians often entertain by holding extravagant parties with plenty of food to eat and beer and wine to drink, while singers, musicians, dancers, acrobats, and jugglers entertain the guests. The Egyptians love music, and play instruments such as the lute, harp, lyre, and several types of flute and pipes.

Those who can read are catered for by several books, papyrus scrolls with stories of travel, adventure, and mayhem. In the hands of the professional storytellers, tales entertain those who are unable to read. Other quiet moments might be spent enjoying household pets, which include geese, monkeys, cats, and dogs. When a pet dies, its collar is buried along with it, ready for reunion with its owner one day in the afterlife.

### Public entertainment

There are no games or public theaters in Egypt, but the musical splendor of public holidays in honor of various gods makes up for this. At large temples, priests and priestesses often perform sacred dramas about the lives of the gods, which not only make for a religious experience, but also a fun day out for the family.

Festivals held in ancient Egypt are usually holidays in honor of important gods. During festivals held in their honor by the priests, statues of the gods are carried through the streets.



Queen Nefertari, wife of Ramesses II, is shown in this painted wall relief playing Senet. **Below:** The wooden Senet set of Kha, royal overseer at Deir al-Medina.



### Playing Senet

In this middle-class home, the playing pieces are made of wood, and when not in use are kept in a drawer at one end of the box. The throw of four carved sticks is used to determine a player's move, depending on the way they fall, crossed or pointed.

Senet is played on a board of 30 or 36 squares laid out in three rows of ten or twelve. Certain key squares are inscribed, and bring a benefit or disadvantage to the player who lands on them. Each player has six pieces and the object is to pass through the opponent's pieces and return to the original starting point, while blocking the other player's moves as much as possible.

**Below:** Dancers and musicians from a tomb in the Valley of the Kings, Thebes.



## CHAPTER 3

# A Working Life

## Scribes—the Machinery of Government

Every freeborn Egyptian boy wants to be a scribe when he is older. Scribes keep the machinery of society and government working, and are honored for their skills—and well paid besides.

The career of scribe in ancient Egypt is as exacting in its requirements as it is honorable and profitable in its rewards. A young man lucky enough to have graduated from one of the great scribe schools of Memphis or Thebes is expected to be able to read, write, and draw to a high level of accuracy.

And more, he must be well versed in mathematics, bookkeeping, management of workers, the law, and even such subjects as mechanics, surveying, and architectural design. The job of surveying farmers' fields is important (*see pages 22–23*), but a scribe who excels in building and surveying might find himself in the king's retinue working on the great royal monuments and temples, a much sought-after position to hold.

### A scribe's functions

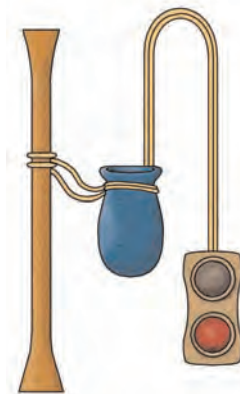
Once he has qualified, a scribe automatically becomes a member of the educated official class. This status exempts him from menial labor of any kind, including the labor tax, and he is on the first step of the administrative ladder up which he may rise through recognized stages to the highest offices in the land.

Scribes of the lowest rank, like the one pictured on the opposite page, make lists, keep records, write letters, and draw up simple legal documents. Those with no flair for administration but who can write beautifully might work in a great temple's House of Life (archive) where documents are stored, and copied when they begin to wear out from use.

For the more able scribe, there are more responsible jobs in the administration, such as supervising the

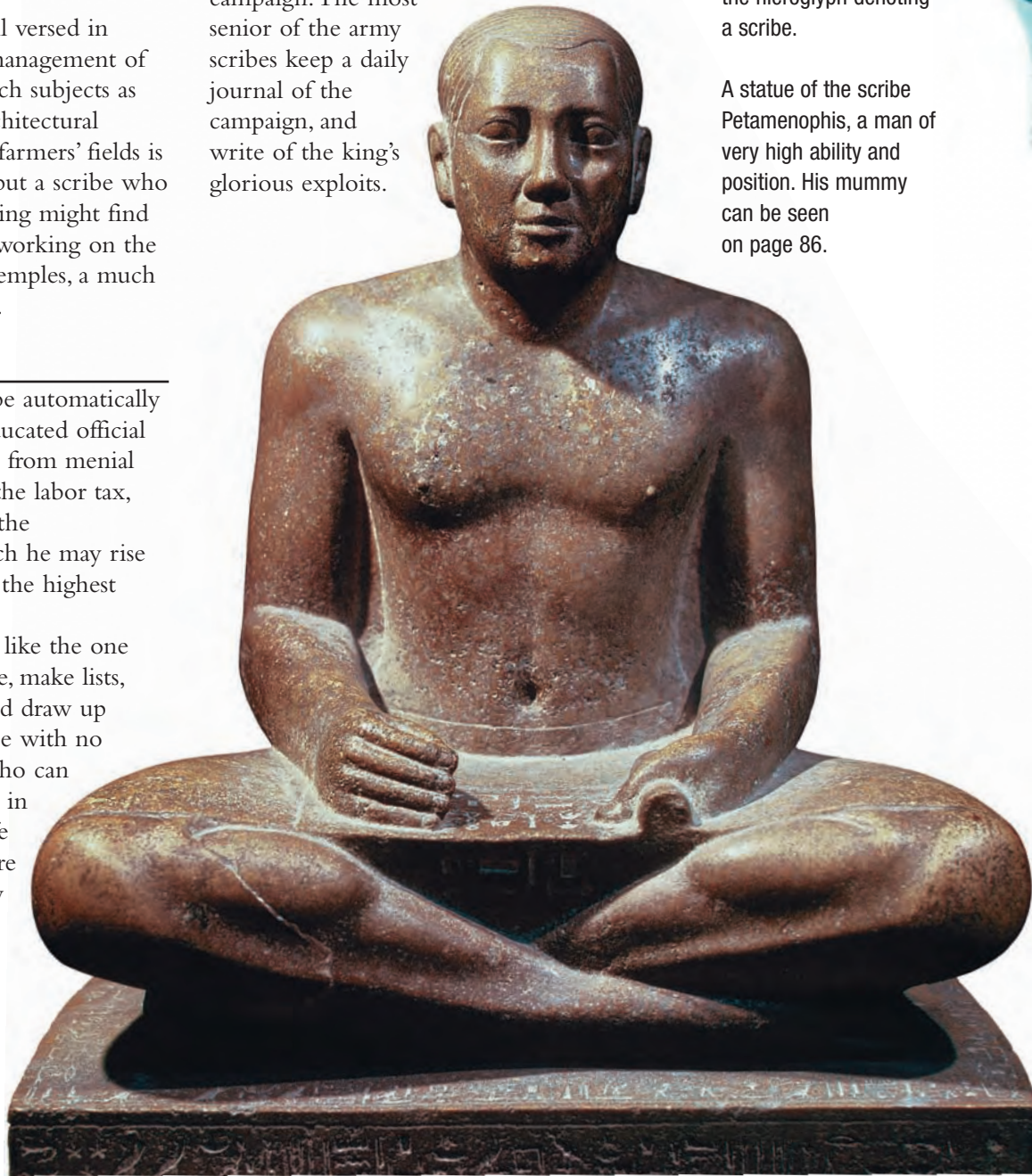
collection of taxes that are paid in both farm produce and labor. The most talented and ambitious men hold top posts in government, and supervise junior scribes.

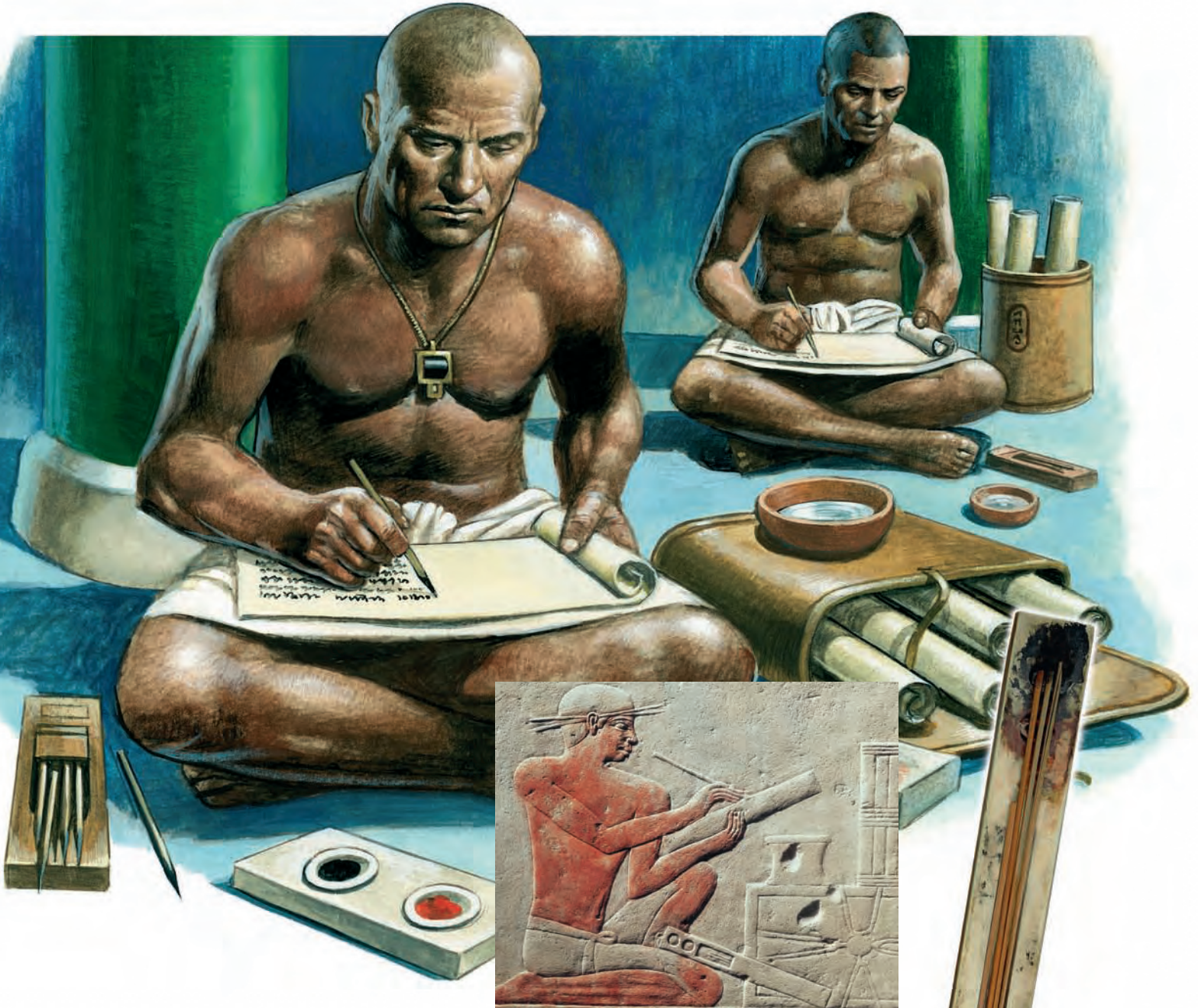
Scribes also act as paymasters for the army, organizing the daily supplies of food, arms, armor, and other equipment necessary on campaign. The most senior of the army scribes keep a daily journal of the campaign, and write of the king's glorious exploits.



The scribe's palette, his reed pen, and the jar of water he uses to wet the color pigment form the hieroglyph denoting a scribe.

A statue of the scribe Petamenophis, a man of very high ability and position. His mummy can be seen on page 86.





### The scribe and his equipment

The scribe pictured above sits with his fellows in the chancellery office of a great lord's estate. The task he is performing—making an inventory of his lord's linen supply—might seem lowly, but an Egyptian noble's possessions are what mark him out. Top-quality linen is important and every item must be accounted for. Linen sheets have an ink inscription in one corner, giving the name of the individual, estate, or government department to which it belongs.

The scribe sits cross-legged so that the front of his kilt is tightly stretched across his thighs to act as a desktop. The small cylinder suspended from his neck is inscribed with

his lord's name, and is used for sealing documents and other items belonging to the estate. He writes on fine papyrus in *hieratic* (see page 57) from right to left, using a brush made from reed with a carefully frayed and trimmed tip.

He keeps his inks—black and red—in two bowls of an alabaster palette. A piece of rag attached to the end of the palette is used as an eraser. Next to the palette is a stone slab for grinding the solid blocks of pigment to make ink. The scribe's bronze basin, containing water for mixing with the pigment, sits on top of a leather bag in which he keeps fresh rolls of papyrus.

In the field, scribes keep notes on scraps of papyrus attached to palettes like this, equipped with a slot to hold pens. One can be seen in the tomb wall carving above.

## Writing—Tool of the Scribe

The first examples of Egyptian writing appeared in about 3300–3100 BCE, and may have been inspired by Sumerian cuneiform writing. The Egyptian script is known as hieroglyphic, which is Greek for “holy writing,” but the Egyptians know it as *medu netier*, or “divine words.”




Pharaohs and nobles have their names inscribed in stone or painted on walls in hieroglyphics. The collected words are called *cartouches*. These are the two *cartouches* of Pharaoh Amenhotep IV.




Hieroglyphs are pictograms—pictorial representations of plants, animals, buildings, people, and objects of daily use. Over time they developed into a written form of the spoken language, with words and whole sentences. The Egyptians use a system that combines *phonograms* (sound-signs that spell out the word in an alphabetic manner) and *ideograms* (pictures with no sound value that are added to a spelled-out word to make its meaning clear).

### How hieroglyphs work

Egyptian writing consists of over 700 hieroglyphs, each representing a sound or an idea. Each hieroglyph corresponds to the sound of one or two letters, for instance:

bread loaf	ankh	cataract
t	nh	sw
		

A sign can also represent an object. So  means mouth, but also represents the sound “r” and can be used as part of the word *nfr*, meaning “beautiful.”

	
n (water)	f (viper)
	r (mouth)

To complicate matters, there are also some three-letter signs. For example *nfr* might also be written as a single sign:



### No vowels

Egyptian scribes write in consonants only. In order to pronounce the language, vowels have to be added. Language experts often disagree as to which vowels should be added, which leads to several spellings of the same name. For example, the hieroglyphs for the name *mnhtp* can be written as Amenhotep, Amenhotpe, or Amunhotep.

### Two-letter hieroglyphs

Some two-letter signs have a meaning on their own, and represent individual words. They are often completed with a stroke, known as the *ideogram* sign that indicates the word corresponds with its pictorial value.

For instance with the *ideogram* stroke this glyph means “duck,” while without the stroke it means “son.”










### Making meanings clear

Sometimes a sign representing an object or movement is placed at the end of a word, to clarify its meaning. This is called a *determinative*. The hieroglyph meaning “scribe” can be followed by the *determinative* of a man to make the word “writer.” The same hieroglyph followed by the *determinative* “papyrus roll” turns the word into “script” or the verb “to write.”



### Counting

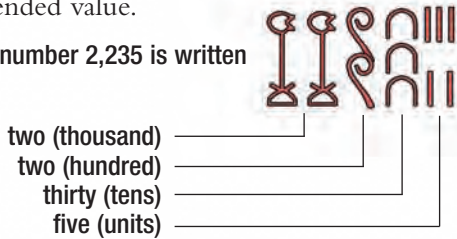
Egyptians count using the decimal system. For the main numbers, the following signs are used:

	unit		ten thousand
	ten		hundred thousand
	hundred		million, infinite
	thousand		

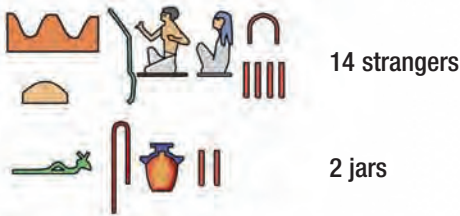
When a scribe writes a number, he places the higher-value signs in front of the lower-value signs. The number signs are then

repeated as often as necessary to reach the intended value.

the number 2,235 is written



When numbers are combined with a word, they come after the word they are referring to:



### Cartouches

When writing the name of a king or a god, scribes use a cartouche. This is an oval frame surrounding the hieroglyphs that spell out the name.



### The calendar

Groups of hieroglyphs are used to indicate the parts of the Egyptian year, with its three main seasons of four months each:



Dates are given by counting the years, months, and days from the start of a new

king's reign. The start point is represented by the hieroglyph:



This example...



means "22nd year, 2nd month, 23rd day, under the majesty of the king of Upper and Lower Egypt, Tuthmosis III." The king's name is contained in his cartouche.

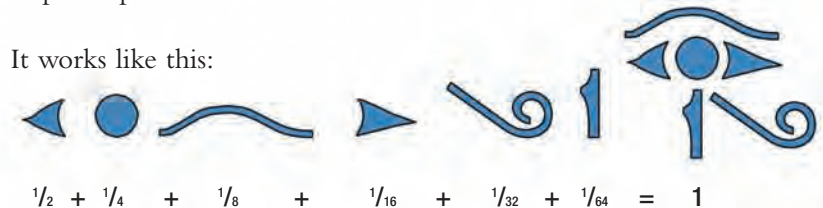
### Egyptian fractions

The *udjat*, or *wadjet*, is a symbol known as the Eye of Horus, or sometimes the Eye of Osiris. Horus is said to have lost his left eye in a battle with the evil god Seth while avenging the death of his father, Osiris. Thoth, god of wisdom, reassembled the eye and returned it to Horus, who in turn gave it to his father and brought him back to life.



Scribes—and especially doctors—use the component parts of the Eye of Horus to denote fractional measurements for the ingredients of prescriptions.

It works like this:



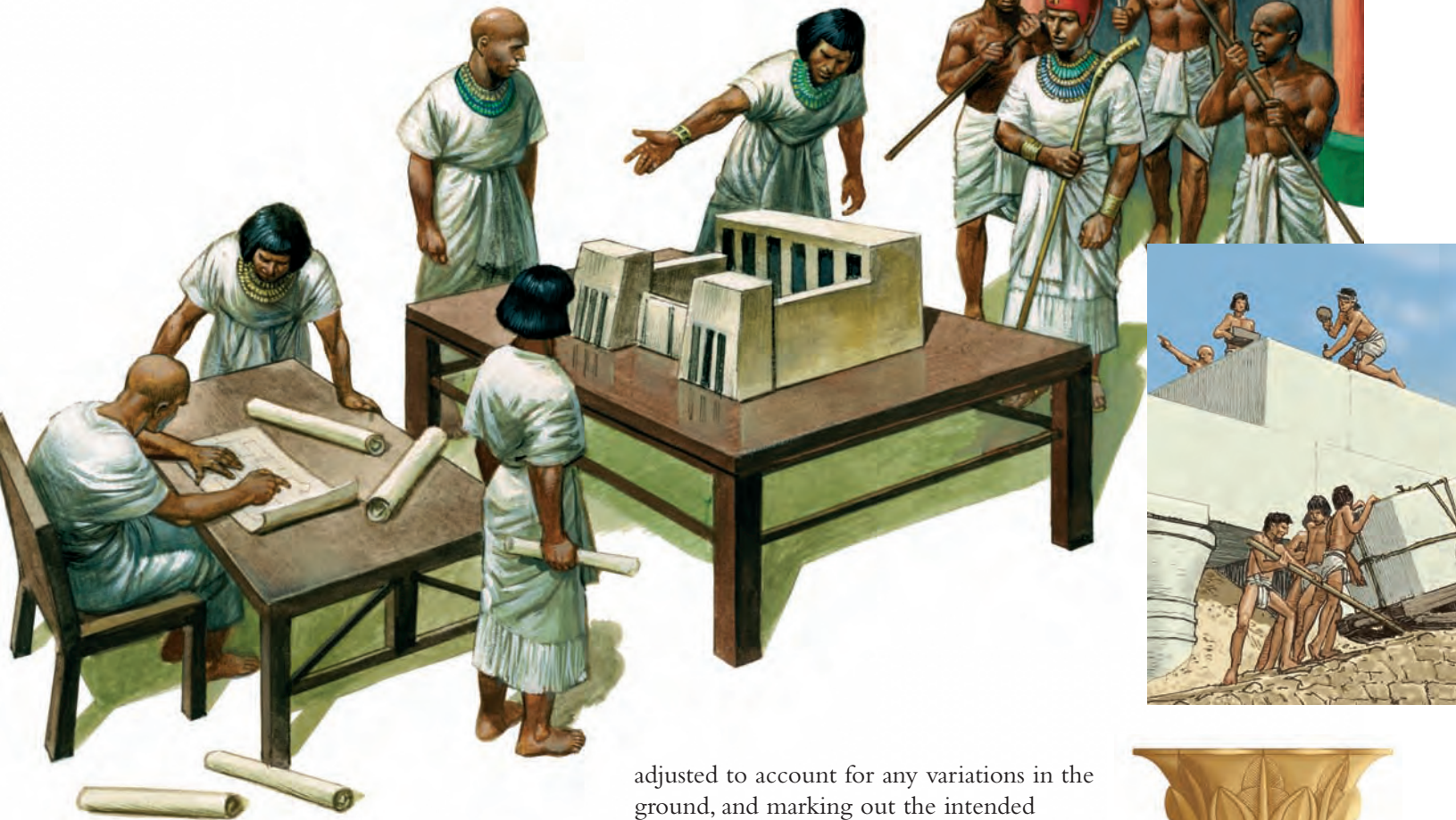
### Shorthand scripts

The Egyptians developed two shorthand scripts for daily use, which were much faster to write than *hieroglyphs*, which were usually reserved for religious and royal inscriptions. The first, known as *hieratic* (shown here), was already in use during the Old Kingdom, and the symbols are simplified versions of the original *hieroglyphs*. During the Late Period (c.750 BCE), an even more flowing script evolved, known as *demotic*.



## Architects, Surveyors, and Engineers

Elite among scribes, great status is enjoyed by architects, surveyors, and engineers, especially those who work directly for the pharaoh on his monumental building programs.



Few men in Egypt are as powerful as the royal architect, for it is he who transforms the pharaoh's dreams into stone. One of the most famous architects, Imhotep, built the first true pyramid for King Djoser (Zoser). Imhotep was so revered that he was later made a god of learning.

It is the task of the architect to draw up plans and make models of any project proposed by the king. For this the architect has an entire state department staffed by numerous scribes who turn his concept into accurate drawings. For these to become reality, the architect must employ the best surveyors and their staff to measure the selected site.

The process of surveying involves testing the proposed site for the soundness of the bedrock to take the new building's weight, taking levels so that the foundations can be

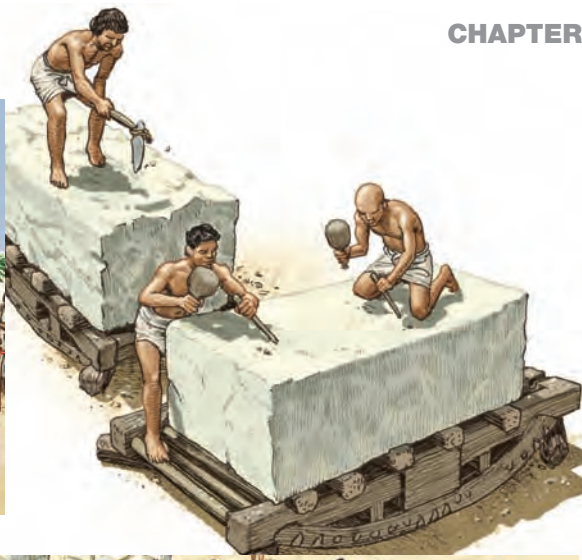
adjusted to account for any variations in the ground, and marking out the intended ground plan. A foundation ceremony is held, during which the king lays out the ground plan with posts and ropes.

### The building logistics

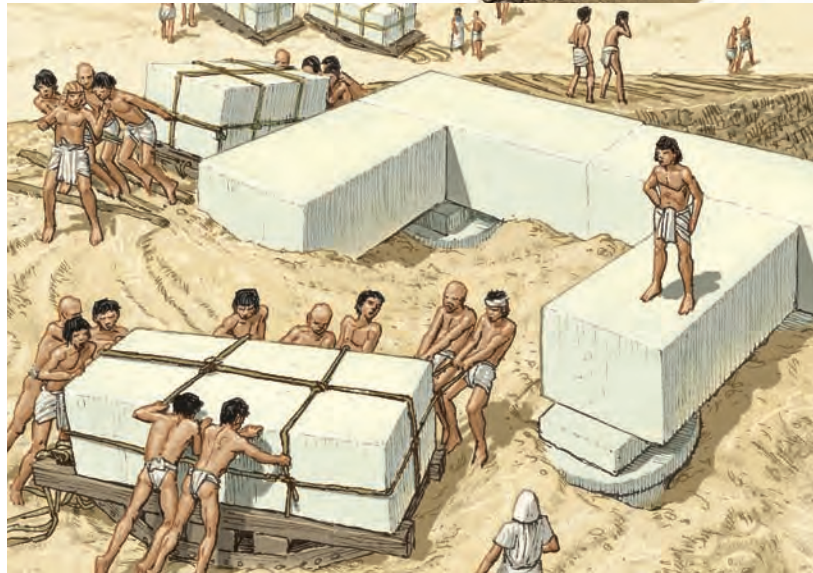
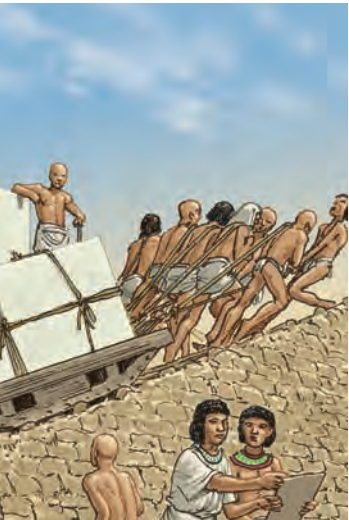
Surveyors are also dispatched to the great rock quarries in the south near Aswan to select suitable stone for the building's blocks, columns, and obelisks. Engineers accompany them. It will be their task to work out how to move the rough-hewn stone blocks and then transport them to the building site. Engineers are also responsible for overseeing the mechanics of building, for instance deciding where earth ramps will be needed as the walls get higher.

The architect is also responsible for the final finish, working with stonemasons on architectural detail and carvings, and with painters on the colored decoration of reliefs, walls, and columns.





Before building starts sacrifices are made and the pharaoh ceremoniously marks the perimeter of the projected structure. Stonemasons begin their work: after rough shaping with a stone hammer, the block is smoothed using a hardened bronze chisel. Mud-brick ramps are erected, up which the stone blocks mounted on wooden sleds are hauled on a track of heavy timber beams. As the walls rise higher, the center of the building is filled with sand for the workers to walk over. When full height is reached, stone cross beams are set into the column tops to hold the roof.

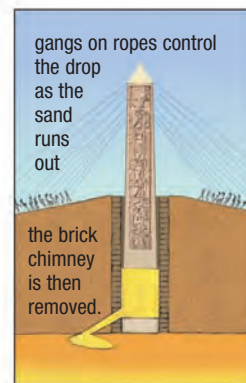
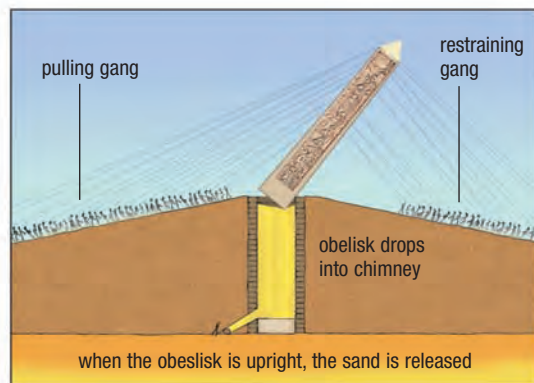
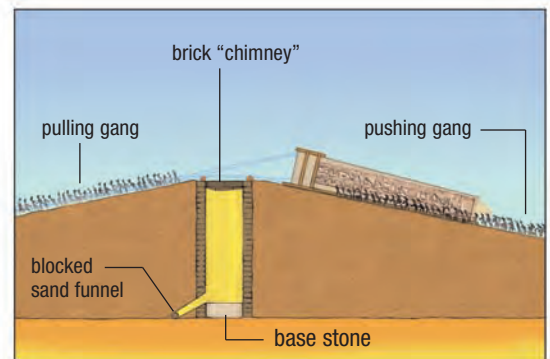


Column capitals take the form of the lotus flower, the symbol of rebirth—like the sun, it is open in the day (left) and closed at night (above).

### Managing the workforce

During his work, the architect is also responsible for the taskforce that may amount to many thousands of men—permanent laborers, peasants paying the labor tax, and prisoners of war.

Scribes handle the innumerable matters of workers' pay, food supplies, accounting for materials and tools, accidents, housing, and the overall schedule.



### Raising an obelisk

A brick "chimney" is built around the base stone and two ramps raised on either side. The chimney is filled with sand. With one gang pulling and the other pushing, the obelisk is dragged up one ramp until its base drops into the chimney's top, resting on the sand. The sand is then released from the bottom.

## The Main Crafts

Egyptians who do not work in the fields and who hold no official positions as scribes form the core of the professional class of artisans—craftsmen in a variety of trades.

Although skilled craftsmen are few in number compared to farmers, their contribution to Egypt's economy is important. The best are wealthy men who own their own workshops and employ fellow artisans, among them potters, carpenters, weavers, jewelers, painters, and workers in leather, glass, or metal.

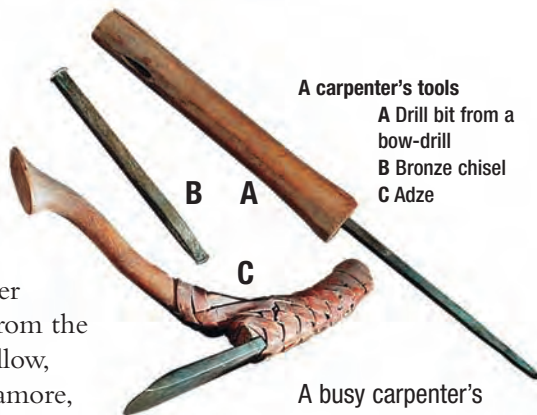
A trainee craftsman, normally following his father's trade, starts off as an apprentice, rises to be a junior, and finally graduates to full craftsman status. The most skilled workers find full-time jobs in the workshops of temples, nobles, and the king.

### Carpentry

Lack of good native timber makes the Egyptian carpenter a master of his trade. Large boards and beams are fashioned by carefully piecing together short, narrow cuttings from the scrubby local trees—willow, tamarisk, acacia, fig, sycamore, and palm. Imported hardwoods, such as pine and cedar from Phoenicia, or ebony from the Sudan, are costly so they are only used for carpentry fixings, door fittings, and small, expensive pieces for the wealthy.

Metal fastenings are rarely used, carpenters preferring to fix pieces with tapered and straight hardwood pegs. Artful cheats can create the impression that a greater weight of wood has been used.

The carpenters' bronze cutting and drilling tools—adze, saw, ax, chisel, knife, scraper, and bow drill—are equipped with hardwood handles. Mallets and set-squares are also of hardwood, and the whetstone used for sharpening blades is quartzite stone. Wood is smoothed with a plane—a lump of sandstone with a carefully grooved cutting surface—and various grades of sand are used as abrasives to give the wood a smooth, even finish.



A carpenter's tools

- A Drill bit from a bow-drill
- B Bronze chisel
- C Adze

A busy carpenter's workshop is depicted in this model, dating from c.2000 BCE.



This painting inside the tomb of Rekhmara, a governor of Thebes, shows artisans at work on different tasks and in a wide range of skills.

### Glassmaking

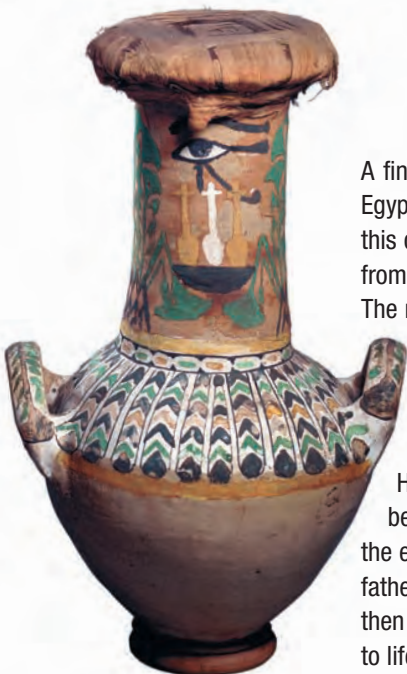
Colored glass beads are prized for use in jewelry, but more spectacular are the elegant vessels made from blue-green glass. These are fashioned by making up the vessel's shape from a clay core around a handling rod. This is dipped into molten glass and leveled by rolling the whole thing on a flat stone called a *marver*. Pincers are used to shape the feet and rims.

Patterns are made by winding threads of red, white, or yellow glass around the still-hot core. These threads are sometimes pulled with a needle in order to form "swag" or "feather" patterns. After cooling, the central core is broken up and removed through the glass vessel's neck.



### Pottery

The art of throwing pottery vessels on a potter's wheel and then firing the part-dried clay in a wood-burning furnace is similar all over the Middle East. A trade related to pottery is that of the alabaster worker. Egypt is rich in fine white or brown alabaster, a soft, translucent stone that the craftsman patiently carves into shapes, such as figurines or pots, drinking cups, and bowls. Carved and smoothed until their walls are paper-thin, alabaster bowls are popular as lampshades, the light flowing warmly through the almost glass-like stone.



A fine example of the Egyptian potter's craft, this decorated jar dates from about 1560 BCE. The neck is adorned with the device known either as the Eye of Osiris or the Eye of Horus. It brings luck because Horus gave the eye to his murdered father Osiris, which then brought him back to life.



Carved alabaster is prized for its translucent beauty.

### Weaving

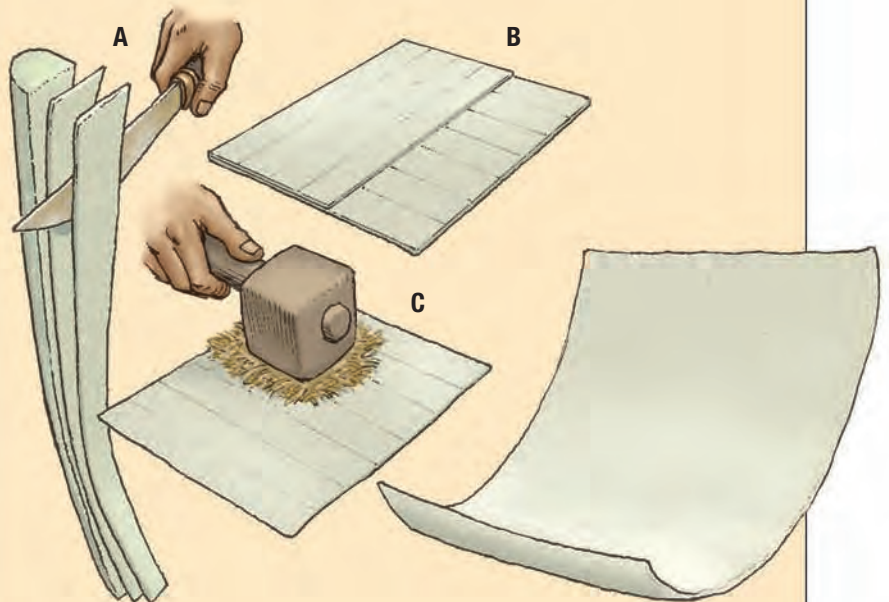
One of the principal trades for women, weaving is done both at home and in special workshops. In the early days the looms were laid out horizontally on the ground, but the Hyksos (*see page 11*) introduced the vertical loom. These are more practical to use indoors because they take up much less space. Other women's occupations include perfume-making and managing farms.

### Leatherworking

Leatherworkers, using hides mainly from cattle and gazelles, make a range of goods, including body armor, shields, arrow quivers, satchels for scribes, sandals, door hinges, and straps used for the seats of stools.

### Paper-making

Paper-making is a vital trade in support of the scribes' efforts. Paper is made from the papyrus reed, which grows along the marshy banks of the Nile. After harvesting, the outer fibers are peeled away and the core of the stalk is sliced into very thin strips that are as broad as possible (A). The strips are soaked in water to remove most of the sugar content. Then the strips are pounded and the excess water removed, after which strips are placed side by side, slightly overlapping.



A second set of strips is placed over the first at right angles (B). After a further pounding (C), the raw papyrus sheet is left to dry under a heavy stone slab for about six days. During this process, the remaining sugar content of the papyrus helps to "glue" the strips and layers firmly together. After drying, the sheet's surface is polished to a smooth finish with a shell or piece of smooth ivory.

## Quarries, Mines, and Metalworkers

Egypt is well supplied with a variety of stones and minerals. Quarries in the Eastern and Western Deserts are within reach of the Nile, but metal-bearing ores are at a greater distance.

**M**ining for copper and gold is done under dreadful conditions, far from home, far from water, under the broiling heat of the desert sun by day and freezing temperatures at night. The work is heavy, dusty, and tiring.

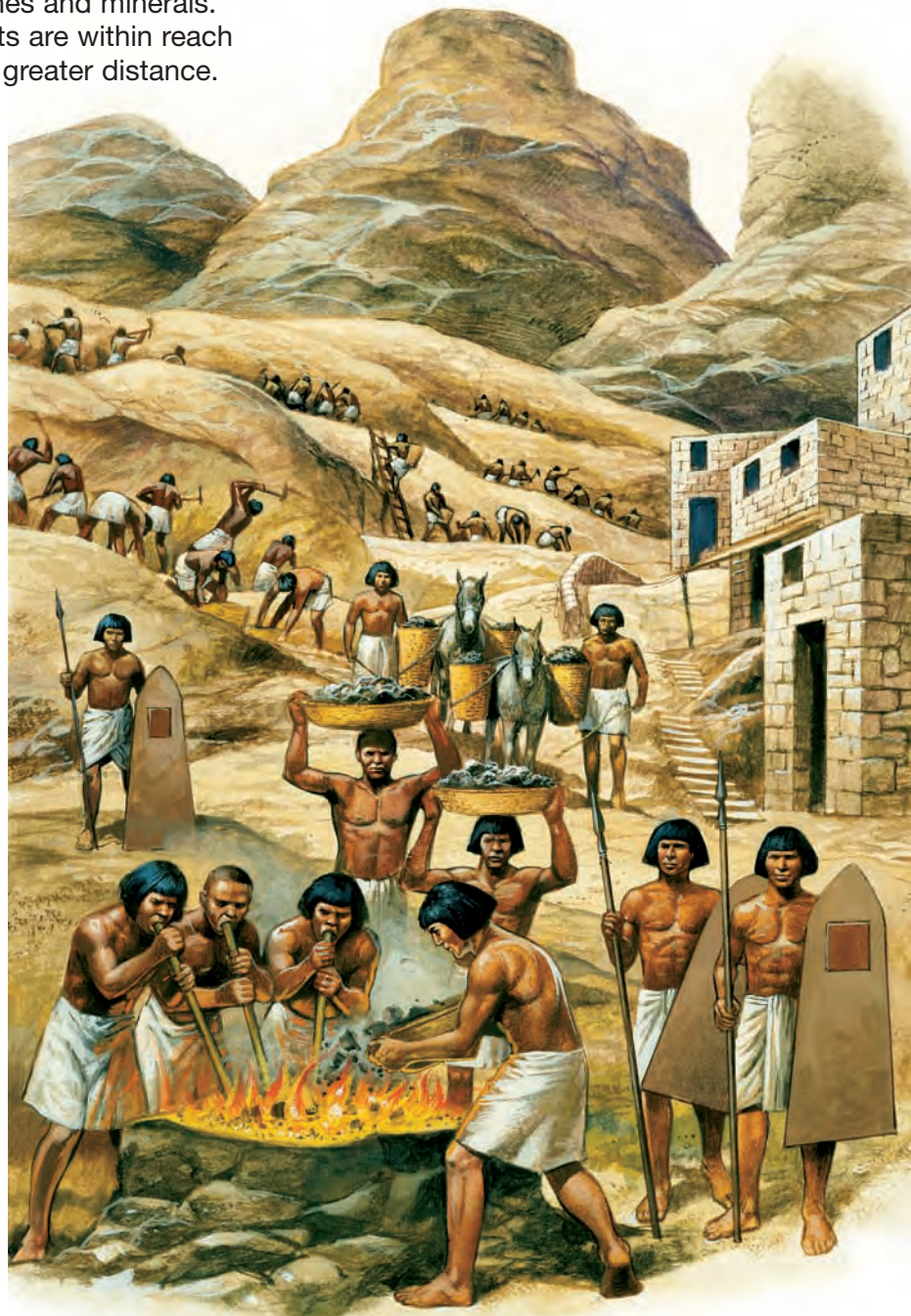
Mining and quarrying expeditions are authorized by the king and financed by taxes. The workforce includes stonemasons, engineers, and mining experts, but the majority is made up of unskilled men who work as part of their labor tax. Because of this, mining and quarrying are usually seasonal activities, carried out during the period of the Nile's inundation. However, larger projects continue throughout the year, using convicted criminals and prisoners of war as slave labor.

### A gold mining camp

Gold is found mainly in the Eastern Desert and Nubia. In these mining sites there are permanent stone-built barracks for the workforce, close to the mineshafts. These plunge horizontally or diagonally downward from the cliff face entrances, following the veins of quartzite rock bearing the gold. The engineers are skilled in drilling vertical shafts, sometimes as deep as 230 feet, into the galleries to act as air ducts.

The underground quartz veins are mined by crushing the rock before it can be extracted. In the dark and winding tunnels, the workers light their way with torches that are fixed to their foreheads. Young boys follow them and laboriously pick up pieces of the crushed rock in their hands and carry them outside.

On the surface, the quartzite rocks are heated to make them brittle and then broken up with stone hammers. The oval stone hammers are about 8 inches long, made of hard basalt rock. A wooden handle is inserted in a deep groove and fastened to the rock. After smashing, the smaller chunks of ore are ground in a mill similar to a corn mill. The



resulting dust is then washed and the gold extracted. This is called “gold of the mountain.”

In some places gold is found nearer to the surface, having formed naturally in sandy riverbeds in prehistoric times when the deserts were lush forests. This alluvial gold is extracted by washing away the lighter sand particles with water and then melting the remaining gold particles. This is known as “gold of the water.”

Stone barracks for the workers and store-houses sit against the rock face in this busy copper mine. Ore is crushed and smelted to extract the copper. Soldiers are on hand to protect the workmen and the precious metal from bandits.



**Egypt's mineral deposits**

- alabaster
- limestone
- sandstone
- basalt/dolerite
- granite(s)
- porphyry
- ◇ natron (salts)
- copper
- tin
- lead
- gold/silver
- ◇ semi-precious stone (type)
- iron

**Other precious commodities**

In Egypt, silver is rarer than gold, which makes it more expensive. The two metals are usually found in the same deposits, and even combined as an alloy. When the silver content of the gold-silver alloy is higher than 20 percent it dulls the metal's golden sheen, and is called electrum.

*Mafaket* (turquoise) and *shemet* (malachite) are mined in the Sinai, while emeralds are extracted from hills near Koptos. Other semi-precious stones are found here and in the Eastern Desert close to Elephantine—jasper, feldspar, amethyst, beryl, lapis lazuli, carnelian, and garnet.



An unfinished granite statue of Tuthmosis III lies half buried in the ground in a royal quarry near Aswan. Work may have been abandoned on the king's death.

**Metalworking**

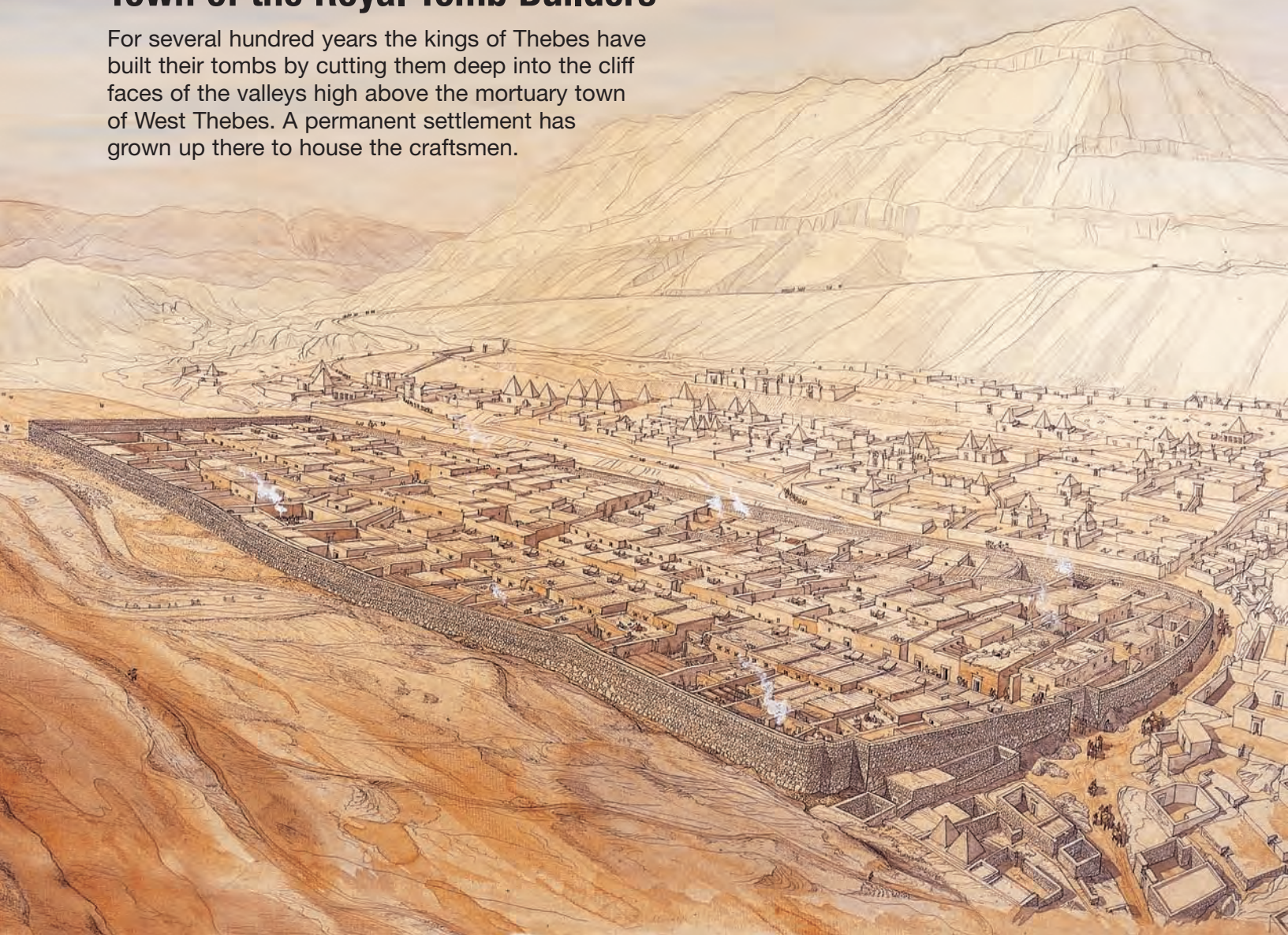
**Jewelers at work making a gold shoulder necklace and using a bow-drill.**

Egyptian smiths work in copper, bronze, silver, gold, and electrum. Copper and bronze are smelted from raw ore brought in from the mines in furnaces fueled by wood and fiercely heated by use of a pair of bellows. Bronze is hammered into shapes for armor, swords, and spearheads. Liquid metal is poured into clay molds for larger pieces, or used in the “lost-wax” casting process for finer objects such as ornaments, which are also light in weight.

In this, a rough shape is made in clay. Bronze pins are inserted and a detailed wax model is built around the clay core. The wax model is then covered by an outer clay mold. Now the clay molds are fired in a kiln and the heat melts away the wax model, leaving a perfect impression of its shape on the inside of the outer mold (the inserted bronze pins keep the central core in place as the wax melts). Next, molten bronze is poured in between the outer mold and the inner core, and when it has cooled, the outer clay mold is cracked away to reveal the finished, hollow (light) bronze figure.

## Town of the Royal Tomb Builders

For several hundred years the kings of Thebes have built their tombs by cutting them deep into the cliff faces of the valleys high above the mortuary town of West Thebes. A permanent settlement has grown up there to house the craftsmen.



Reconstruction of the workers' walled town of Deir el-Medina. Tombs of the wealthier artisans can be seen rising up the hillside on the right, many of them topped by small pyramids. Artifacts buried with the workers and the many wall paintings are the best source of knowledge about the lives of ordinary Egyptians who worked on the royal tombs in the Valley of the Kings.

The tombs in the Valleys of the Kings, Queens, and Nobles are a massive undertaking (see pages 90–91). Just below the entrances to the royal valleys, a community of craftsmen has grown up. The men and their families live in the town of Deir el-Medina, which was built specially to house the tomb-builders. The workers call the place *Pa-demi*, which simply means “the town.”

### **A place of comfort**

Deir el-Medina is unique in as much as its foundations and many of its walls are built of stone and not mud bricks. Where it is situated—far from the river—stone is plentiful and river mud is not. However, bricks brought up to the slope are used

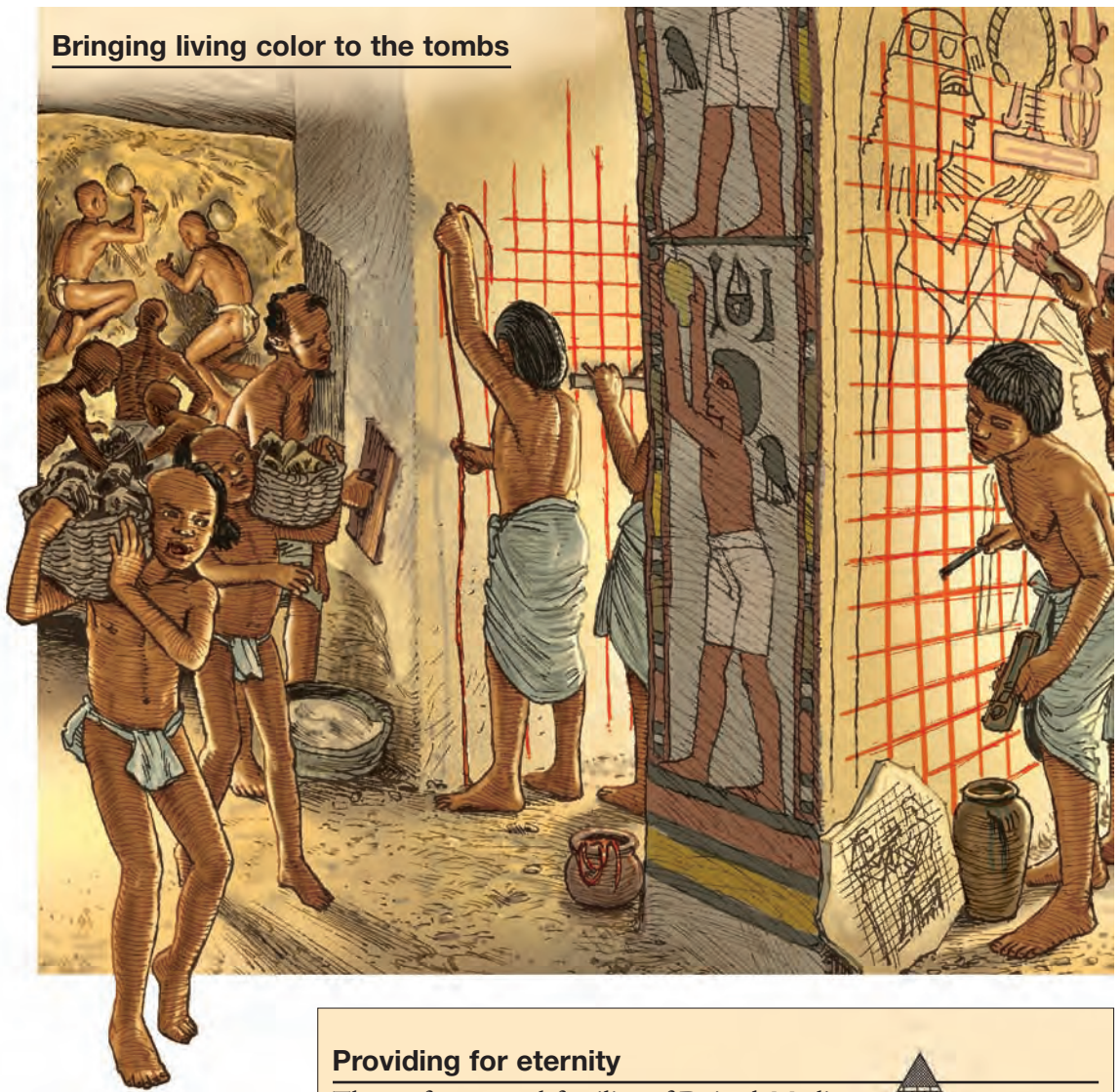
internally, for steps, raised beds, and temporary structures.

The town has its own temple and priests, vizier's court, doctor, scorpion charmer, and a wall around it to keep out desert raiders. There are some 70 homes inside the wall and another 40 to 50 outside. A main street runs from north to south through the middle, with a few side alleys leading off it. The community well—filled by water-carriers from the nearest canal off the Nile, about half a mile away—is situated outside the only gate, at the town's north end.

The houses are lined up along either side of the main street, and each opens directly on to it. The average house has four rooms, although some have as many as seven.

As each section of a tomb is hewed out of the cliff, the walls are coated in plaster. The master-draftsman provides his scribes with sections of drawings made on clay. To ensure accurate enlargement of the original, proportion squares are laid out on both sketches and the wall. The lines forming the square are “snapped” onto the plaster by means of a cord coated with red pigment. The man marking off the squares uses a measuring rod, one royal cubit (20.6 inches) in length. On the prepared grid a preliminary full-size sketch is made in red outline, over which the finished drawing is done in black, ready for the colorists to fill in the detail.

### Bringing living color to the tombs



### The workers

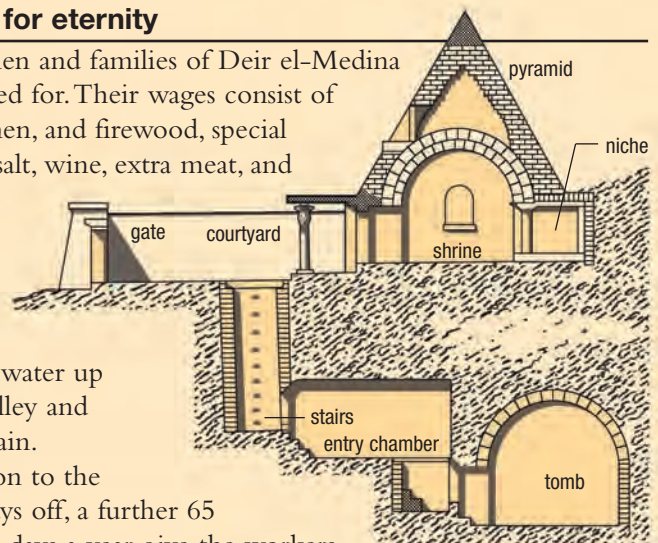
The workmen are divided into two *iswt*, or gangs, known as the Left and Right side gangs, a reference to a boat's crew and reflecting on which side of a tomb they work. An *iswt* is a military-style unit working under a foreman who oversees the workmen's activities. Each gang consists of stonemasons, carpenters, sculptors, and draftsmen/painters.

The Egyptian week is ten days long—eight days of work and two rest days. On working days, the men of Deir el-Medina live in a camp closer to their work up in the royal valleys. Scribes are in attendance to log the workmen's tools in and out from a central store, and record the work done, workers' absences, payments, and supplies. They also write letters for the townspeople and send reports on progress to the vizier.

### Providing for eternity

The craftsmen and families of Deir el-Medina are well cared for. Their wages consist of food, oil, linen, and firewood, special bonuses of salt, wine, extra meat, and silver; and there are slaves to do the heavy work, such as bringing water up from the valley and grinding grain.

In addition to the weekend days off, a further 65 holy festival days a year give the workers plenty of relaxation time. However, not all of this time is spent in feasting. Better off craftsmen have been allowed to purchase plots for their own tombs in the lower hills above the town. While tiny compared to those of their royal master, these are beautifully constructed and decorated, and topped by small pyramids.





*Greek islands*  
wine, copper,  
silver, luxury  
goods

MEDITERRANEAN  
SEA

*Cyprus*  
poppy juice for  
medicine,  
copper

*Lebanon  
(Phoenicia)*  
cedar wood

*Eastern Mediterranean coast*  
timber, tin, copper, silver, wine,  
oils, resins, slaves, horses; exotic  
Far Eastern goods

Euphrates  
Tigris  
BABYLONIA

*Desert oases*  
wine, cattle, reeds,  
dates, natron, salt

EGYPT

Nile

RED  
SEA

*Sinai*  
turquoise,  
malachite,  
copper

ARABIA

**Below:** The thin chief of Punt, Perehu, and his curiously deformed wife Ety wait to greet the Egyptian merchants. This relief is part of a great cycle of images from Hatshepsut's funerary temple detailing the expedition.



Egyptians use scales and standard weights like the *deben*, which is often shaped like a bull's head. The figure at the top of the post represents the goddess Ma'at, who weighs the souls of the dead against her feather (see pages 76 and 84).

*African interior*

ebony wood, ivory, incense,  
ostrich feathers, leopard and  
panther skins

*Nubia*  
slaves, cattle, gold,  
copper, amethysts

*Punt  
(possible site)*  
myrrh trees for  
incense



## Trade and Economy

Egypt is well placed for trade with Africa, Asia, and the Greek islands. One of the most distant and famous Egyptian trading expeditions is the one sent to the fabled Land of Punt by Queen Hatshepsut.

In the ancient world, trading can bring different peoples together—or drive them to war in protection of their goods and land. Crossing frontiers in search of metals often leads to conflict with the local inhabitants, and for that reason trade in Egypt is linked with foreign policy, and therefore a matter for the king. Most overseas trade is organized by the pharaoh, although some temples and independent merchants are granted rights to trade abroad.

Egypt's exports include gold, linen, wheat, and papyrus, as well as a wide range of manufactured goods. Merchants bring back silver, copper, slaves, horses, incense, wine, luxury goods, and—most importantly—good timber, especially cedar from the Lebanon in Phoenicia and ebony from the Sudan.

### Weights and measures

As usual in a barter economy, the biggest cause for argument between traders is the relative value of the goods being exchanged. For example, two copper bowls might be considered to be worth four linen tunics, whereas two of bronze might fetch as much as ten tunics.

For items that can be weighed, such as gold rings, there are standardized weights made of stone, copper, or bronze called *deben*. Although mainly intended for

weighing precious metals, *deben* are also used to give the equivalent value of a wide variety of non-metallic goods.

Goods with a volume such as wine or other liquids are measured by the capacity of standard vessels. The *hinw* (“jar”) has a volume of about 0.1 gallon, the *hekat* (“barrel”) is equivalent to 10 *hinw*, and the *khar* (“sack”) is 160 *hinw*, or about 16.5 gallons.

### The expedition to Punt

Queen Hatshepsut commissioned a trading venture to the distant, legendary Land of Punt, probably situated on the coast of Somalia, East Africa. The fleet sailed from Thebes, down the Nile almost as far as modern Suez, crossed over by canal into the Red Sea, and then undertook the long voyage southward.

The expedition's progress was recorded in detail by scribes in a series of painted reliefs, including the tall, thin chief of Punt, Perehu, and his deformed wife Ety. These are preserved in the queen's great funerary monument at Deir el-Bahari in Western Thebes. The expedition returned safely with its rich cargoes of ebony, ivory, gold, electrum, aromatic woods for perfume-making, cosmetics, and panther skins, not to mention apes, dogs, and natives of Punt.

**Below right:** One of Queen Hatshepsut's sea-going vessels built to undertake the expedition to Punt.



## Doctors and Medicine

Egyptian doctors are highly regarded throughout the Middle East for their skill and knowledge. The best even travel abroad, with the pharaoh's permission, to treat foreign rulers at their request.



A student doctor commonly learns his profession from other physicians in the family, probably his father, but he might also be sent to one of the few medical schools attached to the great temples. Most doctors work as general practitioners within their community, but some specialize in one part of the body. Others work in temples, or as army surgeons.

### Compiling medical knowledge

Over the centuries, the medical profession has accumulated many texts of instruction. There are books about every part of the body, books for surgeons, dentists, and veterinarians, as well as descriptions of various common diseases and books of recipes for medicines.

Egyptian doctors understand a lot about how the human body works, of the nervous system and the effects of injury to the spine. Much knowledge about the body and its organs comes through mummifying the dead (*see pages 86–87*), which has made it clear that the heart is the most important organ because it pumps blood around the body. So doctors know that a patient's pulse “speaks the messages of the heart.”

One of history's first doctors, Hesire, was the “Chief of Tooth-Doctors and Doctors” at the court of the Old Kingdom pharaoh Djoser. Hesire examined a boy who suffered from what sounds like diabetes. Hesire prescribed a special diet of fruits, grains, and honey. Although the diet helped his young patient, it could not cure his problem.



A collection of Egyptian medical instruments, including a papyrus scroll containing texts on diagnosis, medicines, and treatments.

## Medicines

Remedies for ailments fall into three broad categories: treatment with medicines, surgery, and “incubation” (*see below*). There are medicines to be taken by mouth, some to be applied to the skin, and others to be inhaled.

Regularly used herbs include opium, myrrh, frankincense, fennel, cassia, thyme, henna, juniper, aloe, linseed and castor oil. Garlic and onions are regularly eaten to give strength, and raw garlic is given to asthmatics. Fresh, mashed garlic, mixed with water and vinegar, makes a healthy mouthwash and relieves sore throats and toothache, though it does smell strongly!

Leaves from many plants such as willow, sycamore, acacia, and mint are used in poultices for binding wounds. Tannic acid derived from acacia nuts is applied to burns, and castor oil, combined with figs and dates, is used as a laxative.

## Surgery

Doctors sometimes use surgery to treat patients, and open skulls to relieve pressure on the brain. Before operating, the patient is given an alcoholic drink to deaden any pain. Since Egyptians attach great importance to ritual cleanliness, the surgeon and his assistants wash themselves thoroughly and purify their instruments in fire before the operation.



This votive inscription, giving thanks to a god, is typical of many left by people at the gates to a temple. Requests for divine intervention are basic to the healing arts. The two pairs of ears seen at the bottom left are believed to make it easier for the intended god to hear the plea for a cure.

## Magic, prayers, and dreams

Physical medicines such as herbs and surgery are mostly expected to help with the pain, while magic is believed to cure the patient. Some herbal remedies have ingredients such as mice and beetles, which drive out the demons causing the illness. Prayers are a vital part of any treatment, aided by the wearing of charms and amulets to ward off evil.

In serious cases, the doctor will advise a visit to a temple associated with one of the gods of healing—Thoth, Sekhmet, Isis, or Imhotep—where priests are trained as doctors. Here, the patient spends the night close to the god’s inner sanctuary. Such a stay is called “incubation,” during which the patient might be healed by the god, or dream of the god and receive instructions for treatment.

After ritual cleansing, patients are permitted to spend a night close to the god’s inner sanctuary, in the hope the deity will cure them while they sleep.



## An Egyptian Soldier's Life

For ambitious young men with a sense of adventure, a career in the Egyptian army offers excitement and a chance to gain the pharaoh's favor and royal gifts of land.

Egypt of the New Kingdom has a large and well-trained army under its commander-in-chief, the king. He often takes to the battlefield in person, with a bodyguard of elite soldiers, and officials to advise him. The army does not have all the centuries-old traditions of other social institutions, so it is relatively easy for talented individuals to rise through the ranks. Thanks to the gifts of land and slaves they receive from the grateful king, they can advance in society and maintain a high position.

Appreciation for this military nobility is often expressed in inscriptions:

*"The name of the brave man will last because of what he's done. It will never disappear from this Earth."*

### Volunteers and conscripts

One in every hundred able-bodied young men is liable for call-up, but because of the good prospects it offers, the army is never short of volunteers. Conscriptio is only required in times of extreme danger or when the king wants to conquer a new territory.

New recruits have their hair cropped very short or their heads shaved bare. Then they are equipped from the quartermasters' stores with leather body armor, helmets, and leather-covered wooden shields. They are then assigned to a ten-man squad who share a barracks.

### Hard, disciplined training

Egyptian soldiers are expected to become competent with a variety of weapons—battle axes, swords, maces, spears, daggers, bows and arrows—but their unit usually specializes in the use of one particular weapon. Some units are given very specialized training such as trench-digging (by sappers), using battering rams and scaling ladders, and scouting.

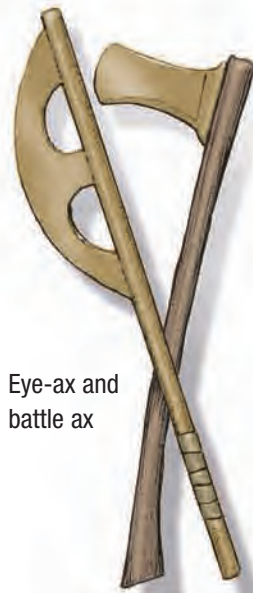
Having just grown to adulthood and been allowed to wear a full head of hair, hapless recruits receive a severe "short back and sides" before getting their army kit. Next stage—a merciless training schedule.



The training is tough, and young recruits are sent on long marches to prepare them for campaign, when the army often covers an average of 12 miles a day over baking desert terrain. Drilling and discipline is hard. Battles usually consist of a succession of precisely executed maneuvers, and soldiers have to be able to respond promptly to the commands of the trumpeter.

**A soldier's tough life**

The scribe Khety says recruits are subjected to brutal training, and barracks life is a constant round of quarrels, rivalries, drunkenness, and gambling. Campaigns, he says, mean hunger, thirst, flies, and wounds that lead to death or permanent disablement. But Khety is trying to dissuade his pupils from abandoning their profession as scribes for the better possibilities of advancement that the army offers an energetic young man.



Eye-ax and battle ax

Recruits are seen training in this wall relief from the funerary temple of warlike Tuthmosis III.



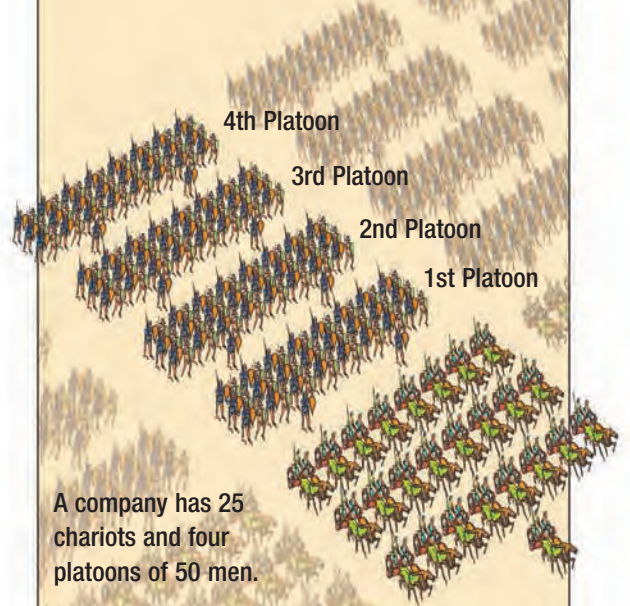
Sickle-sword



**The army's organization**

An army division has several thousand men, typically 4000 infantry and 1000 chariots, organized into 10 battalions of about 500 soldiers. These are further subdivided into companies 250 strong, platoons of 50 men, and squads of ten men who share a barracks tent. Each division is named after one of the major gods such as Amun, Re, Ptah, and Seth.

The overall command of the army is in the hands of the pharaoh or one of his close relatives, usually a son. As the kingdom is divided into Upper and Lower Egypt, so the army is split into a northern and a southern corps overseen by chief deputies, often the viziers.



A company has 25 chariots and four platoons of 50 men.

There is a long line of command extending down from the pharaoh, as this complaint from the scribe Nebmare-nakht indicates: "Let me tell you the woes of the soldier, and how many are his superiors: the general, the troop-commander, the officer who leads, the standard-bearer, the lieutenant, the scribe, the commander of 50, and the garrison-captain."

## The Egyptian Army and Navy

In the New Kingdom era, the army of Egypt is among the most powerful in the Middle East. Much of its success lies in the central organization of arms, armor, and supplies.

In battle, hardened veterans make up the ranks of the army's front line, while young, inexperienced soldiers and recruits form the second ranks and reserves. An elite corps of shock troops called "Braves" are the army's elite. The army unit goes into battle accompanied by a standard bearer, and a trumpeter who passes on the commander's orders with special calls on a long trumpet.

The cavalry is lined up in front of the infantry, consisting of chariots. Each company has 25 two-man chariots drawn by two horses. One man acts as the driver, while the second of the crew does the fighting, but the king is usually depicted on wall paintings driving his own chariot, armed with a powerful bow and javelins.

### All the king's men

The Egyptian army is well organized, not only in the fighting force but also in its support services. There are doctors to look after the men and animals, and scribes to deal with supplies and wages and record the progress of campaigns.

Priests accompany the army to provide magical and spiritual support, while astronomers and astrologers guide the decisions of the commanders and the king. A corps of heralds carry messages and make reports to the king, scouts are sent out to explore the terrain and spy on the enemy, and grooms care for the horses and pack donkeys that carry the supplies, tents, and spare weapons.

Pharaoh's armies are made up of recruits from all over the kingdom.

A soldier's extra reward for victory might be a share of the booty captured from the enemy or a decoration in the form of golden lions or gold flies like these shown here, known as the Gold of Valor.



### The army camp on campaign

Army base camps have brick-built barracks to house the men, but away on campaign temporary camps are constructed. The soldiers live in tents erected within rectangular earthworks made by digging a ditch and throwing up the soil to form a rampart. Shields are placed around the top for added protection, and sentries patrol the defenses on a regular basis.

Egyptian infantrymen on the march carry copper-bladed spears and shields with personal designs for quick identification.

**Below:** Tutankhamun smites his enemies, trampling them under his chariot's wheels.



The tents are laid out in neat rows, with the pharaoh's tent at the center. Beside the royal tent stands another holding the portable shrine of the god Amun. The king enjoys great comfort when campaigning, and his officers are also well looked after by their servants in large, comfortable tents, with two or more rooms and furniture including folding stools and camp beds.



**Below:** A large relief shows the Egyptian navy fighting the Sea Peoples during the reign of Ramesses II.



### The Egyptian chariot

The outstanding advantage of the Egyptian army is the chariot. Built with light, spoked wheels and open weave-work cladding over flexible frames, they are extremely fast and maneuverable in battle. But their weight is so slight that two men can carry them across difficult mountainous terrain, while the horses are led separately by grooms.

The main weapon of the charioteer is a powerful compound-wood bow, firing bronze-tipped arrows capable of piercing thick sheet metal. Extra arrows sit in a quiver strapped to the chariot's side, along with a spare bow and several short javelins for throwing or thrusting.



### The navy

Although boats are a common factor of everyday Egyptian life, sailing the open sea is another matter, but for the adventurous young man a career in the navy might be appealing. Egypt keeps several squadrons of speedy ships to patrol the eastern Mediterranean. The sailors, however, rarely do any fighting, which is done by land troops carried onboard—sometimes as many as 250 men.

The ships can be sailed and rowed, which gives them an advantage over most enemies, who only sail, and powerful archery wins many battles without the need for hand-to-hand combat. In most cases, however, the navy is used to transport troops to where they are needed—on the coast of Canaan or upriver to Nubia, when the boats need to be dismantled and carried up the cataracts.

# A Land Ruled by Gods

## The Major Egyptian Gods

Religion plays a part in every aspect of Egyptian life, nothing is left out. There are gods of the air, the earth, and water, and deities responsible for everything from birth to death.


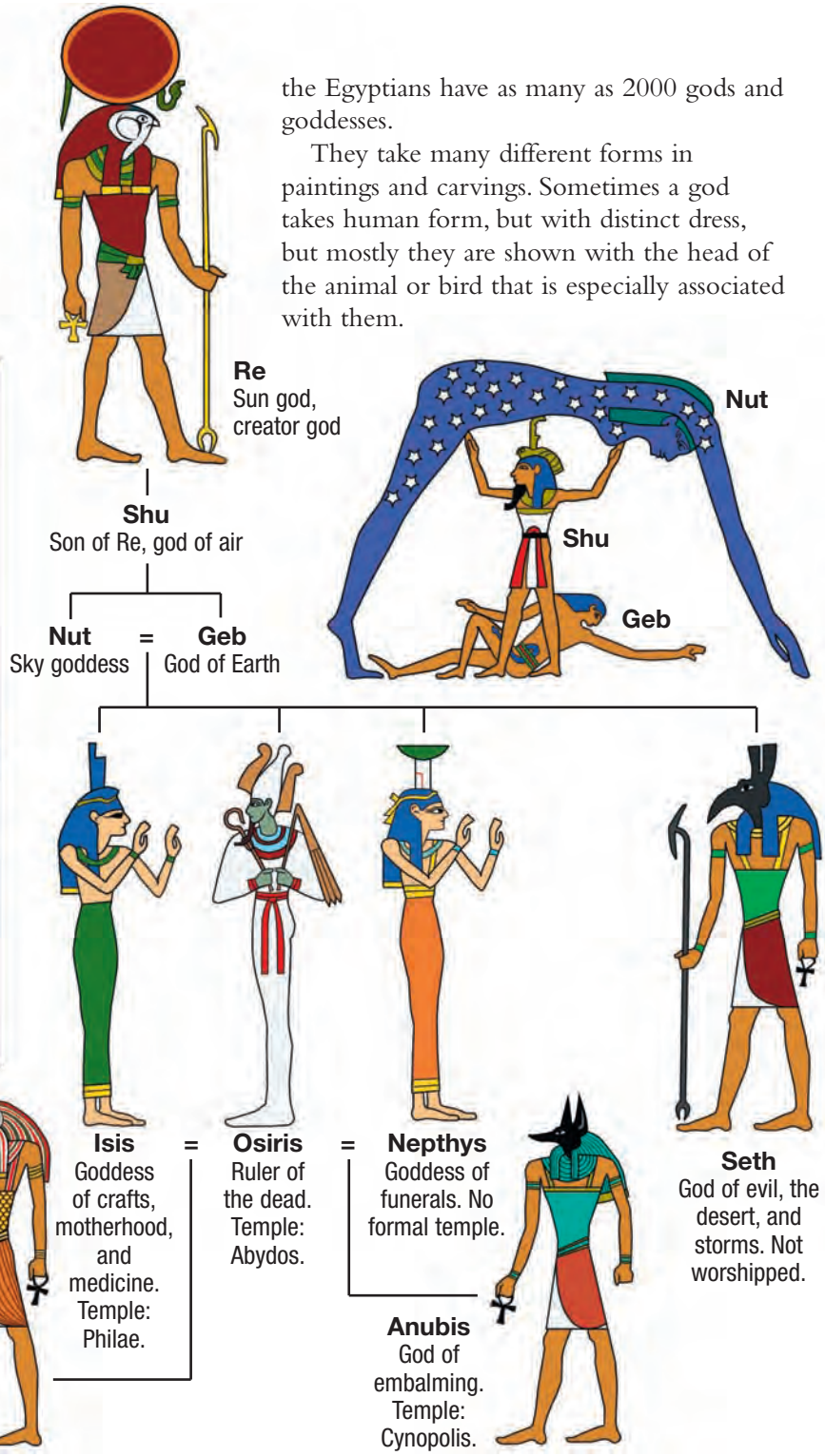
Some gods, such as Amun-Re, Osiris, and Hathor, are worshipped throughout the land, while others have only local followings. The most important gods have huge cult temples in their “home towns,” while many of the lesser deities, usually concerned with domestic matters, have no temples but are worshipped at small shrines in homes. In all,

the Egyptians have as many as 2000 gods and goddesses.

They take many different forms in paintings and carvings. Sometimes a god takes human form, but with distinct dress, but mostly they are shown with the head of the animal or bird that is especially associated with them.

**The creation myth**

The beginning was created from an ocean called Nu, which was shrouded in darkness. Then an island rose up and the sun god Re appeared, who created light and all other things. Some say Re was hatched from an egg laid by a goose named the Great Cackler; some say he flew to the island as a falcon, with which he is associated. Others claim he was born from the sacred blue lotus flower, and still more say he appeared as a scarab beetle on the eastern horizon, the rising sun Khepri, seen here with a scarab for his face.

**Hathor**  
Goddess of love, beauty, and joy. Temple: Dendera.

**Horus**  
King of Egypt Prince of Gods and symbol of the pharaohs. Temple: Edfu.

**Ihy**  
Child god of music. Temple: Dendera.



**Isis**  
Goddess of crafts, motherhood, and medicine. Temple: Philae.

**Osiris**  
Ruler of the dead. Temple: Abydos.

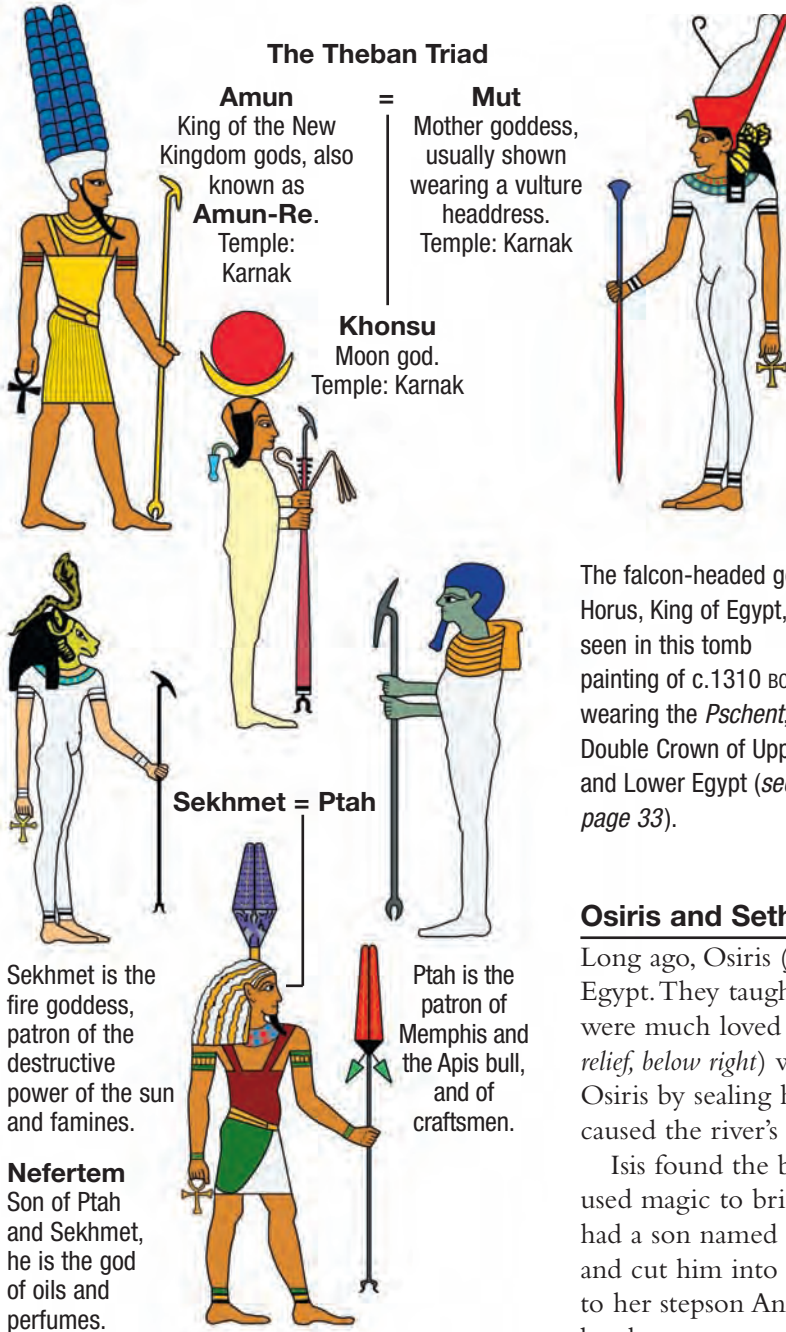
**Nephthys**  
Goddess of funerals. No formal temple.

**Anubis**  
God of embalming. Temple: Cynopolis.



**Seth**  
God of evil, the desert, and storms. Not worshipped.

**The Theban Triad**



**Amun**  
King of the New Kingdom gods, also known as **Amun-Re**.  
Temple: Karnak

**Mut**  
Mother goddess, usually shown wearing a vulture headdress.  
Temple: Karnak

**Khonsu**  
Moon god.  
Temple: Karnak

**Sekhmet = Ptah**

Sekhmet is the fire goddess, patron of the destructive power of the sun and famines.

**Nefertem**  
Son of Ptah and Sekhmet, he is the god of oils and perfumes.

Ptah is the patron of Memphis and the Apis bull, and of craftsmen.



The falcon-headed god Horus, King of Egypt, seen in this tomb painting of c.1310 BCE wearing the *Pschent*, or Double Crown of Upper and Lower Egypt (see page 33).



**Osiris and Seth**

Long ago, Osiris (from a wall painting, below left) and his sister Isis ruled Egypt. They taught men how to farm the land and make wine and were much loved by the people, but their brother Seth (from a wall relief, below right) was jealous. Seth, sometimes known as Set, murdered Osiris by sealing him in a coffin and throwing it into the Nile, which caused the river's annual inundation.

Isis found the body and with the help of her sister Nephtys used magic to bring Osiris back to life. By her brother, Isis had a son named Horus, but Seth found Osiris again and cut him into 13 pieces. Undaunted, Isis appealed to her stepson Anubis the jackal to reassemble her brother as a mummy and breathe life into him. In revenge, Seth attacked Horus, and there were many battles, but in the end Horus won.

Seth was banished to the outlands as the god of evil and Horus became the first king of Egypt. Osiris—more dead than alive—was given command of the kingdom of the dead, where Anubis weighs the hearts of dead men against the Feather of Truth. Hearts weighted down by sin are eaten by Ammit, devourer of wicked souls, and those who are light enough are sent to Aaru, abode of the blessed dead.



## Gods for Everything

Many gods and goddesses have overlapping functions, or even different names depending on where you live along the Nile. Here are a few of the more important ones.

### **Ament** (Amentet)

Ament is patron of the gates to the Underworld. She usually appears dressed in the robes of a queen. She has no temple and is not worshipped, but is revered in many hymns.



Ament

### **Anukis** (Anuket, Anket)

Goddess of the First Cataract, she wears a crown of reeds and ostrich feathers. The daughter of Khnum, she is worshipped throughout Nubia. Her cult center is Elephantine.



Anukis

### **Babi** (Bab, Babay)

Babi is a bloodthirsty baboon god who was ancient even in the realm of Egyptian gods. He symbolizes the virility of the king, but lives on human entrails. Spells are needed to protect against him.



Babi

### **Bast** (Bastet)

Goddess of music and dancing, love and pleasure, she represents the sun's healing power, and is patron of cats, women, and secrets. She commonly appears on amulets as a woman with the head of a cat. Widely worshipped, her cult center is Bubastis. Her son is Mihos.



Bast

### **Bes** (Bisu)

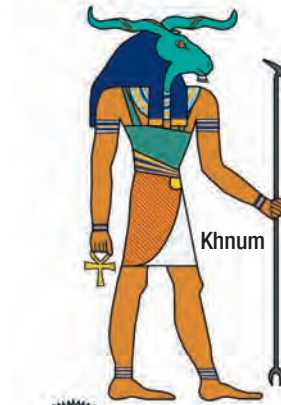
Bes—a fat, ugly, bearded dwarf, often shown sticking out his tongue and holding a rattle—protects against evil spirits. Unique in Egyptian art, he is shown full-face. Patron of the home, childbirth, infants, humor, song, and dance, Bes has no temples or priests but is a popular household deity.



Bes

### **Hapi** (Hep, Hapr)

Shown as a bearded man with breasts and wearing a crown of reeds and lotus blossoms, Hapi is helped by crocodile gods and frog goddesses to ensure that the Nile runs cool and clear. Worshipped throughout Egypt.



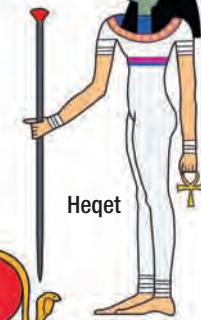
Khnum



Hapi

### **Heqet** (Heket)

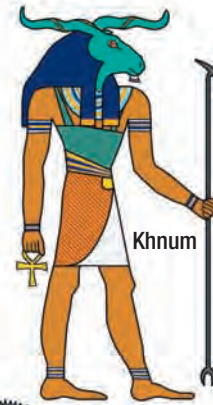
The frog-headed goddess of childbirth, and a water goddess associated with fertility. “Servants of Heqet” are priestesses who train as midwives. Women wear amulets of Heqet to protect them while they give birth. Some say as a wife of Khnum she gives the breath of life before a child is placed to grow in its mother’s womb. Worshipped everywhere.



Heqet

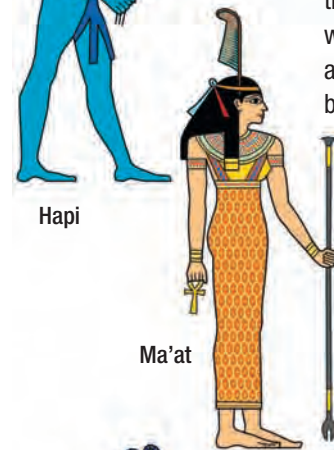
### **Khnum** (Khenmu, Chem, Kemu, Khem)

Khnum is depicted as a man with the head of a ram. He creates people and animals out of Nile clay on his potter’s wheel. He is revered throughout Egypt, with cult centers at Elephantine, Sunnu, Abu, and Semnut.



### **Ma’at**

Goddess of truth, justice, law, and universal order, she appears wearing a crown topped by a huge ostrich feather. Many pharaohs have taken the title “Beloved of Ma’at” to show their love of justice and truth. In the Hall of Two Truths at the entrance to the Underworld, the heart of the deceased is weighed on scales against Ma’at’s feather by Anubis and before Osiris (*see page 85*). So widely is Ma’at revered that even the gods are shown praising her.



Ma’at

### **Mihos**

Mihos is the lion god and son of Bast. His cult center is in the Delta region at Leontopolis.



Min

### **Min**

An old god of fertility and of the harvest, Min’s cult is in Koptos. He is depicted with an erect penis and his arm lifted up to a flail, usually dressed in the white of a mummy.

**Renenetet** (Ernutet)

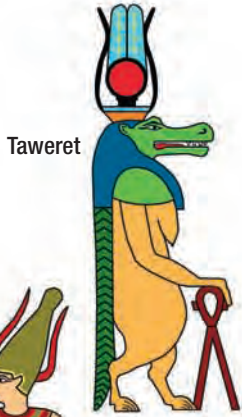
Patroness of the harvest, Renenetet watches over the raising and storing of grain. She also looks after fertility among humans and animals, and is the goddess of linen and good fortune. She protects children and gives them nourishment and their destiny. She is depicted as a cobra, or wearing a cobra on her head.



Renenetet

**Taweret** (Taueret, Taurt, Toeris, Ipy, Ipet, Apet, Opet, Reret)

A combination of crocodile, pregnant hippopotamus, standing on her hind legs with large breasts, and a lion's body, Taweret is a goddess of maternity and childbirth, protector of women and children. Like Bes, she is both a fierce demonic fighter and a deity popular throughout Egypt. As Opet, she is an important Theban goddess, central to the annual inundation festival in her name.



Taweret

**Satis** (Satet, Satjit, Sati)

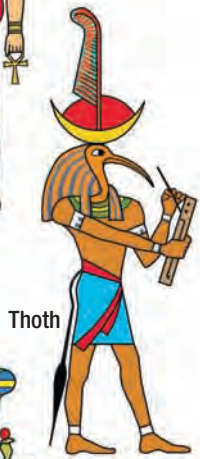
As the patroness of Egypt's borders, she is also the goddess of hunters. She is shown wearing the crown of Upper Egypt flanked by gazelle antlers, carrying in her hands an ankh and a staff. With her husband Khnum and daughter Anukis, Satis forms part of the Elephantine Triad. Worshipped throughout Nubia and Egypt, her cult center is at Elephantine.



Satis

**Thoth**

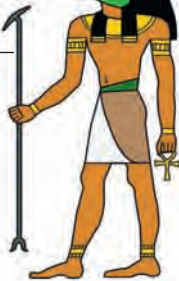
An old god of wisdom, learning, fantasy, writing, wit, speaking, and inventions. He checks the result at the "Balance of Truth" when a soul is weighed against the feather of Ma'at at the court of Osiris. He wears an ibis-stork headdress and carries his writing tools.



Thoth

**Sobek** (Sebek)

The crocodile god, patron of Faiyum, was born from watery chaos when the world was created. He symbolizes the king's physical strength. Cult centers: Arsinoe and Kom Ombo. When he wears the sun disk he is a form of Re, called Sobek-Re.



Sobek

**Four Sons of Horus**

These are funerary deities, gods of the viscera and the canopic jars (see page 84). Their names are Imsety (Imsti), Hapy (or Hpy, not to be confused with the Nile river god, Hapi), Duamutef, and Kebehsenef. As funerary gods, they are not worshipped and have no cult centers.



Hapy and Duamutef

**Sacred animals**

Many Egyptian gods are associated with a particular animal, and many of these are kept in a temple enclosure. They are treated with great respect because the god's spirit passes into them. In this state, the animal can act as an oracle, giving the god's answers by its movements. Sacred animals are often given the full rites of burial on their death and mummified, like this crocodile, before being placed in a wooden casket or a stone sarcophagus.



The most sacred animal in Egypt is the Apis bull (seen below, depicted on a stela). The Apis bull is associated with the cult of Ptah. The birth of an Apis calf is a time for celebration, since it means that the living god has been born. The bull must be black and white, have distinct markings—a white diamond on its forehead, an image of a vulture on its back—double the number of hairs on its tail, and a scarab mark under its tongue.

Once identified, the new Apis bull is allowed to live in comfort for the rest of its life. Its dung and milk are used for magic and medicinal purposes.



Shrine for the god's sacred boat. During the most important festivals, priests bear the god's cult statue on the barque outside the temple to show to the gathered people.

The sanctuary contains a shrine that houses the god's cult statue. Every day at dawn, noon, and sunset the priests dress the god's statue and offer it food.

The great hypostyle hall.

Ordinary people are sometimes allowed into the temple to celebrate a special occasion, but only as far as the courtyard and even then only after undergoing ritual purification.

Sacred pool in which priests purify themselves.

Pylon

Obelisks, sacred monuments to Re, stand before the pylon.



## Temples and the People

To Egyptians the temple is not a place where a congregation gathers to hold services. It is the home of a deity on Earth, a place where gods and goddesses make contact with humans.

The temple is a private place where normally only priests and priestesses go inside to tend the deity's cult statue. Ordinary people are only allowed as far as the entrance to make offerings and pray. The temple precinct is usually walled to keep out impure spirits, with access given through large gateways called *pylons*. The temple itself is usually divided into three main areas—the courtyards, a large hall filled with columns, called the *hypostyle* hall, and the inner sanctuary of the god.

Within the enclosure there may be many other halls and rooms with specific purposes—a place to store and copy books, workshops, accommodation for the priests and acolytes, and a sacred lake holding holy water for purification rituals.

### Temple priests

Priests do not live apart from the community. They can marry and hold secular as well as religious posts. A temple's priests are divided into four groups, called *phyles*. Each *phyle* goes on duty three times a year for a full month. When on duty a priest must be pure—he must shave all his body hair, bathe several times a day, refrain from wearing wool (which is considered impure), and only eat certain foods.

In addition to the priests, there are other staff. Priestesses sing hymns while shaking *sistra* (metal rattles) during ceremonies, and there are professional musicians, singers, and dancers. Bakers and cooks prepare special food offerings for the god, and the temple needs craftsmen, skilled laborers, cleaners, and many slaves. These costs are met by revenues from renting out temple land to tenant farmers.

### Dreams and oracles

All Egyptians believe that dreams are visions from the gods, but the message is not always easy to understand. In such a case the puzzled person can repeat the dream to a priest specially trained to interpret dreams' meanings. The priest has many books to help him find the answer.

In difficult cases where there is a problem in the family or a dispute that neither side can agree on, it is usual to consult an oracle. This is done by asking a temple scribe to write down the question and receive a "yes" or "no" answer from the god when it is presented to the priests. On feast days an inquirer may ask the god directly when he appears on his sacred barque outside the temple wall. Answers are given by the boat swaying backward, forward, or dipping.

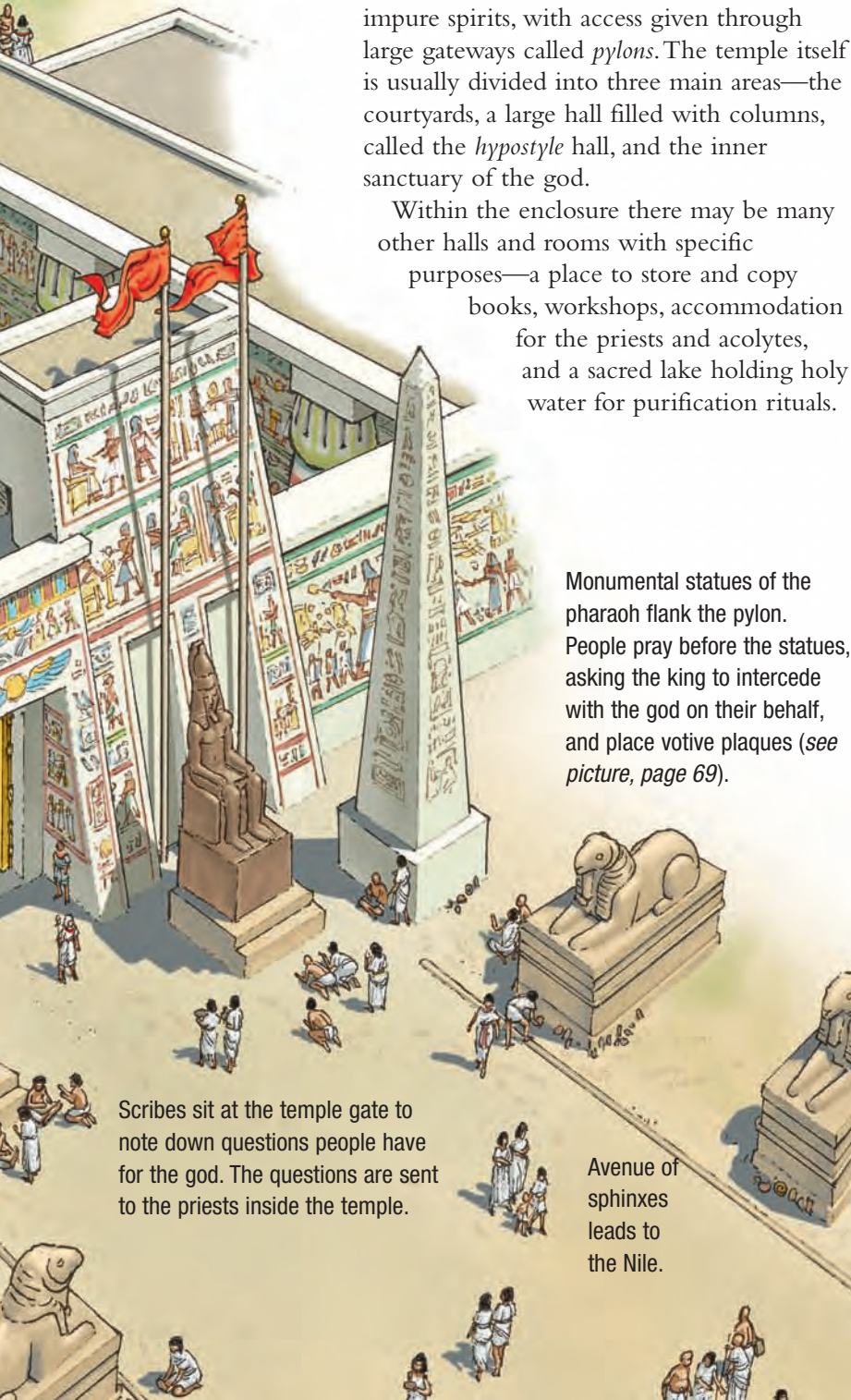
An older, but still popular, tradition is for a person to buy a small hand-sized stela of a pair of ears and place it against the temple wall. This is to remind the god to listen to the person's prayers.

Workshops produce goods such as statues, linen, sacred objects, and furniture.

Monumental statues of the pharaoh flank the pylon. People pray before the statues, asking the king to intercede with the god on their behalf, and place votive plaques (see picture, page 69).

Scribes sit at the temple gate to note down questions people have for the god. The questions are sent to the priests inside the temple.

Avenue of sphinxes leads to the Nile.



## Karnak and Luxor—Monumental Temples

Over a period of 1300 years, the Temple of Amun at Karnak and the neighboring temple at Thebes (Luxor) have grown to become the world's largest religious complexes. These and the following two pages show them in their heyday.

1. Canal from the Nile to the harbor for the royal barges.

2. Temple of Amun-Re at the center of the precinct of Amun.

3. Sacred lake for purifying the priests.

4. Precinct of Montu, Theban god of war, with an avenue leading to its own harbor.

5. Temple of Khonsu.

6. Precinct of Mut.

7. Avenue of ram- and human-headed sphinxes leading south toward the temple of Luxor.

8. City of Thebes.

9. Entrance of a canal (one of several) leading to the funerary temples of West Thebes below the Valley of the Kings.



**K**arnak, the modern name for Ipet-isut (“the Most Sacred of Places”), is a complex of three precincts, to Amun, Mut, and Montu (the Theban god of war), containing several temples, notably to Ptah, Khonsu, Osiris, and Opet (the Theban name for Taweret).

Many pharaohs contributed to the building of Karnak, but it reached its greatest extent between the reigns of Tuthmosis I and Ramesses II.

The Temple of Luxor (*see the following pages*) is known as Ipet-reyst, or “the south Opet,” and it is the focal point of the annual Opet festival. Amenhotep III and Ramesses II were its main builders.

### The sacred procession

An avenue of sphinxes 1.25 miles long connects the two great complexes. Each year during the inundation the cult image of Amun-Re is carried, together with his wife Mut and their son Khonsu, on their sacred boats from Karnak to Luxor to celebrate the festival. Once, they used the sphinx avenue, but it is now customary to make the journey up the Nile, with the gods’ sacred barges towed by several smaller boats.

Although the festival of Opet is primarily religious, it is also significant in renewing the king’s divine rule at that most critical time—the annual flooding of the Nile.



# Luxor

Because the sun god Re sails his solar boat across the Nile, rising in the east to bring life and setting in the west to journey through the Underworld, the east bank of the Nile is the place of the living, while the west bank (off the picture to the left) is for the dead. So West Thebes, site of the Valley of the Kings (see pages 90–91), houses all the funerary temples and buildings associated with the rituals for preparing people for their future in the afterlife, or “Next World.”

## Egypt's great temple builder

Ramesses II lived longer and left behind more temples and monuments than any other pharaoh. This sculpted head once topped a giant seated statue at Luxor temple. There were many such statues of Ramesses at Luxor and another may be seen at the very front of this book (*page 2*).

3

1. Precinct of Mut, most southerly part of the Karnak complex.
2. Avenue lined by ram-headed sphinxes, 88.5 feet wide and 1.25 miles long, connecting Karnak and Luxor.
3. The city of Thebes is built above the annual flood level to avoid being inundated.
4. Neighboring agricultural land, mostly rented out by the temple priests to tenant farmers.
5. Chapel of the goddess Serapis.
6. Chapel of the goddess Hathor.
7. Two giant obelisks stand in front of the temple's first pylon (gateway), with two monumental statues of the seated Ramesses II beside them.
8. Great Pylon of Ramesses II.
9. Great court of Ramesses II, containing a shrine to the Theban triad of gods—Amun-Re, his consort-wife Mut, and their divine son Khonsu.
10. Processional colonnade of Amenhotep III.
11. Forecourt of Amenhotep III.
12. Hypostyle hall.
13. Sanctuary of Amenhotep III.
14. Dock for the sacred barges processing from Karnak for the New Year celebrations.





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## Death and the Next World

Life is but a dream to Egyptians, over in a moment, a mere preparation for life in the west—the kingdom of Osiris, god of the dead, where everyone reaches their full potential.

**Right:** Anubis weighs a dead soul's heart on the scales against Ma'at's Feather of Truth; detail from an illustration in *The Book Of The Dead*.

Considering the importance of achieving perfect peace in the Next World, it is no surprise that Egyptians place great importance on the preparation for death. To enjoy eternal life to the full in the kingdom of Osiris, it is vital that the mortal body of the deceased survives, and to this end great care is taken over the embalming process (see pages 86–87) to ensure that the person's three souls are properly reunited.

For those who cannot afford the costly embalming process, nor an expensive tomb, their grave is a shallow, simple hole in the ground in one of the cemeteries situated on the fringes of the desert. The bodies quickly dry out in the hot sand and so are preserved from decay.

Richer people can afford a stone or rock-cut tomb of several rooms. These are richly decorated with scenes of the funeral and of daily life in the Next World. The painted images provide the deceased with his or her daily needs in the event that the relatives are unable to maintain a regular supply of offerings.

The funeral procession of a wealthy Egyptian makes its way toward his elaborate tomb, led by professional mourners. His slaves carry the heavy grave goods, including the various pieces of furniture he will need in the next life. At the entrance to the shrine, priests stand the coffin upright to perform the ritual known as “opening the mouth.”



### The funeral

After embalming and being placed in its coffin, the body—together with the four canopic jars containing the internal organs—is taken to the tomb in a procession of family and friends. A noble's burial procession is accompanied by professional mourners, priests, animals for sacrifice, and porters to carry the dead man's belongings.

On reaching the tomb, the priest performs a ceremony called “opening the mouth,” which revives the dead person's bodily functions to make ready for the arduous journey to the Next World. The wooden coffin is then placed inside a stone sarcophagus and the lid shut. The burial chamber is sealed, but the outer rooms or upper chambers are left open so that food offerings can be left in the mortuary chapel.



### Reaching the kingdom of the west

No matter the wealth or social standing of the dead person, all must now face the same rigors to reach the Next World. First the dead person must persuade the ferryman Aken to take them across the river of death. Then they have to pass through the 12 gates, each guarded by demons and serpents, and pass by the lake of fire. To help them negotiate these hazards, the deceased has magic amulets—a *djed* pillar, *ankh*, and heart scarab—and spells contained in the *Book of the Dead*.

The next hurdle is to convince the 42 assessors that the dead person has not committed any of the 42 “deadly sins.” If he or she passes this test, they may enter the judgment hall of Osiris. Before the god of the dead, Anubis weighs their heart against the weight of Ma’at’s feather to test whether they have told the assessors the truth.

A sinful heart is heavy, and the person’s soul is given over to Ammit, devourer of the wicked. A virtuous heart is the same weight as the feather, and the dead person may join their ancestors in the kingdom of the west to enjoy eternal life.



◀ Tet or djed pillar, the oldest symbol of the resurrected god Osiris. It represents his backbone and his body, and brings luck to the dead person.



▲ A heart scarab is laid on the breast of the mummy. It is a talisman to secure exemption from any sins the dead person may have committed but forgotten. ▼

▶ The Eye of Horus covers the incision made to drain the body (see page 87).



▲ The ankh is the hieroglyphic sign of life and one of the most potent symbols in Egyptian art.



### An Egyptian's spirit life

A living Egyptian's body is called *khet* or *iru*, meaning “appearance.” The body is known as *khat*. When the *khat* is mummified, it becomes a *sah*. Mummification changes the dead person into a new body filled with magic.

Each individual has three souls, called the *ka*, the *ba*, and the *akh*. The *ka* is a person's “life force,” which is given to a new being by Heqet after Khnum has created them on his potter's wheel (see page 76). *Ka* is represented in hieroglyphs by a pair of arms pointing upward, as seen in the picture above of a husband and wife raising their arms to Osiris. The *ka* survives a person's death, so it requires food and drink, which is why Egyptians make food offerings to the dead.

The *ba* is an individual's personality, what makes them unique. The *ba* must leave the tomb to rejoin the person's *ka* in order to become an *akh*. The *akh* is the dead person's spirit, a ghost that can reach beyond the tomb to have both positive and negative effects on the living. When the *ka* and *ba* are reunited with the *akh* the dead person becomes enduring and unchanged for all eternity.



## Embalming and Mummification

On the Nile's west bank at Thebes, morticians working in the mortuary temples carry on the ancient tradition of Anubis, preparing the deceased for eternal life by embalming their bodies.

The Egyptians believe that mummifying a person's body after death is essential to ensure a safe passage to the Next World. This is done by embalming, a process that helps to preserve the body from natural decay.

Mummification is an expensive process because it takes a long time—about 70 days in all. People make preparations to be embalmed after their death as well as they can possibly afford. High-ranking officials, priests, and other nobles have elaborate burials. Kings, who become gods when they die, have the most magnificent burials of all.



The head and shoulders of the mummy of the scribe Petamenophis, whose statue can be seen on page 54.

Embalming is both a highly skilled process and a deeply religious one, designed to ensure the happy reunion of the deceased with his animating spirit in the afterlife.

### First steps toward immortality

When an Egyptian dies, embalmers collect the body and carry it by boat or litter to their *wabet*, the embalmers' workshop, where they treat it with various processes that preserve it. First, priests recite prayers and make a final attempt to revive the corpse. Next it is washed and ritually purified in a special shelter called an *ibu*.

In the next step, the internal organs are removed through a cut in the left side of the body. These are embalmed by packing them in a salt called natron, which dries out and preserves the tissue. The organs are individually wrapped using long strips of linen and placed in canopic jars. The lids of these jars are fashioned after the four sons of Horus (see page 77), who are each entrusted with protecting a particular organ.

A tomb wall painting shows Anubis in the process of mummifying a body, while in the background Ma'at, the goddess of truth, spreads her wings protectively over the dead soul, who will soon be resurrected.



### Draining and drying

After removing the inner organs, the body cavity is packed with natron. The brain is then drawn from the skull through the nose using long hooks. Since the brain is considered to be unimportant, it is usually thrown away.

The body is placed on a special table and completely covered with natron. The table is slanted, which allows the fluids to drip away as the body slowly dries out. After 40 more days, all the natron is removed to reveal a dried, shrunken corpse. After another cleaning, the mummified body is rubbed with precious oils to help preserve and beautify the skin. The head and body cavity are then stuffed with linen packing.

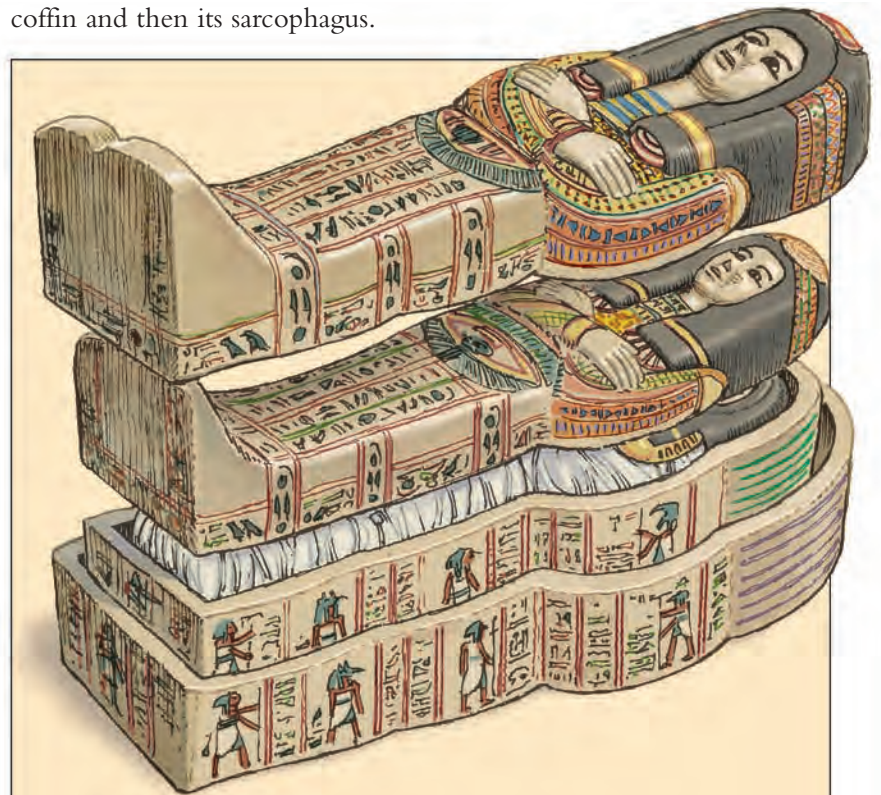


### Protecting the mummy

In the final stage, the cut made in the side of the torso is sewn up and covered with a patch depicting the protective Eye of Horus. The mummy is adorned with gold, jewels, and protective amulets. Protective gold caps are placed over the fingers and toes before being individually wrapped with narrow strips of linen.

The arms and legs are also wrapped, then the entire body is wrapped in strips of linen to a depth of about 20 layers, with amulets of a *djed* pillar, *ankh*, and heart scarab incorporated between the windings to offer the mummy good luck. The embalmers use a resin to glue the wrapping layers.

A portrait mask of the dead person is placed over the wrapped head by the chief embalmer, who wears a jackal mask of Anubis as he completes the ceremony. The mummy is now ready to be placed in a coffin and then its sarcophagus.



### Coffins

Early coffins were simple, wooden rectangular affairs, sometimes decorated with a band of *hieroglyphs*—magic spells to aid the dead person's passage into the Next World—but later ones are as elaborate as the family can afford.

Human-shaped coffins are popular, and nobles are often buried with one coffin nested inside another, each decorated with a mask of the deceased. Above are a rich lady's coffins.

## The Pyramids of Giza

The tombs of the pharaohs are the most magnificent in all Egypt. Those in the Valley of the Kings at Thebes are the most elaborate, but few can match the extravagant splendor of the Fourth Dynasty pyramids at Giza.

The funerary complex at Giza is built on the desert plateau above the old capital city of Lower Egypt, Memphis. There are hundreds of smaller tombs, called *mastabas*, for the nobility and wealthier citizens, sitting in the shadows of the three pyramids of the pharaohs Khufu, Khafre, and Menkaure.

Each pyramid is surrounded by smaller ones for their queens and sons, and connected by long causeways to their mortuary temples where the royal bodies were embalmed.

▼ Khufu's funerary cedarwood barque was discovered by chance in 1954, hidden in a 102-foot deep pit on the south side of the Great Pyramid. It is 141 feet long and was neatly dismantled into its component parts, ready for reassembly in the afterlife.



► The pyramids of Giza, looking to the north from the tomb of Menkaure. Because of the perspective, the middle pyramid of Khafre appears higher than that of Khufu, which is actually the tallest.

### A great wonder

The Great Pyramid, built for Khufu and taking some 18,000 workers 20 years to complete, is one of the ancient Seven Wonders of the World because of its size. It stands 481 feet tall, with each side of the base measuring 754 feet, giving a square area of 568,500 feet (13 acres) and the estimated 2.3 million block weight of 6.5 million tons.†

However, the construction time and back-breaking labor were reduced by quarrying the basalt and granite stone on the spot (to create the base site), and obtaining the limestone casings from a nearby quarry.

† These are original measurements. Damage to the outer layer has reduced the dimensions to a height of 449 feet and base sides of 745 feet.

**Below:** The step Pyramid of Djoser, built about 100 years before Khufu's, was the first truly monumental pyramidal royal tomb.



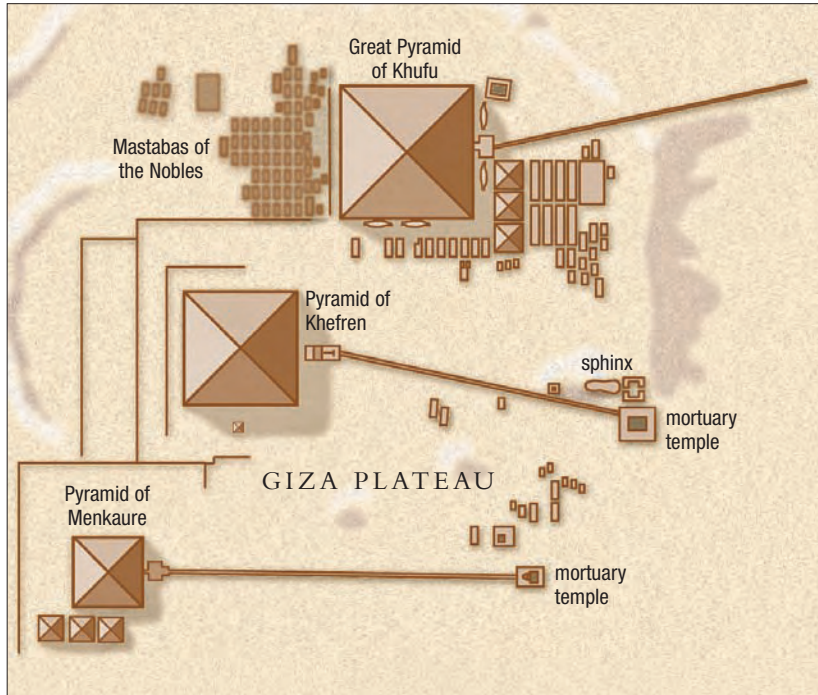
**Leveling the site**

Site plan showing the three great pyramids and surrounding *mastaba* buildings at Giza.

The pyramid's first step sits on a platform of leveled limestone blocks. Across its area, this platform is accurate to within half of an inch, an astonishing achievement.

It was done by erecting a wall around the site to create a huge well, filled with water to

leave only the highest spots visible. These were then cut down to the water level. Next some water was released and the revealed high spots again cut back. This process was repeated until the entire site, between the core and the four walls, was leveled down to the base of the pyramid's platform.

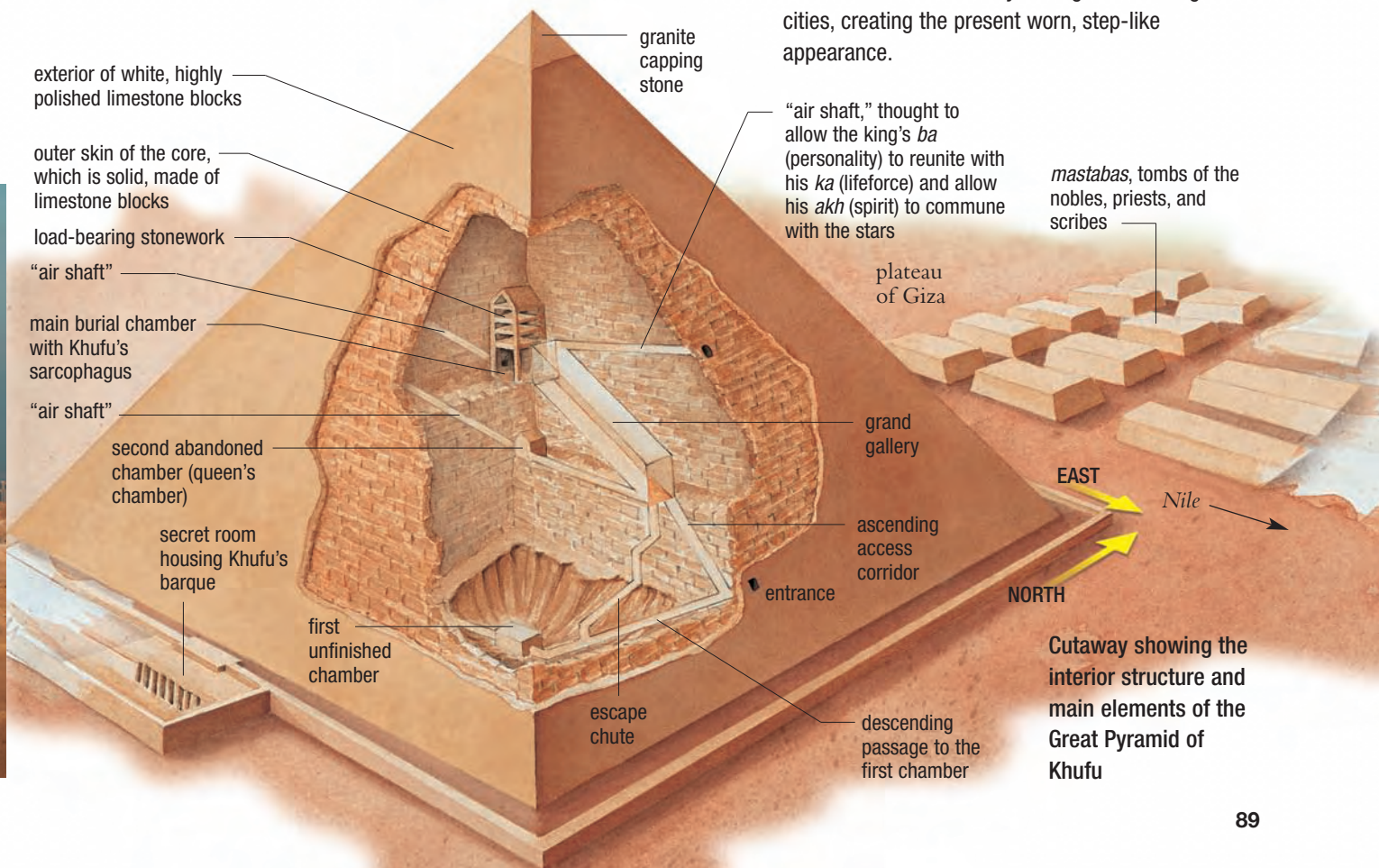


**A sacred geometry**

The sides of the pyramid are almost exactly aligned with the cardinal points of the compass. It is not known what astronomical method was used to achieve this orientation.

The pyramid's distinctive shape—derived from the earlier step-pyramids, such as Djoser's at Saqqara (*pictured opposite*)—is linked to the worship of Re. It is designed to help the king's lifeforce (*ka*) to climb up and accompany him on his daily voyage across the sky. As Re sails the sky on his sacred barge, so Khufu intended to do—a secret chamber beside the pyramid houses a large barque, built in kit form ready for the king's servants to reassemble in the afterlife.

**Below:** Most of the polished limestone outer casing was removed about 600 years ago for building new cities, creating the present worn, step-like appearance.



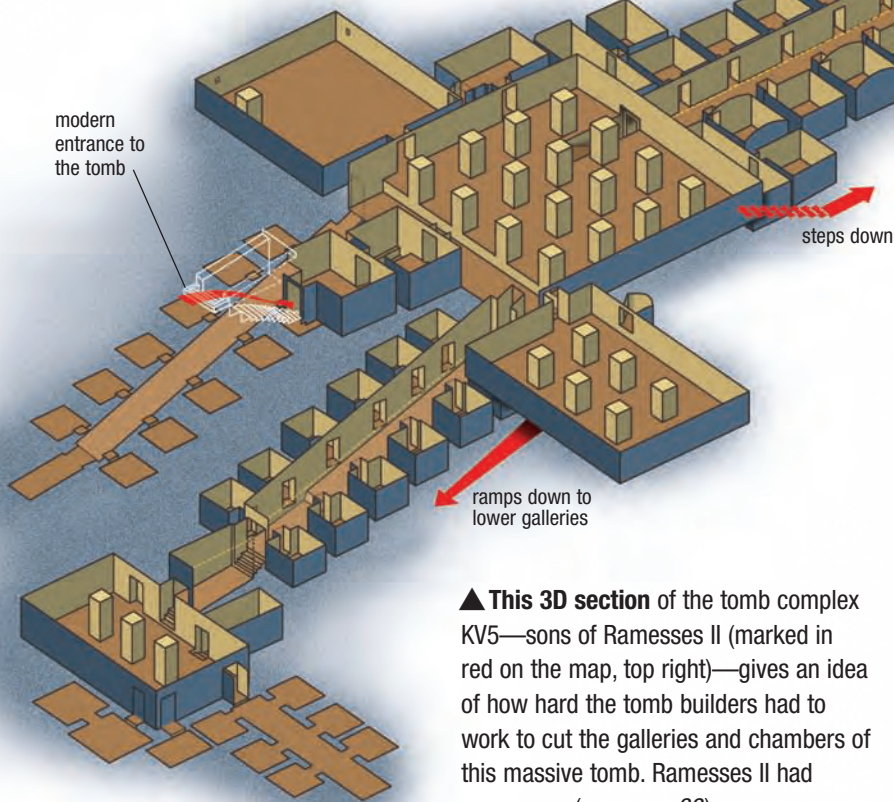
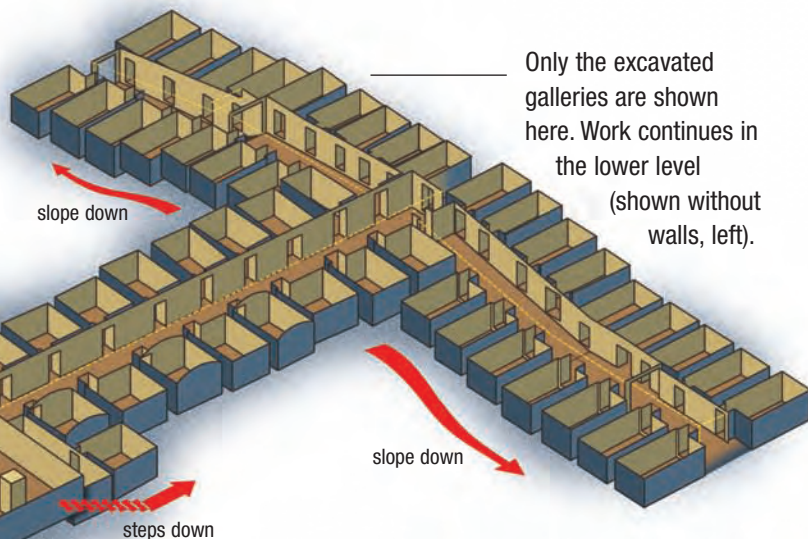
Cutaway showing the interior structure and main elements of the Great Pyramid of Khufu

## Valley of Tombs

The New Kingdom pharaohs and their families are buried in tombs cut into cliffs, situated in two remote valleys—one for the kings and one for the queens—on the west bank of the Nile, opposite Thebes.

From the outside, the tombs are inconspicuous if compared to the pyramids at Giza, but the insides are lavishly decorated. For more than 800 years the skilled craftsmen of Deir al-Medina (see pages 64–65) have worked for the kings, queens, and nobles to make these tombs an extraordinary monument to the Egyptians' belief in eternal life.

Some tombs are quite small, a simple chamber off a sloping shaft. Others, such as the one shown here, are vast complexes. The chambers and galleries are embellished with



▲ This 3D section of the tomb complex KV5—sons of Ramesses II (marked in red on the map, top right)—gives an idea of how hard the tomb builders had to work to cut the galleries and chambers of this massive tomb. Ramesses II had many sons (see page 33).

floor-to-ceiling paintings depicting the great accomplishments of the deceased, his conversations with the gods, the funerary rituals, and scenes of everyday life in the Next World.

► Tomb painting from the tomb of Horemheb, showing the pharaoh with Horus.

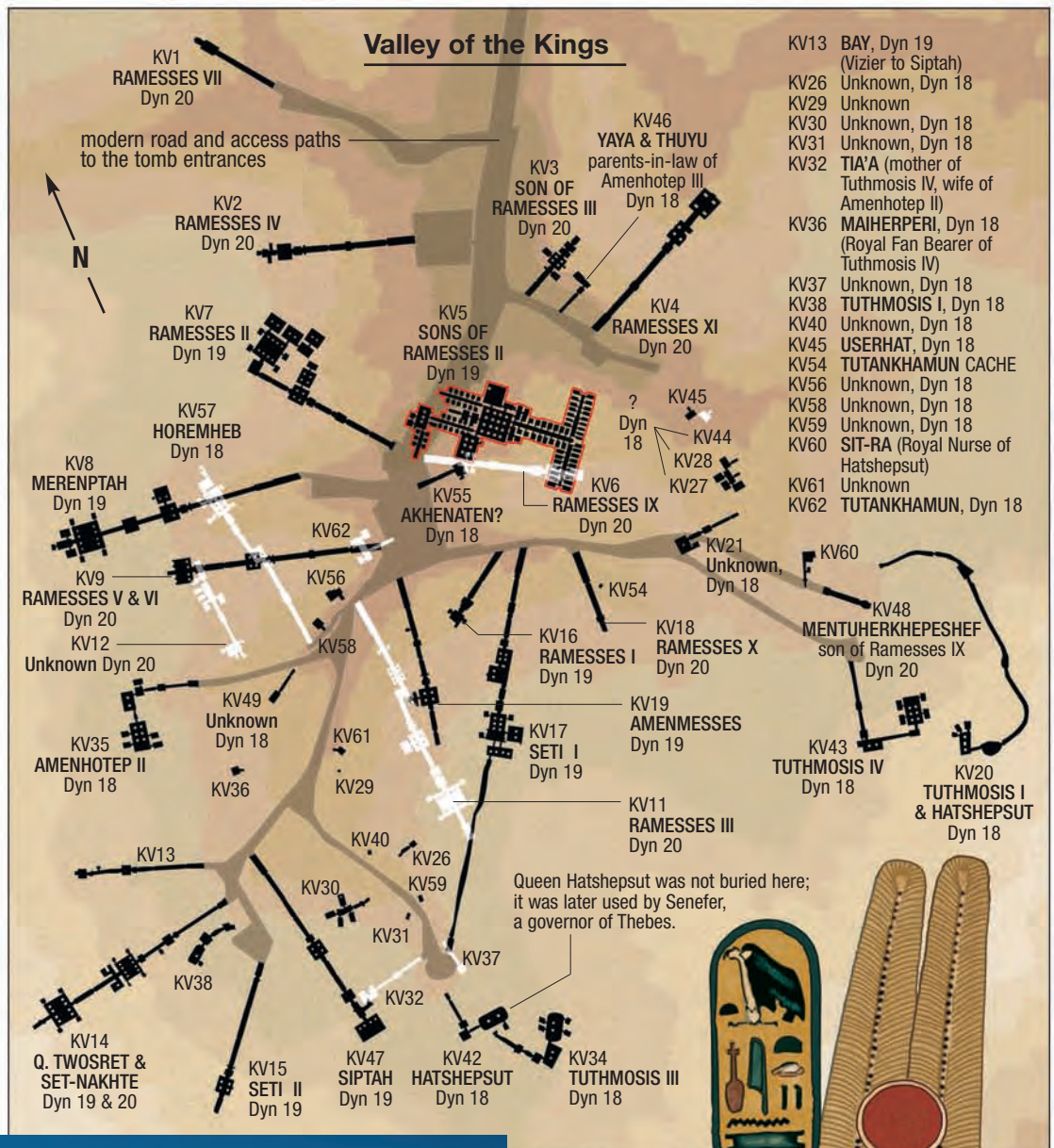


**Right:** The map of the Valley of the Kings shows the huge extent of this royal cemetery. Tombs in white pass over or under those in black.

**Left:** One of the greatest monuments in the royal valleys is not a tomb, but the funerary temple of Queen Hatshepsut. It was built in a unique style by her royal architect Senmut. He was raised so high in status that he built himself a tomb nearby so lavish that it rivals those of the pharaohs.

**Below right:** Wall painting showing Queen Nefertiti.

**Below:** View looking along the Valley of the Kings. From outside, the entrances to the tombs appear unspectacular.



## Everyday Life in the Next World

In preparing their tombs for eternal life after death, the ancient Egyptians have left us a remarkable legacy of art which even after as much as 5000 years brings their everyday life into vivid focus.



Some of the great funerary temples—such as that of warlike Ramesses III—are filled with numerous carved and painted reliefs of brutal carnage. These are testimonies to the dead king's power while he lived. But most of the tombs in the Valley of the Kings are decorated with wonderful paintings of life in the Next World.

The kingdom of the dead was conceived as being no different from the living world,

but without its troubles, so these images show us the grace and enjoyment of good living. Men are shown herding cattle, picking grapes, walking among flower-filled fields, and enjoying banquets and the company of their families.

Some of the most beautiful art comes from the tombs of the craft workers of Deir el-Medina. Without the need for endless repetition of great deeds to fill up the walls





with *hieroglyphs*, the lesser folk were able to paint large, colorful scenes of everyday life. Because of them we know more about living in ancient Egypt than any other of the early Middle Eastern cultures.

Egyptian art would inform and inspire early Greek artists, and through them the Romans and the rest of later European culture. The Greeks, of course, would develop a highly realistic representation, but in spite of its two-dimensional depictions, ancient Egyptian art has rarely been bettered for its simple, elegant expressiveness.

In their tomb paintings, ancient Egyptians truly brought the dead to life to inhabit a beautiful world full of lush greenery, swarming with animals, fed by the waters of the eternal Nile. It was, in fact, the afterworld portrayed as everyday life.



**Above left:** Domestic bliss in the 15th century BCE, from the tomb of Senefer, a noble.

**Above:** A worker's tomb chamber bursts with life at Deir el-Medina.

**Below:** Three geese painted in about 2620.

**Facing page:** Detail of a hunting scene from the tomb of Menna.



# Glossary

**akh** A dead person's spirit. See also *ba*.

**Apis bull** A distinctively patterned bull associated with Ptah, patron god of craftsmen. The most sacred animal of Egypt, a bull with this appearance is believed to have magical abilities.

**apu** Tax paid by an official, calculated on the money passing through his office, to a *vizier*.

**ba** Someone's personality, which they hope will re-join with their *akh* and *ka* in the afterlife.

**barque/bark** A type of boat in which Egyptians bury pharaohs and the prosperous. They believe the deceased will use the barque in the afterlife, along with the other "grave goods" buried with them.

**beku** The tax paid by an individual farmer, tradesman, fisherman, or hunter to a local treasurer.

**Canaan** A region of western Asia roughly corresponding to today's Israel and Palestine, ruled by Egypt in the 15th–13th centuries BCE.

**cubit** A unit of length based on the measurement of a forearm. The Egyptian royal cubit is equivalent to about 20.6 inches and divided into seven palms, each of four digits.

**deben** Also spelled "dbn," meaning ring, it was a standard weight, later changing to block form. Different sizes and different materials give a range of debens. Smaller units called *shena* are also used.

**djed** A pillar or column symbol, shaped like the backbone of the god Osiris. Also spelled "tet," it symbolizes stability.

**Elephantine** An island in the River Nile, also known as Abu or Yabu, the name of its southern town. It is believed to be the home of Khnum, the god who creates people and animals from the Nile's clay.

**Eye of Horus** An elaborate symbol that represents the sun and power, originally known as the Eye of Ra, after the sun god. In mathematics, parts of the symbol represent different sizes of fraction (*page 57*).

**Feather of Truth** In the afterlife, the god Anubis balances a person's heart against this feather. Hearts heavy with sin are eaten by Ammit and the owner's soul destroyed.

**Hamites** The race of peoples from North Africa to which ancient Egyptians belong, as do Berbers and Tuaregs.

**hieroglyphs** A pictorial form of writing, where symbols are combined to modify or "spell out" meaning. There are two simpler, quicker forms of hieroglyphs: hieratic and demotic writing.

**hinw** "Jar," at 0.1 gallons the smallest unit of volume. The **hekat** (barrel) is about a gallon and **khar** (sack) about 16.5 gallons.

**Hittites** A conquering race from Asia Minor who defeated Egypt to retain supremacy of Syria.

**Hyksos** A *Semitic* race that invaded Egypt in 1663 BCE, ruling as the 15th and 16th dynasties, bringing new developments to Egyptian culture. Kings from Upper Egypt drove them out c.1555.

**incubation** The process where an ill person spends a night in the

temple of a god associated with healing, in the hope of being cured through medical instruction in a dream.

**inundation** The annual flooding of the Nile between mid-July and late September, during the season of **akhet**. It deposits fertile river silt onto the land, an event Egyptians believe is the work of the god Hapi.

**iswt** On a large building project, a strictly organized unit of workmen, such as those employed at *Pa-demi*. They are organized as two groups, the "left gang" and the "right gang".

**ka** A person's life force. See also *ba*.

**kenbet** A town court, held under the watch of Ma'at, goddess of order and justice. There are no lawyers—the participants present their own defense and prosecution—and a jury of governors at the Court of Listeners can review a case if the original outcome is questioned.

**khat** The human body. While alive a person's body is a **khet**.

**Kingdoms** When referring to *pharaohs*, an era of ruling dynasties. The Old, Middle, and New Kingdoms are divided by "Intermediate Periods" when lesser families rule.

**kohl** A makeup used on the eyes. Made from malachite (green ore of copper) it is known as **udju**, while **mesdemet** is a dark gray lead ore.

**labor tax** Every year, each household must perform a few weeks' manual work for the good of the Egyptian state, a type of tax.

**Medjay** A tribe from *Nubia* hired as

mercenaries, c.1550 BCE they developed into a type of police force and employed Egyptians in their ranks.

**medu netier** “Holy words”—the Egyptian term for *hieroglyphs*.

**natron** A white, crystalline salt (hydrated sodium carbonate) mined from dry lake beds and used as an antiseptic, hair-remover, and as drying agent for mummification.

**nebet per** The “lady of the house,” a wife who enjoys the privileges of near-equality with her male counterpart.

**nome** One of about 40 districts or provinces, which act as religious and economic centers and sometimes grow in importance so that a ruling **nomarch**, or governor, might threaten the authority of the *pharaoh*. The nomes united into the states of Upper Egypt and Lower Egypt, which themselves joined into a single nation c.3100 BCE.

**Nubia** The region of Africa south of Egypt. It had a developed culture at the same time as the ancient Egyptians’ and during its Kush kingdom period in the 8th–7th centuries BCE briefly ruled Egypt.

**paat** The privileged ruling class, employed as the pharaoh’s officials. Although initially of royal blood, later, commoners can work their way up to *paat* status.

**Pa-demi** “The town,” the name given to Deir el-Medina near Thebes by its workers. It was established for the many workers required to build the lavish tombs and monuments of the Valley of the Kings and Valley of the Queens.

**papyrus** As well as its most famous use as a form of paper, the papyrus

reed that grows along the banks of the Nile is used to make boats, roofs, and even huts.

**peret** The season from November to mid-March in which crops are grown in the soil fertilized during *akhet*, to be harvested during *shemu*.

**Persia** A Middle Eastern country whose Achaemenid dynasty invaded then ruled Egypt from 525 BCE until the arrival of Alexander the Great’s Greeks in 332.

**pharaoh** The king of all Egypt, Menes being the first from c.3100 when he united the Upper and Lower states. Pharaohs are said to become a type of god when they take office. From Memphis the pharaoh’s capital moved to Thebes c.1570 when the city’s kings fought to expel the *Hyksos*. The Greek kings ruled from Alexandria, 332–30.

**phyle** A group of men, such as temple priests or workmen.

**Pre-Dynastic** The period 5000–3100 BCE before Egypt’s 31 dynasties of *pharaohs* began, when the Badarian, Amratian, and Gerzean cultures dominated the country.

**Royal Heiress** The chief wife of a *pharaoh*, usually the eldest daughter of the previous king.

**sah** A mummified body.

**scarab** A type of beetle held to be sacred. Scarab symbols are used as ornaments, commemorative items, grave goods, and general good luck charms.

**scribe** A vital and much sought role in government, scribes are trained to write *hieroglyphs* neatly and accurately and use this skill to

keep records, write letters, monitor taxes, draw architects’ plans, regulate army and building supplies, and more. Scribes do not pay *labor tax*.

**Semites** Groups of peoples who share a similar language and live in a region stretching from Lower Mesopotamia to eastern Egypt.

**shaduf** A counterweighted pole used to lift buckets of water with which to irrigate farmland.

**shemu** The harvest period, from March to the end of April. It is followed by a hot season that leads to the next *inundation*.

**sistrum** A U-shaped metal frame with loops of metal, a sacred instrument used by priestesses.

**tjaty** See *vizier*.

**uraeus** The figure of the sacred asp or cobra with its head in the upright position as though about to strike. It is worn on the headdress of *pharaohs* as a sign of kingship.

**ushabt** Also known as a shawabti, a figurine set in a tomb to represent the deceased and perform their *labor tax* in the afterlife.

**vizier** Derived from the word *wazir*, meaning “bearer of burdens”, *vizier* is the word more commonly used today for the office of *tjaty*. The vizier performs duties on behalf of the pharaoh and sees that instructions are carried out in the king’s name.

**wab** A priest, junior to a **sem** or high priest, who performs cult rituals and gives dedication at funeral ceremonies. Priests washed and shaved off all their bodyhair each day to remain pure.

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