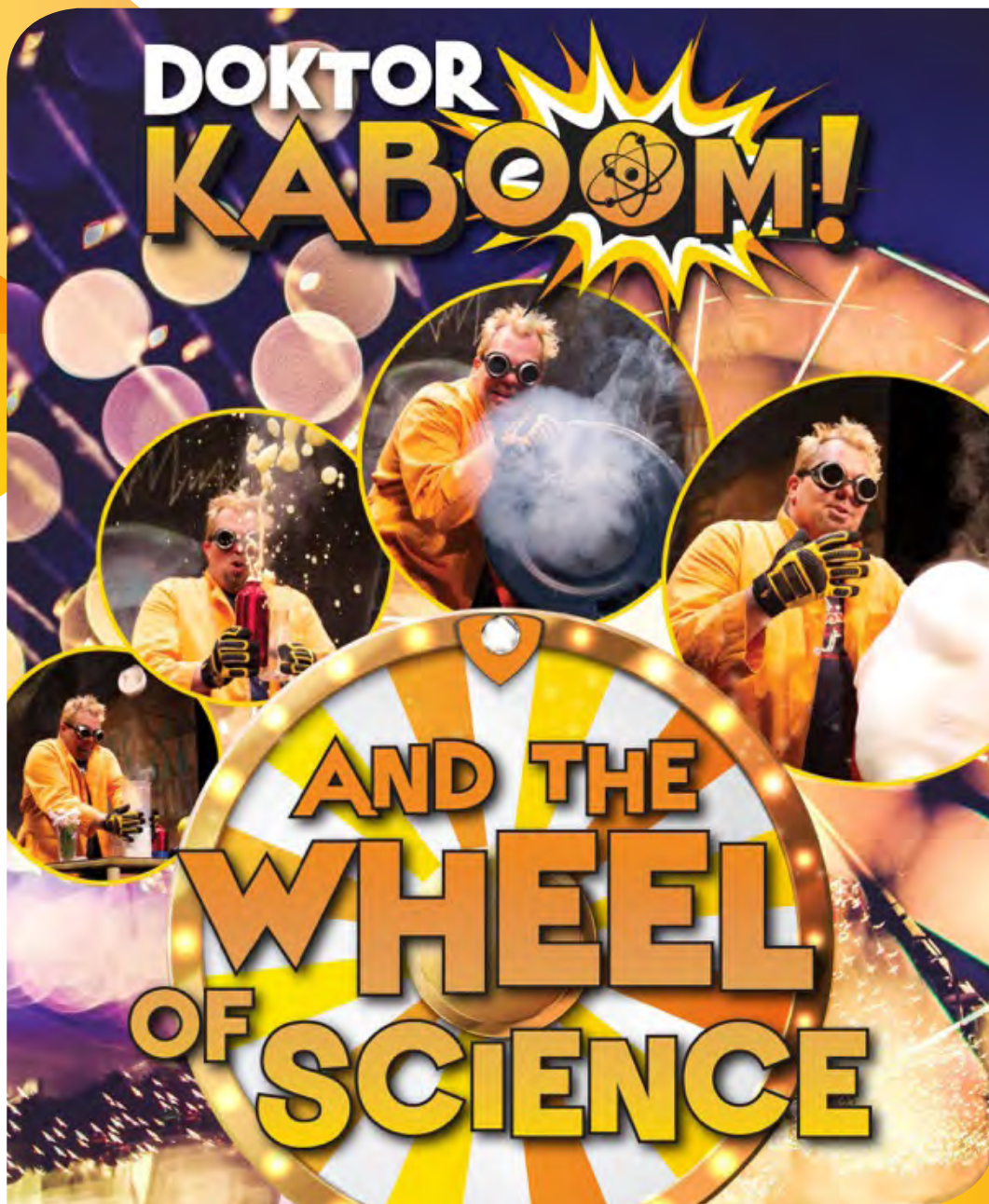




artsbridge
foundation

PRESENTS



2018-2019

FIELD TRIP EDUCATOR GUIDE

Dear Educators,

Welcome to ArtsBridge’s 2018-2019 Field Trip Season! We are thrilled to present *Doktor Kaboom and the Wheel of Science!* to you and your students. Doktor Kaboom! strives to remind audiences of all ages that the foundations of scientific discovery can be joyful tools for a lifetime. Through highly interactive comic performances we encourage students to express their awe of scientific demonstrations, to creatively explore the world around them, and to realize that science and mathematics are meant to be fun.

Thank you for sharing this special experience with your students. We hope this field trip guide helps you connect the performance to your in-classroom curriculum in ways that you find valuable. In the following pages, you will see guidelines regarding your field trip, contextual information about the performance and related subjects, as well as a variety of pre- and post-discussion questions and assessment activities. On page 12, you’ll find the Curriculum Connections included in *Doktor Kaboom and the Wheel of Science!* Please “pick and choose” materials and ideas from the guide to meet your class’ unique needs.

We look forward to inspiring and educating your students through the arts on March 11th, 2019 at the world-class Cobb Energy Performing Arts Centre!

See you at the theatre,

The ArtsBridge Team

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About Cobb Energy Performing Arts Centre



The landmark Cobb Energy Performing Arts Centre is a cultural, entertainment and special events venue of a national significance. Atlanta's first major performing arts facility in four decades, Cobb Energy Centre boasts state-of-the-art systems, amenities and design features that allow the expression of any artistic idea and captivate performers, patrons and event planners. The Centre's strong suit is versatility. It can accommodate events as diverse as Broadway, concerts, corporate functions, private parties and family entertainment.

The Centre's distinctive façade and three-story lobby – highlighted by a 65-foot, floor-to-ceiling glass curtain wall – offer visitors a grand welcome and stunning introduction to a venue of great warmth, elegance and possibilities. Nothing speaks "special occasion" like the majestic lobby – a gathering space and promenade with two grand staircases, specially designed, colored-glass chandeliers and walls of Venetian plaster.

The Centre's 2,750-seat John A. Williams Theatre captures the richness and intimacy of vintage theatres. Yet, it incorporates modern touches and technology – including advanced sound, lighting and acoustical elements – that allow fine-tuning for each performance. With equal poise, the Theatre can host concerts, opera, drama, comedy, lectures, dance and spoken word.

The Cobb Energy Centre is a premier location for black-tie balls, galas, wedding receptions, corporate meetings, banquets, bar and bat mitzvahs, and parties.

- 10,000-square-foot ballroom, divisible into 3 sections, holds up to 630 for a seated meal, 800 in theatre setting and up to 650 for a reception
- 2,750-seat theater ideal for graduations or general sessions
- Unique special event spaces on theater stage, 3-level lobby, and outdoor terrace

The Centre is equipped to ensure ArtsBridge's vision of making sure everyone has access to arts experiences. Designated seats in various locations are available at every event for guests with disabilities and those needing special assistance. The venue is equipped with wheelchair accessible restrooms, elevators, plaza ramps, wheelchair accessible ticket windows, phonic ear devices, wheelchair accessible drinking fountains, and handicapped parking. Please call for more information about this and sign language interpreted performances.

DID YOU KNOW?

- More than 250,000 patrons visit the Cobb Energy Centre each year.
- The Cobb Energy Centre opened in 2007.
- The Cobb Energy Centre has two main spaces:
 - John A. Williams Theatre, 2,750 seats
 - Kessel D. Stelling Ballroom, 10,000 square feet
- No seat is more than 160 feet from center stage in the John A. Williams Theatre.
- There are 1,000 parking spaces on site.
- The Centre is located one mile from the new Braves stadium and only 15 minutes from downtown Atlanta.
- ArtsBridge programs began in 2007 and reach 30,000 – 40,000 to 50,000 students each year.

Field Trip Guidelines

Below are simple guidelines for ArtsBridge Field Trips to Cobb Energy Performing Arts Centre. Please read carefully and contact us at (770) 916-2805 if you have questions.

Reservations: All field trip admissions are to be made in advance. Please do not bring more than the number of seats reserved. Performances are expected to sell out and we will not be able to accommodate an increase in numbers at the last minute. All patrons, including teachers and chaperones, must have a reservation in order to attend these performances. Children under the age of three are not permitted to attend.

Payment: Payments must be made in full, 3 weeks prior to the day of show, or we will not be able to accommodate your reservation. An invoice will be given to you at the time your reservation is made. Once you have paid in full, we will send a confirmation, which will serve as your school's ticket into the performance. ArtsBridge reserves the right to cancel unpaid reservations after the payment due date.

Transportation: The Centre can accommodate school buses, vans and cars. Please be aware that vans and cars will incur a \$6 per vehicle parking fee. A third party contractor runs the Centre's garage and charges this fee. There is no charge for parking school buses. All buses, vans and cars must comply with directions provided by on-site staff.

Arrival: All vehicles should approach the Cobb Energy Performing Arts Centre from AKERS MILL ROAD (map enclosed). Upon entering the driveway, buses will be directed to the circular drive where they will temporarily pull up to the curb for unloading. A Cobb Energy Performing Arts Centre representative will board the bus and check-in your school. Students will be immediately unloaded and buses will be directed to their designated parking areas.

Seating: Students are seated as they arrive, starting with the floor level, first row. The exception to this is for programs with older and younger students in attendance at the same time. In this case, students in kindergarten and first-grade will be seated in the first few rows of the theatre. There are three levels of seating, with the back row of the top level no more than 160 feet from the stage.

Restrooms: Please seat your entire group, before taking restroom breaks, so that you can be easily found. Students MUST be accompanied by adult chaperones when going to the restroom. We encourage that you take groups so there are fewer trips.

Chaperones: Chaperones have a job to perform while at the Centre. Please make sure that your chaperones are interspersed among students, and that they are prepared for the day's responsibilities. Please discuss restroom visits, emergencies, behavior, etc. with your chaperones prior to arrival.

Behavior: Students and teachers are encouraged to enjoy performances, applaud and express enthusiasm in a manner that is appropriate for the performance, yet not disruptive for others. We request that all phones, tablets and any other electronic devices be completely turned off or on silent mode during the performance. We ask that chaperones on upper levels watch for students tossing or throwing items to lower levels and prevent students from climbing or leaning on railings. No student can leave the audience chamber without an accompanying chaperone. Students/classes that are disruptive may be asked to leave the performance with no refund. (See *Theatre Etiquette on Page 8*)

Departure: Performances last approximately one hour. Upon conclusion of the performance, classes will be dismissed to the designated parking area to board their buses and return to school.

Lunch: There is no facility for students to eat lunch in the Cobb Energy Centre. We recommend students eat lunch at the Galleria Specialty Mall, Cumberland Mall, at a park on the route to/from the venue or on their bus. Check Page 7 for some of ArtsBridge's favorite restaurants to eat at around the theatre!



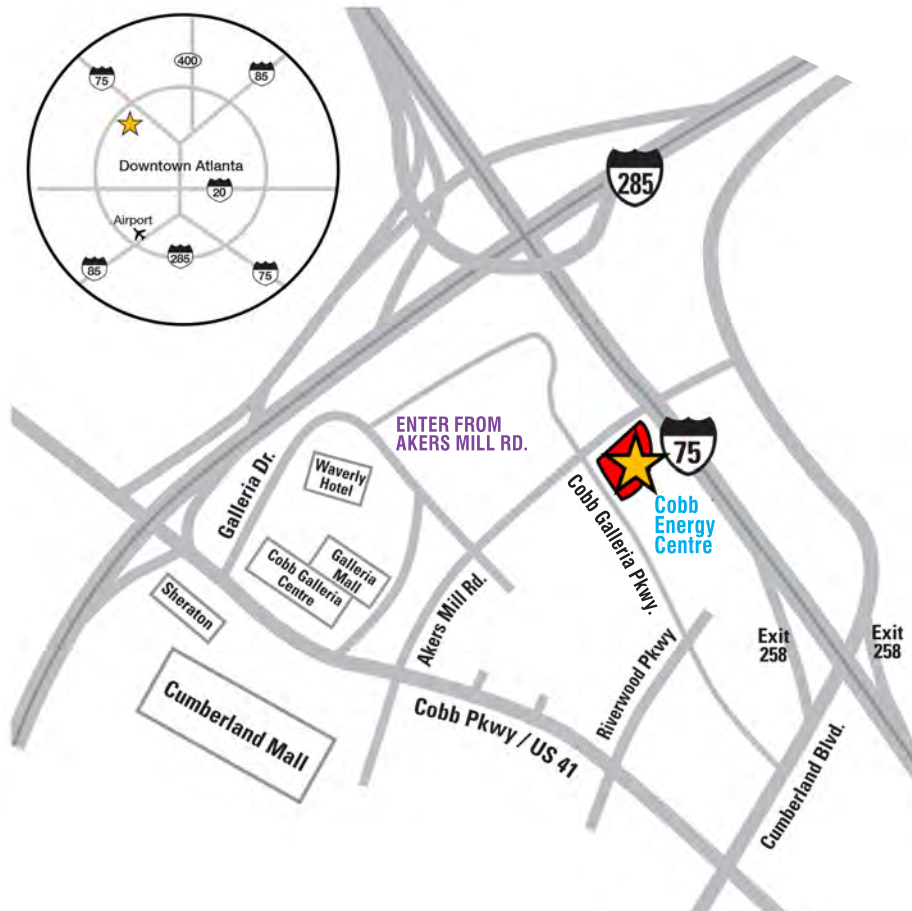
Transportation Information

Buses: All school buses must approach the building from AKERS MILL ROAD on the North side of the building. This will be crucial in assuring a fairly smooth flow of traffic. There will be Centre representatives guiding you. Buses will pull onto the site from behind the building and then drive to the front. PLEASE MAKE SURE YOUR DRIVERS USE THE MAP BELOW. There is no charge to park school buses on-site.

Checking In: When you arrive at the front of the building, a representative from the Centre will board your bus to check-in your school. You and your bus driver will be given a large number that will be taped to the bus windows. Please remember your number, as it will help you find your bus after the performance.

After the Show: After the performance, buses will be parked in the Centre's surface lot in numerical order and representatives will assist you in locating your bus(es). We encourage everyone to board their buses as quickly and safely as possible. For safety reasons, we hold all buses until everyone has boarded, so please make your way directly to the surface parking lot following the performance (see map below).

Cars/Vans/SUVs: You will approach the building in the same manner, but will park in our parking deck. Please note there is a \$6 per vehicle parking fee for cars/vans/SUVs. After you have parked, make your way to level 2 of the deck and to the west side (theatre side) of the building. When you emerge from the parking deck, there will be a Centre representative to check you in and direct you to your seats.



Additional Map for All Vehicles Attending



2800 Cobb Galleria Pkwy, Atlanta, GA 30339

Local Dining

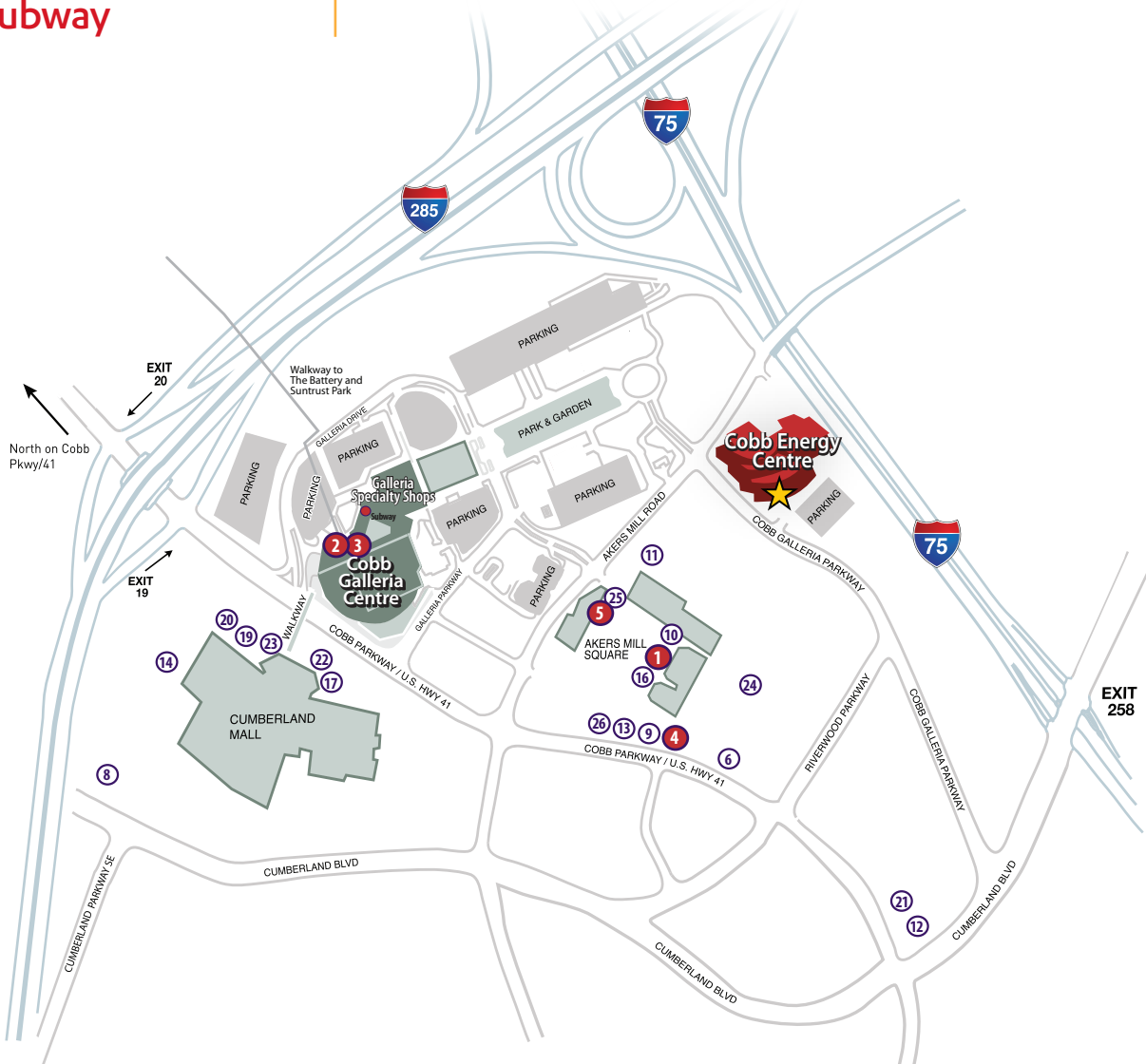
Food Sponsors

ArtsBridge Program Food Sponsors within driving distance of Cobb Energy Performing Arts Centre:

1. Grub Burger
2. Big Chow Grill
3. Murph's
4. Chick-fil-A
5. Subway

Other Nearby Restaurants

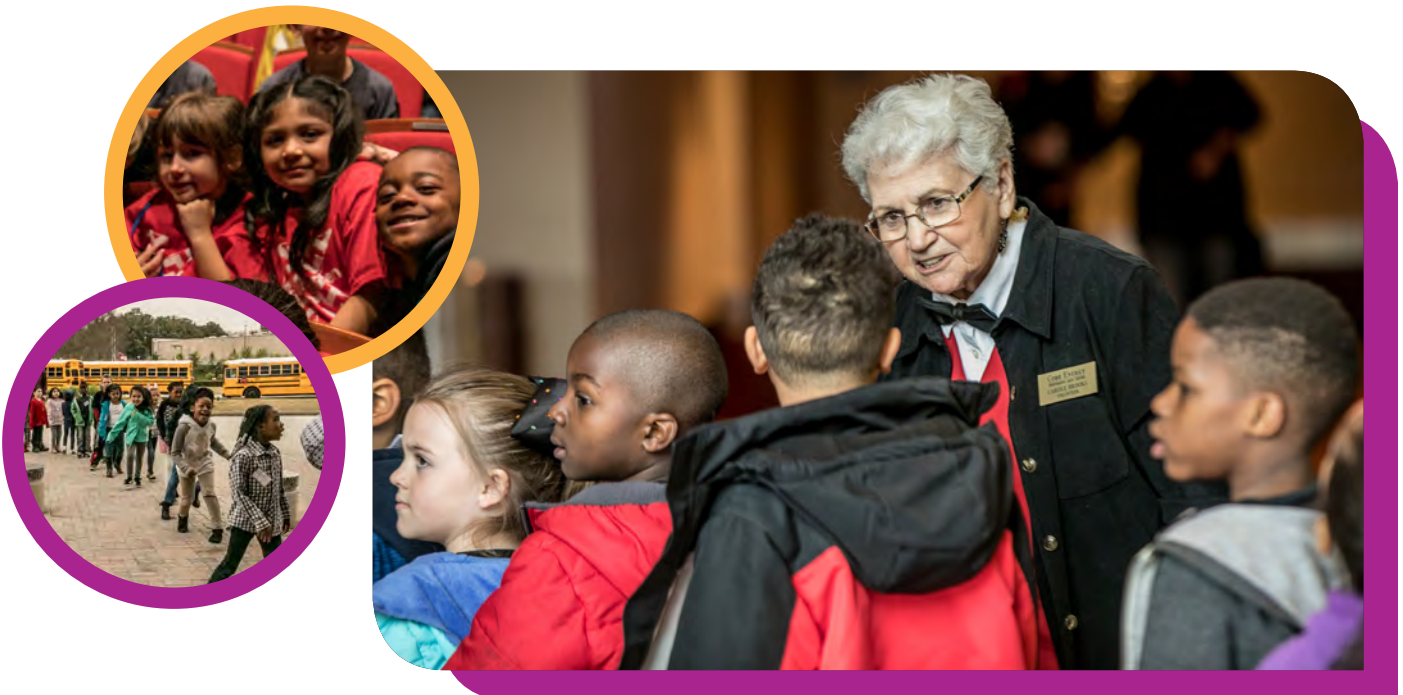
6. Bonefish Grill
7. C&S Seafood and Oyster Bar
8. Carrabba's
9. Chipotle Mexican Grill
10. Chuy's Tex-Mex
11. Cinco's Mexican Cantina
12. Copeland's of New Orleans
13. Corner Bakery Cafe
14. Fresh To Order
15. Kuroshio Sushi Bar & Grill
16. Longhorn Steakhouse
17. Maggiano's Little Italy
18. Olive Garden
19. P.F. Chang's
20. Stoney River Legendary Steaks
21. Taco Mac
22. Ted's Montana Grill
23. The Cheesecake Factory
24. Top Spice
25. Blaze Pizza
26. Zoe's Kitchen



Theatre Etiquette

A live performance is a unique experience shared between performers and audience members. Unlike television or movies, audience distractions can disrupt the performers, production and audience. Before you arrive at the Cobb Energy Centre, please review the following information with your students and chaperones, and help ArtsBridge create a meaningful experience for all.

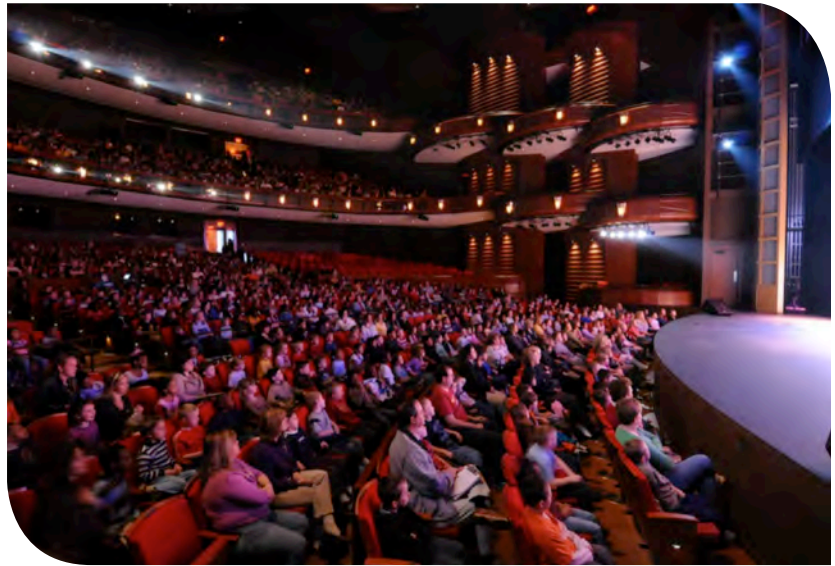
- Arrive early. Groups are seated on a first come, first served basis. Seats are not assigned for ArtsBridge events.
- Food, drink, candy, gum, etc. is not permitted in the theatre.
- Silence or turn off all electronic devices. We encourage you to share your ArtsBridge experience at the Cobb Energy Performing Arts Centre via social media, but please refrain from doing so or texting during performances; the glow from your device is distracting.
- Photography and video/audio recording of any kind is not allowed in the theatre during the performance.
- Respect the theatre. Remember to keep your feet off of the seats and avoid bouncing up and down.
- When the house lights dim, the performance is about to begin. Please stop talking at this time.
- Talk before and after the performance only. Remember, the theatre is designed to amplify sound, so the other audience members and the performers on stage can hear your voice!
- Use the restroom before the performance or wait until the end.
- Appropriate responses such as laughing and applauding are appreciated. Pay attention to the artists on stage – they will let you know what is appropriate.
- If you need assistance during the show, please find your nearest volunteer usher.
- As you enter and exit the theatre, remember to walk and stay with your group.
- Open your eyes, ears, mind and heart to the entire experience. Enjoy yourself!



Pre-Show Activities

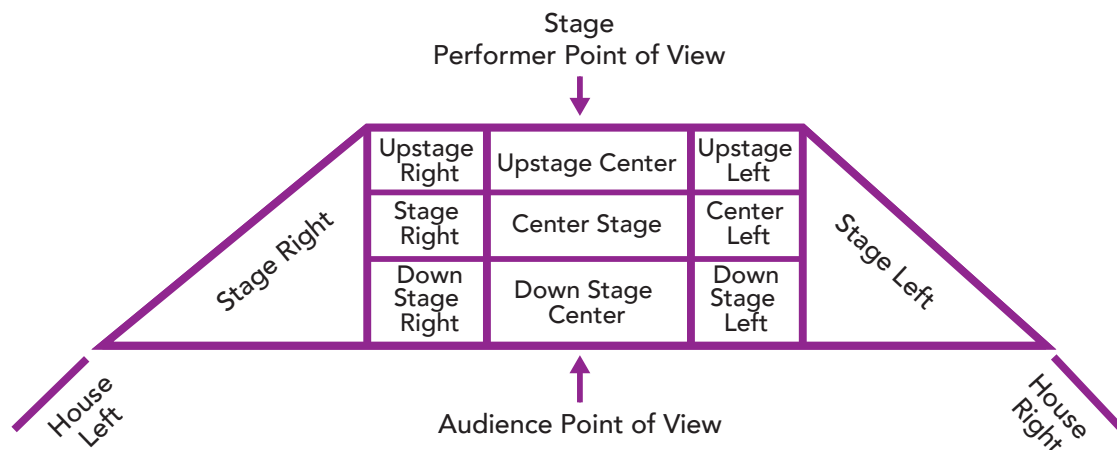
Before attending an ArtsBridge Field Trip, review the following questions and vocabulary with your students:

1. How many of you have experienced a live theatre performance? What did you see?
2. What are some of the differences between going to the theatre and watching television or going to a movie?
3. The BAD Audience Member! A fun way to review theatre etiquette with your students is to have them point out bad audience behavior during a show. Here's one way to illustrate this concept:



- a. Have students present something to the class. The key is they are “actors” and the class is the audience.
- b. Once they are into the activity, you (the teacher) leave the room and then re-enter. Enter loudly, chew gum, step on people’s feet, talk to them, etc. Be the worst audience member. Find a seat and continue to talk to others, ask what’s going on in the performance, take pictures, talk on your cell phone etc.
- c. Ask the class to list all the bad behavior. Write these on the board.
- d. Ask the audience members how they felt when the bad audience member came into the theatre. Could they hear the actors? Were they distracted?
- e. Ask the actors how they felt. Could they concentrate on their performance?

4. Review the stage diagram below with the students. Draw the diagram on the whiteboard and have students come up and write in each part of the stage.



Theatrical Vocabulary

Review the following theatrical terms with your students before attending the performance! This will help them better understand all of the elements of a production.

Author – the writer of a script; also called the book

Audition – to perform to get a role for the production; usually includes singing, dancing and reading scenes from the show; usually takes place in front of the Director & Creative Team

Ballad – a slow song for actors to showcase vocal clarity

Blocking – the specific movement of actors on stage; usually given by the Director

Box Office – a booth inside the theater where tickets are sold

“Calling the Show” – the process of calling out the lighting, sound and scene-change cues during a performance; usually done by the stage manager

Casting – the process through which actors are chosen for roles in the production

Casting Agent – one who chooses actors for roles in the production

Choreographer – one who designs dance sequences and teaches them to the cast of the production

Composer – one who writes the music

Conductor – one who directs the orchestra

Costumes – a set of clothes in a style typical of a particular country or historical period

Curtain Call – the appearance of one or more performers on stage after a performance to acknowledge the audience’s applause

Director – one who supervises the creative aspects and guides the artistic vision of the production

Dress Rehearsal – rehearsal in which performers practice with costumes, props, lights and microphones

Dresser – one who assists performers with their costumes during dress rehearsals and shows

Electrician – one who works with the lighting designer to adjust and operate lighting instruments

Ensemble / Chorus – typically singers, dancers or actors who perform in group numbers

Head Carpenter – one who builds the sets for the production

House Left – the left side of the theater, when facing the stage (audience’s point of view)

House Manager – one who oversees all aspects of the audiences; responsible for ushers and audience safety

House Right – the right side of the theater, when facing the stage (audiences point of view)

Lighting Designer – one who decides where the lighting instruments should go, how they should be colored and which ones should be on at any particular time to affect mood, visibility and to showcase costumes and sets

Lyricist – one who writes the words to a song

Makeup Artist – one who applies cosmetics to a performer’s face and body

Music Director – one who teaches and rehearses the music with the orchestra

Orchestra Pit – the lowered area in front of a stage where the orchestra (musicians) sit and play during the performance

Overture – an orchestral piece at the beginning of an opera, suite, play, oratorio, or other extended composition

Producer – a person responsible for the financial and managerial aspects of staging a play, opera, musical, ballet, etc.

Program – a listing of the order of events, names of the cast and crew and other relevant information for the production

Property (Props) Manager – one who manages all items used on stage that cannot be classified as scenery, electrics or wardrobe

Proscenium arch – the arch opening between the stage and auditorium; the frame of the stage

Read-through – the cast reads through the script without movement or music; typically done at the first rehearsal

Set Designer – one who creates the scenery for the stage

Sitzprobe – the first rehearsal with both the performers and the orchestra, with no staging or dancing

Sound Designer – one who plans and executes the layout of all sound playbook and equipment for the show

Sound Operator – one who handles the sound playbook and mixing equipment for the show; work with Sound Designer

Sound Board – a desk comprising a number of input channels where each sound source is provided with its own control channel through which sound signals are routed into two or more outputs; controls all microphones and music

Spotlights – a lamp projecting a narrow, intense beam of light directly onto a place or person, especially a performer on stage

Standby / Understudy – one who studies a role and is prepared to substitute a performer when needed

Stage Left – the left side of the stage, when facing the audience (performer’s point of view)

Stage Manager – one who is responsible for the quality of the show’s production, assists the director and oversees the show at each performance

Stage Right – the right side of the stage, when facing the audiences (performer’s point of view)

Technical Rehearsal – rehearsal incorporating the technical elements of a show such as the scene and property shirts, lighting, sound and special effects

Uptempo Song – a fast, upbeat song for actors to showcase dancing and acting ability

Usher – one who guides audience members to their seats

Wig Master / Mistress – one who obtains and customizes wigs for performers to wear

DOKTOR KABOOM!

AND THE
WHEEL OF SCIENCE

SO MUCH SCIENCE, SO LITTLE TIME...

Doktor Kaboom is having trouble picking his favorite science demonstrations, so he's bringing them all! Unfortunately there are way too many to do them all in one show.

Doktor Kaboom has built a great big spinning wheel and labeled it with everything from optical illusions to chemical reactions to a homemade hovercraft, and more! At least a dozen fantastic routines ready to go. Wherever the wheel stops, that's what's next!

Will we turn a water bottle into a rocket or catapult bananas across the stage? Electrocute a pickle or create artificial gravity? Who knows? No two shows will be the same.

SO, STEP RIGHT UP, AND LET'S SPIN THAT WHEEL!

THE CHARACTER: Imagine Mister Wizard and the Nutty Professor had a Rock Star German love child. Picture that child decades later, touring the world with a fully equipped lab, a wicked cool haircut, and a love of performance that knows no bounds. Now put him onstage, and let the absurdity begin! Doktor Kaboom! takes his audience on an amazing educational tour of the modern scientific method, using humor and comedy while demonstrating spectacular applications of the physical sciences.

THE MISSION:

Doktor Kaboom! Believes science is for everyone! Through highly interactive comic performance Doktor Kaboom encourages students to creatively explore the world around them.

CURRICULUM CONNECTIONS

SCIENCE – Georgia Performance Standards

SKP2, SKP3, S1P1, S1P2, S2P1, S2P2, S2P3, S3P1, S3P2, S4P2, S5P3, S8P1- S8P5

FINE ARTS – Georgia Performance Standards

Music - M3GM.6-.8 , M4GM.6-.8, M5GM.6-.8, M6GM.6-.8, M7GM.6-.8, M8GM.6-.8

Theater - TAES3.1, TAES4.1, TAES5.1

Dance - D3FD.2, D4FD.3, D4FD.2, D5FD.2

Taking STEM entertainment to a new level and audiences are loving it.

"Part Mister Wizard, part Mr. Rogers. Magnificent!"
-a happy dad



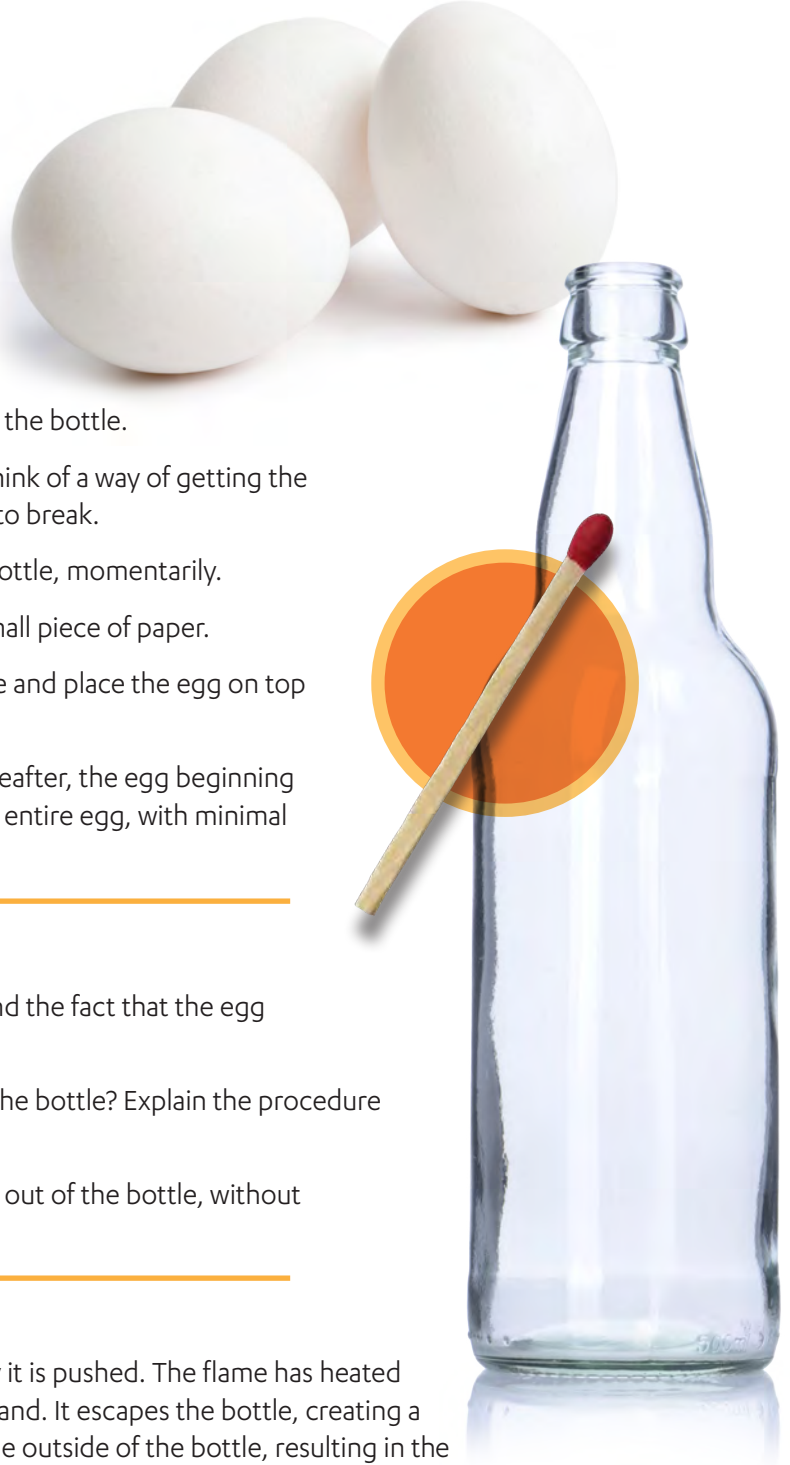
Photo by Martin Albert

POST-SHOW ACTIVITIES

CLASSROOM DEMO: AIR PRESSURE

MATERIALS:

- Boiled eggs
- Narrow necked bottle or flask
- Matches, paper



PROCEDURE:

- 1 Place the peeled, boiled egg on top of the bottle.
- 2 Question students to see if they can think of a way of getting the egg into the bottle without causing it to break.
- 3 Remove the egg from the top of the bottle, momentarily.
- 4 Light the match and start burning a small piece of paper.
- 5 Drop the burning paper into the bottle and place the egg on top of the bottle, narrow end down.
- 6 Observe the flame go out shortly thereafter, the egg beginning to be "sucked" into the bottle, and the entire egg, with minimal damage, in the bottle.

DISCUSSION:

- 1 How are the burning piece of paper and the fact that the egg gets "sucked" into the bottle related?
- 2 Does the egg really get "sucked" into the bottle? Explain the procedure in a more scientific fashion.
- 3 Propose a method for getting the egg out of the bottle, without causing damage to the egg.

EXPLANATION:

The egg is not sucked into the bottle. In reality it is pushed. The flame has heated the air inside the bottle, causing the air to expand. It escapes the bottle, creating a pressure differential between the inside and the outside of the bottle, resulting in the air molecules outside the bottle hitting the egg with more force per area than the air molecules on the inside, resulting in the egg being literally pushed into the bottle.

MATH PATTERNS

(5th Grade and Up)

It is unfortunate that many people grow up deciding they hate mathematics. It is more likely that they simply dislike numbers. But, math is not about numbers. Numbers are simply the alphabet of mathematics. Math is about patterns. We use numbers to describe and explore these patterns.

For example, counting is a pattern: 1, 2, 3, 4, 5...
The next number in the pattern is, of course, 6.
And on, and on, and on.

For Example, Multiples of 9:

$1 \times 9 = 09$	$10 \times 9 = 90$	09, 90
$2 \times 9 = 18$	$9 \times 9 = 81$	18, 81
$3 \times 9 = 27$	$8 \times 9 = 72$	27, 72
$4 \times 9 = 36$	$7 \times 9 = 63$	36, 63
$5 \times 9 = 45$	$6 \times 9 = 54$	45, 54



A FUN PATTERN:

Using this pattern you can multiply 11 by any 2-digit number faster than someone else can do it with a calculator.

To multiply any two digit number by 11:

- For this example we will use 26.
- Separate the two digits in your mind (2__6).
- Notice the hole between them!
- Add the 2 and the 6 together ($2+6=8$)
- Put the resulting 8 in the hole: 286. That's it! $26 \times 11 = 286!$

The only thing tricky to remember is that if the result of the addition is greater than 9, you only put the "ones" digit in the hole and carry the "tens" digit from the addition. For example 49×11 ...
 4_9 ... $4 + 9 = 13$... put the 3 in the hole and add the 1 from the 13 to the 4 in order to get 5 for a result of 539 ... $49 \times 11 = 539$.

POST-SHOW ACTIVITIES

#1 Write a Review

Goal: To write a review of the performance.

Explanation: In this activity, students will reflect on the performance by writing their own review.

Activity:

1. Ask students to imagine that they are a critic for the school newspaper. They are going to write a review of *Doktor Kaboom* to inform others about what they experienced.
2. In the review, they should describe with details:
 - a. What they saw
 - b. What they heard
 - c. How the performance made them feel
 - d. What the performance reminded them of
 - e. What their favorite part was and why
3. Remind students that they must paint a picture of the experience with their words so that others who did not see the performance can imagine it as vividly as possible.

Follow-Up Discussion Questions:

1. What did you include in your review? Why did you want to share that particular idea?
2. What things did writing the review make you think about that you hadn't thought of by just watching the show?



Photo by Martin Albert

#2 Write An Original Song

Goal: To write song lyrics inspired by an academic subject, such as in *Doktor Kaboom!*

Explanation: In this activity, students will write the lyrics to an original short song inspired by an academic subject of their choice.

Activity:

1. Invite students to think about a subject area they would like to write a song about. It could be a favorite subject, or even a subject they struggle with.
2. In their song, they should include more than one verse and a chorus that repeats. The lyrics do not have to rhyme, but it should be something catchy and easy to remember.
3. The song should highlight a particular theme, such as spelling words, historical events, or a concept in math (just a few examples). It could be anything!
4. Provide students with time and resources to conduct any research before they begin writing.

Follow-Up Discussion Questions:

1. How are your song lyrics similar to ones in *Doktor Kaboom*? How are they different?
2. What was challenging about this activity?
3. What other subject areas could you write short songs about to help you remember the subject matter? Do you think this is a tool you can use when studying?

POST-SHOW ACTIVITIES

#3 Write a Letter

Goal: To reflect on the performance experience and to practice writing skills.

When: After the performance.

Explanation: After the show, students will write letters to *Doktor Kaboom* performers or to ArtsBridge donors whose support keeps field trip tickets accessibly priced for school groups.

Activity:

1. After attending the performance, discuss the experience with your students. Use the following discussing questions to guide the conversation:
 - a. What was the show about?
 - b. What parts of the show were most exciting?
 - c. Which character did you enjoy the most? Why?
 - d. What did the characters learn?
2. Next, invite students to write a letter to the performers or to ArtsBridge donors about their theater experience.

a. Letter Example #1

Dear *Doktor Kaboom* Performers,
My favorite part of the show was....
While watching your show I felt... because...
I have drawn a picture of the scene when....
If I could be in your show, I would play the part of
... because...

b. Letter Example #2

Dear ArtsBridge donors,
Thank you for helping my class go to the Cobb Energy Centre to see *Doktor Kaboom!* My favorite part of the show was.... While I was watching the show I felt... because... I have drawn a picture of the scene when... This experience was special because...

3. After writing the letter, students can illustrate a scene from the performance.
4. Last, mail the letters to use and we'll make sure they get to the right people.

ArtsBridge Foundation
Attn: Education Department
2800 Cobb Galleria Parkway
Atlanta, GA 30339

Follow-Up Discussion Questions:

1. What did you choose to share in your letter? Why?
2. How does receiving a letter make you feel?
3. How do you think the recipient of your letter will feel when he or she receives your letter? Why?
4. Why do you think the performers choose to make being a performer their career?
5. Why do you think people give money to help students like you attend ArtsBridge performances at the Cobb Energy Performing Arts Centre?



Photo by Martin Albert

RESOURCES AND SOURCES

Web Sources

<http://www.doktorkaboom.com/>
<https://sciencebob.com/category/experiments/>
<http://www.sciencekids.co.nz/experiments.html>
<http://redtri.com/classic-science-experiments/>
<https://www.youtube.com/watch?v=sHLfadiMs5I>

**"Better
than Star Wars!
Well, episode 2"**
- Ecstatic 8 year old

**"Spectacular...
nobody can captivate
an audience better"**
-Broadway World



Photo by Martin Albert

