

Lyric
Unlimited

LYRIC OPERA OF CHICAGO
2018/19

**BACK
STAGE
PASS!**

This Backstage Pass! belongs to:



Rhoda AND THE Fossil Hunt

An Opera for Young People

Major support provided by the **Nancy W. Knowles Student and Family Performances Fund**. *Rhoda and the Fossil Hunt* and *Opera in the Neighborhoods* are supported by Lead Sponsor **J. Christopher and Anne N. Reyes** and cosponsors an **Anonymous Donor**, **Robert and Evelyn McCullen**, and **Wintrust Community Banks**.

Educational Partner:

FIELD.
MUSEUM

WELCOME!

You're reading the latest edition of Lyric Opera of Chicago's **Backstage Pass!** In this book you'll learn about the world of opera and Lyric Unlimited's production of *Rhoda and the Fossil Hunt*.

OP·ER·A (NOUN) A play in which most or all of the words are sung, and the music helps tell the story.

Like a movie or a play, opera also uses visual arts, acting, and sometimes dance to help tell the story. The first operas were written over 400 years ago—but *Rhoda and the Fossil Hunt* was written in 2017!

WHAT TO EXPECT

- The performance lasts 40 minutes
- This opera is sung in English
- Our show requires you to be a quiet listener, but you can clap and cheer loudly at the end

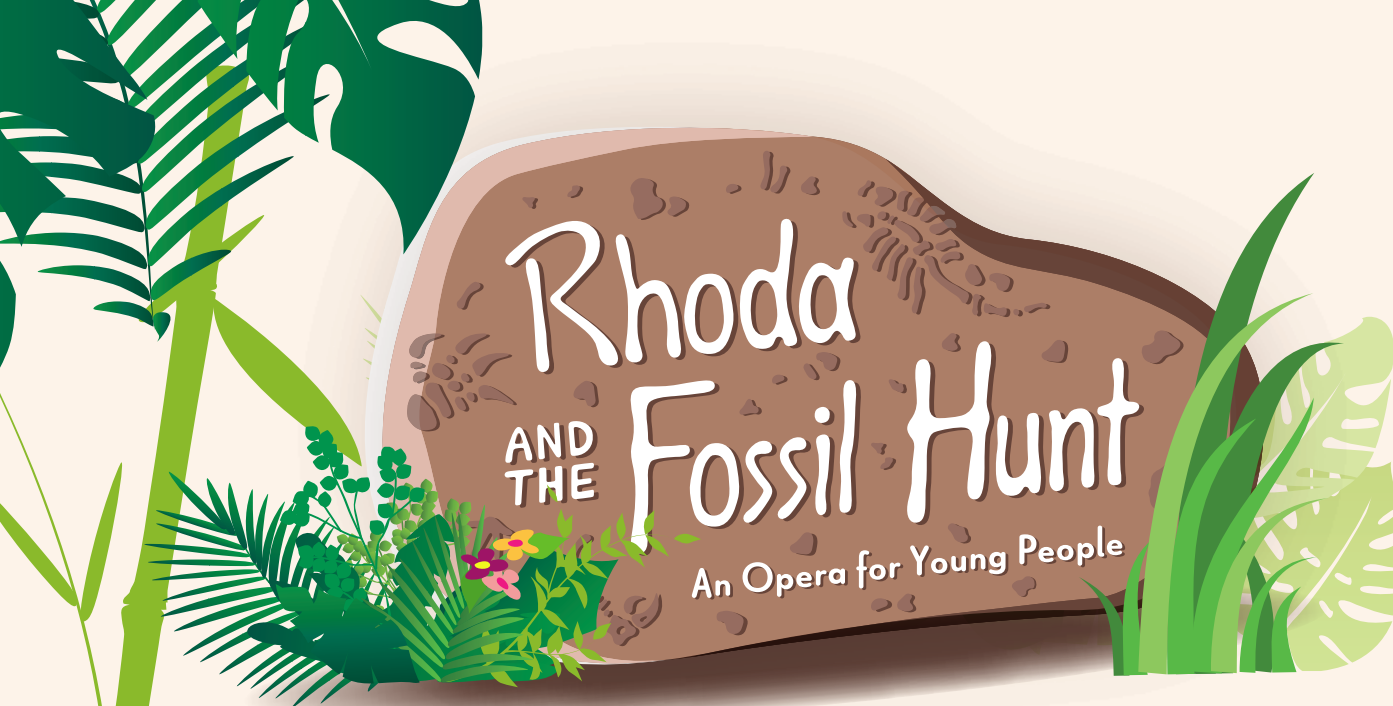
LOOK FOR

- Scenery, props, and costumes onstage that help tell the story
- Performers changing costumes and playing multiple characters

LISTEN FOR

- People singing and speaking their stories
- Different kinds of voices, from high (soprano) to low (baritone)
- Different sounds from the instruments: high, low, loud, and quiet





Music by John Musto
Libretto by Eric Einhorn

Family Performances at Francis W. Parker School: November 10 – 11, 2018
Opera in the Neighborhoods tour: October 15 - November 16, 2018

Rhoda, *soprano* Boya Wei
Charles R. Knight "Topsy", *baritone* Nicholas Ward
Dr. Henry Osborn, *tenor* Aaron Short
Cavewoman/Tyrannosaurus Rex, *mezzo-soprano* Leah Dexter

Stage Director Eric Einhorn

Scenic Designer..... Arnel Sancianco
Costume Designer Summer Lee Jack
Properties Designer Kathryn Johnson

Music by John Musto
Libretto by Eric Einhorn

Set fabricated by Theatre at the Center, Munster, IN
Costumes fabricated by Marie Stair

Dinosaur puppet designed and fabricated by Brandon Kirkham
Wigs fabricated by the Lyric Opera Wig Department; Sarah Hatten, Wigmaster

Photography and recording of any kind are
not allowed during the performance.
Silence cell phones and other devices.

Rhoda and the Fossil Hunt is a co-production with On Site Opera
and the Pittsburgh Opera. The extended edition of the opera
was commissioned by Lyric Opera of Chicago.

OPERA

STARTS WITH A STORY!

Someone, usually a librettist or composer, finds a story they think will make a good opera. The story can be from literature, like myths or fairytales, or from historic or present-day events. It can even be completely made up! *Rhoda and the Fossil Hunt* is based on real people and places—with some fun additions like talking dinosaurs and living paintings.

LIBRETTIST

The librettist is a writer who turns the story into a script. In opera, the script is called the **libretto**.



Eric Einhorn
Librettist

THE CHARACTERS IN *RHODA AND THE FOSSIL HUNT*

RHODA

A curious eight-year-old girl who joins her grandfather every Saturday at the museum

CHARLES R. KNIGHT "TOPPY"

Rhoda's grandfather; A sculptor and painter who creates art based on fossils and scientific inference

DR. HENRY OSBORN

Paleontologist and president of the American Museum of Natural History

TYRANNOSAURUS REX

A fossilized skeleton on display at the museum

CAVEWOMAN

A Neanderthal woman from a museum display



THE STORY OF RHODA AND THE FOSSIL HUNT

In the early 20th century, Dr. Henry F. Osborn was president of the American Museum of Natural History and a respected paleontologist, a scientist who studies fossils. To bring the museum's fossil collection to life for visitors, Dr. Osborn turned to painter Charles R. Knight.

Through his detailed paintings, Knight took viewers millions of years back in time to see dinosaurs as active creatures instead of just fossilized skeletons. In fact, you can see some of his wall-sized paintings, called murals, at The Field Museum in Chicago.

Every weekend, Knight's granddaughter, Rhoda, joined him at the museum while he worked. Rhoda called her grandfather "Tippy." She watched in awe as Tippy used scientific knowledge and his imagination to transform the massive fossils unearthed by the museum's paleontologists into paintings and sculptures.

In the opera, we join Rhoda at the museum as she goes on a hunt for the missing fossils of the newly discovered dinosaur, Deinocheirus. With the help of a friendly Tyrannosaurus Rex skeleton and a cavewoman (who prefers to be called a Neanderthal), Rhoda uncovers clues about the past and learns about the connection between creativity and science.

KEY WORDS TO KNOW

Read the syllables in parentheses out loud to learn how to say the words and names correctly.

DINOSAURS

- Apatosaurus (Uh-PAH-tuh-SORE-us)
- Deinocheirus (DINE-oh-KY-rus)
- Tyrannosaurus Rex (tih-RAN-oh-SORE-us REX)
- Archaeopteryx (ARK-ee-op-tur-icks)
- Brontosaurus (BRAHN-tuh-SORE-us)
- Maniraptor (MAN-nih-RAP-tore)

PREHISTORIC MAMMALS

- Sabretooth Cat (SAY-ber-tooth CAT)
- Woolly Mammoth (WOOL-ee MAM-muth)

TERMS

- Paleontology (PAIL-ee-uhn-TALL-oh-gee)
- Neanderthal (nee-ANN-dur-thall)
- Cretaceous Era (cruh-TAY-shus AIR-uh)

WHAT IS A FOSSIL?

Fossils are the remains or traces of an organism that have been preserved over many hundreds of years.

Fossils provide evidence for what Earth was like in the distant past. Fossils can tell us about animals, plants, and other organisms that lived long ago, but have since gone **extinct**, like dinosaurs.

Scientists who study fossils, like Dr. Osborn, are called **paleontologists**. They use fossils as evidence to understand what dinosaurs and other organisms looked like, how they behaved, and what their environment was like.



Study the image of the fossil to the left and describe what you see (this is called making **observations**). Then using that information, make an educated guess about, or **infer**, what the fossil might be and record questions for further study.

Trilobite © The Field Museum, GEO86418_06d, Photographer John Weinstein

OBSERVATIONS

What details do you notice about the fossil?

INFERENCES

What might your observations tell you about this fossil?

QUESTIONS

What additional questions do you have for further study?

HOW DO PALEONTOLOGISTS FIND FOSSILS?



Examine the image below to find the fossils underground.

Circle each fossil you find and note the time period in which it lived.

When paleontologists hunt for fossils, they follow a basic process:

1. They **prospect**, or search for fossil fragments among the rock in a given area.
2. They **excavate**, or use tools to remove the rock around a fossil.
3. They record a map of the dig site for future reference.
4. They make a plaster **field jacket** (like a cast you would put on a broken arm) to protect the fossil.
5. Lastly, they remove the fossil and transport it to the lab for further study.

Paleontologists can estimate the age of a fossil based on which **strata**, or layer of Earth, it was found. Different strata correspond with different periods on the **geologic time scale**, a system for tracking Earth's history.



CENOZOIC

Holocene

Pleistocene

Pliocene

Miocene

Oligocene

Eocene

Paleocene

MESOZOIC

Cretaceous

Jurassic

Triassic

PALEOZOIC

Permian

Pennsylvanian

Mississippian

Devonian

Silurian

Ordovician

Cambrian

Proterozoic

Archean

MUSIC'S ROLE IN OPERA

Music is an important part of telling the story in opera. It moves the action of the story forward and lets the audience know how the characters feel or what they are thinking.

SING IT LOUD!

You won't see any microphones on stage at the opera. Why not? Because opera singers train for years to make their voices fill an entire auditorium WITHOUT microphones! Here are voice types usually found in opera:

SOPRANO (soh-PRAH-no)

The highest voice. They usually sing roles like daughters, or in Rhoda's case, a granddaughter.

MEZZO-SOPRANO (MET-soh soh-PRAH-no)

The middle high voice. Mezzos can be almost any type of character — and in this opera, the Tyrannosaurus Rex and Cavewoman are mezzos — played by the same performer!

TENOR (TEH-ner)

Usually the highest male voice. The leading male character is usually a tenor, but in our story Dr. Henry Osborn plays a supporting role.

BARITONE (BEAR-ih-tone)

The middle low voice. Baritones play all sorts of roles. Charles R. Knight, "Topsy," is a baritone.

BASS (BASE)

The lowest, deepest voice. Bases often play old and wise characters, but they can also be villains.

COMPOSER

The composer writes the music in a way that best tells the story. The written-out music is called the **score**.



John Musto
Composer

CAST

The cast includes all of the singers who perform the opera.



Boya Wei
Rhoda, soprano



Nicholas Ward
Charles R. Knight
"Topsy," baritone



Aaron Short
Dr. Henry Osborn,
tenor



Leah Dexter
Tyrannosaurus
Rex/Cavewoman,
mezzo-soprano

TELL YOUR STORY!

Now that you know the characters played by the different voice types in *Rhoda and the Fossil Hunt*, try to finish the story below with characters you think match the voice type listed.

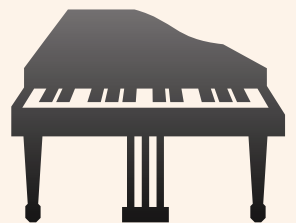
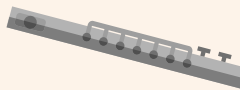


_____ looks all over the museum to find the missing
(Soprano)
fossils to help her grandfather _____ and the museum
(Baritone)
director _____ complete the dinosaur, Deinocheirus.
(Tenor)
With the help of the _____ and _____,
(Mezzo-Soprano) (Mezzo-Soprano)
she uses her imagination and scientific inference to save the day!

What do you think might happen next? Write your answer in the space below.

ORCHESTRA

Rhoda and the Fossil Hunt, like many operas, was written for a group of musicians playing instruments, or **orchestra**, to perform with the singers. Often an orchestra is large, but for this opera, there are only three members in the orchestra!



The orchestra for *Rhoda and the Fossil Hunt* consists of a flute, clarinet, and piano.



Listen carefully throughout the opera for moments when the orchestra tells the story instead of the singers. Do you hear any repeated music that might represent certain characters or actions?

VISUAL ARTS SET THE STAGE

In opera, the music tells the story that you hear. Everything you see onstage is part of the visual arts.

The story in an opera can take place in many different places and times. The location of the opera is called the **setting**. Scenery, props, costumes, wigs, and makeup help create the opera's setting. Some operas also use lighting to help tell the story.

STAGE DIRECTOR

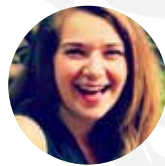
The **stage director** decides how the setting of the opera will look. They also determine how the singers will act onstage.



Eric Einhorn
Stage Director

DESIGNERS

Designers work with the stage director to decide how the opera will look and how its story will be told. They create the scenery, props, and costumes. *Rhoda and the Fossil Hunt* also has a puppet designer.



Summer Lee Jack
Costume Designer

COSTUMES

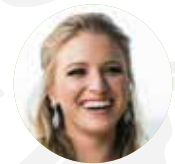
Costumes are the clothes performers wear in an opera. The costumes help tell you about the character – whether they are shy or bold, nice or mean, young or old, or where they might live.

SCENERY & PROPS

The **scenery**, or set, shows the location of the story. Sometimes operas happen in a house, or on a street, or even a museum! Props are the objects performers use on stage to tell the story. Props can be anything: fossils, fake food, paintbrushes, or any other object.



Arnel Sancianco
Scenic Designer



Kathryn Johnson
Properties Designer



Brandon Kirkham
Puppet Designer

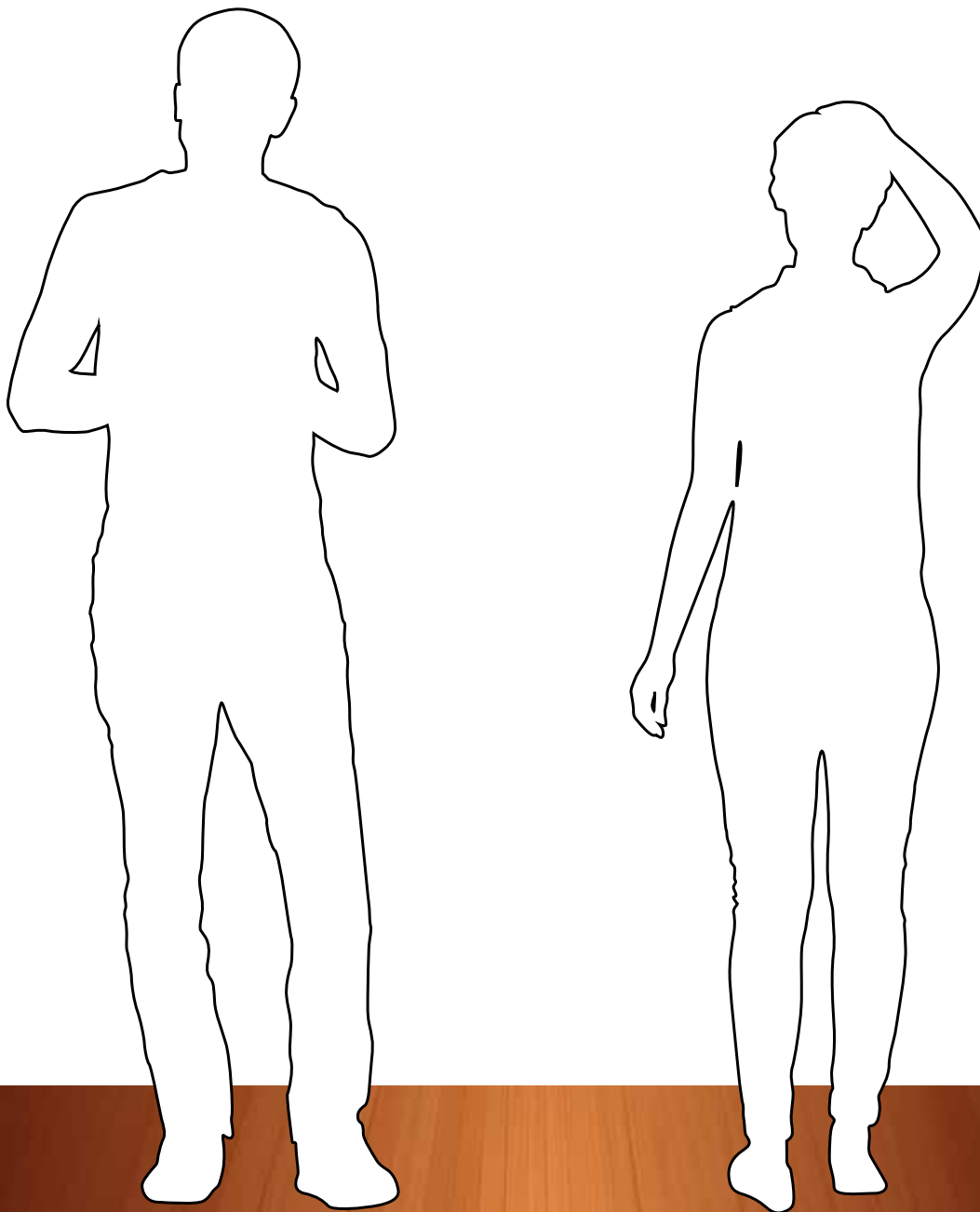
WIGS & MAKEUP

Like costumes, operas use **wigs and makeup** to change the performers into different characters. Makeup and wigs can make a performer look younger, older, like a dinosaur, a cavewoman, or anything else you can imagine!



BE A DESIGNER!

Now it's your turn to be a scenic and costume designer. Below are two blank figures. Using what you know about *Rhoda and the Fossil Hunt*, draw costumes and props for two characters in the opera. Behind them, draw scenery and props based on where the opera takes place, a museum!



FROM PAGE TO STAGE: HOW AN OPERA IS CREATED

You have learned a lot about the various roles in creating an opera. Now, see how they all come together from start to finish.

LIBRETTIST The writer who turns the story into a script.

COMPOSER The person who writes the music in a way that tells the story.

STAGE DIRECTOR The person who decides how the opera will look and how the singers will act.

DESIGNERS People who decide how the scenery and costumes will look.

ORCHESTRA The orchestra tells the story by playing music on instruments for the opera.

STAGE MANAGER The person backstage who controls everything that happens onstage during a performance through signals and whispered commands.

CREW The people working behind the scenes to make sure all sets and props are in the correct place throughout the performance.

CAST All of the singers on stage who perform the opera.

AUDIENCE The audience is YOU. What would a show be without an audience? That's when everyone's hard work pays off!

WOULD YOU INVITE DEINOCHIEIRUS TO DINNER?

In the opera, Rhoda learns about a type of dinosaur called Deinocheirus. Examine the fossil images below and decide whether Deinocheirus was:

- A **herbivore**, or plant eater
- A **carnivore**, or meat eater
- An **omnivore**, which eats both plants and animals

Support your claim with evidence from your observations using the questions in the table below.



Deinocheirus Skull



Deinocheirus Claw

SOME QUESTIONS TO CONSIDER: What do these bones look like? Do they resemble any current animals? If so, what do those animals eat?

CLAIM

Was deinocheirus an herbivore, carnivore, or omnivore?

EVIDENCE

What are your observations of the images?

REASONING

How do your observations support your claim?

MAKING THE OPERA HAPPEN

Can you figured out which person is responsible for each job at the opera?

1. I design the clothes singers wear onstage.

2. I write the music that is performed in the opera.

3. I control everything that happens onstage during a performance.

4. We are the singers who perform the opera.

5. I decide how the opera should look and how the singers act onstage.

6. We help tell the story by playing music on instruments.

7. I design what the scenery, or set, will look like.

8. We help behind the scenes to move props, scenery, and equipment.

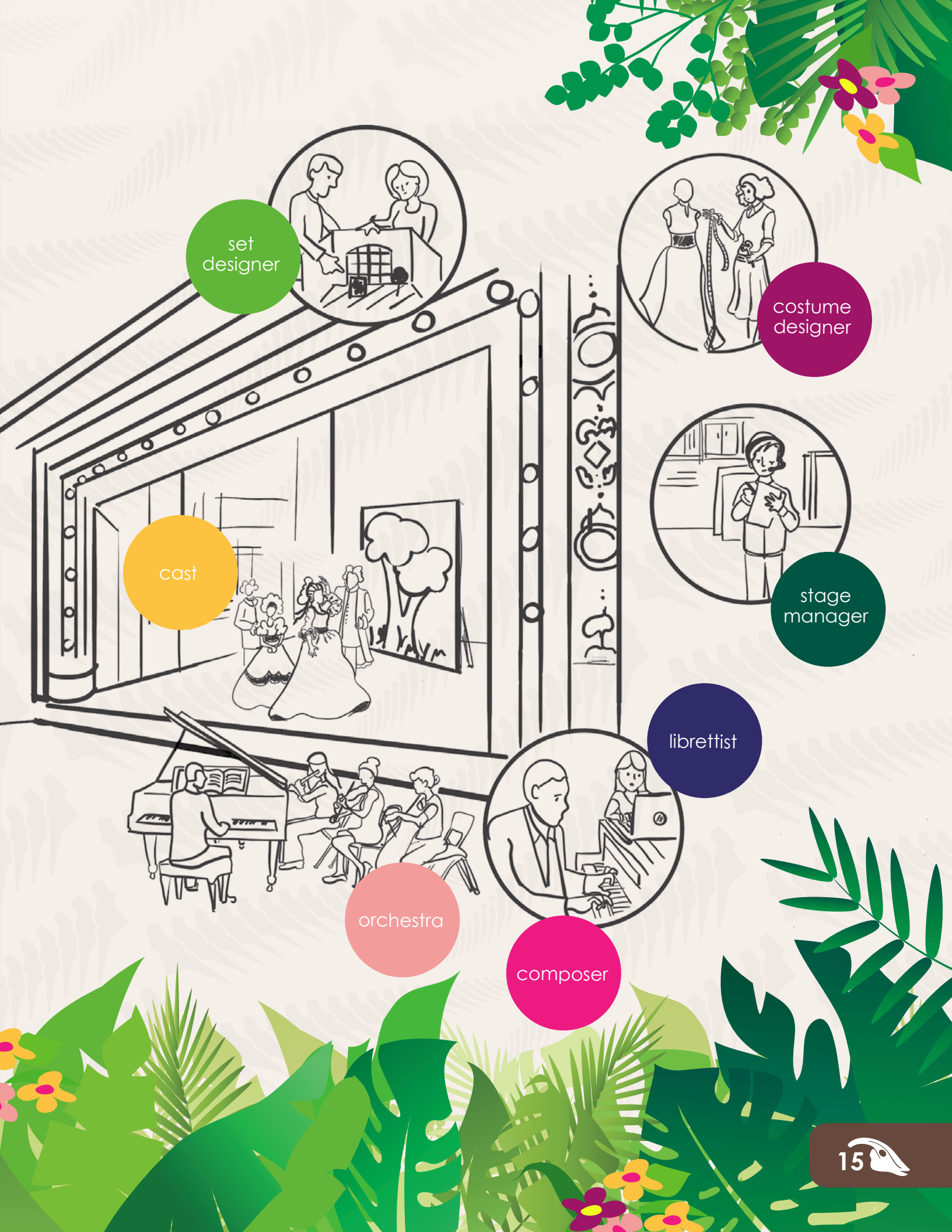
9. I write the words that are spoken and sung in the opera.



crew



stage director



set
designer

costume
designer

stage
manager

librettist

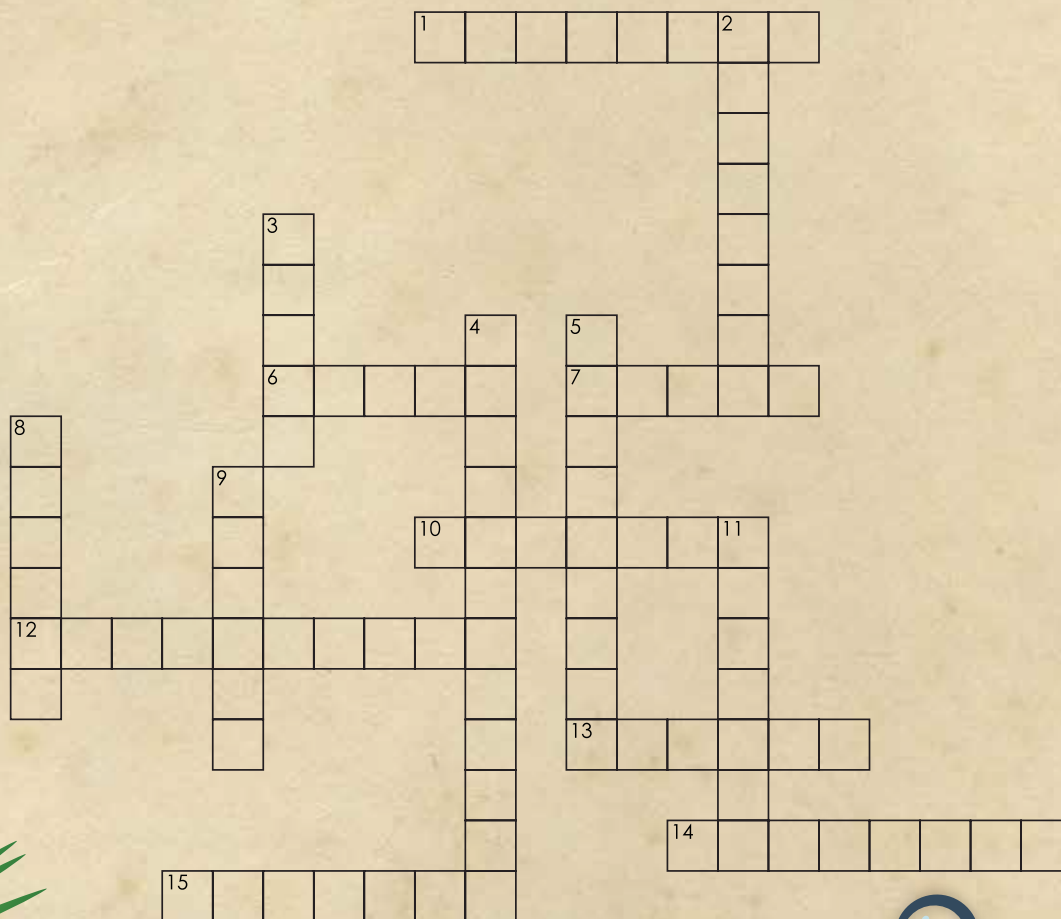
composer

orchestra

cast

CROSSWORD EXCAVATION

Uncover the answers to this crossword puzzle using terms found throughout the *Backstage Pass*!



ACROSS

1. The clothes singers wear in an opera
6. The granddaughter of Charles R. Knight
7. Use information to make an educated guess
10. The remains of an organism that have been preserved over many years in rock
12. A person who writes the words or script of an opera
13. Layers of Earth in which fossils are found
14. A person who writes music
15. Also called the set, this is art onstage that shows the location of the story

DOWN

2. Use tools to remove the rock around a fossil
3. A story told through music
4. The science of studying fossils
5. Large reptilian creatures that lived on Earth long ago
8. Large, wall-sized paintings that "Topsy" created
9. Building where you can see fossils on display
11. The highest voice type