PLAY GUIDE



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418 W. Short Street Lexington, KY 40507 859.254.4546 www.lctonstage.org

Apollo: To The Moon By Mary Hall Surface

Presented on the LCT Main Stage: March 17 - 27, 2019 On Tour: January 31 - May 3, 2019

Major Contributors:





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Dear Educator -

Lexington Children's Theatre is proud to be producing our 80th season of plays for young people and their families. As an organization that values the arts and education, we have created this Play Guide for teachers to utilize in conjunction with seeing a play at LCT.

Our Play Guides are designed to be a valuable tool in two ways: helping you prepare your students for the enriching performance given by LCT's performers, as well as serving as an educational tool for extending the production experience back into your classroom.

We designed each activity to assist in achieving the Kentucky Academic Standards (KAS), including the National Core Arts Standards for Theatre. Teachers have important voices at LCT, and we rely heavily on your input. If you have comments or suggestions about our Play Guides, show selections, or any of our programming, your thoughts are greatly appreciated. Please email Jeremy Kisling, our Associate Artistic Director in Charge of Education, at jkisling@lctonstage.org.

Please use the Teacher Response form following a performance. We are thrilled that you rely on LCT to provide your students a quality theatrical experience, and we hope this resource helps you in your classroom.

LCT's Education Department

The mission of our education programming



The mission of Lexington Children's Theatre's Education Department is to provide students of all ages with the means to actively explore the beauty, diversity, complexity, and challenges of the world around them through the dramatic process. We strive for young people to develop their own creative voice, their imagination, and their understanding of drama and its role in society.

Your role in the play

You may wish to have a discussion with your class about your upcoming LCT experience and their role as audience members. Remind your students that theatre can only exist with an audience. Your students' energy and response directly affects the actors onstage. The quality of the performance depends as much on the audience as it does on each of the theatre professionals behind the scenes and on stage.

Young audiences should know that watching live theatre is not like watching more familiar forms of entertainment; they cannot pause or rewind us like a DVD, there are no commercials for bathroom breaks,



nor can they turn up the volume to hear us if someone else is talking. Your students are encouraged to listen and watch the play intently, so that they may laugh and cheer for their favorite characters when it is appropriate.

At the end of the play, applause is an opportunity for your students to thank the actors, while the actors are thanking you for the role you played as an audience.

Meet the Cast - Apollo: To The Moon



Joey Cassella (*Scott Gibson*) - Joey is thrilled to join the Lexington Children's Theatre family. Joey graduated with a B.A. in Theatre Performance from James Madison University in 2017. Joey performed in *The Lost Colony* this past summer as Chief Manteo. He also appeared as part of the original cast of their new touring children's theatre show, *The Mystery of The Lost Colony*, that performed in North Carolina schools this past fall. Previous credits also include Oberon in *A Midsummer Night's Dream, Hal in Picnic*, and *Jasper in The Aliens*. When he's not performing, Joey can be found rooting for the Philadelphia Eagles, Sixers, Phillies, and Flyers. (joeycassella.com)



Claire Hilton (Sarah) - Claire is so excited to join LCT's spring tour shows, *Rapunzel* and *Apollo: To The Moon*. Claire graduated with a BFA in musical theatre from Emerson College, and has since been hopping from state to state and show to show, fulfilling her love of travel along the way. Favorites include performing as Greta the *Penguin in Mr. Popper's Penguins* and choreographing *The Best Christmas Pageant Ever: The Musical*. This is her Lexington Children's Theatre debut! Enjoy the show!



Cadence Lamb (Sarah) - Cadence is thrilled to join the LCT family for the first time. She has a BFA in Acting from Illinois Wesleyan University and sixteen years of dance training. Favorite roles include: Constance (King John) and Princess of France (Love's Labour's Lost) at the Texas Shakespeare Festival, Ariel (Tempest) and Friar Lawrence/ Benvolio (Romeo and Juliet) at the Flagstaff Shakespeare Festival, and Elizabeth Proctor (The Crucible) and Crumbs-in-Pockets (The Girl Who Fell...) at Illinois Wesleyan University. She loves her family, friends across the world, writing music, and coffee.

Play Synopsis

Apollo: To The Moon begins with the countdown to take off for the famous Apollo 11 mission. Scott Gibson watches with the world as the rocket takes off. The story then moves into a flashback with young Scott telling his younger sister Sarah about the movie *The Day the Earth Stood Still* which has sparked his fascination with space. After being sent to his room to get ready for bed, Scott spends a few moments looking through his telescope dreaming about what it would be like to travel to the moon.

A few years go by, and Scott gets into college with a full scholarship to study astronomy. He listens to his radio on the evening President Eisenhower sends a message around the world using the first communication satellite. In his excitement over this historic achievement in technology, Scott continues to dream of making it to the moon and keeping up with the space age. He soon heads to graduate school where he has the privilege of attending a press conference with James Webb, the director of the National Aeronautics and Space Administration (NASA).

During the conference, Mr. Webb addresses the race to space between the United States and Russia. When asked what kind of person it takes to make it as an astronaut, Mr. Webb replies that it takes an extraordinary person who is brave and self-confident with fast reflexes. Scott believes that he can become an astronaut and go to space. He starts to daydream of training with famous astronauts Alan Shepherd and John Glenn to motivate him. However, Scott learns that you have to be a test pilot to be considered for the astronaut program, so he changes course to become a scientist that helps get others to the moon.

A few years later, with his newfound vigor, Scott listens as President Kennedy sets the goal to send a man to the moon before the end of the decade. Scott takes the proclamation as an extra push to finish graduate school early and lands a job at the Jet Propulsion Laboratory. Then, NASA annaouces their search for scientists, not just test pilots, to add to their missions into space. Despite the risks of failure and death, Scott works towards applying for astronaut candidacy. He makes it through several rounds of testing in the application process, improving his health and getting a shining recommendation from his boss, but Scott is ultimately rejected due to the abundance of other qualified applicants.

Scott finds himself broken-hearted and unsure of what to do next. His sister Sarah tries to comfort him by encouraging him to pay attention to other things happening in the world. As Scott plans to leave his job to figure out what's important in life, his boss informs him of a new opportunity to work on a project that would develop a special technology to be placed on the moon. Scott's passion for space and all its possibilities is rekindled. He then watches as Buzz Aldrin and Neil Armstrong successfully land and walk on the moon, which provides a new hope for himself and the rest of the world.





What to know - before the show!

Phases of the Moon

Place a lamp in the middle of the room with the classroom lights off; this represents the sun. Each student is given a white Styrofoam ball that they put on the end of their pencils. Their heads are the Earth, and the Styrofoam balls are the moon. As the students turn in their spots, they will see the phases of the moon on the Styrofoam balls.

5-ESS1.B: Earth and the Solar System

Marshmallow Constellations

Have the students create recreate the night sky by following diagrams of different constellations using mini marshmallows (stars) and toothpicks, gluing them down to black construction paper for display.



5 ESS1.A: The Universe and its Stars

Our Solar System is filled with many interesting stars. For more constellations visit <u>https://stardate.org/nightsky/constellations</u>

Apollo to the Moon (Captain on Deck)

This activity is similar to Simon Says because it challenges listening skills. All players face the facilitator. The first command is "Astronauts Ready." For this command, students stand at attention with their hands behind their back. The only command players can do from Astronauts Ready is "at ease," which is when they can relax from that position. Other commands include:

Lift Off! – Jump into the air like space ships; sound effects are encouraged.

Meteor Shower – Crouch low to the floor and cover head with hands.

Apollo to the moon – Respond by saying "One giant leap for mankind!"

Find your crew – Split into groups of three and sit together on the ground.

Moonwalk – Walk backward three steps.

Captain's Log

Have the students pretend to be astronauts and write journal entries about what they went through during their training processes and eventually going to space, documenting everything they saw, heard, and felt. They can also include drawings of their intergalactic observations.

2.35 and 2.34 Psychomotor Skills

What to know - before the show!

Contextual Article

The Space Race in the 1960s

In May 1961, President Kennedy told Americans that he wanted to send an astronaut to the moon. No country had been to the moon yet and he wanted the United States to get there first, before Russia. At this time, the United States and Russia, also called the Soviet Union, raced to see who could do more in space. The two nations in the mist of the Cold War, a state of political hostility. In this war, actions were important. Sending a man to the moon first would show that the United States was a leader in the world.

The Soviet Union started the race before John F. Kennedy became President. In October 1957, they used a rocket to send the first satellite, Sputnik, into space. People in the United States were shocked when they heard about Sputnik because it showed that the Soviet Union had the technology and scientific knowledge send an object into space. The United States worked hard and sent its first satellite in January 1957. After a few years, the Soviet Union surprised the United States again. On April 12, 1961, the Soviet Union sent the first man to space. His name was Yuri Gagarin and he orbited the earth one time. It took him less than two hours to go all around the earth in his spacecraft. Americans were worried that the Soviet Union had better technology than the United States. A few weeks after Gagarin's flight, the United States sent Alan Shepard into space, but Shepard did not orbit the earth. Since the Soviet Union was winning the space race, President Kennedy decided that the United States would try to go to the moon first. The Soviet Union had the same goal. They continued to go back and forth with new achievements.

The United States finally sent John Glenn to orbit the earth in 1962. The Soviet Union sent the first woman into space and was the first country to have a person go outside of a spacecraft in outer space on a space walk. In February 1966 the Soviet Union came one step closer to the moon by landing the first unmanned spacecraft on the moon. It looked like the Soviet Union would win the race, but the United States was able to pull ahead. On July 20, 1969, two Americans, Neil Armstrong and Buzz Aldrin, landed a spacecraft on the moon and walked on its surface. The United States became the first – and only – country to have astronauts walk on the moon. The Soviet Union never landed a man on the moon. Instead, the country focused on using unmanned spacecraft to explore the moon and built a space station. After years of competition, the race to the moon was over.





Many minds, one mission

As we saw in *Apollo: To The Moon*, it takes more than just the astronauts to make a space mission possible! Below are listed different roles a scientist could have had in getting a man on the moon. Split students up into groups to research the different roles below. Then, have them share with the class their findings with the class about what job they were assigned and how they are just as vital and important to our day to day interactions with space.

Possible jobs to research:

Aerospace or Aeronautical Engineers Avionics and Instrumentation Engineers Computer Engineers Materials Engineers Mechanical Engineers Robotics Engineers Laser Technicians Radar Technicians Satellite Technologists Plasma physicists

Below are links that can provide even more information about what these different people do to help us learn about and explore space!

https://www.bls.gov/careeroutlook/2016/article/careers-in-space.htm

https://jobs.lovetoknow.com/Careers_in_Space_Science

ELA 3.4, ELA: 3.6

Design Your Own Satellite!

How would you like to be the chief engineer for an important NASA mission? In this activity, you get to design the latest and greatest satellite. Your satellite could help study things happening on Earth, take pictures of planets in our solar system, keep an eye on our sun, or even find planets elsewhere in the universe!

You get to decide how to make your satellite—it's all up to you. While you are building your satellite, though, keep in mind that it must have a couple of basic things:



Design Your Own Satellite! continues on next page.

Design Your Own Satellite, continued



Container: Your satellite needs some sort of container to hold all of the gizmos together and keep the instruments safe.



Power Source: You will need something to give your satellite electricity so that it can run all of its high-tech gizmos. Solar panels or fancy batteries are two options.



Scientific Instruments: This is the why you launched your satellite in the first place! Instruments can take pictures of far away galaxies or planets right here in our Solar System, measure chemicals in Earth's atmosphere, or keep a close eye on our Sun's activity. It's your decision!



Communication Device: You will need some way to communicate with Earth. Antennas (shaped like dishes or poles and rods) are a good way to do this.



Orientation Finder: Make sure you have something that lets your satellite know where it's pointed and which way is 'up.' Something that looks at the stars (a star tracker) would work.

These are just suggestions. Be creative and find new ways to build your satellite!



- Rice crispy treats
- Sugar wafers Graham crackers
- Pretzels
- Gummy worms/candy
- Licorice twists
- Frosting
- Brownies
- Toothpicks (don't eat these, just use them to keep the food together!)
- Juice boxes or other small boxes
- Toothpicks
- Chopsticks
- Plastic cups and bowls
- Popsicle sticks
- Straws
- Screws, nuts, bolts, etc.
- Paperclips
- Construction paper
- Balloons
- CDs or DVDs
- Shiny paper

This activity was taken from the NASA website! https://spaceplace.nasa.gov/build-a-spacecraft/en/



VA: Cr2.1.4, ETS1.C

Flight-Crossword Puzzle

5-ESS1.A, 5-ESS1.B

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Across Clues

1. The resistance to relative motion between two surfaces in contact.

4. The rate of motion in a particular direction.

5. The difference in _____ gives an airfoil lift.

8. Indicates the height above sea level.

9. Is how fast the air is moving past an airfoil.

10. The downward force on a plane.

11. A force generated by an airfoil which acts

perpendicular to the income flow.

13. The science that deals with the motion of air and the forces it produces on an airfoil.

15. The side to side motion of an airplane.

17. A line depicting the flow path of a particlle of air.

19. The distance from one wing tip to the other.

21. When the air flow separates from the airfoil reducing the lift.

23. Irregular motion of air; uneven currents of air.

24. The motion of an airplane caused by the use of ailerons

25. The straight line from the leading edge to the trailing edge of an airfoil.

26. Part of an airplane that causes it to roll.

Down Clues

1. A push or pull exted on an object.

2. The force that counter acts the weight of an airplane.

3. The part of an airplane that controls the yaw of the airplane.

6. The distance from one wing tip to the other.

7. The measure of the curvature of the airfoil.

8. A streamlined surface designed in such a way that

air flowing around it produces useful motion

10. A three dimensional object that moves through the air and can generate lift.

12. The force the engine supplies to the airplane.

14. The point on an airfoil that separates the upper and lower streamlines.

16. A facility where an airstream is forces across an airfoil to study aerodynamics.

18. The Curve described by a projectile in flight.

20. The up and down motion of an airplane controlled by the elevators.

22. The force that opposes thrust.

What to Read Next

Moonshot: The Flight of Apollo 11 by Brian Floca

Here is the flight of Apollo 11 which showcases the many great machines and people behind the greatest story of the summer of 1969.

Floating in Space by Franklyn M. Branley

Ever wonder what life is like aboard a space shuttle? This book explores how astronauts handle the weightlessness of space, how they eat and get exercise, and so much more.

Apollo 13: How Three Brave Astronauts Survived a Space Disaster by Kathleen Weidner Zoehfeld

After a dangerous explosion damaged their spacecraft on a mission to the moon, three astronauts were determined to do one thing: make their way back to Earth safely.

Zathura by Chris Van Allsburg

This sequel to the Caldecott-winning book Jumanji follows two disgruntled brothers left alone for the evening with a mysterious board game with intergalactic challenges that forces the boys to learn to work together.

LCT teaches in YOUR school!

Would you like to see some of these play guide activities modeled in your classroom?

Book a workshop for your class with one of LCT's teaching artists! In our pre-show workshops, our teaching artists will engage students in acting skills and themes from the play through drama activities. In our post-show workshops, students will extend their play-going experience by strengthening their personal connection to the play and deepening their understanding of the themes and characters.



Call us at 859-254-4546 x 226 to book a pre or post-show workshop for your class!

To learn more about Lexington Children's Theatre and our programming for your school visit: <u>www.lctonstage.org/for-educators/in-school-experiences/</u>