

MESA ARTS CENTER PRESENTS THEATER UNSPEAKABLE performing MOON SHOT

Piper Theater | Sep 26 & 27 | 10 AM & 11:50 AM | Grades: 4-12

2019/2020 EDUCATOR RESOURCE GUIDE



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ABOUT MOON SHOT...

In order to recreate the story of America's Apollo 11 lunar landing, seven actors squeeze onto a 21-square feet stage nearly as tight as NASA's original Mercury capsules. Using only their bodies and their voices, this astounding troupe of actors brings to life one of the most daring times in the history of human exploration: the Space Race. From the Cold War to Sputnik, from Yuri Gagarin to Neil Armstrong, this action-packed show brings the company's tongue-in-cheek humor to a whole new atmosphere — one where the rules of gravity no longer apply.

ABOUT THEATER UNSPEAKABLE...

Moon Shot is presented by Theater Unspeakable, a Chicago based theater company formed in 2010 by Marc Frost. This company focuses on devising new forms of physical theater mostly through the use of a platform style. This physical theater style was heavily influenced by Marc's experience in a theater program at the London International School of Performing Arts. Marc's personal goal is to continue experimenting with physical theater styles until he and his collaborators are able to create new forms of physical theater of their own. Theater Unspeakable is best known for their first piece "Superman 2050" as well as "The American Revolution" which was performed last year here at the Mesa Arts Center.



WELCOME!

Dear Educator,

Thank you for selecting a **Performing Live for Students!** field trip with the Mesa Arts Center. We have a dynamic season planned and we look forward to connecting you to our many artists and performances. With Performing Live, students are able to experience live theatre and make educational connections well beyond the classroom.

We also recognize and appreciate the energy and time spent on your part in coordinating field trips. In this guide we have provided information to help make this the best experience possible.

In addition, the Mesa Arts Center has many open and inviting spaces that make good places to hold a brown bag lunch. No prior arrangements need to be made.

Please contact our offices at engagement@mesaartscenter.com or 480-644-6564 should you have any additional questions.

Enjoy the show!

TEACHER AND CHAPERONE INFORMATION

Chaperones

- Assign each chaperone a designated group of students and provide him/her with a written list of the students in that group.
- Ask chaperones to stay with their assigned group throughout the field trip. Adult chaperones are responsible for the students' conduct and behavior throughout their visit to the Center.
- Please review theater etiquette rules and responsibilities with all chaperones.
- Have the phone numbers of every chaperone in your group to quickly access each other in case of emergency.

Theater Etiquette

- No Food or Drink inside the theatre (besides bottled water).
- Students must be accompanied by chaperones at all times.
- Cameras and recording devices may not be used during the performance.
- Please silence cell phones and resist the urge to text message.
- Listening and following the House Managers and Ushers will help the seating and dismissal process.
- Feel free to laugh, clap and enjoy the show but also to be respectful of those around you.



CURRICULUM CONNECTIONS

Theater Unspeakable: Moon Shot

Arizona Academic Standards in the Arts

These standards can be achieved through discussion questions or activities included in the study guide.

<u>Theatre</u>

TH.RE.7.4-HS — Respond to or evaluate artistic choices made in a guided theatrical experience.

TH.RE.9.4-HSc – Respond or evaluate a theatrical work using supporting evidence, personal aesthetics, and artistic criteria.

TH.CR.2.4-HSb — . Participate in defined responsibilities required to present a theatrical work informally to peers.

TH.PR.6.4-HS — Perform in a group guided theatrical experience and present it informally to an audience.

<u>Music</u>

MU.CN.11.4-8a — With appropriate guidance, explore relationships between music and other content areas.

Arizona's English Language Art Standards

These standards can be achieved by participating in the study guide.

Reading

Grades 4-12.RI.1 – Read carefully to determine what the text says explicitly and to make logical inferences from it.

<u>Language</u>

Grades 4-12.L.4 – Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

Writing

Grades 4-12.W.2 — Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

Grades 4-12.W.4 — With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.

Speaking and Listening

Grades 4-12.SL.1 — Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

Grades 4-12.SL.2 — Ask and answer questions about key details in a text read aloud or information presented orally or through other media. Grades 2 & 3 focus more on narrowing to main idea and key details.



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Arizona's College and Career Ready Standards

These standards can be achieved by participating in the study guide.

<u>Science</u>

Strand 1 of the Science standards lays out the Inquiry process for students in grades 4-12 (if your grade level is in a transition year to the new Science standards these skills would fall under Dimension 1). Performance objective details vary by grade but the general goals of each Concept are below:

SC-S1C1 – Observe, ask questions, and make predictions.

SC-S1C2 – Participate in planning and conducting investigations, and recording data.

SC-S1C3 — Organize and analyze data; compare to predictions.

SC-S1C4 - Communicate results of investigations.

Social Studies

These are from the 2018 Arizona History and Social Studies Standards

7.SP1.1 – Analyze connections among events and developments in broader historical contexts.

7.H1.2 – Trace the development and impact of scientific, technological, and educational innovations within historical time periods.

7.H2.1 - Investigate how conflict can be both unifying and divisive throughout communities, societies, nations, and the world.

7.H3.5 – Investigate a significant historical topic from global history that has significance to an issue or topic today.

HS.SP1.1 – Evaluate how events and developments were shaped by unique circumstances of time and place as well as broader contexts.

HS.H4.2 – Explain how artistic, philosophical, and scientific ideas have developed and shaped society and institutions.

HS.H3.1 – Analyze how societies, leaders, institutions, and organizations respond to societal needs and changes.





PRE-PERFORMANCE CLASSROOM ACTIVITIES

Included in this resource guide are a variety of activities created to correspond with the Arizona College and Career Readiness Standards to enhance the students' growth, reading skills, and overall comprehension.

Questions to Ponder...

- Question 1 How do you determine what is important in life? Should you do what's best for yourself? For your family members? For everyone? What should you do if these conflict? (Grades 4-12.SL.1)
- Question 2 Science gives us truly amazing things like cellphones and space ships, but also frightening things like bombs. How far should science be allowed to go? (Grades 4-12.SL.1)

Activities to Explore...

Some of the vocabulary used by astronauts (and the actors in Moon Shot) may be unfamiliar to your students. Take a look at the vocabulary on page 8 with your students. To help them retain the vocabulary, you can have them create sentences, act out the vocabulary words, or draw visuals to go with them.

Standards Implemented: Grades 4-12.L.4Approximate time: 15-20 minMaterials Needed: Page 8, optionally paper/pencils/drawing materials

To give students some background and visuals of the first moon landing, these websites may be useful. The first shows the video and audio of the moon landing to give students an idea of how the astronauts and the flight deck communicated. The second link has 45 photos with descriptions that span before, during, and after the moon landing. https://www.firstmenonthemoon.com/

https://www.theatlantic.com/photo/2014/07/45-years-ago-we-landed-men-on-the-moon/100775/

Standards Implemented: Grades 4-12.SL.2 & RI.1 Approximate time: 10-15 min Materials Needed: A computer with internet access ideally projected to a screen

There is still so much exploration to be done in the universe and researchers can use help from kids as well! If you go to <u>https://www.zooniverse.org/projects/zookeeper/galaxy-zoo/</u><u>classify</u> your class can help classify images of galaxies from space telescopes. If the link ends up taking you to the main page, just search for Galaxy Zoo and the project should come up.

Standards Implemented: SC-S1C2 Materials Needed: Computers with internet access Approximate time: 15-20 min



POST-PERFORMANCE CLASSROOM ACTIVITIES

Questions to Discuss

- Question 1 There was a lot of history covered in this performance. What events stuck out to you the most? Were there any events you were not familiar with? (Grades 4-12.SL.1 & SL.2)
- Question 2 What did you think of the way the play was presented? Did you think the use of the platform enhanced the ideas or distracted from them? (Grades 4-12.SL.1; TH.RE.7.4-HS)
- Question 3 After seeing how famous historical figures were portrayed in the performance, did you see any of them in a different way? (Grades 4-12.SL.1; TH.RE.9.4-HSa)

Activities for the Classroom

The Space Race between the Soviets and the Americans was a lengthy one that spanned 24 years. Have students take a look at the timeline on pages 9 and 10 for important events in the Space Race. Students can choose one of the events to research in detail. Depending on your age group, students can write a paragraph or research paper, create a project or presentation about the event they choose to research.

Standards Implemented: Grades 4-12.W.2; 7.SP1.1, 7.H1.2, 7.H2.1, 7.H3.5, HS.SP1.1, HS.H4.2, HS.H3.1

Materials Needed: Pencils, paper

Approximate Time: 45–60 min

Now that students have seen the show, have them try out their own platform style presentation. See page 11 for details on how students can make history come to life in the classroom.

Standards Implemented: TH.CR.2.4-HSb, TH.PR.6.4-HS Approximate time: 30-45 min Materials Needed: Platform or tape to mark an area on the floor

The song *Beautiful Dreamer* is heard repeatedly throughout Moon Shot. Though it was a tumultuous time in history, a group of people held fast to their dream of someone walking on the moon and made it happen. Have students listen to *Beautiful Dreamer* and then write about a dream they hope to realize in their life.

Standards Implemented: Grades 4-12.W.4; MU.CN.11.4-8aApproximate time: 20-30 minMaterials Needed: Pencils, paper, you can find a recording with lyrics of "Beautiful Dreamer" at:https://www.youtube.com/watch?v=lYUZE2Lpqhc



MOON SHOT SPACE RACE VOCABULARY

V2 (Vergeltungswaffe 2 "Retribution Weapon 2")

A large, weaponized rocket built by the Germans during World War II. It could be launched from Germany and used to target cities and towns in neighboring enemy countries, causing death and destruction. It was used to deadly effect in Great Britain, but luckily the war ended before the German scientists were able to mass-produce the weapon.

<u>Orbit</u>

The curved path of an object around a star, planet or moon. For instance, when an object exits the Earth's upper atmosphere, that object is subject to the Earth's gravitational pull. The object will revolve around the Earth in an elliptical motion, known as an orbit.

Satellite

An object placed into orbit around the Earth or moon in order to collect information or communicate.

Cold War

The state of political hostility that existed between Soviet Russia and the United States from 1945 to 1990.

Capsule

A small spacecraft (or part of a larger one) that contains the sensitive instruments or crew.

The Eagle Has Landed

A code phrase spoken by mission commander Neil Armstrong after successfully landing the lunar module (codename: Eagle) on the surface of the moon for the very first time.

Astronaut/Cosmonaut

A person who is trained to travel in a spacecraft. American space travelers are known as astronauts, Soviet space travelers are known as cosmonauts.

<u>NASA</u>

National Aeronautics and Space Administration was founded in 1958. It is an independent agency of the executive branch of the United States federal government responsible for the civilian space program.

Women In Space Program

A program spearheaded by the American Air Force aimed at testing women's physical ability to withstand the rigors of space flight. Details of the program were presented to NASA, which ultimately decided against allowing American women in manned space flight.

Vocabulary from Theater Unspeakable Resources.



MOON SHOT SPACE RACE TIMELINE

1945 - Wernher von Braun Surrenders to Americans

Following the German defeat in WWII, V2 Rocket designer Wernher Von Braun was captured and brought to America, where he was instrumental in designing the rockets which would eventually take astronauts to the moon.

1945 - Russians capture the assembled V2 Rockets

While the Americans had von Braun, the Soviet Union managed to smuggle the existing Nazi-era V2 rockets out of Germany for use in their very own space program.

1957 - Sputnik 1 and Sputnik 2 (Featuring Laika)

Beating the United States in the early stages of the space race, the Soviet Union launched the first ever artificial Earth satellite, known as Sputnik 1. Sputnik 2 was launched in the same year, the first satellite to carry a living animal into orbit.

1959 - First photograph of Earth from satellite orbit

NASA launched the Explorer 6 in August of 1959. This small satellite was designed to study trapped radiation in Earth's atmosphere and to transmit photos back to NASA.

1960 - First animals and plants returned alive from space (Belka and Strelka)

Two dogs (along with 40 mice and several plant species) were successfully launched into orbit by the Soviets. They returned to Earth alive, and Strelka the dog later gave birth to a litter of puppies, one of which was given as a gift to First Lady Jacqueline Kennedy. White House advisors initially opposed accepting the puppy, as they believed it was likely that the Soviets had planted microphones inside the dog in order to listen in on national defense meetings.

1961 - First Human Spaceflight (Yuri Gagarin)

Cosmonaut Yuri Gagarin became the first human in space after successfully completing an orbital spaceflight. After the 108-minute flight, Gagarin ejected from the capsule and parachuted to safety from 7 kilometers above the Earth's surface. He landed on a Soviet farm.

1961 - First Pilot-Controlled spaceflight (Alan Shepard)

Astronaut Alan Shepard became the first human to complete a suborbital flight and return to Earth safely without ejecting from the space capsule three weeks after Gagarin's infamous flight.



MOON SHOT SPACE RACE TIMELINE CONTINUED

1962 - President Kennedy's speech

Speaking at Rice University in Houston, Texas, President John F. Kennedy publicly announced the United States' intent to land a human being on Earth's moon by the end of the 1960's. This was a serious gamble, as the Soviet Union had shown itself to be a formidable rival in the space race thus far.

1963 - First woman in space (Valentina Tereshkova)

Once again asserting dominance over the Americans in the space race, the Soviet Union launched capsule Vostok 6 into space with a one-woman flight crew, civilian Cosmonaut Valentina Tereshkova. The American Air Force's "Women in Space Program" had been thwarted by NASA just one year prior. The first American woman in space would not come until 1983.

1963 - President Kennedy is assassinated

While riding in a presidential motorcade in Dallas, Texas, President Kennedy was shot by Lee Harvey Oswald, and died later that day at Parkland Memorial Hospital. In addition to being a national traumatic event, the assassination was particularly harrowing for NASA, as the President had been the most famous and vocal proponent of the space program.

1965 - First spacewalk

A Soviet spacecraft featuring an inflatable airlock was the site of the first spacewalk. Cosmonaut Alexey Leonov wore a specialized spacesuit in order to complete the 12-minute spacewalk.

1966 - Death of Sergei Korolev

After living a life in secret, chief Soviet rocket designer Sergei Korolev's death was announced as a tragedy for all Soviets. A hero's funeral was held for Korolev in Moscow.

1967 - Apollo 1 Disaster

NASA's first manned mission to the moon never made it off the ground. During a launch rehearsal test in January, a fast-spreading cabin fire took the lives of the three-man crew of Apollo 1–Gus Grissom, Ed White, and Roger Chaffee. Manned Apollo flights were suspended for 20 months following the tragedy.

1969 - First Humans on the moon (Apollo 11)

At long last, NASA fulfilled the promise of the late John F. Kennedy. On July 20th, the spacecraft piloted by Astronaut Buzz Aldrin and holding mission commander Neil Armstrong landed on the surface of the moon. The lunar module holding the two astronauts was known as *Eagle*.

Timeline from Theater Unspeakable Resources.

EDUCATION @ MESA ARTS CENTER

PLATFORM PERFORMANCE EXCERCISE

Students are given a mission: to make history come to life. The students also have an important constraint. They have to do it all on a three feet by seven feet stage platform (just like Theater Unspeakable does in their show "Moon Shot").

<u>Materials</u>: Stage platform, of approximately three feet by seven feet in size; or alternatively, use tape and tape measure to tape out the dimensions of the platform on the floor.

Procedure:

- 1. Split the students into groups of seven or smaller
- 2. Have each group create the historic image of American astronauts landing on the moon inside of the platform. Alternatively, students can create an image related to one of the events on the Space Race Timeline on pages 9 and 10.
- 3. Have the students create two images of the moments that led to this iconic image as well as two images of the moments that followed it.
- 4. Give the students time to create transitions between these three images.
- 5. Ask students to present the Images and Transitions for each Iconic Image to the class.

Discussion:

After all groups have performed, discuss with students which images were most memorable or successful? Which groups worked together well to create their images? Which groups used the space most creatively?



Activity from Theater Unspeakable Resources.

BUS PARKING MAP





STEPS TO UNLOAD

- Enter the drop off area by coming in westbound on 1st Avenue.
- 2 Pull up to the curb marked with cones and wait until notified to unload passengers.
- 3 Await parking direction from MAC security

STEPS TO PICK UP

- Passengers will exit the theater and meet buses in the bus parking lot area.
- Wait for clearance to depart.





THANK YOU!

Questions? Please contact Engagement at:

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