empower our community to celebrate and advance our symphonic culture by actively supporting the endeavor for excellence in music education. We seek to become an indispensable partner in the education of our community’s children and to create sustainable, meaningful programs and partnerships that foster strong relationships with schools and families. As Alabama’s orchestra, we aspire to reach all citizens of the greater Birmingham area and the state of Alabama, truly diverse audiences reflective of our unique makeup, and to provide programming that is ever more relevant, imaginative, and exciting. Through a world-class orchestra that offers extraordinary performances, we strive to inspire in our community a life-long passion for music, learning, and creativity.

**Explorer Concerts**
*Pre-K - 2nd grade*
Are you ready for a musical adventure? The Alabama Symphony Orchestra presents a special program for our youngest audience members. One that is casual, interactive, and lots of fun!

- **September 27, 2018** | 9:30 am & 11 am
  Northpark Baptist Church, Trussville

- **October 9, 2018** | 9:30 & 11 am
  Vestavia Hills Unites Methodist

- **October 11, 2018** | 9:30 am & 11 am
  Dawson Family of Faith

- **October 12, 2018** | 9:30 am & 11 am
  Dawson Family of Faith

**Sensory Friendly Concert: Tuneful Trick-or-Treat**
Join the Alabama Symphony Orchestra for some harmonious hocus pocus in a welcoming and Sensory Sensitive environment! Costumes are encouraged!

- **Sunday, October 14, 2018** | 3pm
  Alys Stephens Center, Jemison Concert Hall

**Young People's Concerts**
*3rd - 6th grade*
Explore the orchestral beyond in this stellar program geared towards 3rd - 6th grade, and featuring music from Holst's The Planets, Mason Bate's Mothership, and lots of familiar surprises along the way.

- **Out of this World!**
  - **November 7 & 8** | 10 am
    Samford University’s Wright Center
    Christopher Confessore, Conductor

**Alabama Symphony Youth Orchestra**
Under the direction of Kevin Fitzgerald, the ASYO is made up of some of the most musically talented youth from across our state!

- **Fall Concert** | **Saturday, November 17, 2018** at 2 pm
  Alys Stephens Center, Jemison Concert Hall

- **Holiday at the Galleria** | **Sunday, December 2, 2018** at 2 & 4 pm
  Come hear the ASYO play Holiday favorites near the Carousel at the Riverchase Galleria.
  Proudly presented by Riverchase Galleria.

- **Side by Side Concert with the Alabama Symphony Orchestra** | **Sunday, February 24, 2019** at 3 pm
  Alys Stephens Center, Jemison Concert Hall
  Feauturing the 2019 Lois Pickard Grand Prize Winner

- **Spring Concert** | **Saturday, May 18, 2019** at 2 pm
  Alys Stephens Center, Jemison Concert Hall
  Feating the 2019 ASYO concerto competition winner

Email dsirkot@alabamasymphony.org for more information or visit alabamasymphony.org

*concerts, artists, and repertoires subject to change  Free Event
<table>
<thead>
<tr>
<th>Tier</th>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$1,000-$9,999</strong></td>
<td>The Hess Foundation, Donald &amp; Ronne Hess Independent Presbyterian Foundation, Mr. and Mrs. Jeremy Knowles, The Mockingbird Foundation, Robert Raiford &amp; Zane Rhoades, Sanjay &amp; Dora Singh Southern Food Management, Inc., The Symphony Volunteer Council (SVC), Jim Wilson &amp; Associates</td>
</tr>
<tr>
<td><strong>$26,000-$49,999</strong></td>
<td>Hill Crest Foundation, Robert Meyer Foundation, Shelby County Commission Symphony 30, Vulcan Materials Company</td>
</tr>
</tbody>
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**Up to $999**
- Kathryn Acree
- Beau Vinci Violins
- Kathleen Berecek
- Vincent Cirulli
- William & Joy Denton
- Diamond Film & Video
- Gadsden Music Company
- Holdbrooks Electric, LLC
- Carlos Izcaray
- & Yolanda Serafimov
- David & Rupa Kitchens
- Vijay Kodali & Vineeta Kumar
- Virupaksha Kothandapani
- Rohit & Geeta Malik
- Morris, Hayes, Wheeles, Knowles, & Nelson NorthStar EMS, Inc.
- Ranjit Prasad
- Royal Cup, Inc.
- Shades Mountain Music Club
- Jeff & Susanne Thomas
- Kathy and Mat Whatley
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Acknowledgements
Dr. Rob Lyda, music teacher at Cary Woods Elementary in Auburn, AL and Chair of The National Association for Music Education’s Council for General Music Education
Dear Teachers and Parents,

We are excited to bring you this Teacher Guide to accompany the 2018-2019 Alabama Symphony Orchestra Young People’s Concerts. This guide is designed to enhance your students’ experience at the Symphony. Lessons were developed by Dr. Rob Lyda.

How to use this guide:

- **Lessons:** Lessons are designed to be customized to your classroom. Use as many as you like; add and shorten them ad libitum! Whether you are a music teacher or an english teacher, we encourage you to peruse this guide and see what is useful in your classroom. We hope you will find these lessons can be adapted to different classroom situations and resources!

- **We'd love to see your students' creations:** Ever wonder how you can help advocate for music education in Alabama? Consider submitting your student work developed as part of the enclosed activities along with pre and post quiz scores to the ASO! Every submission will be used in our music education advocacy efforts. Feel free to send a short video of student choreography, artwork, or even just a photograph of your students working on these lessons. Please find the form for student submission on page #42. Showing growth through the arts is an important advocacy tool. Send us student work after the concert. We will send you a $1 off per ticket coupon for the 2019-2020 Young People’s Concert series.

By bringing your students to an ASO Young People’s Concert, you have shown your commitment to the arts as a vital part of a child’s education. Whatever your role in education, please consider writing to your representative, perhaps combined with a student’s success story, to help advocate for arts education funding. The ASO relies on our partnerships with you to provide great educational programming.

I look forward to seeing all of you for another great year of Young People’s Concerts!

Deanna Sirkot  
Director of Education  
Alabama Symphony Orchestra  
205.314.6936  
dsirkot@alabamasymphony.org
Program

This program integrates the symphony, science, and technology.

Strauss: Also sprach Zarathurstra
Star Wars Instrument Demos
Holst: Selections from The Planets, Op. 32
   IV. Mars
   V. Jupiter
Mozart: Symphony No. 41, mvt. 1, exposition
Mason Bates: Mothership
Debussy: Clair de Lune
Williams: Star Wars Main Title

Concert will be performed without intermission
Mobile phones and other electronic devices must be set to silent/vibrate during the performance.
Christopher Confessore

Christopher Confessore serves as Resident Conductor and Principal SuperPOPS! Conductor of the Alabama Symphony Orchestra and Music Director and Principal Conductor of the Brevard Symphony Orchestra in Melbourne, FL.

In recent seasons, Mr. Confessore’s schedule as a guest conductor has included appearances with the Detroit Symphony Orchestra, Jacksonville Symphony Orchestra, New Mexico Philharmonic, Naples Philharmonic, Sarasota Orchestra and the Orlando Philharmonic Orchestra. He appears annually as a conductor of Walt Disney World’s Candlelight Processional at EPCOT – a production featuring a full orchestra, 300-voice choir and celebrity narrators including Whoopi Goldberg, Neil Patrick Harris and Gary Sinise. Heralded as a sensitive accompanist and inspiring collaborator, Christopher Confessore has accompanied a distinguished list of world-class concert artists, including Itzhak Perlman, Joshua Bell and Lang Lang. As a Pops conductor, he has appeared with a diverse group of superstars, including Grammy Award winners Art Garfunkel, Roberta Flack, Judy Collins, Amy Grant, Marvin Hamlisch, LeAnn Rimes, Indigo Girls, Chris Botti and Charlie Daniels and Tony Award winner Idina Menzel. Music columnist Mary Colurso of The Birmingham News remarked “Anyone who regards the symphony as stuffy and elitist hasn’t been to a SuperPops show when Confessore’s in charge. He exudes nice-guy appeal on stage, along with real warmth, a sense of humor and smarts to spare.”

For a complete concert calendar, visit www.christopherconfessore.com
Meet the Musicians

FIRST VIOLIN
Daniel Szasz
CONCERTMASTER/THE BEVERLY HEAD AND HUGH KAUL CHAIR

Jinsong Gao
ASSOCIATE CONCERTMASTER

Mayumi Masri
ASSISTANT CONCERTMASTER

Yifan Zhou
ASSISTANT CONCERTMASTER

Ai-Yi Bao

Sarah Nordlund Dennis
Viktor Dulguerov
Roger James
Anne Pandolfi
Pei-Ju Wu

SECOND VIOLIN
Yuriko Yasuda
PRINCIPAL

Tara Mueller
ASSISTANT PRINCIPAL

Karl Braaten
David Handler
Levon Margaryan
Serghei Tanas

VIOLA
Zakaria Enikeev
ASSISTANT PRINCIPAL

Lucina Horner
Rene Reder
Meredith Treaster
Kurt Tseng

CELLO
Warren Samples
PRINCIPAL

Andrew Dunn
ASSISTANT PRINCIPAL

Mary Del Gobbo
Peter Garrett
Hellen Weberpal
Xi Yang

BASS
Alexander Horton
PRINCIPAL

Richard Cassarino
ASSISTANT PRINCIPAL

Michael Bradt
Mark Wilson

FLUTE
Lisa Wienhold
PRINCIPAL

Hillary Tidman
ASSISTANT PRINCIPAL

OBOE
James Sullivan
PRINCIPAL

Machiko Ogawa Schlaffer
ASSISTANT PRINCIPAL

CLARINET
Kathleen Costello
PRINCIPAL/THE SYMPHONY VOLUNTEER COUNCIL CHAIR

Brad Whitfield
ASSISTANT PRINCIPAL

BASSOON
Tariq Masri
PRINCIPAL

Alex Zdanis
ASSISTANT PRINCIPAL

HORN
David Pandolfi
PRINCIPAL/THE SYMPHONY VOLUNTEER COUNCIL CHAIR

Kevin Kozak
Jeffrey Solomon
ASSISTANT PRINCIPAL

Nina Adair

TRUMPET
Ryan Beach
PRINCIPAL

Nicholas Ciulla
ASSISTANT PRINCIPAL

TROMBONE
Jay Evans
PRINCIPAL

TUBA
Andrew Miller
PRINCIPAL

TIMPANI
Jay Burnham
PRINCIPAL

PERCUSSION
Mark Libby
PRINCIPAL

Bill Williams

HARP
Judy Sullivan Hicks
PRINCIPAL/THE MRS. R. HUGH DANIEL CHAIR
Lesson 1: Instruments of the Orchestra

Objectives
- Students will identify the instrument families of the orchestra.
- Students will be able to classify instruments by how vibration is created.
- Students will be able to discuss composer’s intent related to musical themes.

Duration
- One 30-40 minute session

Academic Standards
- COS Music: 3.11, 3.16, 3.17, 3.20; 4.11, 4.16, 4.17, 4.20; 5.11, 5.16, 5.17, 5.20; 6.11, 6.16, 6.17, 6.20-#11, 16, 17, 20
- COS Science: 4.6
- COS Technology: 3.16; 4.15; 5.19

Materials Needed
- Internet Access
- Post-it Notes

Lesson 1 Vocabulary
- Brass Instrument- An instrument made of metal such as brass that produces sound when the musician buzzes his or her lips against a cup shaped mouthpiece.
- Percussion Instrument- An instrument made of a variety of materials that produces sound when it is struck or hit.
- String Instrument- An instrument made of wood that produces sound when the musician vibrates the string either by using their bow or plucking the string.
- Woodwind Instrument- An instrument made of wood that produces sound when the musician blows air against a reed or across a hole to vibrate it.
- Theme- A recognizable melody, upon which part or all of a composition is based.
- Composer- A person who creates music compositions.
- Ensemble- a group of musicians performing together.
- Sound- Vibrations that travel through the air and can be heard by a person’s ear.
- Vibration- A rapid motion created by a performer when they buzz, pluck, bow, blow, scrape, or strike an instrument.

Introduction
- Play the following excerpt (0:00-1:15): https://www.youtube.com/watch?v=4rQ5DLm8ZEl. It would be best if the students didn’t see the clip. Ask the students if they recognize the music. Tell the students that the clip is of John Williams and the Boston Pops playing the main theme from Star Wars. Tell the students that they are going to learn about the instruments of the orchestra using the music of Star Wars.

Process/Activities
1. Ask the students if they know what the term song means. Composers, like John Williams, often write music to represent a person, place, or thing. The composer’s intent is for people to hear the theme music and associate it with a specific person, place or thing. John Williams writes music for movies. Many of John Williams’ scores include theme music that is supposed to make us think of T-Rexes, little aliens trying to phone home, and galaxies far, far away.
2. Give each student a post-it note. Ask the students to write one instrument they thought they heard in the clip from Star Wars on their post-it note.
3. Tell the students that instruments belong to families. Families are a way to group instruments by how they are made or the way they produce sound.
4. On a digital board, chalkboard, or poster paper have a chart that looks like this:

<table>
<thead>
<tr>
<th>Brass</th>
<th>Percussion</th>
<th>Strings</th>
<th>Woodwinds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Have the students place their post-it notes under the instrument family heading they thing their selected instrument belongs. Discuss the answer.

5. Ask the students if they know how sounds are created. Discuss with students vibration. Instruments produce sounds when part of the instrument vibrates. Show the first 30 seconds of this video: https://www.youtube.com/watch?v=8YGQmV3NxBM of guitar strings vibrating as they are plucked. Discuss the video with the students. Ask the students if they noticed that each string vibrated in different ways.

6. How the vibration is created determines the type of sound produced. Also, the thickness of strings, length of tubes, and material instruments are made of determines how we will hear the sound. Vibrations on instruments are created in various ways. Instruments are classified into families based on the material they are made of and also how vibration is produced.

7. Discuss with the students the chart below:

<table>
<thead>
<tr>
<th>How the vibration is created.</th>
<th>Brass</th>
<th>Percussion</th>
<th>Strings</th>
<th>Woodwinds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buzzing lips on a cup shaped mouthpiece.</td>
<td>By scraping, striking, or hitting.</td>
<td>Plucking or moving the bow across the strings.</td>
<td>Blowing air across a reed or a hole.</td>
<td></td>
</tr>
<tr>
<td>Materials instrument is made of.</td>
<td>Metal</td>
<td>Various-Metals, Membranes, etc.</td>
<td>Instrument body is made of wood. The strings are made of metal.</td>
<td>Generally, wood.</td>
</tr>
</tbody>
</table>

8. Tell the students they are going to watch videos featuring each of the instrument families playing themes from Star Wars. When John Williams wrote the themes for each piece they will hear, his intent was to portray the characteristics of each character and/or place. After listening to each theme discuss the instrument families again and the characteristics of the Star Wars character and/or place. The chart below is provided for you if you are not familiar with Star Wars.

<table>
<thead>
<tr>
<th>Musical Excerpt</th>
<th>Brass</th>
<th>Percussion</th>
<th>Strings</th>
<th>Woodwinds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperial March-Darth Vader’s Theme</td>
<td>Cantina Band</td>
<td>Princess Leia’s Theme</td>
<td>Rey’s Theme</td>
<td></td>
</tr>
</tbody>
</table>
Brass:
Imperial March – (excerpt 0:00 to 0:40) - BBC Orchestra
https://www.youtube.com/watch?v=p2fhsD9cP-g

Percussion:
Cantina Band – Upper St. Clair Percussion Ensemble
https://www.youtube.com/watch?v=DrtTkSpbDDY

Strings:
Princess Leia’s Theme (excerpt 2:17 – 3:49) – BBC Orchestra
https://www.youtube.com/watch?v=fdlc_Fok4dM

Woodwinds:
Rey’s Theme (excerpt 0:00 – 1:00) – Seattle Orchestra
https://www.youtube.com/watch?v=nIyiRh33k4rg
Rey’s Theme - Woodwind Quintet – Foundry Five Woodwind Quintet
https://www.youtube.com/watch?v=x4p3xMkKKmk

Reflection/Assessment

- After listening to all of the excerpts and discussing the orchestra families revisit the post-it note chart from the beginning of the lesson. Decide if all the post-it notes are in the correct categories. If not, move the note to the correct instrument family. If moving a post-it note, give a specific reason why the note should be moved. After watching the Star Wars music videos, decide which instruments are missing and add to the chart.

Extension Activities

1. Intensity of sound or loudness of sound is measured in decibels (dB). While visiting the Symphony, use a decibel meter app on a phone or tablet to measure the decibels levels produced by the orchestra. Let the app listen for 5-10 seconds and then pause the meter. Use the chart below to record your answers. When you get back to school discuss your findings. Have multiple students complete this activity at differing times during the orchestra's performance. Compare answers. Using Internet resources, investigate safe and dangerous decibel levels.

<table>
<thead>
<tr>
<th>Name of Piece</th>
<th>dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Brass Section-Imperial March</td>
<td></td>
</tr>
<tr>
<td>The Percussion Section- Cantina Band</td>
<td></td>
</tr>
<tr>
<td>The String Section-Leia’s Theme</td>
<td></td>
</tr>
<tr>
<td>The Woodwind Section- Rey’s Theme</td>
<td></td>
</tr>
<tr>
<td>Mars: The Bringer of War</td>
<td></td>
</tr>
<tr>
<td>Jupiter: The Bringer of Jollity</td>
<td></td>
</tr>
<tr>
<td>Mothership</td>
<td></td>
</tr>
</tbody>
</table>

2. There are many videos on YouTube that teach how to make found instruments. Create several found instruments and classify in which orchestra family they would fit best. Hypothesize various ways to change the instrument to produce different sounds (i.e. shorting and lengthening, striking with a different material, creating strings from different materials). Conduct an experiment to test your hypothesis and share your results.
Lesson 2: Mothership & Found Sounds

Objectives
- Students will use technology to sample found sounds.
- Students will work in groups to create found sound compositions using technology.

Materials Needed
- Tablets with recording capabilities
- Apps that can sample (Garageband, Samples, etc).
- Classroom Instruments
- Internet

Duration
- One or Two 30-40 minute sessions

Academic Standards
- AL COS Music: 3.1, 3.5, 3.6; 4.1, 4.5, 4.6; 5.1, 5.3, 5.6; 6.1, 6.3, 6.5
- AL COS Science: 3.3.1, 3.2, 3.3, 3.4; 4.1; 5.6, 5.7; 6.11
- AL COS Technology: 3.13; 4.12, 4.13; 5.13; 6.11, 6.23

Background – To the Teacher

Mothership was composed for the YouTube Symphony Orchestra in 2011. This piece has several unique features such as found sounds and improvised solos. In a conversation I had with Mason Bates, he discussed using sampled sounds in several of his compositions. He has used sounds to musically propel starships, melt glaciers, and recreate the sounds of a North Carolina night. This lesson plan is a launching point for students to sample sounds and create a musical piece based upon their found sounds.

Lesson Vocabulary
- Composer’s Intent- Meaning or feeling of the music planned and conveyed by a composer.
- DJ- A person who plays recorded music on the radio, in a club, or other venue.
- Timbre- The character or quality of a musical sound as distinct from its pitch and intensity.

Introduction
- Ask the students if they think everyday items can be used to create music. Show the students the following video (0:16 – 1:48) of The Everyday Ensemble https://www.youtube.com/watch?v=TPU3NefyktQ. Discuss the video with the students.
- Ask the students if they think the music from the video would be appropriate to hear at a symphony concert? Why or why not? Show the students the following video (0:00 – 1:25) of Mason Bates performing with the YouTube Symphony Orchestra at Carnegie Hall: https://www.youtube.com/watch?v=n4tJKh__fak&list=RDn4tJKh__fak&t=7.
- Does Mason Bates fit the look of a symphony performer? What instrument is Mason Bates performing? Ask the students if they know what is meant by the term DJ. Mason Bates is DJing with the Symphony. He is using sounds in new an unique ways.

Process/Activities
1. Show the students the following video of Mason Bates discussing performing his pieces with the symphony (2:13 – 2:50) https://www.youtube.com/watch?v=LxLVR2XQdC8.
2. The sounds used in Mothership are used to convey intent (momentum of the ship, space, docking, etc.) and also to add different timbres to the orchestra. Play the following excerpt (0:00 – 2:20) of the London Symphony Orchestra performing Mothership: https://www.youtube.com/watch?v=N0K1kJOins4.
3. Ask the students the following guiding questions. How did the electronic sounds add to the overall performance? Did the sounds help you imagine space? How would you describe the various timbres created by the sound pad? How do the sounds change the orchestra's performance?
4. Tell the students that Mason Bates used sampled sounds from NASA satellites, sped-up and slowed down helicopter propellers, and rocket sounds. Ask the students to theorize what other sounds could be sampled to add to the piece. Discuss with the students that Mason Bates didn't have the sounds play randomly, but the sounds fit within the structure of the piece.
5. Pass out the Sampling Composition graphic organizer found on pg. #. Tell the students that they are going to work in groups of 4 to 5 to sample sounds and create a found sound composition. Discuss with students the different timbres of the orchestra instrument families create. Ask the students to find and sample different sounds to create a short musical piece. Ask the students to create a title and find sounds that convey their intent. The students may also use classroom instruments with their found sounds.

6. Using tablets, iPads, phones, etc. have the students capture sounds in the classroom or around the school. There are several free and paid apps that will aid this project. The students will sample sounds to create loops. Discuss with the students the similarities between a loop and an ostinato. Before starting the project, please make sure the students know how to use the technology.

7. Work with the students to create their compositions. The students will need ample time to explore, refine, and present compositions. Discuss with the students their intent and provide feedback throughout the process.

Reflection/Assessment

Host a classroom concert of the students’ compositions. Have the students solicit feedback from peers. The students should discuss how the sounds sampled demonstrate their intent.

Extension Activities

1. Research other classical pieces that have used sounds to portray events and things. Examples include – Symphonie Fantastique, The Pines of Rome, An American in Paris, etc. Have the students examine the techniques composers used before technology to portray intent.

2. Several of the musical elements in Mothership are purposefully written to portray motion. Together research motion, force, and energy. Work in groups to build Lego® race cars that demonstrate various types of motion and force (gravitational, wind, and magnetic). Have the students conduct research experiments comparing and contrasting different forces. Examine the Alabama Course of Study for Science to guide your class experiments.

3. Mason Bates used sounds from NASA for his piece Mothership. Using the following NASA website: https://spaceplace.nasa.gov/x-ponder/en/ to research how satellites communicate to and from Earth. The following website provides sounds of the first satellites launched into space: https://www.youtube.com/watch?v=MjVorX1YVng. NASA has also released a website of spooky space sounds: https://www.nasa.gov/vision/universe/features/halloween_sounds.html. Have the students listen to several of these sounds and theorize the intent of a piece of music composed using the spooky sounds.
Lesson 3 Mothership & Improvisation

Objectives
- Students will compare and contrast two recordings of Mothership.
- Students will improvise solos over the 12 bar blues.

Duration
- One or Two 30-40 minute sessions

Academic Standards
- AL COS Music: 3.1, 3.5, 3.6; 4.1, 4.5, 4.6; 5.1, 5.3, 5.6; 6.1, 6.3, 6.5

Materials Needed
- Internet Access
- Various Melodic Instruments

Background – To the Teacher

Mothership was composed for the YouTube Symphony Orchestra in 2011. This piece has several unique features such as found sounds and improvised solos. In a conversation I had with Mason Bates, he mentioned the use and influence of the Blues in his music. You can clearly hear influence of the Blues during the Eb Clarinet and Violin solos at the beginning of Mothership. This lesson is designed for the students to apply the concept of improvisation heard in Mothership in their classroom. As with any creative endeavor, there are no clear right or wrong answers. Take the time to allow the students to explore and discuss intent about their creative process.

Lesson Vocabulary

- **Improvisation**: Music created and performed spontaneously “in-the-moment”, often within a framework determined by the musical style.
- **Backing Track**: A recorded musical accompaniment, especially for a soloist to play or sing along with.
- **12 Bar Blues**: A musical progression based on the Blues that uses the I, IV, and V chord.
- **Solo**: To perform alone or as the predominant part.

Introduction

- Ask students what it means to create something new. Use the following guiding questions: Have you ever put something together without the instructions? How do we know if someone is creative? How are scientists, engineers, artists, musicians, authors, and doctors creative? How are the scientific process and the creative process similar?
- Show the students the graphic of the Scientific Process vs. Creative Process. Discuss with the students how the two are similar and the two are different. Discuss that all disciplines use creative thinking to solve problems. Tell students that Mason Bates composed Mothership with several creative possibilities and they will be using creative thinking to improvise.

Process/Activities

1. Play the following video excerpt (0:00 – 1:13) of Mason Bates discussing Mothership: https://www.youtube.com/watch?v=LxLVR2XQdC8.
2. Discuss with the students the term soloist. Ask for examples of soloists in the student's personal music.
3. Tell the students that some soloists play music that is written for them ahead of time and some soloists make up their solo on the spot. When music is made up on the spot it is called improvising. Ask the students if they can think of times they have improvised (games, stories, musically, etc.).
4. Play the following video excerpt (0:25 – 2:15) of the Mason Bates and Michael Tilson Thomas discussing the first two improvised solos of Mothership. https://www.youtube.com/watch?v=cvAhGH9fHD0&t=137s
5. Tell the students they are going to listen to two excerpts from * Mothership*. The first clip will have no soloists. The second clip will have soloists. Remind the students to listen for the docking signal. The docking signal sounds like chirps or beeps, when the solo section starts you can hear an airy sound like two ships connecting.

Both clips are of the London Symphony Orchestra.

Clip 1 – No Soloists (2:00 – 3:45) - https://www.youtube.com/watch?v=cRXRVH72ns8
Clip 2 – With Soloists (2:00 – 3:46)  
https://www.youtube.com/watch?v=N0K1kJOins4

6. Discuss differences in the two clips with the students. The first clip was a backing track. A backing track is a musical accompaniment for a soloist to play or sing with. The second track had example solos recorded. * Mothership* was originally created for the YouTube Symphony orchestra and Mason Bates solicited soloists from all over the world to submit video solos.

* The Alabama Symphony will perform * Mothership* with non-improvised solos.

7. Play the following clip (1:13 – 2:13) of Mason Bates discussing improvisation: https://www.youtube.com/watch?v=LxLVR2XQdC8.

8. Discuss with the students what Mason Bates meant by providing a framework (harmonic progression, rhythm, etc.). Tell the students that they will get a chance to be improvisers. They are going to use a 12 bar blues progression to improvise solos. The students can improvise on any melodic instrument in the classroom (xylophone, ukulele, recorder, etc.).

9. Show the students the visual with the notes for * Mothership* Blues found on pg. 28. Discuss with the students that solos do not have to be overly complicated. Suggest that the students start with one note and then add another.

10. Use the following backing track to play solos: https://www.youtube.com/watch?v=Dp4ENdloztI. The backing track is in D. We have also provided a visual for the 12 bar blues in D with ukulele chords if you would prefer your students to perform the harmonic progression with the backing track. We have also provided a scale diagram visual for ukulele.

**Reflection/Assessment**

- Have several students perform their improvised solos. Ask for peer and self-feedback. Discuss with the students the concept of intent and how they portrayed intent through their performance.

**Extension Activities**

1. Compare the solos performed by members of the London Symphony orchestra’s version of *Mothership* (2:00 – 3:46) https://www.youtube.com/watch?v=N0K1kJOins4 with the solos in the YouTube Symphony’s version of *Mothership* (3:51 – 5:31) https://www.youtube.com/watch?v=PFh7LAFe14w. Use musical vocabulary to compare and contrast.

2. Have the students work in groups using Dash Coding robots with the xylophone attachment to code melodies for the D Blues progression. Have a class concert showcasing the robots’ melodies.


4. As a class write a letter or e-mail to someone in a STEM field and someone in an Artistic field. Ask questions about how they use the creative process in their work. Compare and contrast the answers.

5. Have students participate in a drum circle. One of the drum parts should be the framework and the students improvise with other percussion instruments.
Lesson 4: The Planets, Op. 32 Introductory Lesson Plan
*Mars: The Bringer of War & Jupiter: The Bringer of Jollity*
Gustav Holst (1874-1934)

**Objectives**
- Students will research, compare, and contrast three planets in our solar system.
- Students will explore how composers manipulate the elements of music to write pieces of music to represent ideas, people, and places.

**Duration**
- One 30-40 minute sessions

**Academic Standards**
- AL COS Music: 3.16, 3.17, 3.18; 4.16, 4.17, 4.18; 5.16, 5.17, 5.18; 6.15, 6.16, 6.17; 6.18
- AL COS Science: 5.16, 5.17; 6.1, 6.2
- AL COS Technology: 3.16; 4.15; 5.19

**Materials Needed**
- Internet
- Holst and The Planets readings
- The Planets: Comparing and Contrasting 3-2-1 Graphic Organizer

**To the Teacher**

Gustav Holst was interested in how the stars and planets influenced human's thinking and interactions. Holst's interest in space led him to compose the orchestral suite, The Planets, from 1914 –1919. Each movement of The Planets is named for an individual planet in our solar system with the exclusion of Earth. Originally, the planets of our solar system were named for Greek and Roman characters in mythology.

There are natural learning connections that can be made to English Language Arts and World History when studying The Planets. The Alabama Course of Study for Language Arts discusses studying myths, legends, and folk tales and their literary meaning at various grade levels. All cultures have created stories to explain the world around them. Whether the stories are about Roman mythology or Kathryn Tucker Windhams's Jeffrey and the 13 Alabama Ghosts, the stories are meant to entertain and fuel our imaginations. While there is a natural connection between The Planets and myths, please use your professional judgment as to how much time you devote to non-musical study. The primary focus of this lesson should be learning how Holst's understanding of the physical and legendary characteristics of individual planets informed the writing of The Planets.

**Lesson Vocabulary**
- **Orchestral Suite** – A multi movement piece of music for orchestra.
- **Movement** – An independent musical composition that is part of a larger work.
- **Composer** – A person who creates musical compositions.
- **Elements of Music** – Melody, harmony, rhythm, form and the expressive elements of dynamics, tempo, and timbre (tone color)

**Introduction**
- Ask the students if they have ever wanted to visit space. Do they know anyone who has ever visited space? Do they think anyone besides astronauts will ever visit space? How have composers, authors, artists, and movie directors made movies about space if they have never been to space? Tell the students that today they are going to learn about Gustav Holst. Holst never visited space, but he wrote an orchestral suite called The Planets.
Process/Activities

1. Read aloud or silently the article on Gustav Holst. As you and the students read, complete the new terms section of the 3–2–1 graphic organizer. Answer any questions the students have about the reading.
2. Read aloud or silently the article on The Planets. As you and the students read, complete the new terms section of the reading 3–2–1 graphic organizer. Answer any questions the students have about the reading.
3. Remind the students that Holst wrote The Planets before humans were able to visit space. The first telescope was invented in 1608. The first rocket to carry a human into space was in 1961. Before there were inventions to visit or see into space, authors, composers, and artists had to rely on myths, legends, and their imaginations to create stories, music, and art about space.
4. Tell the students they are going to work in groups to complete “The Planets: Comparing and Contrasting” graphic organizer. The students will research Earth, Mars, and Jupiter using a NASA website (http://spaceplace.nasa.gov). Give the students 10–15 minutes to complete the task. Also, as the students research the planets continue to add unfamiliar terms to their 3–2–1 graphic organizer.
5. At the conclusion of the allotted work time, have the students share what they learned about the planets.
6. Discuss with the students that they are going to listen to excerpts from The Planets. Remember, Holst only had what he knew about legends and myths to inform his compositions about the individual planets. He used his knowledge to manipulate the elements of music (melody, harmony, rhythm, form and the expressive elements of dynamics, tempo, and timbre) to create each individual movement. The students will listen to two excerpts from The Planets: Mars: The Bringer of War and Jupiter: The Bringer of Jollity. War is a term most of the students will probably be able to identify. Jollity, on the other hand, may need some explanation. In this meaning, it is referring the primary character of ancient Roman mythology and is meant to be cheerful, gleeful, and full of energy.
7. Listen to the first excerpt (4:04 – 6:45) - Mars: The Bringer of War
   BBC Orchestra - https://www.youtube.com/watch?v=cXOanvv4piU
8. Ask the students if they heard examples of war in the excerpt? Ask the students if anything they learned from their research of the planet Mars made them think of war?
   Chicago Symphony Orchestra - https://www.youtube.com/watch?v=MhHwr1lrErrY
10. Ask the students if they heard examples of jollity in the excerpt? Ask the students if anything they learned from their research of the planet Jupiter made them think of jollity?
11. Compare and contrast the two excerpts using appropriate musical terminology.

Reflection/Assessment

• Have the students complete the remainder of the 3–2–1 graphic organizer. Ask for volunteers to share what more they want to learn about the planets (musical or actual). Ask for volunteers to share one thing they found most interesting from their research.

Extension Activities

1. NASA has been an important part of Alabama since 1958. Use the following website: http://www.encyclopediaofalabama.org/article/s–137 to research NASA in Alabama. The students can work in groups to create a PowerPoint presentation about important facets of Alabama’s space program.
2. In 1977 NASA launched the Voyager 1 & 2 spacecraft to collect information about our solar system to send back to Earth. Included on the spacecraft was a Golden Disc of Humanity. This disc included information and artifacts about humans. To learn more about Voyager 1 & 2 and the Golden Disc visit this website: https://voyager.jpl.nasa.gov.
3. Collaborate with other teachers to plan a cross-curricular project to create a new Golden Disc of Humanity. Decide what new discoveries in all subject areas and the arts should be included. Students can showcase their projects using posters or create an online exhibit.
Lesson 5: The Bringer of War
Gustav Holst (1874-1934)

Objectives
- Students will perform a rhythmic ostinato in 3/4 meter.
- Students will examine how composers portray ideas through music.
- Students will compare and contrast the meter two pieces of music.

Materials Needed
- Internet
- Rhythm Sticks
- 5 vs. 4 Tapping Chart
- Ostinato Rhythm Graphic
- Mars and Vader T-Chart
- *Mars and Imperial March* Venn Diagram

Duration
- One or two 30-40 minute sessions

Academic Standards
- ALCOS Music: 3.7, 3.9, 3.11, 3.16, 4.9, 4.10, 4.16; 5.9, 5.10, 5.11, 5.16; 5.17; 6.8, 6.16, 6.18
- ALCOS Science: 5.16; 6.1, 6.3
- ALCOS Technology: 3.16; 4.15; 5.19
- Language Arts: 3.2; 4.4, 4.8

To the Teacher
- All excerpts from Mars: The Bringer of War for this lesson are from a performance by the BBC Symphony Orchestra. You can find the performance here: https://www.youtube.com/watch?v=cXOanvv4plU&start_radio=1&list=RDcXOanvv4plU.
- All excerpts from Imperial March for this lesson are from a performance by the BBC Symphony Orchestra. You can find the performance here: https://www.youtube.com/watch?v=p2fhsD9cPg&start_radio=1&list=RDp2fhsD9cP-g.

Lesson Vocabulary
- Col Lengo – *Italian term meaning to hit the wood. String players use the wood of the bow to strike the strings.*
- Composer – *A person who creates musical compositions.*
- Elements of Music – *Melody, harmony, rhythm, form and the expressive elements of dynamics, tempo, and timbre (tone color).*
- Meter – *Grouping of beats and divisions of beats in music, often in sets of twos (duple meter) or threes (triple meter).*
- Ostinato – *a repeated musical phrase or rhythm.*

Introduction
- Play the following clip (3:32 – 4:12) for the students - https://www.youtube.com/watch?v=Xs0K4ApW14g
  Explain to the students that this breaking news bulletin is from the radio broadcast of "War of the Worlds" from 1938. This broadcast caused mass hysteria and fueled age-old fears of what could be living on Mars.
- Show the students the following picture: https://en.wikipedia.org/wiki/Mars_in_culture#/media/File:War-of-the-worlds-tripod.jpg
  Ask the students questions about the picture. Tell the students this is a depiction of the Martians from War of Worlds. For centuries, people thought there could be life on Mars. People imagined that any life on Mars was hostile. Ancient mythology and astrology confirmed the ideas of a hostile Mars.
- Show the students this picture of Mars’ landscape: https://mars.nasa.gov/resources/8844/panorama-above-perseverance-valley-on-mars/. Ask the student to hypothesis what it would be like to live here.
1. Have the students stand and move to a rhythm played on a hand drum or other small percussion instrument. Alternate playing the following rhythmic patterns:

\[ \frac{4}{4} \quad \frac{4}{4} \quad \frac{4}{4} \quad \frac{4}{4} \quad \frac{4}{4} \quad \frac{4}{4} \]

Play the accented notes on the head of the drum and the unaccented notes on the rim of the drum. Play the rhythm patterns independently, pause, and then work to alternate between the two patterns without a break.

2. Ask the students if they had difficulty moving to either one of the rhythm patterns.
Tell the students that the beat can be grouped into regular sets. This grouping is called meter. Meter is often grouped into twos and threes, but sometimes it can be a combination of three and two. Mars: The Bringer of War from The Planets is grouped in five (3+2). Demonstrate the two rhythm patterns again. Have the students count with each one.

3. Pass out the 5 vs. 4 tapping chart found on pg. #. Also, project the tapping chart for the students to see. Tell the students that they are going to listen to two pieces of music that are meant to portray similar ideas. The first has a meter grouped in five and the second has a meter grouped in twos. Discuss the graphic on the tapping sheet. The Mars graphics are grouped in fives and The Imperial March graphics are grouped in four. Demonstrate for the students how to count and tap using the chart.

4. Play the following clip from Mars: The Bringer of War (4:08 – at least to 5:10). Have the student tap the charts as they silently count to five.

5. Play the following clip of The Imperial March (at least the first minute). Have the student tap the charts as they silently count to four.

6. Discuss the student's ability to keep the beat during each of the excerpts. Ask the students why they think the grouping of four is easier for them to keep the beat.

7. Tell the students that Holst wrote a rhythmic part that is present throughout the piece. The rhythmic pattern helps to drive the piece. When a rhythmic pattern or musical phrase is continually repeated it is called an ostinato.

8. Show the students the tapping chart for Mars with speech. We have provided four versions of this tapping chart for you to chose from based on your instructional preference (Rhythm only, Speech and Rhythm, Takadimi Counting and Rhythm, and All). Teach the Mars rhythm through speech (Traveling through the sky of red.). Have the students practice tapping their chart while saying the rhythm. Be sure to make the connection that the rhythmic pattern is an ostinato.

9. Another way Holst made the music sound more militaristic was by having the strings at the beginning of Mars play Col Legno. Col Legno means to strike the strings with the wood of the bow. Tell the students they will demonstrate this technique with rhythmic sticks. Using the Mars Tapping Charts, have the students speak the rhythm and play with rhythm sticks.

10. Once the students are able to play the ostinato with the rhythm sticks try it with the recording of Mars. Play the excerpt from 4:04 – 4:53. The snare drum clearly plays the ostinato part.

11. Tell the students that composers often write music to sound like a person, place, or even idea. Holst used the five-meter in Mars to sound like war and make the listener feel uneasy. The composer of The Imperial March, John Williams, wrote his music to make you think of Darth Vader. Composers manipulate the Elements of Music to create music to sound certain ways. Discuss the ways the elements of music were manipulated in the two pieces.

12. Show the students the Mars vs. Darth Vader Character T-Chart. Discuss, compare, and contrast the characteristics of each person with the students. Ask the students if there should be any characteristics added to the list. Refer to the two excerpts and ask the students how the composers manipulated the elements music to portray the characteristics listed.
Reflection/Assessment

Listen to both Mars and The Imperial March again. As a class, complete the Venn diagram provided to compare and contrast the two pieces. Make sure the students use appropriate musical vocabulary when comparing and contrasting. Also, continue to make a connection between the composer’s intent and the portrayal of specific people/characters in each piece.

Extension Activities

1. Have the students examine other pieces of music written in 5/4 time and compare to Mars: The Bringer of War. Some examples included Take Five (https://www.youtube.com/watch?v=PHdU5sHigYQ) by Dave Brubeck and The Mission Impossible Theme 0:00 – 0:52 (https://www.youtube.com/watch?v=7alss3sDJdg). Discuss the grouping of the beats and how the instrumentation changes the composer’s intent.

2. NASA has created a series of lesson plans to conduct experiments and compare and contrast Mars and Earth. Visit this NASA website to learn more: https://www.nasa.gov/pdf/145913main_Mars.and.Earth.Guide.pdf.

3. Discuss with students evidence of ancient Roman Culture in the present day. Alabama is famous for the statue of Vulcan that sits atop Red Mountain in Birmingham. Vulcan was the ancient Roman god of fire and metalworking. Have the students research the Roman mythology of Vulcan using student friendly websites (https://kids.kiddle.co/List_of_Roman_gods_and_goddesses and http://rome.mrdonn)
Lesson 6: Jupiter: Bringer of Jollity
Gustav Holst (1874-1934)

Objectives
- The students will identify the use of syncopation in a musical example.
- The students will discuss the composer’s intent and use of the Elements of Music in Jupiter.
- The students will create movement pieces in groups to demonstrate duple and triple meter.

Duration
- One or two 30-40 minute sessions

Academic Standards
- ALCOS Music: 3.7, 3.9, 3.11, 3.16, 4.9, 4.10, 4.16; 5.9, 5.10, 5.11, 5.16; 5.17; 6.8, 6.16, 6.18
- ALCOS Science: 5.16; 6.1, 6.3
- ALCOS Technology: 3.16; 4.15; 5.19
- ALCOS Language Arts: 4.5, 5.2, 6.7

Materials Needed
- Internet
- Movement Props (Scarfs, ribbons, etc.)
- Hand Drum
- Definition Thought Cloud
- Theme 1 Graphic
- Duple vs. Triple Tapping Chart
- Hymn from Jupiter

To the Teacher
- All excerpts from Jupiter: The Bringer of Jollity for this lesson are from a performance by the Chicago Symphony Orchestra. You can find the performance here: https://www.youtube.com/watch?v=MhHwr1tLrrY.

Lesson Vocabulary
- Elements of Music – Melody, harmony, rhythm, form and the expressive elements of dynamics, tempo, and timbre (tone color).
- Meter – Grouping of beats and divisions of beats in music, often in sets of twos (duple meter) or threes (triple meter).
- Syncopation - The placement of rhythmic accents on weak beats or weak portions of the beat.

Introduction
- Show the students the definition thought cloud graphic organizer for the word Jollity. Discuss the term Jollity. Ask the students to think of ways to show being jolly or cheerful. Write the students' answers on the thought cloud.
- Show the students the following picture of Jupiter: https://www.jpl.nasa.gov/spaceimages/details.php?id=pia02873
Tell the students that the atmosphere of Jupiter is made of hydrogen and helium gas with brown, yellow, red, and white clouds. Discuss how the physical characteristics of Jupiter might have influenced the idea of jollity.

Process/Activities
1. Ask the students how a composer might portray jollity in music. Remind the students that composers manipulate the elements of music to portray people, places, and things in their music. Holst used several of the elements of music to portray jollity.
2. Show the students the Jupiter Theme 1 Graphic. Play the theme for the students.

Discuss syncopation with the students. Syncopation is what gives the theme its jumpy or peppy feel. Tell the students that syncopation is passed throughout the orchestra. Discuss the instrument graphics. The first time they hear the theme it is played by the horns, violas, and cellos. The second time they hear the theme it is played by the low brass, and low woodwinds.

3. Play the recording of theme 1 (0:00 – :30).

4. Discuss with the students that in addition to the use of syncopation, Holst also used various timbres to portray jollity. For example, theme one is played first by higher voices and then by the low voices of the orchestra. Theme one is also passed around the orchestra throughout the piece. Play a longer example from the recording and have the students find the theme or examples syncopation.

5. Play the following excerpt (1:48 – 1:56 & 6:35 – 6:50).

Have the students compare and contrast the two excerpts. The first excerpt has no metal sounds whereas the second has metals sounds (bells and tambourine). Have the students discuss how the metals sounds change the overall effect.

6. Holst used metallic sounds to give a shimmering effect to portray jollity. Ask the students about metallic sounds in classroom instruments. Compare the metal sounds (triangle, metallophones, glockenspiels, etc.) to other non-metal classroom instruments (xylophone, hand drums, etc.). Discuss that often composers want to portray tone colors as bright or dark. Have the students discuss how bright sounds are more appropriate for jollity.

7. Review the term meter with the students. Discuss with the students experiences they have had in the past with meter. Tell the students that the piece Jupiter shifts between two different meters. Holst shifted between the two meters to give a feeling of dancing and jollity.

8. Play the duple example (1:07 – 1:30).


10. Pass out the duple versus triple meter tapping page found on pg. #. Play the examples again, but this time have the students tap the pointing pages as they listen. The students may need to practice counting and tapping before listening. The students may also need to count silently as they tap.

11. Have the students move to the two different meters. Either use a hand drum or body percussion to demonstrate the two meters. When using the hand drum, play the strong beats on the head of the hand drum and the weak beats on the rim of the hand drum. When the students are performing body percussion, in duple have the students pat on the strong beats and clap on the weak beats and in triple have the students pat on the strong beats, clap on weak beat two, and snap on weak beat three. Have the students experience moving without the musical examples and then have them demonstrate the two meters while listening to the musical examples.
12. Discuss with the students strong versus weak beats. Ask the students which were the strong beats in each example. Discuss with the students that in triple meter you can count or conduct in one instead of or addition to counting in three. Play the triple meter example on the hand drum again and this time have the students step or pat only on beat one. Play the musical example for the students and have them move only on one.

13. Refer to the definition thought cloud graphic organizer from the beginning of the class. Discuss with the students that Holst purposely shifted between duple and triple meters in Jupiter to give the idea of dancing. One way to show Jollity is through dancing.

14. Divide the students into groups. Tell the students that they are going to create movement pieces for the duple and triple sections of Jupiter. One group will create a movement piece in duple and the other group will create a movement piece in triple. Brainstorm with the students how their movement pieces could incorporate elements of Jupiter from what they learned during an earlier class meeting (gaseous, size, distance from the sun, etc.).

**Reflection/Assessment**

Students will perform movement pieces that reflect duple or triple meter. Ask each group questions about their creative intent (why did you choose to..., how do you think your movement demonstrated..., etc.). Offer peer and teacher feedback to each group. During another class period, have the students incorporate peer feedback, perform their movement pieces again, and evaluate their performances.

**Extension Activities**

1. The NASA Jet Population Laboratory and Bill Nye have created eight short videos about the planet Jupiter. Explore these videos with your students. You can view the videos here: [https://www.youtube.com/playlist?list=PLTv...](https://www.youtube.com/playlist?list=PLTv...).

2. The atmosphere of Jupiter has amazed scientists since Galileo first observed the planet in 1609. Using milk, food coloring, and dish soap we can simulate the swirling effect of Jupiter’s atmosphere. Using this video [https://www.youtube.com/watch?v=kAQamrSy0Nw](https://www.youtube.com/watch?v=kAQamrSy0Nw) watch a demonstration of swirling colors. Have the student hypothesize how the same effect is created on Jupiter. Research Jupiter’s atmosphere to confirm or deny the student’s hypothesis.

3. In the middle of Jupiter (3:06 – 4:51), Holst composed a hymn like lyrical section. After the piece premiered, Holst added words from poem by Cecil Spring Rice, The Two Fatherlands to create a new hymn. The marriage of the tune and the lyrics became known as the English patriotic hymn, I Vow To Thee My Country. The hymn has been used at state funerals, weddings, and other official English ceremonies. A lyric and melody page has been provided for I Vow To Thee My Country. A performance of the hymn at a Remembrance Day celebration can be viewed here: [https://www.youtube.com/watch?v= bvouc8Qs_Ml&list=RBvouc8Qs_Ml&start_radio=1](https://www.youtube.com/watch?v= bvouc8Qs_Ml&list=RBvouc8Qs_Ml&start_radio=1). Research and learn Alabama by Julia Tutwiler. A performance track of Alabama is available here: [https://www.youtube.com/watch?v=tn5zHyn3Ujs](https://www.youtube.com/watch?v=tn5zHyn3Ujs). Have the students compare and contrast the two songs and their uses. If time permits, have the students write new lyrics to either tune about their hometown.
Vibration Station

All musical instruments use vibration to make sound, but different instruments vibrate in different ways. You can use everyday objects to discover how each family of the orchestra makes its unique sound.

String instruments, like the violin, make sound when their strings vibrate.

You try it:
Take the top off of an empty shoebox and place several different sized rubber bands around it. Pluck the rubber bands, watch them vibrate and listen to the sound they make. Which rubber bands vibrate faster? Which ones vibrate slower? Do some rubber bands sound higher or lower than others?

Woodwind instruments, like the flute and clarinet, make sound when air vibrates through them.

You try it:
Blow across the top of an empty water or soda bottle and listen to the sound that the vibrating air creates. Try filling the bottle with different amounts of water. Does more water in the bottle make the sound higher or lower? Also, try blowing across different sized bottles. Do small bottles sound different than large bottles? Fill several bottles with different amounts of water, and you can even play a song!

Brass instruments, like the trumpet, make sound when you vibrate your lips together and put them up to the mouthpiece.

You try it:
Purse your lips together like you are going to whistle. Now “buzz” your lips so that they vibrate. What does it feel like? Can you make the sound go higher or lower? Can you “buzz” a tune? Try buzzing into a paper towel tube. What happens to the sound?

Percussion instruments, like drums, cymbals, and maracas, make sound when you hit them or shake them, causing the instrument itself to vibrate.

You try it:
Play several different percussion in your music classroom or find things at home that you can hit or shake. What is each instrument made of? What does each material look like and sound like when it vibrates? Hit something metal, then grab it with your hand: why does the sound stop?

Did you know that your voice is a musical instrument too? It makes sound when air passes through your vocal cords and makes them vibrate.

You try it:
Put your fingertips on your throat and make a sound with your voice. Can you feel the vibrations? How many different sounds can you make? How do the vibrations change? Can you make them go faster or slower?
You can see shapes, lines, and patterns in the orchestra just by watching the conductor. Depending on the meter of a piece of music, the conductor uses special patterns to show the orchestra where the beats are.

When a piece of music is in groups of two beats, or duple meter, the conductor beats “in 2.” Start with your hand near the middle of your body. Move your hand straight down for Beat 1, then straight up for Beat 2.

What kind of shape or lines does this look like?

Conduct along in 2:
BEETHOVEN - Symphony No. 7 - Leonard Bernstein
https://www.youtube.com/watch?v=J12zprD7V1k

Do you know any songs that you can conduct in 2?

When a piece of music is in groups of three beats, or triple meter, the conductor beats “in 3.” Start by moving your hand down for Beat 1 like before. This time, move your hand up and to the right for Beat 2, then up and back to center for Beat 3.

What kind of shape or lines does this look like?

Conduct along in 3:
La Peri: Fanfare — Dukas
https://www.youtube.com/watch?v=ouK3viJ7E4o

Do you know any songs that you can conduct in 3?

Sometimes a piece of music with duple meter has longer phrases, so it works better for the conductor to beat “in 4” instead of “in 2.” To conduct in 4, move your hand down for Beat 1, up and to the left for Beat 2, straight across to the right for Beat 3, and up and back to center for Beat 4.

What kind of shape or lines does this look like?

Conduct along in 4:
Mozart, Eine Kleine Nachtmusik
https://www.youtube.com/watch?v=tSL5-wxgvFY

Listen to the “William Tell Overture”. Would you conduct it in 2 or 4? Try Both!
https://www.youtube.com/watch?v=xoHECVnQC7A
Sampling Composition
Graphic Organizer

Composition Title:

____________________________________

Group Name:

________________________________________________

Sound 1

Sound 2

Sound 3

Sound 4

Sound 5
Mothership Blues

D7  D7  D7  D7
   /   /   /   /

G7  G7  D7  D7
   /   /   /   /

A7  G7  D7  D7
   /   /   /   /
Notes for Mothership Blues
Ukulele Scale

Ukulele Scale
Reversed
Gustav Holst was an English *composer* and music teacher. He was born to a musical family and began composing and playing the piano at an early age. However, he was a sick child. He had asthma, poor eyesight, and pain in his hands. Holst decided to take up playing the trombone to strengthen his lungs. He also figured that moving the trombone slide wouldn’t hurt his hands as much as when he played piano.

Holst attended the Royal Conservatory of Music in London. After graduating from the Royal Conservatory, he made his living playing the trombone in several orchestras. In 1907, he was hired to be the director of music at Morley College. He continued teaching the rest of his life.

Holst is most famous for rediscovering various types of English music. Holst worked with fellow English composer Ralph Vaughan Williams to teach English vocal, instrumental, folk, and church music to spread throughout the world. He wrote new music too - over 200 pieces including *The Planets*.

Gustav Holst died May 25, 1934 in London. Even though Holst has been dead for a long time, his music is still performed by choirs and orchestras throughout the world.
The Planets, Op. 32
1914 - 1916

Gustav Holst was interested in space and stories about space. Holst’s interest in space inspired him to compose an **orchestral suite** called *The Planets* between 1914 & 1916. An *orchestral suite* is a large musical piece made up of several smaller **movements**. *The Planets* have seven movements (Mars, Venus, Mercury, Jupiter, Saturn, Uranus, Neptune) each representing the characteristics and emotions of the planets from stories and legends. There is no movement for our home planet of Earth.

Humans have created stories to explain the world for centuries. In our own American culture we have stories, myths, and legends that have been used to describe daily life and history. Composers have used folk tales, legends, and myths for inspiration to write music.

Do you know how the planets got their names? The planets in our solar system were named for the Roman characters in ancient **mythology**. Roman mythology is a collection of stories that ancient Romans used to explain their world. Each of the characters in Roman mythology had characteristics and personalities that were believed to influence human beings.

Humans have created stories, art, and music to explain their world. We also create to explain places we have dreamed of visiting. Looking into the night sky, we have dreamed of what might be in the stars. TV shows like Star Trek, movies like Star Wars, and music like *The Planets* are all different ways we have tried to explain visiting space. As you learn about the real planets Mars and Jupiter, see how close Gustav Holst got to capturing their spirit.

*Mars: The Bringer of War*  

*Jupiter: The Bringer of Jollity*
As you read, list key terms in this box:

3 Facts you learned.

2 Questions you still have.

1 Thing you thought was the most interesting.
Mars: The Bringer of War - Gustav Holst
5 vs. 4 Tapping Chart

Imperial March - John Williams

Mars: The Bringer of War - Gustav Holst
Ostinato Rhythm
Mars: The Bringer of War - Gustav Holst
Ostinato Rhythm with Speech

Traveling through the sky of red.

Mars: The Bringer of War - Gustav Holst
Ostinato Rhythm with Takidimi Counting

ta-ki-da ta ta ta-di ta
Mars: The Bringer of War - Gustav Holst
Ostinato Rhythm with Speech and Takadimi Counting

Traveling through the sky of red.

ta - ki - da ta ta ta - di ta

<table>
<thead>
<tr>
<th>Mars</th>
<th>Vader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roman god of War</td>
<td>Dark Lord of the Sith</td>
</tr>
<tr>
<td>Son of Jupiter</td>
<td>Evil</td>
</tr>
<tr>
<td>Loved Conflict &amp; Violence</td>
<td>Cold</td>
</tr>
<tr>
<td>Protected Soldiers in Battle</td>
<td>Fought with a Light Saber</td>
</tr>
<tr>
<td>Rode a chariot pulled by fire breathing horses</td>
<td>Intelligent</td>
</tr>
<tr>
<td>Symbolized by a flame and eagle</td>
<td>Good Pilot</td>
</tr>
<tr>
<td>Feared - Not Well Liked</td>
<td>Wounded</td>
</tr>
<tr>
<td></td>
<td>Tragic</td>
</tr>
</tbody>
</table>
Imperial March

Mars: The Bringer of War
Jupiter: The Bringer of Jollity - Gustav Holst
Definition Thought Cloud

Jollity
lively and cheerful activity or celebration.
Jupiter
Theme 1

Group 1
Horns, Violas, Cellos

Group 2
Bass Clarinet, Bassoons, Trombone, Euphonium, and Tuba

These rhythmic patterns are passed around
Jupiter: The Bringer of Jollity - Gustav Holst
Duple vs. Triple Tapping Page
Hymn from
Jupiter: The Bringer of Jollity

A \textit{hymn} is a song that is sung to praise.
A \textit{patriotic hymn} is a song that is sung to praise your country.

\textit{I vow to thee my Country}

music by Gustav Holst
words by Cecil Spring-Rice

\begin{quote}
I vow to thee my country all earthly things above,
Entire and whole and perfect, the service of my love;
The love that asks no question, the love that stands the test,
That lays upon the altar the dearest and the best;
The love that never falters, the love that pays the price,
The love that makes undaunted the final sacrifice.
\end{quote}
Submit Student Work from these Lessons to the ASO!
We’d love to see what your students have created!
to accompany all lessons

Instructions: Complete the information below, enclose student work, and mail to:

Education Department
Alabama Symphony Orchestra
3621 6th Avenue South
Birmingham, AL, 35222

School, Group, or Family name:__________________________________________
Address:__________________________________________________________________
Contact name:___________________________________________________________
Contact email:___________________________________________________________
Phone:___________________________________________________________________

Any Comments?
We Want to Hear from You!

Now that you've seen an ASO Concert, write us a letter and tell us about your experience. You can write your own letter or use this sheet as a guide. Send your letters to:

Alabama Symphony Orchestra
Attn: Education
3621 Sixth Avenue South
Birmingham, AL 35222

Date__________________

Dear Alabama Symphony Orchestra,

I just came to see a Young People's Concert called ________________________________.

One thing I liked about the concert was ____________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

My favorite piece of music you played was ________________________________________

______________________________________________________________________________

______________________________________________________________________________

Something new that I learned was ________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

If I could play an instrument in the orchestra, I would play the ________________________.

Sincerely,

Name __________________________________________

Address _______________________________________

___________________________________________
Glossary

Adagio- Slowly
Allegro- At a fast pace
Andante- At a walking pace
Ballad- A poem or song that recurs at intervals, usually following each verse
Brass Instrument- An instrument made out of metal such as brass that produces sound when the musician buzzes their lips against a cup shaped mouth piece
Chorus- A part of a song that recurs at intervals, usually following each verse
Concert Master- the lead first violin player in an orchestra who is responsible for beginning the tuning process
Conductor- A person who directs the performance of an orchestra
Duple Meter- A time signature with two beats per measure. Strong-week
Dynamic- How loud or soft the music is
Fermata- A musical symbol that means to play the note a little longer
Finale- The final part of the music
Folk Song- Music that is passed down orally. Traditional songs that reflect a place, time period, or group of people
Form- The structure of music
Forte- Loud or strong
Fortissimo- Very loud
Homophony- When all of the instruments play different notes, but change notes at the same time
House lights- The lights that shine onto the audience
Melody- The notes that make up a tune or theme
Melody and accompaniment- When one instrument has the melody and the others support the melody by playing background music
Mezzo forte- slightly loud
Opera- A dramatic work that tells a story through singing and orchestra
Orchestration- The act of assigning music to instruments of the orchestra and selecting which instruments play specific parts
Overture- Music that introduces an opera. It often contains music that is heard later in the opera
Patron- another word for audience member or someone who has purchased a ticket to an event
Percussion instrument- An instrument made out of a variety of materials that produces sound when it is struck or hit.
Pianissimo- Very soft
Piano- Soft or gentle
Polyphony- When the instruments play different notes and change notes at different times
Primary Source- A first hand account of historical events
Principal Musician- The first chair player of each instrument section
Section- A group of musicians who play the same instrument
Solo- When one instrument plays by itself
Stage lights- The lights that shine onto the performers on stage
Stage Manager- the person who is responsible for setting up the chairs of the orchestra and directing when the lights turn on and off
Stage technician- The person off stage who assists the stage manager and turns the lights on and off
String instrument- An instrument made out of wood that produces sound when the musician vibrates the string either by using their bow or plucking the string.
Tempo- How fast or slow the music is