

Have you ever stood on your head so that up was down and down was up? Of course, to everyone else, your down was up and your up was down. Now that you are completely confused, come see why Egypt's up is down and down is up.

Generally, we speak of places in southern locations as being “down south.” In Egypt, however, the southern region of the country is unexpectedly called Upper Egypt. Why, you ask? Egypt's south is “up” because the Nile River flows from mountains in southern Africa downstream to the Mediterranean Sea in the north. Since southern Egypt lies upstream, it is referred to as Upper Egypt. On the other hand, we normally refer to northern locales as “up north.”

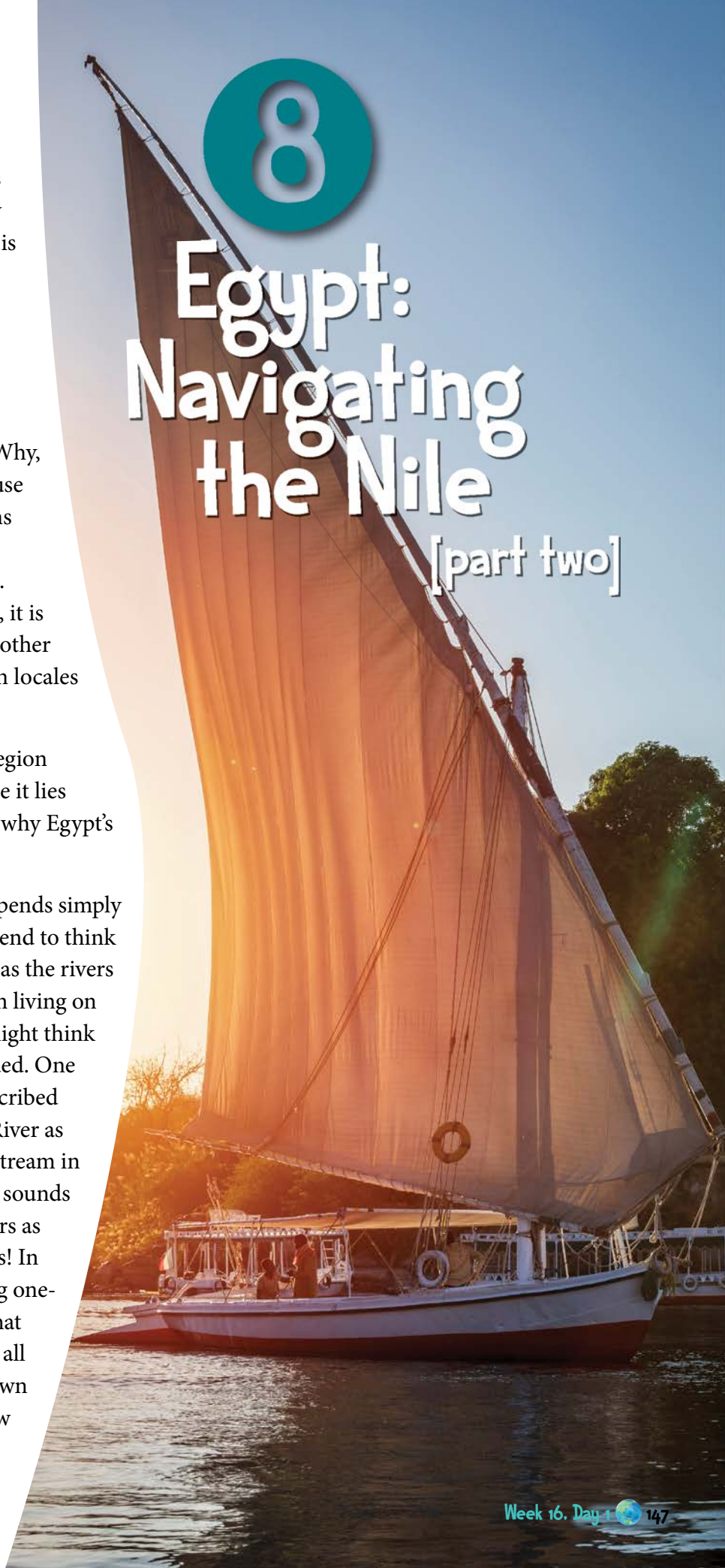
But not so in Egypt; the northern region is actually named Lower Egypt since it lies downstream. Can you now explain why Egypt's up is down and down is up?

While the direction a river flows depends simply on where mountain ranges are, we tend to think all rivers flow in the same direction as the rivers we live near. If you were an Egyptian living on the north-flowing Nile River, you might think that the rest of the world was upended. One Egyptian pharaoh, Tuthmosis I, described the great south-flowing Euphrates River as “the inverted water that goes downstream in going upstream.” The poor pharaoh sounds as confused over south-flowing rivers as we may be over north-flowing rivers! In Egypt, it is the mighty Nile, covering one-sixth of the earth's circumference, that determines upper and lower — and all of life. Step on board for a cruise down the Nile that will change forever how you see Egypt!

8

Egypt: Navigating the Nile

[part two]





In the dim before dawn, we wake early on the deck of our felucca [fi·luh·kuh], a traditional Egyptian sailboat, to watch as the Nile riverbank stirs to life. Do you hear the blaring chant of the muezzin in a hidden village mosque calling sleepy Egyptians to prayer? A kingfisher skims inches above the waters. The felucca's triangular white sail billows in a gentle gust of wind. Did you catch a glimpse of the pure white egrets standing stock still in the bulrushes clumped along the water's edge? On the riverbank, a brown humpbacked cow chews its cud under the shade of a date palm. Farther down the river, fishermen in a small rowboat haul in their nets of catch. Don't you almost want to crane your ear for the baby's cry, to peer over the railing in hopes of sighting a glimpse of a bobbing basket? For this is the same Nile River that carried baby Moses to the feet of Pharaoh's daughter. The waters of the Nile have known

Egyptian
goose



Aristotle, Alexander the Great, Mark Anthony, Cleopatra, and Julius Caesar. Can you envision Joseph, second in command only to the Egyptian pharaoh himself, floating down these same waters past the towering pyramids? Isn't it hard to imagine this magnificent Nile running red with blood during one of God's ten plagues? Jesus, the Christ Child, journeyed here to Egypt and her regal river. The longest river in the world, the Nile may transport you and me back through the pages of history and the Bible, but for Egyptians today and for thousands of years of history, the Nile River has been the essence of existence, the life breath of the desert.

Coursing almost 1,000 miles (1,600 km) through the heart of Egypt, the Nile River forges a gorge of green growth 10 miles

reservoir: a natural or artificial lake for storing water

(16 km) across at its widest point. (The word “Nile” comes from the Greek word that means “river valley.”) Today, nearly all of Egypt’s 103 million people live within a slender 12 miles (19 km) of the Nile River, only a narrow 4% slice of Egypt’s land.



Burqa



Fellahin

Through the mist rising off these waters, we see women in dark burqa [*boor-kuh*] gowns (a loose robe worn by Muslim women, covering them from head to toe, with veiled holes for their eyes) carrying laundry from mud-brick houses with flat straw roofs down to the Nile. Sons of the farmers, called fellahin [*fel-lahin*], not much older than you, herd sheep and goats to drink Nile waters before leading them out to graze. A boatman, heading south, rows slowly against the Nile’s northerly stream. Today, as in the sweep of Egyptian history, we see the waters of the Nile River as Egypt’s wash tub for families, as its garden hose for thirsty crops, and as its highway, carrying boatloads of tourists, sugarcane, and cotton bales across the country. Yet this magnificent river has changed with the march of time. If you will travel south, to Upper Egypt, you’ll discover how.

Near the city of Aswan (can you locate that on your map?), you can’t miss seeing one of the world’s most massive structures, the Aswan High Dam, rising 364 feet (111 m) out of the depths of the Nile. It would take three 12-story apartment buildings stacked on end from the Nile’s riverbed to reach the height of this enormous granite wall corking the Nile! Taking ten years to construct, one billion dollars to fund, and enough rock to build seventeen Great Pyramids, the Aswan High Dam, straddling 2.3 miles (3.7 km) across the river, is Egypt’s heavy net to capture the Nile! The **reservoir** [*reh-zr-vwaar*] formed by the dam is one of the world’s largest man-made lakes, the 312-mile (502-km) wide Lake Nasser.



Aswan High Dam



For thousands of years, the Nile, swollen from rains in southern Africa, annually overflowed its banks, flooding the entire valley. In modern times, the Nile swamped the basements of homes in the northern city of Cairo. When the Nile ebbed away, it

gifted Egyptians with four million tons (3.6 million metric tons) of rich silt spread over their fields. But the Bible records how God sometimes chose not to raise the Nile: “[He] shall smite the waves in the sea, and all the deeps of the [Nile] shall dry up...and the sceptre of Egypt shall depart away” (Zechariah 10:11; KJV). When the Nile did not flood the valley, the power of Egypt indeed departed — crops withered in the fields, and tummies ached for food. During the 1960s and 1970s, Egyptians decided to capture the annual **flood** (water overflowing onto land that is usually dry) with a dam across the river and release the water steadily over the course of the year. The thunder of foaming white waters that now roars continuously through the dam not only aids faster travel of boats down the Nile but also generates electricity used throughout the country. Without the annual flooding of the Nile, the Egyptian fellahin now plant three seasons of crops; have more fields to cultivate; and irrigation of crops such as cotton, onions, rice, and potatoes is much easier. The Aswan High Dam has changed the flow of the Nile and the face of Egypt.

parasite: an organism that grows and feeds on another organism but does not contribute anything to its host

While people may have good reasons for changing the God-given geography of a place, there are often harmful outcomes. As the Aswan High Dam inflated Lake Nasser with the Nile River, more than 90,000 poor Egyptian peasants were forced to pack up what little they owned and move out of the way of the rising waters. The

lake formed by the dam also threatened to flood some Egyptian treasures that couldn't be easily moved, such as the stone temple of Abu Simbel. Would the four 66-foot (22-m) high statues of the Pharaoh Ramses (that's as high as 12 tall men standing one on top of another!) that had stood at the entrance to the temple for thousands of years drown in the rising waters of Lake Nasser? Heroic rescuers from all over the world rushed to save Abu Simbel's temple and the four statues, cutting each into hundreds upon hundreds of blocks, hauling the sections to the new lake shore, and reassembling the puzzle of pieces. It took ten years to complete this rescue mission!

Some effects of the Aswan High Dam, however, cannot be altered; the rich silt God intended to fertilize the parched desert land during the annual floods now lies trapped behind the dam at the bottom of Lake Nasser. Egyptian farmers, clad in flowing *galabeas* [gal-abeas] (an ankle-length loose shirt), can be seen today spreading a million tons of artificial fertilizer on their fields as a substitute for the natural nutrients that God once deposited on the dry floodplain. Pharaoh's daughter may have bathed in the Nile, but today, one warily avoids these waters. The construction of the Aswan High Dam has increased the population of a tiny **parasitic** worm that can penetrate the skin of anyone swimming in contaminated water. With no dry spells between floodings, the parasitic worms thrive, making infected children especially sick with fever. God designed the world in an intricate balance; when we alter His creation in hopes of making it better in some ways, we often inadvertently make it worse in other ways.

The massive Aswan High Dam captures floodwater during the rainy seasons and releases the water throughout the year. The dam also generates tremendous amounts of electric power for Egyptians — more than 10 billion kilowatt-hours every year. That's enough electricity to power one million televisions for 20 years.

Egyptian farmers





Weaving date leaves



Date tree

Across the river, children wave to us from the balcony of their cruise ship, one of the hundreds that sail the Nile River. Egyptian merchants paddle their rowboats out to the larger cruise ships, tossing up towels emblazoned with pictures of famous Egyptian monuments. The tourists barter for a deal, tossing down money in return for a keepsake from Egypt. Nearly 500 years before the birth of Jesus, there were tourists sailing up and down the Nile, pursuing the wonders of already ancient Egyptian civilization. A tourist named Herodotus, possibly history's earliest recorded travel writer, wrote his own field notes of his Egyptian excursion: "Egypt is the gift of the Nile." Today, tourism is one of Egypt's main industries. Everywhere, we see sightseers streaming from one ancient Egyptian wonder to the next. We also see armed tourist police monitoring travelers' safety and safeguarding the all-important business of tourism.

During our northward sail down the Nile, the captain of our small felucca docks often, and we slip under the dappled shade of a date palm tree. Egypt is the world's top producer of dates. In some fields, a crop of cabbages grows in the shade of the date palms.

We often see millions of harvested dates spread out like a pebbly carpet, drying in the Egyptian sun. With woven baskets at their feet, veiled Egyptian women diligently sort through the rug of dates by hand. As you bite into your next date, remember those Egyptian women — perhaps it was one of them who sorted your date!

On our sail toward the Egyptian city of Luxor and the Valley of the Kings, do you notice that none of the mud houses of the fellahin villages have windows of glass but merely open spaces in the walls? Call "Assalaamu aleikum" [ah-sah-LAY-koom] (Arabic for "hello") to the young girl collecting cow dung for fuel in the open hearth of her family's outdoor kitchen. While your family may cook dinner outside on the BBQ during the summer months, rural Egyptians cook dinner outside year-round!

Memory Joggers

What an exciting trip down the Nile! There are so many beautiful and surprising sights along the river. 1 In which direction does the Nile flow? 2 In which direction do rivers usually flow? 3 What famous baby floated on the Nile in a basket? 4 Why do the majority of Egypt's peoples live close to the Nile? 5 What lake is formed by the dam? 6 Before the dam was built, what would happen to the Nile's rising waters? 7 What happens now? How has that affected the land? 8 Which kind of ships sail up and down the river each day? 9 What is a fellahin? 10 How do some of the villagers prepare their food?

Adventure Challenge 15

name _____

Testing Your Knowledge

Which of the following people were listed in your chapter as having been on the Nile River? Circle them.

Moses

Marco Polo

Aristotle

Alexander the Great

Cleopatra

King Arthur

Mark Anthony

Julius Caesar

Per Kilowatt - Hour



Aswan High Dam

(Note: You will need a calculator.)

The Aswan High Dam produces more than 10 billion kilowatt-hours every year. Kilowatt-hours is defined as a “measure of electrical energy equivalent to a power consumption of 1,000 watts for 1 hour.”¹

First calculate the kilowatt-hours for the following appliances.

This the formula: $\text{Watts} \times \text{hr} \div 1000 = \text{kWh}$. Use your calculator.

See if you can do the following math:

1. A stove using 3000 watts of power for a period of 1 hour. _____ kWh
2. A refrigerator using 650 watts of power for a period of 5 hours. _____ kWh
3. A 50-inch TV using 150 watts of power for a period of 3 hours. _____ kWh

¹ *The Oxford Pocket Dictionary of Current English*; Thompson, Della – editor. Oxford, England: Oxford University Press, 2000.

The Aswan High Dam - Know the Numbers



Use a calculator to find the missing information about the dam.

1 foot = 0.3048 meters

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. _____ m (13,000 ft) long</p> <p>2. _____ m (3,220 ft) wide at the base</p> <p>3. _____ m (130 ft) wide at the crest</p> <p>4. _____ m (364 ft) tall</p> | <p>1 cubic meter = 35.3 cubic feet or 1.3 cubic yards</p> <p>5. 43,000,000 cubic meters _____ (cu yd) of material</p> <p>1 cubic meter/second = 35.31467 cubic feet per second</p> <p>6. Around 11,000 cubic metres per second (_____ cu ft/s) of water maximum can go thru the dam.</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



→ Near Luxor, we drift past fields where electric pumps bring water to irrigate crops and donkeys pull two-wheeled carts heaped with sugar cane. Together with other tourists from around the world, we line up in the Valley of the Kings to see the ancient tombs of Egypt's long-dead pharaohs. Can you hear the commentary of our guide over the voices of the other German, Italian, and Spanish guides educating their own groups of explorers? Travelers come to descend the steep ramps down into the stuffy burial chambers. The walls of the pharaohs' tombs still radiate today with the original paintings from thousands of years ago!

The site nearly every tourist comes to Egypt to see lies farther north on the Nile, near the city of Cairo [KY·roh]. (Can you locate Cairo on your map?) Outside of Cairo looms the world's most enormous and renowned grave markers, weathered by thousands of years of Egyptian sands. Perhaps you have visited quiet cemeteries, kneeling to run your hands across names carved in granite





Valley of the Kings

headstones? Nothing you have ever seen in a cemetery prepares you for this breathtaking burial site. The famous French general Napoleon came to these sands outside of Cairo; looked up at the towering, indescribable gravestones; and declared, “From atop these pyramids, forty centuries look down upon you.” If you lined each freezer-sized stone of this grave marker end to end, the stones would pave a one-lane road stretching from San Francisco on the southwest coast of the United States to New York City on its northeast coast! These are the Pyramids of Giza [gee-zuh].

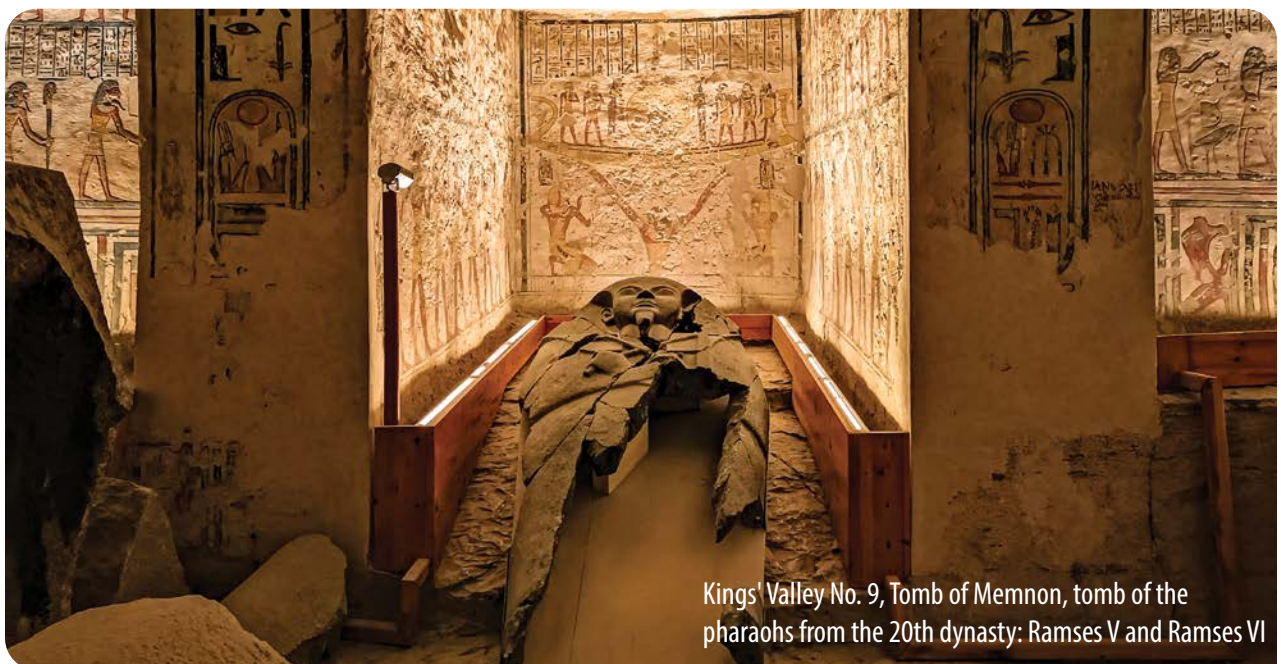
Weighing more than 15 billion pounds (nearly 7 billion kg), with each side of its base measuring the length of two and a half football fields, the Great Pyramid is where the royal mummy of Pharaoh Khufu [koo-foo] (Cheops [kee-ops]) once rested in death. Camel-mounted tourist police ensure no sightseers attempt to climb the gravestones of the pharaohs. You may, however, step down the steep, tunneling ramp into the bowels of the Great Pyramid, your hand touching the massive,



Pyramids of Giza



polished limestone sides. Did an Egyptian pharaoh, centuries ago, touch this same stone? Standing in the deathly still and bare King's Chamber where Khufu once lay, doesn't your mind return to Ecclesiastes 3:11 (NIV), which reads, "[God] has also set eternity in the human heart"? This mind-boggling monument, one of the most famous structures on the whole planet and the work of more than a hundred thousand ancient Egyptians, stands as a magnificent witness of how the hearts of all people beat with a God-given desire for eternal life, but the pharaohs of Egypt believed themselves to be gods. Sadly, the Egyptians worshipped the pharaohs and created other false gods and their own ideas of how to achieve eternal life. The grandest of pyramids and idols made of the most precious of metals cannot give us eternal life. Only the living God of the Bible can give us eternal life in heaven with Him. In the Bible, John 3:16 tells us "For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life."



Kings' Valley No. 9, Tomb of Memnon, tomb of the pharaohs from the 20th dynasty: Ramses V and Ramses VI



sphinx: a mythological Egyptian creature with the body of a lion and the head of a man, ram, or hawk

Have you ever buried your body in heavy sand with only your head and toes poking out? That is how the world's largest single-stone statue, the Great Sphinx, remained for thousands of years in front of Khufu's pyramid — the lion-like body of the Sphinx hidden under the sand with only its man-like face sticking up! The tons of sand that sweep across the Egyptian deserts have actually preserved the **Sphinx** through the centuries. Under its blanket, the soft limestone has been protected from erosion by a constant barrage of wind-blown grains of sand. The process of erosion constantly reshapes the landscape of our earth, carving soil with streaming water, sculpting shorelines with crashing waves, and sweeping sands across the desert — which bury and protect the Sphinx!

Looking up at the Sphinx's 13-foot (4-m) wide face, you immediately notice that it is missing something important — its nose! Did the Sphinx lose its nose because of erosion? Just like we don't know who the Sphinx's face is carved to look like, when it was built, or who built it, we also do not know for certain what happened to its nose. Few believe the legend that Napoleon's French soldiers blasted the nose off with a stray cannonball, but some suggest a devout Muslim cut the nose off when he discovered Egyptian peasants worshipping the Sphinx. We do know, however, that the statue is now eroding away right before our very eyes, chips of limestone falling off under the blazing heat of the Egyptian sun and the drifting smog of Cairo.

If you'll shift your gaze from the 2,500,000 limestone blocks of Pharaoh Khufu's (Cheops) tomb and from the 65-foot (20-m) high Sphinx, can you see the dwarfed houses of a Cairo suburb just several hundred meters away? The children playing soccer — Egypt's favorite sport — in the shadow of the pyramids live right over there in those houses. Cairo, Egypt's capital city, spills over nearly right to the feet of the Great Sphinx itself!

I'd like to read more about ordinary Egyptians... what do you think?

As modern-day tourists wander through the remnants of ancient Egypt, so do modern and ancient ways mingle in the city of Cairo. Here, in one of the most populated cities in the world and the second-largest city on the African continent, we spot camels and donkey carts sharing the clogged streets with careening cars driving “wherever they can find space.” We carefully weave our way through ten widths of cars just to make it to the other side of the street.

Look at all of the apartment buildings that line the streets! Swarming Cairo has more people seeking a place to live than it has living accommodations. More than 50,000 people live in every square mile (or 2.6 sq km) of Cairo, making it one of the most crowded cities in the world! Thus, valuable land is used to build apartment buildings for many families instead of a single house for only one family. With few yards to play in, children relax with their families out on balconies in the cool of the evening after dinner. And dinner is served late — at 10 p.m. or even later!

In this tangle of high rises and buses, we discover some of the most valued ancient Egyptian treasures. Do you recall how all the tombs we visited were empty? That is because all of the treasures are here in the Egyptian Museum of Cairo. Take a long look; no cameras are allowed in this sprawling museum of marvels. You have only your memory to focus on the hair of Ramses's mummy or the gold mask of King Tut.

In this city of opposites, mummified Egyptians lie in ancient storehouses of dazzling wealth, while across town from the museum, some Egyptians make their homes on trash heaps or amongst the grave markers of a cemetery.

Mokattam is Cairo's garbage dump where the **Zabbaleen** (garbage collectors) families sift through the 2,000 tons (1,814 metric tons) of garbage dumped here each day, digging for materials to recycle or sell. Carved out of a nearby mountainside is a church that seats 20,000 people, where city dwellers gather to praise the God who “*raiseth up the poor out of the dust*” (Psalm 113:7; KJV).

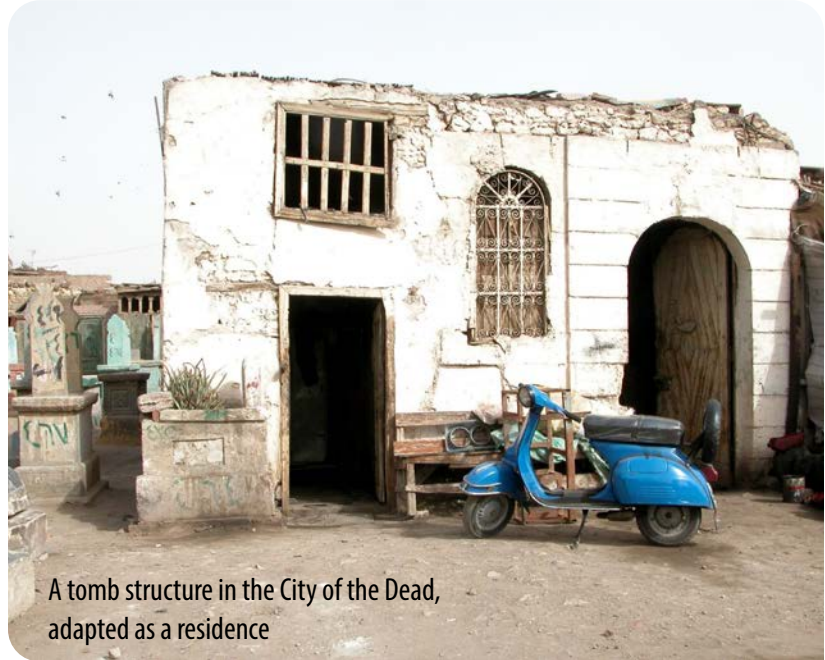


Mokattam



Not far from Garbage City is the City of the Dead — which is very much alive. Amongst the tombs of Egypt's past rulers, we see laundry strung up to dry and grave markers used as desks and shelves. Tens of thousands of Egyptians make their home in the quiet of these cemeteries since families can't find affordable places to live in crowded Cairo.

As you read these words, an Egyptian child may be playing in their backyard across from the pyramids, and a fellahin boy may be bringing the goats to drink at the Nile's edge while his sister cooks flatbread in the family's outdoor oven. While you sleep tonight, Nile waters will still roar through the Aswan High Dam on their course from Upper to Lower Egypt, just as it has for millennia, painting the Egyptian desert green with life. When you wake tomorrow morning, you may wash your face with a washcloth made in Egypt, and the date in your breakfast muffins may have grown in the sunshine beside the Nile. The land of ancient wonders, Egypt is a land very much alive today — this very day — pulsing with the current of the Nile.



A tomb structure in the City of the Dead, adapted as a residence

Memory Joggers

Now we have seen some of Egypt's most famous and ancient sights. Were you as amazed as I was?

- 1 What are the pyramids and who were they built for?
- 2 How big is the Great Pyramid?
- 3 What has been happening to the Sphinx over time?
- 4 What important feature is it missing?
- 5 Are the houses of Cairo far away from the ancient monuments?
- 6 What might we see in the Egyptian Museum?
- 7 What is Mokattam?
- 8 What do the Zabbaleen do there?
- 9 Can you describe the City of the Dead?
- 10 Why do people live in places like Mokattam or the City of the Dead?

Adventure Challenge 16

name _____

Find the Words!

Luxor
pyramids
Zabbaleen

tombs
pharaoh
City of the Dead

Nile River
Sphinx
fellahin

Napoleon
Mokattam
Lower Egypt

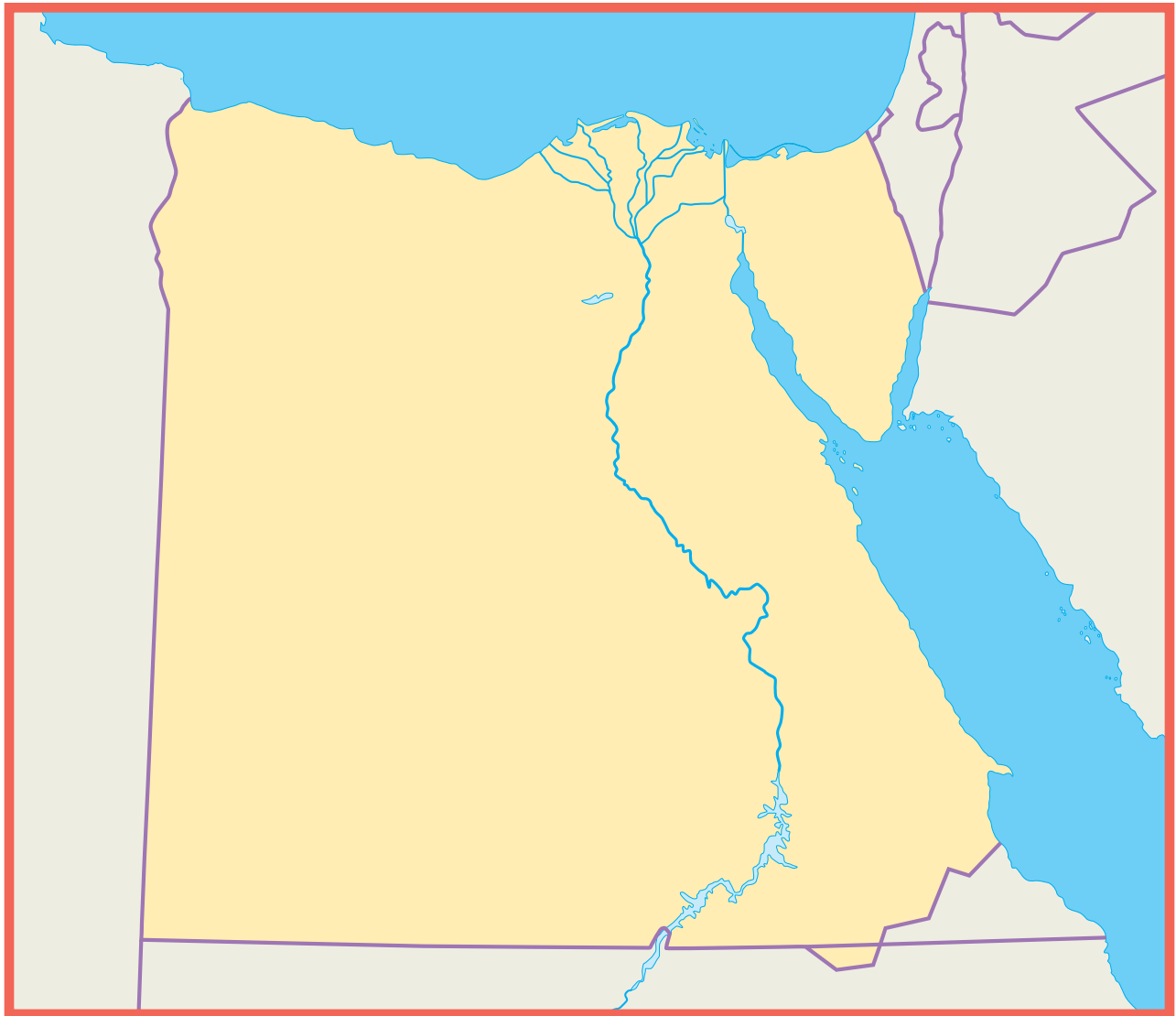
Cairo

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



name _____

Mapping It Out!



Label the following places on your map:

Nile River

Aswan

Lake Nasser

Luxor

Cairo

If you'd like, draw pictures or symbols on your map representing:



A felucca on the Nile



Aswan High Dam



Mokattam



The Pyramids of Giza



Groups of tourists in Luxor

Challenge mapping:

Can you point out the following on your map? Upper Egypt and Lower Egypt



name _____

Geographers write what they’ve seen in order to share the adventure with others — and so they can revisit the places in their memories! On your travel log, record three important sights you want to remember from your photos of Egypt.

Land of Egypt:



May I walk every day unceasingly on the banks of my water, may my soul rest on the branches of the trees which I have planted, may I refresh myself in the shadow of my sycamore.

Egyptian tomb inscription, ca. 1400 B.C.

“And Israel dwelt in the land of Egypt, in the country of Goshen; and they had possessions therein, and grew, and multiplied exceedingly.”

Genesis 47:27; KJV