IN THE LATE 19TH CENTURY, ARCHAEOLOGISTS WORKING ON THE banks of the Nile made a remarkable discovery: some four hundred fragments of letters addressed to a pharaoh named Akhnaten. The significance of the find was unmistakable, but who was this mysterious pharaoh? Unlike other Egyptian leaders, whose towering pyramids, richly decorated tombs, and exquisite temples left an indelible mark on Egypt’s landscape, Akhnaten’s reign was cloaked in mystery. And as archaeologists dug into his legacy, they unearthed a series of religious and social reforms so bold, so counter to ancient Egyptian traditions, that his successors felt compelled to erase all traces of this rebellious leader’s reign.

This season, Philip Glass’s landmark opera Akhnaten receives its Metropolitan Opera premiere in an astonishing new production by Phelim McDermott. A mesmerizing mix of ancient imagery and modern stage spectacle, McDermott’s production is deeply influenced by Egyptian art and artifacts, yet it makes no claim to authentically represent Akhnaten’s life. Instead, McDermott says, the production attempts to “create a mythical, dreamlike version of ancient Egypt,” one that “communicates what it was like for people in the early 20th century to rediscover this ancient world.” Star countertenor Anthony Roth Costanzo agrees. “This production offers us a view of Egypt like it would have been imagined in 1922, when English explorers found Tutankhamun’s tomb,” he explains. “It’s a representation of fantasies about ancient Egypt, mixed with images inspired by real ancient artifacts. So what you see is a creative depiction of history.”

This guide takes the idea of a “creative depiction of history” as its jumping-off point, inviting teachers and students alike to ask: How do we construct narratives about the distant past? What can modern art teach us about the ancient world? And what can archaeological discoveries teach us about the modern age? The materials on the following pages include an introduction to Philip Glass’s musical language, a historical overview of Akhnaten’s life and reign, and classroom activities that will bring the opera’s music and story to life. By delving into Akhnaten’s music, drama, and design, this guide will forge interdisciplinary classroom connections, inspire critical thinking, and help students excavate the ancient world behind Glass’s timeless work.
This guide is intended to cultivate students’ interest in *Akhnaten*, whether or not they have any prior acquaintance with opera or the performing arts. It includes activities for students with a wide range of musical backgrounds and seeks to encourage them to think about opera—and the performing arts as a whole—as a medium of both entertainment and creative expression.

In particular, this guide will offer in-depth introductions to:

- The historical Akhnaten and the ancient sources Glass used to tell the pharaoh’s story
- Philip Glass’s creative process, from the opera’s inception through its premiere
- The ancient Egyptian artifacts that inspired Phelim McDermott’s staging
- Creative choices made by the artists of the Metropolitan Opera for this production
- The opera as a unified work of art, involving the efforts of composer, librettist, and Met artists

Met Opera Education would like to thank Dr. Edward Bleiberg, curator of Egyptian, Classical, and Ancient Middle Eastern Art at the Brooklyn Museum, and Sean Gandini, artistic director of Gandini Juggling, for generously sharing their knowledge with the writers of this guide.
THE STORY

SUMMARY: It is time for a transition of power in Ancient Egypt. The pharaoh Amenhotep III has died, and his son, Amenhotep IV, will inherit the crowns of Upper and Lower Egypt—and with them, the religious and social traditions that have served the Egyptian people for thousands of years. Yet this young pharaoh is full of strange ideas. Sweeping aside the pantheon of Egyptian gods, he institutes a bold new religion dedicated to the sun god Aten. Renaming himself “Akhn-Aten” (“Spirit of Aten”), the pharaoh sets about reforming Egyptian society to accord with his new beliefs. Soon, however, the conservative Egyptian priests rebel against what they view as Akhnaten’s sacrilegious reforms—and set about destroying all traces of his memory.

THE SOURCE: Ancient texts collected and compiled by Philip Glass, Shalom Goldman, Robert Israel, Richard Riddell, and Jerome Robbins. When Philip Glass decided to write an opera about the pharaoh Akhnaten, he faced an unusual creative challenge: How do you write an opera about a historical figure when almost all record of that person’s life has disappeared? In contrast to the well-documented subjects of Glass’s previous operas, Albert Einstein and Mahatma Gandhi, Akhnaten is known to modern archaeologists only through a small, fragmentary collection of ancient artifacts. In fact, this scarcity of archaeological evidence was partly intentional: In the years following Akhnaten’s death, his successors, scandalized and outraged by the pharaoh’s religious reforms, had systematically destroyed the monuments of Akhnaten’s reign. Add to this the inevitable ravages of three and a half millennia, and it is no wonder that archaeologists have pieced together only a spotty record of the pharaoh’s life. Yet rather than viewing this fragmentary record as an impediment to understanding Akhnaten’s story, Glass viewed it as a vital part of the story—a story encompassing not merely the seventeen years of Akhnaten’s reign but also the 3,500 years that have since elapsed.

Working closely with Shalom Goldman, an expert on the ancient Near East, Glass set about piecing together a series of vignettes representing what is known of Akhnaten’s life. Some of these scenes were inspired by artifacts from Akhnaten’s reign (for instance, a relief of Akhnaten and Nefertiti sitting with their six daughters), while other scenes were inspired by ancient Egyptian artifacts more generally (such as the Book of the Dead). The libretto, too, was stitched together from fragments of ancient text, including an inscription from a boundary marker found near the ruins of Akhnaten’s city Akhetaten, fragments of the “Amarna letters” (diplomatic correspondence from Akhnaten’s court), and a prayer likely written by Akhnaten himself (the beautiful “hymn to the sun”). The text for the Prelude comes from the Pyramid Texts, the earliest extant funerary literature from ancient Egypt, while the text for Amenhotep III’s funeral comes from the much later Book of the Dead. The love duet between Akhnaten and Nefertiti was taken from a poem found in a sarcophagus at the Valley of the Kings.
VOICE TYPE
Since the early 19th century, singing voices have usually been classified in six basic types, three male and three female, according to their range; some opera boasts a seventh voice type, the countertenor, as well:

SOPRANO
the highest voice type, normally possessed only by women and boys

MEZZO-SOPRANO
the voice type lying below the soprano and above the contralto; the term comes from the Italian word “mezzo,” meaning “middle”

COUNTERTENOR
a male voice type with a range comparable to that of the female mezzo-soprano, achieved by singing in the falsetto (or “head voice”) range

CONTRALTO
the lowest female voice, also called an alto

TENOR
the highest standard voice type in adult males

BARITONE
the male voice lying below the tenor and above the bass

BASS
the lowest voice type

while another text (from the “Attack and Fall” scene at the end of Act III) was found in the tomb of Akhnaten’s close relative Tutankhamun. Glass and his collaborators also included Psalm 104 from the Hebrew bible (sung by the chorus after Akhnaten’s hymn) and, as a gesture toward the importance of modern archaeology and tourism in bringing ancient Egypt back to light, passages from Frommer’s and Fodor’s guides to Egypt, spoken by the Professor at the end of Act III.

ACT I: Year 1 of Akhnaten’s reign, Thebes. FUNERAL OF AMENHOTEP III: Amenhotep III has died, and preparations for his funeral are under way. Priests mummify Amenhotep’s body, removing his organs, placing them in canopic jars, and wrapping and embalming the body. When his heart is removed, it is weighed on a giant scale; according to an ancient Egyptian custom, if the heart is as light as a feather, the pharaoh will successfully travel on to the afterlife. Amenhotep III’s ghost looks on, reciting prayers from the Book of the Dead as these rituals take place.

CORONATION OF AKHNATEN: Amenhotep III’s son, Amenhotep IV, steps forward and prepares to be crowned emperor. He is dressed in sacred robes, and the two crowns representing Upper and Lower Egypt are brought together and placed on his head. Amenhotep IV climbs a flight of stairs and looks out over the country he now rules.

THE WINDOW OF APPEARANCES: The new pharaoh stands at the Window of Appearances and announces his desire to form a new religion dedicated to the sun disc, or “Aten.” He has also decided to change his name to “Akhnaten,” which means “Spirit of Aten.” Akhnaten, Nefertiti (his wife), and Queen Tye (his mother) praise the Aten as the sun fills the sky behind them.
ACT II: *Years 5 to 15, Thebes and Akhetaten.* THE TEMPLE: Akhnaten and Queen Tye have begun to implement Akhnaten’s religious reforms, replacing the old religious order with new rituals that venerate the Aten. So when Akhnaten enters a temple and finds priests performing the old religious rites, he is furious. He banishes the priests and decides to build a new temple dedicated entirely to the Aten.

AKHNATEN AND NEFERTITI: Akhnaten and Nefertiti sing a duet celebrating their love. Then they turn toward the sky and sing of their love for the Aten.

THE CITY: A temple to Aten is no longer enough for Akhnaten. Now, he wants to build a whole new city where he can rule Egypt while venerating the sun god. He will call this new city Akhetaten, “Horizon of Aten.” Workers begin building Akhetaten in the Egyptian desert as Akhnaten looks on.

THE HYMN: Akhnaten sings a prayer to the Aten.

ACT III: *Year 17 and the present, Akhetaten.* THE FAMILY: Akhnaten, Nefertiti, and their six daughters live in peaceful harmony in their new palace. Yet outside the city, revolution
is brewing. Queen Tye has heard that the Egyptians, unhappy about Akhnaten’s changes, come regularly to protest at the gates of the city.

ATTACK AND FALL: The crowds of protesters have only grown, and now they are led by the priests of Amun (the priests of the old religious order). When the priests and protesters manage to break down the palace doors, Nefertiti, Queen Tye, and Akhnaten’s daughters are dragged away. Akhnaten is attacked and killed.

THE RUINS: The ghost of Amenhotep III is seen mourning his son’s death. Meanwhile, Akhnaten’s body is prepared for burial, and the new pharaoh, Tutankhamun, is crowned. The old religion is restored. The Aten is forgotten, and Egypt’s many traditional gods are once again venerated by the priests and people alike.

As Tutankhamun’s coronation takes place, a modern-day professor tells a group of students about the archaeological discoveries that have helped bring ancient Egypt to light.

EPILOGUE: The ghosts of Akhnaten, Nefertiti, and Queen Tye look down on the ruins of their city, and we hear their voices one final time.
<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>PRONUNCIATION</th>
<th>VOICE TYPE</th>
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</tr>
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<tbody>
<tr>
<td>Akhnaten</td>
<td>ahk-NAH-ten</td>
<td>countertenor</td>
<td>Young and idealistic, Akhnaten envisions a new religion for the people of ancient Egypt.</td>
</tr>
<tr>
<td>Nefertiti</td>
<td>neh-fer-TEE-tee</td>
<td>mezzo-soprano</td>
<td>Nefertiti’s love for Akhnaten blinds her to the growing anger outside the palace walls.</td>
</tr>
<tr>
<td>Queen Tye</td>
<td>Queen TIE</td>
<td>soprano</td>
<td>Unlike Nefertiti, Queen Tye knows the people of Egypt are unhappy about Akhnaten’s reforms, and she worries about what will happen to her son.</td>
</tr>
<tr>
<td>Amenhotep III</td>
<td>ah-MEN-hoh-TEP</td>
<td>spoken</td>
<td>Although the opera begins with Amenhotep III’s funeral, the pharaoh’s ghost appears throughout the opera to offer commentary (in English) on the events taking place onstage.</td>
</tr>
<tr>
<td>The professor</td>
<td>spoken, played by the same actor as Amenhotep</td>
<td></td>
<td>At the end of the opera, the professor can be seen lecturing a group of students about archaeology and ancient Egypt.</td>
</tr>
</tbody>
</table>
1937 On January 31, Philip Glass is born in Baltimore. He begins studying violin at age six and flute at age eight. Sitting on the living room floor and listening attentively to his older brother’s piano lessons, he soon picks up keyboard fundamentals, as well.

1952 At age 15, Glass begins attending the University of Chicago through their early admission program. He will receive his BA in Liberal Arts in 1956.

1957 Hoping to attend the Juilliard School in New York, Glass spends six months in Baltimore working as a crane operator and saving money. He enrolls in Juilliard at the end of the year.

1964–67 Glass travels to Paris to study with Nadia Boulanger, one of the most revered music pedagogues of the 20th century. While there, he is introduced to sitar player Ravi Shankar, from whom he learns about the repeating cyclic patterns of Indian classical music. Glass is deeply impressed by this structure, which will later have a strong influence on his “minimalist” style of composition.

1976 Glass’s opera *Einstein on the Beach*, a five-hour work created with theater director Robert Wilson, premières in France to wild acclaim. On November 21, the opera is performed at the Metropolitan Opera House, which Glass and Wilson have rented for the occasion. *Einstein* marks a decisive turning point in Glass’s career. From now on, much of his time will be devoted to composing music for the stage.

1979 Glass visits the conductor Dennis Russell Davies at his summer home in Vermont. Glass’s newest opera, *Satyagraha*, based on the life of Mahatma Gandhi, will premiere in Europe the following year, and Davies encourages Glass to turn *Einstein* and *Satyagraha* into the first two parts of an operatic trilogy celebrating great historical thinkers.

1980 *Satyagraha* premieres in Holland at the Netherlands Opera. Glass settles on Akhnaten as the subject for his third historical opera. The trilogy thus includes representatives from three broad categories of intellectual endeavor, with Akhnaten (“the man of religion”) joining Gandhi (“the man of politics”) and Einstein (“the man of science”).
Joining forces with Shalom Goldman, an expert on the ancient Middle East, Glass constructs a libretto for Akhnaten based on ancient artifacts and texts. Composition of the new opera’s music begins in the summer of 1982.

On March 24, Akhnaten premieres in Stuttgart, Germany. In November of the same year, it enjoys its American premiere in Houston before traveling on to New York and London.

The Einstein-Satyagraha-Akhnaten trilogy is performed in its entirety for the first time, in Stuttgart.

Glass is nominated for his first Academy Award for best original score, for the film Kundun. He will be nominated again in 2002 (for The Hours) and 2006 (for Notes on a Scandal).

Glass receives the National Medal of Arts “for his groundbreaking contributions to music and composition.” At the award ceremony, President Obama calls Glass “one of the most prolific, inventive, and influential artists of our time.”

Glass receives a Kennedy Center Honor. His fellow 2018 honorees include Cher, Reba McEntire, Wayne Shorter, and the creative team behind Hamilton.
Up in the Air: Juggling Rhythm and Meter in Akhnaten

Philip Glass’s music is often held up as an example of so-called minimalist music, a designation that references his supposedly minimal musical materials: diatonic scales and arpeggios, simple patterns, and extensive repetition. Yet this designation can make it easy to overlook just how complex this music can be. Under the music’s surface, we can hear a wonderfully intricate filigree of musical sounds as Glass juxtaposes, overlaps, and combines different rhythms and melodies.

This activity will help students engage with the ever-changing rhythmic and metrical patterns in Akhnaten through a physical exercise: juggling. The basic juggling moves have been supplied by Sean Gandini, the master juggler who appears with his juggling troupe in Akhnaten. Students will:

• Learn a series of simple juggling movements
• Practice connecting these movements to duple- and triple-meter musical excerpts
• Combine the simple juggling movements to make more complex juggling patterns
• Use these juggling patterns to analyze musical excerpts from Akhnaten

Music

IN PREPARATION
For this activity, students will each need two juggling balls, tennis balls, hacky sacks, or other objects that are easy to throw and catch in a single hand. Teachers will need a metronome, a video recording device such as a smart phone (optional), and the audio selections available online or on the accompanying CD. Teachers may also wish to utilize the accompanying video featuring master juggler Sean Gandini, available on the Met Education website.

CURRICULAR CONNECTIONS
Music, Music Theory, Dance, Physical Education

LEARNING OBJECTIVES
• To develop students’ understanding of rhythm and meter through visual, auditory, and kinesthetic/tactile cues
• To direct students’ attention to what they will see and hear in Akhnaten
• To introduce students to the sound of “minimalist” music and to examine the hidden complexities of this musical style

A scene from Akhnaten
RICHARD HUBERT SMITH / ENGLISH NATIONAL OPERA
GUIDE TO AUDIO AND VIDEO CLIPS FOR THIS ACTIVITY

For this activity, there are 11 audio selections, available online or on the accompanying CD:

TRACK 1: Verdi, Il Trovatore, “Vedi! Le fosche notturne (Anvil Chorus)”
TRACK 2: Mozart, Le Nozze di Figaro, “Non più andrai”
TRACK 3: Verdi, La Traviata, “Libiamo, ne’ lieti calici (Brindisi)”
TRACK 4: Bizet, Carmen, “Près des remparts de Séville (Seguidilla)”
TRACK 5: Wagner, Die Walküre, “Hojotoho! Heiaha! (Ride of the Valkyries)”
TRACK 6: Verdi, Aida, “Triumphal March”
TRACKS 7–10: Akhnaten, Prelude (excerpts)
TRACKS 11–12: Akhnaten, Funeral of Amenhotep III (excerpts)

There is also a video, specially prepared for this guide, in which Sean Gandini demonstrates the juggling techniques included in this activity. Teachers may wish to review the video before the class begins and/or show this video in class as part of the exercise. It can be found at: https://www.metopera.org/discover/education/educator-guides/akhnaten/.

STEPS

In this activity, students will learn a series of juggling patterns and practice performing these patterns in time with excerpts from several operas. Beginning with one-ball patterns, and then progressing to throwing two balls, students will explore how physical movements and visual cues can help us listen to and understand musical rhythms. Students will then use the juggling patterns they have learned to analyze and discuss selections from Akhnaten. Finally, students will be invited to respond creatively to their own favorite music by choreographing juggling patterns to a work of their choice.

STEP 1: When you see an accomplished juggler, their ability to toss numerous balls in complex patterns may seem like magic. Yet the basic principles of juggling are very simple: To keep track of everything, jugglers just need to know exactly how long a ball will be in the air and where it is going to land when it comes down. Using this basic principle, students will learn a variety of juggling patterns and practice connecting these patterns to different musical meters.

Ask students to stand up and face the front of the classroom; alternatively, if the set-up of your classroom permits, you may wish to have them stand in a large circle facing inward. Distribute one juggling ball to each student, and explain that they are going to learn a variety of throwing patterns with the ultimate goal of choreographing a juggling “accompaniment” to Philip Glass’s score. Also explain that this activity is meant to be fun: Dropping balls is fine—in fact, it’s an inevitable part of learning to juggle, and even master jugglers drop balls from time to time! Students are expected to support and encourage each other during each step of this exercise.

COMMON CORE STANDARDS AND AKHNATEN

CCSS.ELA-Literacy.RI.6.7
Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

CCSS.ELA-Literacy.SL.6.5
Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.

NOTE FOR EDUCATORS: To make this activity as inclusive as possible, you may need to offer adjustments to the juggling movements in the following steps. Some options include:

• Holding a ball for the given number of counts (rather than throwing it up in the air)
• Throwing a ball and catching it in both hands (rather than catching it in one hand)
• Tossing a ball and having another student catch it (rather than throwing it up and catching it yourself)

You may also wish to invite students to suggest other adjustments that they or their fellow students can use.
FUN FACT: In 1984, between the European and American premieres of Akhnaten, Philip Glass was invited to compose the music for another modern event with its roots in the ancient world: the Olympics! At the opening ceremonies in Los Angeles on July 28, American decathlete Rafer Johnson lit the Olympic cauldron as Glass’s newly composed work played in the background.

Now begin with a simple experiment. Ask your students to count together out loud, following a steady pulse. You may wish to use a metronome to keep everyone on track; $J = 120$ is a good pulse for this activity. Count an intro to help students establish the rhythm (something like “1–2–3–4–5–6–ready–go”), then throw a ball in the air. When you throw the ball, students should start counting: “1–2–3–4–5 …” They should keep counting until the ball falls back into your hands. Throw the ball a few times at a very low height: Ideally, the throw will take two counts (throw the ball up on 1, let it land back in your hands on 2). After throwing the ball a few times for 2 beats, throw it for 3 counts (throw it up on 1, let it continue through the air on 2, and catch it on 3). Next, throw a four-beat pattern. Alternatively, you can ask one or more volunteers to throw the ball in front of the class. Conclude with a simple question: Does the ball go higher when you count more beats or fewer?

Now ask students to experiment with their own juggling balls. Ask them to throw a two-beat pattern: Stand at the front of the room and count “1–2–1–2 …“ Students should throw the ball on 1 and catch it (with one or both hands) on 2. After students are comfortable with this, switch to a three-beat pattern (students throw the ball on 1 and catch it on 3). Four beats is more difficult, but invite students to try.

STEP 2: Now it’s time to start linking this action with music. Students may already be familiar with the ideas of meter and rhythm, but it will still be useful to remind students that Western music is typically organized around a steady pulse. Musical meter arises from how these pulses are grouped: If the pulse is grouped into two- or four-beat patterns, we say the music is in “duple meter”; if the pulses are organized in groups of three, we say the music is in “triple meter.”

Tracks 1–6 (on the accompanying CD or online) feature short excerpts from a variety of operas. Each of these excerpts has a strong meter, listed in the chart below. Start by asking students to throw the balls up in the air for the number of counts indicated, keeping time with the music as you play each excerpt. (For now, students need only throw the balls up and down; more complex patterns will be introduced in subsequent steps.) You do not need to play all the excerpts in their entirety, but ensure that you play each excerpt long enough that students feel comfortable throwing their ball in time with the music.
### TRACK EXCERPT METER COUNTS PER THROW

<table>
<thead>
<tr>
<th>TRACK</th>
<th>EXCERPT</th>
<th>METER</th>
<th>COUNTS PER THROW</th>
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<tbody>
<tr>
<td>1</td>
<td>Verdi, Il Trovatore, “Anvil Chorus”</td>
<td>4/4</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Mozart, Le Nozze di Figaro, “Non più andrai”</td>
<td>4/4</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Verdi, La Traviata, “Brindisi”</td>
<td>3/8</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Bizet, Carmen, “Près des remparts de Séville”</td>
<td>3/8</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Wagner, Die Walküre, “Ride of the Valkyries”</td>
<td>9/8</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Verdi, Aida, “Triumphant March”</td>
<td>4/4</td>
<td>4</td>
</tr>
</tbody>
</table>

**STEP 3:** Now let’s make things a little bit more complicated. Instead of simply throwing the ball up for three counts, let’s divide that three-beat pattern into a 2+1 pattern:

**PATTERN 1**

**BEAT 1** Throw the ball up from one hand  
**BEAT 2** Catch it in the same hand  
**BEAT 3** Pass it across to the other hand

Count a slow “1–2–3–1–2–3 ...” for the class, and ask your students to count out loud with you while they juggle this pattern. After a few seconds, ask them what they notice about this pattern. Accept all answers, but draw their attention to the fact that each three-beat group starts in a different hand (i.e., if the first group of three starts in the right hand and passes to the left, then the second group of three will start in the left hand and pass to the right).

Once students are comfortable juggling this pattern, play Verdi’s “Brindisi” (**Track 3**) again, and ask them to juggle this pattern in time with the music’s three-beat structure. Keep in mind that the higher the ball is thrown, the longer it will take to land back in your hand; since the tempo of this excerpt is relatively quick, students will need to keep their throws small. Next, try juggling this same pattern to Bizet’s “Près des remparts de Séville” (**Track 4**). If you and your students wish, you may also try juggling this pattern to Wagner’s “Ride of the Valkyries” (**Track 5**).

**STEP 4:** Now let’s move on to some four-beat patterns. Patterns 2 and 3 have both been designed for juggling in 4/4 time. Introduce Pattern 2, below, and have students juggle this pattern to Verdi’s “Anvil Chorus” (**Track 1**) and Mozart’s “Non più andrai” **FUN FACT:** Mention the phrase “ancient Egyptian makeup,” and an image of Elizabeth Taylor’s iconic green-and-black *Cleopatra* cat-eye is likely to spring to mind. Yet there is good evidence that this dramatic makeup was, in fact, part of ancient Egyptian beauty rituals. Green malachite and black galena (a type of lead ore) were the two basic cosmetic pigments used in ancient Egypt; these were mixed with water and applied to the skin with a small spatula of wood or metal. In addition to lending a rich color to the skin, the minerals offered practical health benefits. Galena has antibacterial properties, and it absorbs the sun’s rays, acting as a kind of proto-sunglasses or eye-black, like athletes use today. There is also evidence that the shape of the eyeliner was meant to imitate the eye of the falcon-headed god Horus; amulets of this eye, worn as jewelry, were thought to protect the wearer, and it is possible that the quintessential Egyptian “cat-eye” was meant to have a similar effect.
For the ancient Egyptians, death was both an end point and a beginning. Although burial signified the end of life on earth, the tomb was also the space from which souls could be reborn into the eternal land of the dead, or duat, as long as the proper rites were followed during burial—and as long as the dead were adequately prepared for their journey to the afterlife. It was this latter necessity, of equipping souls for their posthumous journey, that gave rise to the fascinating body of Egyptian literature known as “funerary texts.” In contrast to the spells recited by priests at the time of burial, funerary texts were intended to be spoken by the soul itself after death. (For this reason, funerary text prayers are written in the first person.) Moreover, since funerary texts were buried with mummies—written on small papyrus scrolls placed over mummies’ mouths, carved into tomb walls, and/or painted on the linens in which mummies were wrapped—they have frequently been unearthed during archaeological excavations of burial sites, and numerous examples exist for study in the present day.

The earliest known funerary texts were carved into an interior wall of the Pyramid of Unis around 2250 BCE; in reference to these carvings, all funerary texts from the Old Kingdom (c. 2700–c. 2200 BCE) are grouped under the general title “Pyramid Texts.” The funerary texts from the Middle Kingdom (c. 2200–c. 1550 BCE) are known as “Coffin Texts,” while the funerary texts dating to the New Kingdom and after (c. 1550 BCE–c. 100 CE) are known as the Book of the Dead, a name bestowed on them by 19th-century Egyptologists. Philip Glass and Shalom Goldman drew extensively on funerary texts while crafting the libretto for Akhnaten: The text of the prologue comes from the Pyramid Texts, while the chorus from Amenhotep III’s funeral is drawn from the Book of the Dead.

Below you will see an image from a copy of the Book of the Dead now in the collection of the British Museum. Prepared for the royal scribe Ani around 100 years after Akhnaten’s death, this papyrus scroll is famous for its exquisite illustrations. The panel reproduced here depicts an event featured in the opening scene of Akhnaten: the weighing of the heart. In the lower-left corner stands Ani, clad in white, approaching a giant scale. Ani’s heart sits in the left pan of the scale, while the right-hand pan holds a feather, representing maat, or “divine truth and order.” The jackal-headed god Anubis (kneeling under the left arm of the scale) steadies the scale before the weighing begins. Along the top of the panel, gods and goddesses wait to deliver judgment on whether or not Ani will be allowed to travel on to the land of the dead. The ibis-headed god Thoth stands to the right of the scales, ready to note the results of the judgment. If the scale is balanced, Ani’s soul will be allowed to continue on to the afterlife. Otherwise, Ani’s heart will be devoured by the creature sitting under the scale, a terrifying monster with the head of a crocodile, the shoulders of a large cat, and the haunches of a hippopotamus.

Book of the Dead, Papyrus of Ani, British Museum, used by permission
(Track 2). (Note that right and left hands may be switched in any of the following directions to suit individual students’ preference.)

PATTERN 2

**BEAT 1** Throw the ball from the right hand.

**BEAT 2** Catch the ball with the right hand.

**BEAT 3** Pass the ball to the left hand.

**BEAT 4** Pass the ball to the right hand.

Now introduce Pattern 3, and play Tracks 1 and 2 again as students practice this new pattern.

PATTERN 3

**BEAT 1** Throw the ball from the right hand (it will need to be thrown high enough that it remains in the air through Beat 2 and lands in the left hand on Beat 3).

**BEAT 2** (The ball is still in the air.)

**BEAT 3** Catch the ball with the left hand.

**BEAT 4** Pass the ball from the left to the right hand.

Finally, divide your students into two groups; ask one group to juggle Pattern 2 while the other group juggles Pattern 3; they should juggle these two patterns simultaneously as they listen to the “Anvil Chorus” (Track 1) one final time. You may wish to start by having all students on one side of the room juggle Pattern 2 while students on the other side juggle Pattern 3. You may wish to alternate patterns (so the first student in the circle will juggle Pattern 2, the second Pattern 3, the third Pattern 2, etc.). Or you may wish to start by dividing the class into two large groups, and then shuffle students so that the patterns are alternating.

If you have a means of making a video of the class, do so now. Play the video back for students, and ask them to describe the effect of having two different patterns happening at the same time. Does it change the way they hear the music?

**STEP 5:** Now let’s turn to the music of Akhnaten. Invite students to put down their balls and simply listen as you play Track 7 through once. Prepare students for the excerpt by asking them to identify the meter of this piece (the answer is duple meter).

Play Track 7 again, and ask students to throw their balls up and down in time with the meter (throw on beat 1, catch on beat 2). Next, invite students to throw each of the four-beat patterns introduced in the previous step as they listen to this track.

Move on to Track 8. This track starts at the beginning of the Prelude, but it contains longer than Track 7. Play 15 to 20 seconds of the track, and then pause it; ask students if they noticed anything about the meter of the piece. You may wish to repeat this track again, playing only the first 15–20 seconds, before inviting students.

**FUN FACT:** It took a long time for Philip Glass to make ends meet through composition; during the 1960s and ’70s, he mostly made his living as a mover and taxi driver. This did not mean, however, that his compositions remained unknown. As Glass recalls in his 1987 book *Music by Philip Glass*: “I vividly remember the moment, shortly after [Einstein on the Beach] played at the Met Opera House, when a well-dressed woman got into my cab. After noting the name of the driver (New York law requires the name and photograph of the driver to be clearly visible), she leaned forward and said: ‘Young man, do you realize you have the same name as a very famous composer?’”
to share their observations. Does it still feel like the piece is in duple meter? Does it feel like it changes at some point? (The answer is that after eight bars, it switches to triple meter. If your students are advanced, you may also point out that the four-note arpeggio pattern has now become a three-note arpeggio pattern to accommodate this change of meter.)

Track 9 begins where the triple meter section of the Prelude begins. Play this track, and have your students practice juggling the three-beat pattern introduced in Step 3 as they listen to this excerpt.

Finally, return to Track 8. There are eight bars of 4/4 music before the 3/4 section begins. Have students choose their favorite four-beat pattern (different students can juggle different patterns) and perform it eight times. Count the bars out loud as your students juggle. Then, when the 3/4 section arrives, have students start juggling the 3/4 pattern. Is it easy to make this transition? Why or why not?

STEP 6: Now play Track 10, and ask students to listen with their eyes closed. As students listen, they should imagine how they might throw their ball in time with this music, using any of the patterns or techniques already studied. At the end of the clip, start the track again, and have students open their eyes and throw the ball in whatever pattern they imagined. If possible, make a video recording of the result. How many patterns did students come up with? What does it look like when everyone is throwing the ball according to whichever pattern they feel most strongly?

STEP 7: In the final step of this activity, students will progress to juggling with two balls. Distribute a second ball to each student. (If students feel more comfortable still using a single ball, that is fine.)

Introduce students to Pattern 4, and then immediately play Track 11, an excerpt from the Funeral of Amenhotep III. The entire excerpt features a steady 4/4 pattern, so students will be able to focus on handling two balls rather than trying to keep up with changing meters. Nevertheless, as students become more comfortable with the two-ball patterns, invite them to listen carefully to the music and pay attention to how the musical and juggling patterns interact.

PATTERN 4
Hold one ball in each hand and count out loud. On odd counts, toss the ball in the right hand up a few inches and immediately catch it in the right hand; on even counts, toss the ball in left hand up a few inches and immediately catch it in the left hand.

Once students are comfortable with Pattern 4, introduce Pattern 5. (It may help to watch the video accompanying this exercise, in which Sean Gandini performs this pattern.) Again, invite students to try juggling the pattern to Track 11.
Compare the images on this page. They all represent ancient Egyptian pharaohs. They were all produced in the 14th century BCE. And yet, within these three portraits, we see two strikingly different aesthetic styles. The statue at top left depicts Akhnaten’s father, Amenhotep III, and is a classic example of Egyptian portraiture. The lines are straight and strong. The body is muscular. The elbows, hips, and knees form right angles. Amenhotep’s neck is obscured by the false beard worn by Egyptian pharaohs, while a heavy headdress surrounds his face. His appearance is chiseled but generic; there are no features that truly distinguish him from the other Egyptian rulers of this dynasty.

Now look at the other two images on this page. Both depict Akhnaten. In one relief, Akhnaten (on the left) sits with his wife, Nefertiti. They both look up toward the Aten, the rays of which can be seen streaming down in bold diagonal strokes. The other relief also depicts Akhnaten, although this time we see only his head. In contrast to the rectilinear statue of Amenhotep, these images are defined by curves. Akhnaten’s hips and thighs are voluptuous. His lips are thick, and his face is fleshy. Commentators have observed that Akhnaten seems to have not only male physical attributes but female attributes as well; indeed, in some portraits Akhnaten even seems to have breasts or a pregnant belly.

So what should modern viewers make of these images of Akhnaten? One possible explanation is that Akhnaten was a hermaphrodite or had a rare medical condition. Archaeologists and medical historians have identified diseases that may have caused these unusual physical features, but without a mummy that can definitely be identified as Akhnaten’s, such hypotheses remain conjecture. Other scholars, meanwhile, have suggested that these portraits are not meant to be seen as realistic images of the pharaoh. Instead, they argue, Akhnaten chose to be represented with both male and female attributes because fertility was a central component of his new religion. By straddling the boundary between male and female, Akhnaten could become a singular source of human life. In this, he was akin to the Aten, which nourished and enabled all life on earth with the warmth of its rays.

However we choose to interpret Akhnaten’s portraits, it is important to remember that images always tell a story. Today, we curate our images through how we dress, through the use of photographic filters, or through the selection of a particular artist who will paint, sculpt, or photograph us. As your students look at these images of Akhnaten, invite them to consider: If people 3,000 years from now were going to see an image of me, what would I want it to look like?
PATTERN 5

**Beat 1** Toss one ball from the right hand to the left; at the same time, pass the ball in the left hand to the right.

**Beat 2** Catch the ball tossed by the right hand (on beat 1) in the left hand.

**Beats 3–8** Continue as in Pattern 4.

Introduce Pattern 6; you may also wish to give students time to experiment with variations on this pattern.

PATTERN 6

(Similar to Pattern 5, but doubling the quick toss at the beginning)

**Beat 1** Toss one ball from the right hand to the left; at the same time, pass the ball in the left hand to the right.

**Beat 2** Catch the ball tossed by the right hand (on beat 1) in the left hand.

**Beat 3** Toss one ball from the right hand to the left; at the same time, pass the ball in the left hand to the right.

**Beat 4** Catch the ball tossed by the right hand (on beat 3) in the left hand.

**Beats 5–8** Continue as in Pattern 4.

You can also invite students to try repeating the toss from right to left three or even four times in a row. Alternatively, they can toss the ball from right to left anywhere in the eight-beat structure. (Students may also find it easier to count 16-beat patterns—instead of eight-beat patterns—since this will give them more “rest” time between tosses from right to left.)

Play Track 11 again, and let students practice whichever version of the above pattern they like most. Encourage them to try several different patterns. Then move on to Track 12. Again, encourage students to juggle whichever pattern they like most; if they prefer, they may also juggle a one-ball pattern at this point.

**STEP 8:** If possible, make a video recording of students performing their favorite juggling patterns as they listen to Tracks 11 and 12. Then play this video back for the students. Bring the activity to a close with a class-wide discussion about the activity. The following questions will help guide students’ responses:
• What did it feel like to juggle these patterns? Did it help you follow along with the music? Why or why not?
• What did it look like when those around you were juggling these patterns? Did it help you follow along with the music? Why or why not?
• What are some other ways you might be able to express this music through physical activities? Dance? Jumping rope? Meditation?
• If you had to describe Philip Glass’s music to someone who had never heard it before, what would you say?

FOLLOW-UP: Invite students to work in small groups to develop juggling choreography for a song of their choosing. If students wish, they can try throwing larger balls, like beach balls or basketballs, to one another for a different visual result. Give them some time in class to develop this choreography, or assign it as a homework assignment. Then invite them to perform their selections for the class. Did this activity give them new insight into their musical selection?
KS: Tell us a little bit about how you got into music and singing. What first attracted you to opera in particular?

ARC: I started taking piano lessons when I was six, and it was my piano teacher who first suggested I try singing. I sang a lot of musical theater in my home town in North Carolina, but when I was 11, I decided I wanted to try singing professionally, in New York. I started by singing on Broadway, where I had an amazing time. Two years later, when I was 13, I was asked to do an opera. It was Benjamin Britten's *The Turn of the Screw*, a complicated psychological story with very difficult, very beautiful music, and it had a kind of emotional expression that I hadn’t found in other music. I really liked having this connection to human emotion through art—that's what got me hooked on opera. In a more general sense, opera deals with major subjects like love and death: things that happen only a handful of times in our lives. So opera lets us see and think about these major subjects through a lens of beautiful art, which I think is very valuable.

KS: Why and how is opera singing different from the other kinds of singing you've done?

ARC: Opera has no microphones; instead, we use singing techniques that are hundreds of years old to project our voices. If you think about opera as the Olympics of singing—as the most extreme thing that we can do with the human voice—you realize it’s all about the mechanics of how our bodies work. You have to use your body to get as much breath as possible, and then you have to control how that breath comes through your vocal cords. If we had no head—if our head was cut off at the throat—vocal cords would sound just like a kazoo. But as we change the shape of our mouth, or manipulate different pieces of skin in our throat, or use any of the other things we learn how to do as singers, that “kazoo” sound bounces around into what we call resonators and takes on shape and color. It’s really the shape of your face that determines the sounds you make, which is what is so cool and so deeply human about singing opera.

KS: You're a countertenor, which is an unusual voice type in opera. Tell us about your voice: What is your range, and how do you do it?

ARC: I don't want to rely too heavily on gender, but in the simplest terms I am basically a man singing in a woman’s register using what's called “falsetto,” or the “head voice.” We all have two different vocal registers: our “chest voice,” which is the voice that we speak in, and our “head voice,” which you can find if you slide your voice all the way up until it cracks—that's where the head voice begins. Now imagine you're stretching a rubber band. The more you stretch it, or the shorter the piece of rubber you have, the higher the sound will be when you pluck it. What I'm doing with my vocal cords as a countertenor is either stretching them out or making them shorter so the sound they produce has a higher pitch. And I'm doing that by only vibrating part of my vocal cords. So we countertenors just take normal physiology, the standard tools that anyone uses when they speak or sing, and then do slightly different things with them.
KS: How did you discover that you wanted to be a countertenor? What made you want to focus on your falsetto range?
ARC: I sang on Broadway as a boy soprano, and I really enjoyed and had a lot of success with it. Then, when I was doing my first opera, people started saying, “Your voice has changed, but you’re still singing high; maybe you’re a countertenor.” I didn’t even know what that was, but I thought, “Well, if I can keep singing like this, then great!” So when I was about 13, I started to take lessons and figure out how to sing as a countertenor—very gently and in very simple ways—and I never looked back.

KS: Why do you think Philip Glass chose a countertenor for the role of Akhnaten?
ARC: There are statues and paintings from ancient Egypt that depict Akhnaten with some features—hips, chest, even lips and cheeks—that some people feel look more feminine. So was Akhnaten a hermaphrodite, or was he potentially trying to make himself more feminine because he saw god as the unification of man and woman? Akhnaten saw god as the sun, rather than as a specific, gendered person. And since Akhnaten made himself more female, was in a sense “between” man and woman, I think Philip Glass thought the perfect voice for this leader and thinker would be that of a countertenor, which straddles that line between masculine and feminine.

KS: You’ve sung a good deal of Philip Glass’s music. What are some of the challenges of singing his work?
ARC: First of all, memorizing Philip Glass’s music is almost impossible! There is a lot of repetition. Philip Glass will take a little chunk of music and repeat it two or three times, and then he’ll make a small change and repeat that two or three times, then make another small change and repeat that … So it’s easy to get lost. And Akhnaten is three hours of music—that’s a lot of music to remember, and a lot of repetition! The only way to learn it is to practice, practice, practice. It took me about four months to learn this music by heart. Also, once I enter in Akhnaten—which is about 15 minutes into the show—I’m singing almost the whole night through. And so, for me, singing Akhnaten is like running a marathon. I have to be really prepared, I have to be really strong vocally, and I have to understand how to pace myself, just like you would if you were running a long race.

KS: Akhnaten’s libretto features three ancient languages: Hebrew, ancient Egyptian, and Akkadian. What are the specific challenges of singing those languages?
ARC: Hebrew is a language that still exists, so we know how to pronounce it. Ancient Egyptian and Akkadian are much more challenging, because we don’t know exactly how they were pronounced. We know what the consonants were, but (and this is my understanding from talking with Egyptologists and scholars) we don’t know exactly what the vowels were. For instance, if you look at how Philip Glass and one of the librettists, Shalom Goldman, chose to spell Akhnaten, you might notice it’s with one fewer E than you often see—sometimes it’s spelled Akhenaten. That was because we don’t know exactly how many Es were in there, so Goldman and Glass thought, “Well, it’s easier to say and easier to sing without that extra syllable, so we’ll just do the shorter version.”

KS: Akhnaten isn’t, of course, just music and poetry: Like all operas, it also has a huge production that goes along with it. Is there anything in particular we audience members should know going into it?
ARC: I think Phelim’s staging is, at its heart, about creating a sense of ritual and a sense of unlocking the spirits of the ancient world through our own concentration and attention. When this opera starts, and the music is very repetitive, and things are happening very slowly, I imagine people often think, “How am I going to make it through three hours of this?” But if you let yourself go there, if you take your mind away from swiping through apps on your phone or clicking through different tabs on your browser and let it slow down slightly to a different pace, the opera grabs you.
History & Social Studies

IN PREPARATION
For this activity, you will need the reproducible resource available at the back of this guide entitled Puzzle Me This, copies of Akhnaten’s summary and illustrated synopsis, colored pencils, scissors, glue sticks, and envelopes (any size).

CURRICULAR CONNECTIONS
Archaeology, Anthropology, History, Visual Arts, Creative Writing, Communication

LEARNING OBJECTIVES
• To deepen students’ familiarity with Akhnaten’s story and themes
• To foster students’ own creativity and problem-solving skills in a collaborative setting
• To challenge students to think deeply about historical narratives and the modern reconstruction of the past

Puzzle Me This: Piecing Together Akhnaten’s Story

Imagine you have been given a box with 15,000 puzzle pieces. You don’t know if the pieces are all part of a single puzzle, or if there are multiple puzzles mixed together in the same box. You don’t know what the puzzle(s) depict(s). You don’t even know if you have all the puzzle pieces—you might put the whole thing together, only to discover that a large part of the puzzle is missing. Nevertheless, if you want to have any hope of understanding the image, you must try your best to put the pieces together. This, in essence, is what archaeologists faced when they started piecing together Akhnaten’s scattered history.

This activity will invite your students to consider a fundamental challenge of archaeology: How can we construct a historical narrative when all we have are fragmentary artifacts? By making (and then solving) a puzzle based on Akhnaten’s illustrated synopsis, students will have the opportunity to think deeply about archaeology and history while familiarizing themselves with the opera’s plot. Students will:

• Make a series of puzzles based on individual sections of Akhnaten’s illustrated synopsis
• Collaborate in small groups to reconstruct the illustrated synopsis in its entirety
• Think about the relationship between these puzzles and the structure of Philip Glass’s opera
• Reflect on what it means to craft a “creative depiction of history,” and think about how other media might be employed to imaginatively recreate historical events
STEPS
This activity will use a collaborative, hands-on project to facilitate critical thinking, discussion, and reflection. Students will begin by using Akhnaten’s illustrated synopsis to craft a series of puzzles. They will then distribute their puzzle pieces to two other groups of students, who will be tasked with recreating the original image from these sparse fragments. As students attempt to reconstruct the full synopsis, conversational prompts will invite them to consider how Akhnaten’s plot reflects the fragmentary nature of the pharaoh’s real-life archaeological record.

STEP 1: Divide students into small groups of two to three students; ideally, the number of groups in the class will be a multiple of three. Number each of these groups “1,” “2,” or “3” (there will likely be multiple groups with the same numerical designation).

The early steps of this activity will be most successful if students have a basic understanding of Akhnaten’s story but lack detailed knowledge of the opera’s plot. Distribute the summary provided in this guide (but do not distribute the full synopsis) and ask students to read it aloud in their small groups. This summary is designed to whet students’ appetites rather than providing in-depth coverage of the opera’s plot. When your students have finished reading, ask them to write down any questions they have about the opera’s story. Students will return to these questions at the end of the activity.

STEP 2: The illustrated synopsis for Akhnaten consists of three full pages and one half-page. Distribute one page to each group: Give copies of page 1 to all the groups numbered “1,” give copies of page 2 to all the groups numbered “2,” etc. Randomly distribute a few copies of the final half-page, as well. Do not let students see the other pages of the illustrated synopsis.

Explain that each group is going to make a puzzle from their designated page. Distribute scissors and ask students to cut their image(s) into around 10–15 pieces; these pieces can be any size or shape the students wish. (For younger students, teachers may wish to have adult volunteers or classroom assistants do the cutting instead.)

Once all the puzzles have been cut, distribute two envelopes to each group. Ask the students to divide their puzzle pieces into two (approximately equal) piles and put one pile of pieces in each envelope; label both of these envelopes with the group’s number. Finally, collect all the envelopes.

STEP 3: Now it’s time to start reassembling the synopsis-puzzle. Give each group a glue stick and a copy of the reproducible Puzzle Me This. Then distribute one envelope of puzzle pieces to each group according to the instructions below:

- Each Group 1 will get one of the envelopes marked “2”
- Each Group 2 will get one of the envelopes marked “3”
- Each Group 3 will get one of the envelopes marked “1”

COMMON CORE STANDARDS AND AKHNATEN

CCSS.ELA-Literacy.RH.11-12.6 Evaluate authors’ differing points of view on the same historical event or issue by assessing the authors’ claims, reasoning, and evidence.

CCSS.ELA-Literacy.RL.9-10.5 Analyze how an author’s choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.

CCSS.ELA-Literacy.SL.9-10.1.d Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.
Tell students to write the number from the envelope at the top of their reproducible sheet (where it says “Synopsis Puzzle: Page ____”). Explain that the reproducible sheet will give them a space to recreate the original images from the synopsis.

Invite students to start putting the puzzle together, but remind them that they only have half the pieces. They’ll have to make an educated guess as to how the pieces fit together and where they would likely be located within the full image. Since students have only one puzzle per group, they will have to work together to decide where each piece should go. As such, they will need to practice careful communication skills, expressing their own opinions, listening respectfully to dissenting ideas, and working together to negotiate a solution that is satisfactory to all the people in the group.

As students work, ask them to keep track of their decision-making processes. How did they decide where each piece should go? Were there specific clues that helped them figure it out? Once students think they know the (approximate) location of each piece, ask them to glue the pieces in place on their reproducible sheet.

**STEP 4:** Students will now have a fragmented page from the illustrated synopsis. The next question is: What should go in the blank spaces? Ask students to decide as a group what is missing, and ask them to fill in the blank parts of the page with their own drawings and words. Again, students will have to collaborate respectfully to create their shared image. As students work, ask them to think about how they are deciding to fill in these blank spaces and why they have chosen to fill them in this way. Remind them that they will be expected to explain their decision-making process at the end of the activity.

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**FUN FACT:** Akhetaten (“Horizon of Aten”) was built on the East side of the Nile, about halfway between Memphis and Thebes, on a flat plane bordered by two high cliffs. At the Eastern edge of this plane, the cliffs come together to form a valley; each morning, the sun disc (or “Aten”) can be seen rising between the steep valley walls. The result is a geographical feature closely resembling the ancient Egyptian hieroglyph for “Akhet” or “horizon,” thereby evoking this divine city’s name.

Members of the Egypt Exploration Society investigating Tell el-Amarna in 1922

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**COURTESY EGYPT EXPLORATION SOCIETY**
**STEP 5:** Give each group another copy of the reproducible and repeat Steps 3 and 4, distributing the remaining envelopes according to the following instructions:

- Each Group 1 will get one of the envelopes marked “3”
- Each Group 2 will get one of the envelopes marked “1”
- Each Group 3 will get one of the envelopes marked “2”

(If time is limited, this step may be skipped.)

**STEP 6:** Now it’s time to compare the “reconstructed” images with the originals. Give each student a full copy of the illustrated synopsis and invite them to spend a few minutes walking around the room and observing how the different pages were completed. It may be helpful to display all the versions of page 1 together, all the versions of page 2 together, etc.

When students return to their seats, start an open conversation about this exercise and how it might reflect the challenges faced by archaeologists. The following questions will help guide the discussion:

- How did the “reconstructed” images compare to the originals? Were you surprised when you saw the original? Why or why not?
- Were the different reconstructions similar? Why or why not? What might account for the differences?
- How might this exercise be similar to piecing together artifacts in an archaeological dig? How might it be different?
- In a broader sense, why might it be difficult to understand an individual, culture, or society when the only traces we have are fragmentary?
**STEP 7:** Ask students to return to the questions they wrote down in Step 1. In their groups, they should discuss whether or not they have since learned the answers to these questions. Do they understand the plot better now? Are there any questions that remain unanswered?

Explain that when Philip Glass began composing *Akhnaten*, he faced a challenge similar to the puzzle activity students just completed. He knew some pieces of Akhnaten’s story, but there were still large chunks missing. Based on what your students now know about *Akhnaten*’s plot, do they think Philip Glass filled in these “missing pieces,” or does it seem like some parts are still “missing”? Why do they think so?

Invite your students to share any final thoughts and impressions of this activity.

**FOLLOW-UP:** Opera is just one way that modern artists can tell an ancient story. You may wish to conclude this activity by asking your students to imagine they have been hired to tell Akhnaten’s story in any medium of their choice. Some possibilities include:

- Video game
- Choose-Your-Own-Adventure novel
- TV series
- Epic poem

What medium would students choose? Why?

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**FUN FACT:** If you look into the orchestra pit during a performance of *Akhnaten*, you might be struck by a glaring absence: The orchestra has no violins! When *Akhnaten* premiered in Stuttgart, Germany, the Stuttgart Opera’s main auditorium was undergoing renovations, and *Akhnaten* was scheduled to be performed in a different auditorium with a much smaller pit. Glass knew that he would have to cut back on the size of his orchestra if he wanted his players to fit under the stage. Rather than removing a few performers from each string section, however, he decided to do away with the violin section entirely while retaining the usual number of violas, cellos, and basses. The result is a low, dark orchestral timbre that perfectly balances the high pitches of Akhnaten’s counter-tenor voice.
The ancient Egyptian pharaoh Amenhotep III dies. His son Amenhotep IV is crowned Pharaoh of Upper and Lower Egypt.

C. 1347 BCE
Amenhotep IV abolishes the traditional Egyptian religion and establishes a new religion dedicated to the sun disc, or “Aten.” He changes his name from Amenhotep (“Amun Is Satisfied”) to Akhnaten (“Spirit of Aten”) and founds the city of Akhetaten (“Horizon of Aten”).

1336 BCE
Akhnaten is overthrown. The pharaohs who succeed him reinstate Egypt’s traditional religion and attempt to destroy all traces of Akhnaten’s reign.

1887 CE
A collection of nearly 400 clay tablets and fragments is discovered at the ruins of Akhetaten, near the modern town of Tell el-Amarna. Mostly consisting of diplomatic correspondence sent to Akhnaten’s court, the “Amarna letters” (as the collection comes to be known) spark archaeological interest in Akhnaten’s reign.

1891
The British archaeologist Flanders Petrie conducts the first formal excavations of Akhetaten.

1922
The pharaoh Tutankhamun’s tomb is discovered in Egypt’s Valley of the Kings. A close relative of Akhnaten, Tutankhamun (whose birth name was actually Tutankhaten, “Living Image of the Aten”) was a short-lived pharaoh who played a relatively minor role in Egyptian history. Yet his tomb, untouched by grave robbers for more than 3,000 years, is full of treasures, and its discovery—one of the most famous archaeological finds of all time—sparks a worldwide craze for all things ancient Egyptian.
Ten Essential Musical Terms

Arpeggio  An arpeggio is a musical figure in which the notes of a chord are played in succession rather than at once. The term comes from an Italian verb meaning “to play the harp.” Arpeggios are a common element of minimalist music. By organizing the notes in an arpeggio into ever-changing rhythmic patterns, minimalist composers can create a great deal of musical interest even when the same notes are repeated over and over, as in the Prelude to Akhnaten.

Chord  A combination of notes that sound simultaneously, usually comprising at least three different pitches. The triad, a type of chord built from a root pitch with two thirds stacked above it, is the basic building block of tonal harmony. Chords may be consonant (in which case they sound stable and pleasant) or dissonant (in which case they sound unstable and harsh).

Chorus  A group of singers performing together. The chorus’s music can range from simple unison melodies to complex, multi-part singing with a high range from simple unison melodies to complex, multi-part singing with a high range so they can sing remarkably high lines of music.

Countertenor  The highest male vocal type, with a range equivalent to a female mezzo-soprano or soprano. Countertenors have the deep speaking voices typical of adult males, but they carefully train their falsetto (“head”) range so they can sing remarkably high lines of music.

Duet  The most famous operatic musical form is the “aria,” a vocal number for solo voice, but opera is full of numbers for multiple voices, as well. Such works for “ensemble” (i.e., a group of singers) are typically labelled according to how many people are involved in the scene: A duet is for two singers, while a trio is for three singers. (One also hears about quartets, quintets, sextets, septets, octets, and even nonets—scenes for four, five, six, seven, eight, or nine singers, respectively.) Although duets are often used for love scenes in opera, they may also be used for arguments, conversations, or any other kind of scene involving two main characters.

Hemiola  A rhythmic device that superimposes or interchanges duple and triple rhythmic groupings. For instance, if one person claps twice for every click of a metronome while another person claps three times per click, the result will be a hemiola. Alternatively, if one person claps two times per metronome click and then switches to clapping three times per metronome click, this juxtaposition of duple and triple beat divisions is also called a hemiola.

Hymn  From the Greek hymnos, meaning “song of praise,” and now typically used to refer to a song in praise of a god (or gods). A broad term, “hymn” encompasses a great variety of musical styles, languages, and religious traditions. In the Roman Catholic church before the Second Vatican Council, hymns were typically sung in Latin; in contrast, Protestant hymns were typically sung in the vernacular (the language spoken by believers in their day-to-day lives).

Libretto  The text of an opera or staged musical drama, comprising all spoken words and stage directions. Literally “little book” in Italian, the word refers to the centuries-old practice of printing a small book with an opera’s text, which was available for sale prior to a performance. A related word, “librettist,” refers to the artist who creates the words for the composer to set to music, either adapting them from an existing source or writing original material. By contrast, the opera’s music in written or printed form is called a “score.”

Minimalism  A style of composition marked by a purposefully simplified melodic, rhythmic, and harmonic language. It often features lengthy repetitions and ostinatos of simple musical gestures against a static harmonic (typically diatonic) background. As a musical movement, minimalism first arose in the 1960s as a reaction against the complex atonality and fragmented musical forms of the mid-20th century. The foremost minimalist composers are Philip Glass, Steve Reich, and Terry Riley, although not all composers whose work is described as “minimalist” embrace the term.

Rhythm and Meter  Western music unfurls in time in relation to a steady pulse or beat. Whether or not this pulse is actually played (for instance, by a steady drumbeat), all durations are conceptualized, notated, and understood in relation to this pulse. “Meter” refers to how these pulses are grouped and divided (for instance, the repeating pattern of three quarter-notes that forms the basic structure of 3/4 time), while “rhythm” refers to the varying durations of notes that are performed within a given meter. The interplay between different rhythms and meters gives minimalist music much of its variety and texture.
From a modern perspective, it’s easy to view Akhnaten as a bold thinker ahead of his time. For his contemporaries, however, Akhnaten’s reforms were infuriatingly sacrilegious. As soon as Akhnaten was dead, his successors reestablished Egypt’s traditional religion and set about destroying all traces of his reign. Faces were picked out of reliefs depicting Akhnaten and his family. The buildings at Akhetaten were systematically dismantled. References to the Aten were even removed from royal names: Akhnaten’s close relative Tutankhaten, for instance, was renamed Tutankhamun, a reference to the traditional Egyptian sun god Amon-Ra. Yet this story of overthrow and destruction, so central to the opera Akhnaten’s final scenes, raises an obvious question: If the material markers of Akhnaten’s reign were destroyed, how do we know anything about him?

The fact that Akhetaten’s building blocks had been detached and desecrated didn’t mean they weren’t still useful. Egyptian pharaohs, who liked to build large commemorative temples and tombs, were always in need of raw building materials. The carved stones from Akhetaten couldn’t be used in a way that would render their imagery visible, of course, but there was another way that Egyptian builders could repurpose these stone blocks: as stuffing materials inside monumental walls. In particular, the pylons (large trapezoidal gates) at temple entryways required a good deal of filler stone, and in the century following Akhnaten’s death, the stone blocks from his capital city were used to fill pylons at the temples of Karnak and Hermopolis Magna. Some three thousand years later, when archaeologists began studying these temples, they discovered the stones from Akhetaten as well.

Studying history through ancient detritus may at first seem strange, but vital historical artifacts have often survived precisely because they were once identified as trash. Medieval book binders, for instance, used scraps from old manuscripts to help bind new books; today, these scraps offer the only existing trace of books that are otherwise lost forever. National Geographic and other scientific publications often report on archaeological and anthropological discoveries enabled by studying prehistoric garbage piles. In other words, the old adage that “one person’s trash is another person’s treasure” is nothing short of a fundamental tenet of archaeology.
IN PREPARATION
For this activity, students will need the Performance Activity reproducible handouts found at the back of this guide.

COMMON CORE STANDARDS AND AKHNATEN
CCSS.ELA-Literacy.RH.6-8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

CCSS.ELA-Literacy.SL.8.2 Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

Supporting the Student Experience during the Live in HD Transmission

Watching and listening to a live performance is a unique experience that takes students beyond the printed page to an immersion in images, sound, interpretation, technology, drama, skill, and craft. These performance activities are designed to help students analyze different aspects of this experience while engaging critically with the performance. Each performance activity incorporates a reproducible sheet; students should bring these activity sheets to the Live in HD transmission and fill them out during intermission and/or after the final curtain.

For Akhnaten, the first activity sheet, “Akhnaten Archaeology,” invites students to identify how real-life Egyptian artifacts inspired Phelim McDermott’s production. Each of the five images on the reproducible handout depict real Egyptian artifacts held in museums around the world. As students watch the Live in HD transmission, they should try to identify where these images (or something like them) appear in the stage design (sets, costumes, etc.).

The second activity sheet is called “Opera Review: Akhnaten,” and it includes a scene-by-scene rating system to help students keep track of the opera’s story and develop their own opinions about what they see and hear. This activity is the same for each opera, and it is intended to guide students toward a consistent set of objective observations while enriching their understanding of the art form as a whole.

The performance activity reproducible handouts can be found at the back of this guide. On the next page, you’ll find a follow-up activity created specifically for reviewing the Live in HD performance of Akhnaten. This activity is intended to inspire careful, critical thinking about what students have seen and heard while also inspiring students to engage in further discussion and study.
Students will enjoy starting the class with an open discussion of the Met performance. What did they like? What didn’t they like? Did anything surprise them? What would they like to see or hear again? This discussion should be an opportunity for students to review their performance activity sheets and express their thoughts about the visual design of the Met production, the singers’ performances, and Akhnaten’s music and story. The following questions may facilitate this discussion:

- Who (or what) do you think the jugglers represent? Are they characters who take part in the opera’s story? Are they external to the story? Something else?
- Did the production look old? Did it evoke an ancient world? Why or why not?
- What do you think it symbolizes when the jugglers all drop their balls in Act III?
- At the very end of the opera, as Akhnaten’s body is prepared for burial and his soul prepares to make its journey to the land of the dead, he gets dressed in a way that is reminiscent of how he got dressed for his coronation. Why do you think the director, Phelim McDermott, made this choice?

Next, invite your students to engage in a thought experiment. Imagine that an archaeologist 3,500 years in the future is investigating the ruins of our society. Then ask your students to consider:

- What might this archaeologist find? What kinds of artifacts from our society would survive for several millennia?
- How might the archaeologist interpret these artifacts? For instance, if they found an iPhone, what might they think it was?
- What would these artifacts tell them about our society?

(For teachers who want to explore this thought experiment more fully, the sidebar on the following page includes three additional resources.)

Now ask your students to think about a civilization that is 3,500 years old (like Akhnaten’s). Based on the brainstorming your students did above, do they think we can ever fully understand a culture that existed many millennia ago? What might make it hard for us to comprehend life in ancient Egypt?
Further Reading


Macauley’s satire tells the story of an archaeological study on the North American continent. As we read, we discover that the archaeologists are from the future, the civilization they are studying is our own, and the “tomb” they are eagerly excavating is nothing more than a sleazy motel room. The archaeologists’ analysis of the room’s contents is comical (a bathtub is interpreted as a sarcophagus, the water taps as ancient musical instruments), yet behind the humor is a cautionary message: Our interpretation of the past is always clouded by our own priorities and assumptions. Many of the plot points are modeled after the discovery of Tutankhamun’s tomb in 1922.


An accessible history, complete with excellent photographs, of the discovery of King Tutankhamun’s tomb.


An overview of how scholars and tourists have understood the Parthenon over the years, this article begins by imagining how archaeologists 2500 years in the future might interpret the World Trade Center memorial and the new skyscraper (“One World Trade Center”) that towers over it.

https://www.newyorker.com/magazine/2014/04/14/deep-frieze
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| 1 | Verdi, *Il Trovatore*, “Vedi! Le fosche notturne (Anvil Chorus)”  
Excerpt from the Metropolitan Opera broadcast of October 3, 2015, conducted by Marco Armiliato, with the Metropolitan Opera Orchestra and Chorus. |   |
| 2 | Mozart, *Le Nozze di Figaro*, “Non più andrai”  
Excerpt from the Metropolitan Opera broadcast of March 26, 2016, conducted by Fabio Luisi, with Mikhail Petrenko as Figaro and the Metropolitan Opera Orchestra and Chorus. |   |
| 3 | Verdi, *La Traviata*, “Libiamo, ne’ lieti calici (Brindisi)”  
Excerpt from the Metropolitan Opera broadcast of December 27, 2014, conducted by Marco Armiliato, with Marina Rebeka as Violetta, Stephen Costello as Alfredo, and the Metropolitan Opera Orchestra and Chorus. |   |
| 4 | Bizet, *Carmen*, “Près des remparts de Séville (Seguidilla)”  
Excerpt from the Metropolitan Opera broadcast of February 11, 2017, conducted by Asher Fisch, with Clémentine Margaine as Carmen and the Metropolitan Opera Orchestra and Chorus. |   |
| 5 | Wagner, *Die Walküre*, “Hojotoho! Heiaha! (Ride of the Valkyries)”  
Excerpt from the Metropolitan Opera broadcast of April 13, 2013, conducted by Fabio Luisi, with the Metropolitan Opera Orchestra and Chorus. |   |
| 6 | Verdi, *Aida*, “Triumphal March”  
Excerpt from the Metropolitan Opera broadcast of April 15, 2017, conducted by Daniele Rustioni, with the Metropolitan Opera Orchestra and Chorus. |   |
| 7 | Akhnaten, Prelude (excerpt): duple meter |   |
| 8 | Akhnaten, Prelude (excerpt): duple and triple meter |   |
| 9 | Akhnaten, Prelude (excerpt): triple meter |   |
| 10 | Akhnaten, Prelude (excerpt) |   |
| 11 | Akhnaten, Funeral of Amenhotep III (excerpt) |   |
| 12 | Akhnaten, Funeral of Amenhotep III (excerpt) |   |
CLASSROOM ACTIVITY

Puzzle Me This

Synopsis Puzzle: Page _____
PERFORMANCE ACTIVITY

Akhnaten Archaeology

The following images are all taken from real-life Egyptian artifacts that inspired this production of Akhnaten. As you watch the opera, see if you can spot where these artifacts (or something like them) appear in the costumes and stage sets. Be prepared to discuss your findings when you return to class.

1. 

2. 

3. 

4. 

5. 

PERFORMANCE ACTIVITY

Opera Review: *Akhnaten*

Have you ever wanted to be a music and theater critic? Now’s your chance!

As you watch *Akhnaten*, use the space below to keep track of your thoughts and opinions. What did you like about the performance? What didn’t you like? If you were in charge, what might you have done differently? Think carefully about the action, music, and stage design, and rate each of the star singers. Then, after the opera, share your opinions with your friends, classmates, and anyone else who wants to learn more about Philip Glass’s opera and this performance at the Met!

<table>
<thead>
<tr>
<th>THE STARS</th>
<th>STAR POWER</th>
<th>MY COMMENTS</th>
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<tbody>
<tr>
<td>Anthony Roth Costanzo as Akhnaten</td>
<td>✭✭✭✭✭</td>
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<tr>
<td>J’Nai Bridges as Nefertiti</td>
<td>✭✭✭✭✭</td>
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<td>Disella Lárusdóttir as Queen Tye</td>
<td>✭✭✭✭✭</td>
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<td>Zachary James as Amenhotep and the Professor</td>
<td>✭✭✭✭✭</td>
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<tr>
<td>The Jugglers</td>
<td>✭✭✭✭✭</td>
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<tr>
<td>Conductor Karen Kamensek</td>
<td>✭✭✭✭✭</td>
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<tr>
<th>THE SHOW, SCENE BY SCENE</th>
<th>ACTION</th>
<th>MUSIC</th>
<th>SET DESIGN / STAGING</th>
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<tbody>
<tr>
<td>The funeral of Amenhotep III</td>
<td>✭✭✭✭✭</td>
<td>✭✭✭✭✭</td>
<td>✭✭✭✭✭</td>
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<tr>
<td>MY OPINION OF THIS SCENE:</td>
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<tr>
<td>Akhnaten receives his royal robes and climbs a staircase</td>
<td>✭✭✭✭✭</td>
<td>✭✭✭✭✭</td>
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<tr>
<td>The Window of Appearances</td>
<td>✭✭✭✭✭</td>
<td>✭✭✭✭✭</td>
<td>✭✭✭✭✭</td>
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<tr>
<td>MY OPINION OF THIS SCENE:</td>
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<tr>
<td>Akhnaten stops the ritual to Amun</td>
<td>✭✭✭✭✭</td>
<td>✭✭✭✭✭</td>
<td>✭✭✭✭✭</td>
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<tr>
<td>Akhnaten and Nefertiti sing a duet</td>
<td>✭✭✭✭✭</td>
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<tr>
<td>The founding of Akhetaten</td>
<td>★★★★★</td>
<td>★★★★</td>
<td>★★★★★</td>
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<tr>
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<tr>
<td>Akhnaten's hymn to the sun</td>
<td>★★★★★</td>
<td>★★★★</td>
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<tr>
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<tr>
<td>Akhnaten and Nefertiti sit with their daughters</td>
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<td>★★★★</td>
<td>★★★★★</td>
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<tr>
<td>MY OPINION OF THIS SCENE:</td>
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<tr>
<td>Protesters attack the palace</td>
<td>★★★★★</td>
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<tr>
<td>Akhnaten's death</td>
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<tr>
<td>The coronation of Tutankhamun</td>
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<tr>
<td>A lecture</td>
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<td>★★★★</td>
<td>★★★★★</td>
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<tr>
<td>MY OPINION OF THIS SCENE:</td>
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<tr>
<td>Akhnaten, Nefertiti, and Queen Tye look at the ruins of their city</td>
<td>★★★★★</td>
<td>★★★★</td>
<td>★★★★★</td>
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<tr>
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