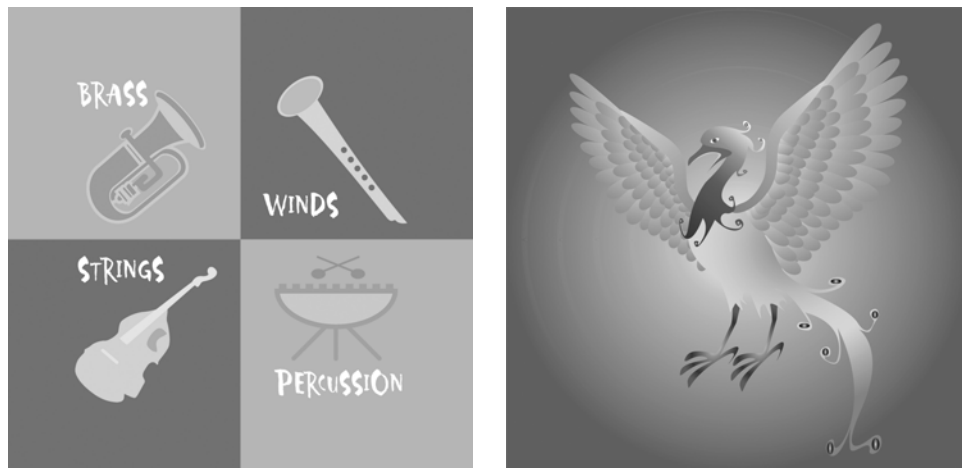


CONCERTS FOR YOUNG PEOPLE 2009–10 SEASON

INTRODUCTORY LESSON PLANS



A series of lesson plans designed to acquaint your students with the symphony orchestra setting.

ORCHESTRA SEATING

Sarah Munch
Hillsborough High School
Hillsborough, New Jersey

Music Selection: None Composer: N/A Grades: K-2 NJCCCS: 1.3.2.B (1), 1.4.2.A (2), 3.3.2.C (1) Introductory Lesson	
<i>Essential Question(s):</i> How would the sound of an orchestra change if the instruments were rearranged?	
<i>Students will know that:</i> <ul style="list-style-type: none">• Instruments are grouped in families• The strings are located in the front of the orchestra• The woodwinds are located in the center of the orchestra• The brass instruments are located in the back of the orchestra• The percussion is in the back of the orchestra• The string section plays a prominent role in orchestral music• The dynamic quality of each instrument section influences the seating arrangement	<i>Students will be able to:</i> <ul style="list-style-type: none">• Diagram an orchestra• Write justifications for placing instruments
<i>Procedure:</i> <ol style="list-style-type: none">1. Hand out a set of instrument family cards.2. Ask the students to arrange the instrument families any way they choose, facing them as if they were the conductor.3. Have the students fill out a worksheet (attached) filling in the blanks “I placed the <u>(section name)</u> in the <u>(front, left, right, center, back)</u> of the orchestra because <u>(reason).</u>”4. Provide facts about the timbre of certain instruments (“Percussion instruments produce a loud sound”) and ask the students to rearrange the instruments according to their new knowledge of them. <p><i>*Note: Another strategy could be to invite older instrumental students to demonstrate each instrument family, and younger students could determine which is softer / louder.</i></p>	

Follow-up / Extension activity:

After the concert, hand out the figurines one more time and ask students to recall the seating arrangement of the New Jersey Symphony Orchestra. After a few minutes, discuss what the students recall, and draw a diagram of the orchestra up on the board.

Assessment Evidence:

- Performance assessment
- Classroom discussion
- Writing task
- Compare / Contrast activity

Resources:

1. “The Story of the Orchestra” by Robert Levine
2. A complete set of orchestral instrument family cards for each student
3. Handouts – Fill-in-the-Blank worksheet

Name: _____

Introductory Lesson Worksheet



Part 1 Directions:

Circle the instrument family in each pair that makes the LOUDER sound.

1. String instruments Percussion instruments
2. Woodwind instruments Brass instruments
3. Brass instruments Percussion instruments
4. Woodwind instruments String instruments



Part 2 Directions:

After arranging your orchestra, circle the word that completes the sentence.

1. I placed the string instruments in the front / middle / back of the orchestra.
2. I placed the woodwind instruments in the front / middle / back of the orchestra.
3. I placed the percussion instruments in the front / middle / back of the orchestra.
4. I placed the brass instruments in the front / middle / back of the orchestra.



Conductor



Strings



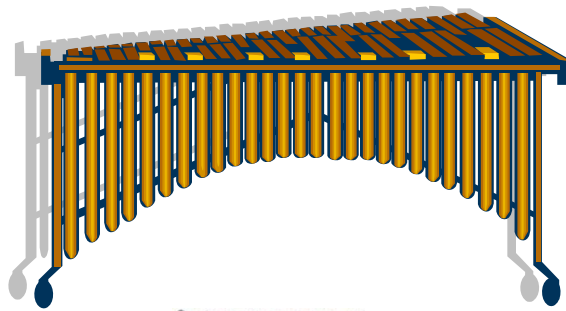
Woodwind Family



Brass Family



Percussion Family



ORCHESTRA PREPARATION

Annie Pecorelli
Ridge School
Ridgewood, New Jersey

<p>Music Selection: None Composer: N/A</p> <p>Grades: K-4 (can be modified for 4-8, see procedure and resources) NJCCCS: 1.1.4.A (2), 1.3.4.B (2), 1.4.4.A (1), 1.5.4.A (2)</p> <p>Introductory Lesson</p>	
<p><i>Essential Questions:</i> Why do musicians share their music through performances? Why do musicians undergo specific preparation rituals for these performances?</p>	
<p><i>Students will know that:</i></p> <ul style="list-style-type: none"> • Members of the orchestra have a different set of preparation rituals than other careers • Instruments can be grouped in a variety of ways including family, playing method, materials, etc 	<p><i>Students will be able to:</i></p> <ul style="list-style-type: none"> • Identify instruments by the preparation method that musicians must undergo • Group instruments by family and other distinctive characteristics
<p><i>Procedure:</i></p> <ol style="list-style-type: none"> 1. Students will begin the lesson with a discussion on preparation for their day. <i>What did you do to get ready for school day? What do you think your teachers did?</i> Students will segue into predictions about what orchestra members must do to get ready for their jobs. <i>Do musicians get ready for their jobs the same way that people in other careers do?</i> 2. Students will read the book “The Philharmonic Gets Dressed.” (See resources for further information on alternative books.) 3. Students will discuss the families of orchestra in context of what each grouping must do to prepare for the performance, i.e., string players must have additional strings, percussionists must leave their instruments at the venue, etc. 4. Upon finishing the book, students will be given instructions on how to play the game “Know Your Instrument.” Students will each receive one card with an instrument and picture on the front. On the reverse side, additional instrument information will be given, including family classification, additional parts/pieces, etc. This information can be omitted for older students to make the game more challenging. 5. Lastly, students will play the game “Know Your Instrument.” Scattered around the room, students will study the card they’ve been given including the instrument’s shape, size and additional information provided on the reverse side. Teacher will progressively call out directions for students to move throughout the room. Examples include: “Find instruments that musicians stand while they play,” “Find instruments 	

<p>that can be carried easily.” Every time a student finds the proper instrument, they will be awarded points. Students are responsible for tallying their own points.</p> <p>6. At the conclusion, students will return to the original question presented: How do musicians get ready for their jobs? Students will have a brief closing discussion on the differences and similarities of orchestral preparation versus traditional careers.</p>
<p><i>Assessment Evidence:</i></p> <ul style="list-style-type: none">• Students are able to effectively listen to the selected book• Students are able to successfully understand the particulars of their instrument in the “Know Your Instrument Game”• Students are able to group their instrument based on verbal cues given by the teacher
<p><i>Resources:</i></p> <ul style="list-style-type: none">• “The Philharmonic Gets Dressed” by Karla Kushin• Alternative book for K-4 students: “Meet the Orchestra” by Ann Hayes• Alternative book for 4-8 students: “The Story of the Orchestra” by Robert Levine• Instrument cards (next page)



Violin

- The violin is a member of the string family.
- A bow is used to play the violin. It is made of bleached horsehair and rubbed with rosin to make it less slippery.
- The violin has approximately 70 pieces, all of which are glued together.
- Strings have a lower pitch as they get thicker and longer. Strings will be higher if they are thinner and shorter.
- The violin can produce several effects, including *pizzicato*, which is a plucking of the strings; *vibrato*, which is a slight wavering of the tone; and *glissando*, which is the act of sliding a finger along the string.
- Violins often play the melody of the music.



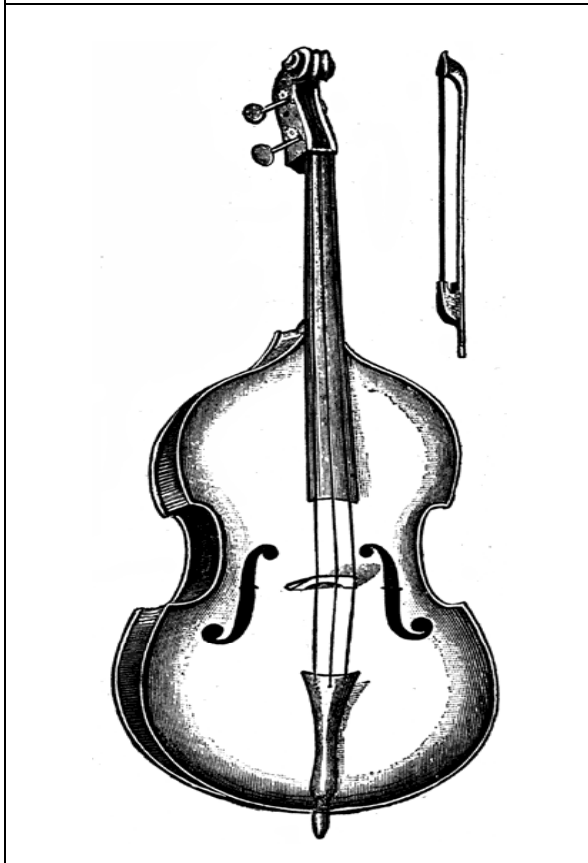
Viola

- The viola is a member of the string family.
- A bow is used to play the viola. It is made of bleached horsehair and rubbed with rosin to make it less slippery.
- The pieces of the viola are never nailed together – only glued. There are approximately 70 pieces in all.
- The viola can produce several effects, including *pizzicato*, which is a plucking of the strings; *vibrato*, which is a slight wavering of the tone and *glissando*, which is the act of sliding a finger along the string.
- The viola is one-seventh larger in size than the violin and can play a fifth lower.
- The strings of the viola are thicker than those of the violin.



Cello

- The cello is a member of the string family.
- The full name for the cello is the violoncello.
- A bow is used to play the cello. It is made of bleached horsehair and rubbed with rosin to make it less slippery.
- The pieces of the cello are never nailed together – only glued. There are approximately 70 pieces in all.
- The cello can produce several effects, including *pizzicato*, which is a plucking of the strings; *vibrato*, which is a slight wavering of the tone; and *glissando*, which is the act of sliding a finger along the string.
- The cello's strings are an octave lower than those of the viola.



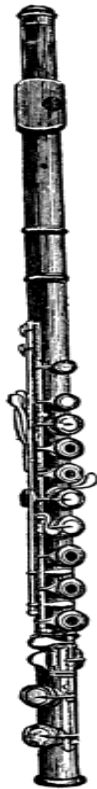
Double Bass

- The double bass is a member of the string family.
- A bow is used to play the double bass. It is made of bleached horsehair and rubbed with rosin to make it less slippery.
- The pieces of the double bass are never nailed together – only glued. There are approximately 70 pieces in all.
- Sometimes, players of the double bass stand when they play.
- The double bass can produce several effects, including *pizzicato*, which is a plucking of the strings; *vibrato*, which is a slight wavering of the tone and *glissando*, which is the act of sliding a finger along the string.
- The double bass is the lowest sounding instrument of the string family.



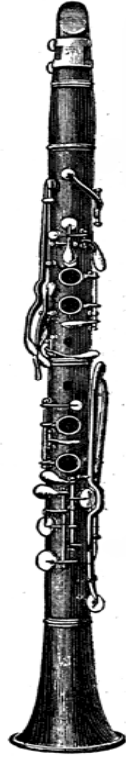
Piccolo

- The piccolo is a member of the woodwind family.
- The piccolo is only one of two woodwind instruments to be played sideways.
- The word piccolo means “small” in Italian.
- The piccolo is pitched an octave higher than the flute.
- The piccolo has two sections that are fitted together by the player.
- Usually, an orchestra only has one piccolo.
- Holes in the tubing of the piccolo are covered by padded caps that produce different pitches.
- The piccolo is made of metal.



Flute

- The flute is a member of the woodwind family. It is one of two instruments in that family that is played sideways.
- The tone of the flute is made by blowing across the mouthpiece, much like one would blow across the top of a bottle to produce sound. The air that enters the flute vibrates and produces sound.
- Flutes are made in three sections that are fitted together by the player.
- In a symphony orchestra there are usually two or three flutes.
- The flute is one the most difficult instruments for beginners to play. Sometimes, it can take beginners weeks to produce sound on the flute.
- The origin for the word flute is “flaut,” which is Latin for “blasting air.”



Clarinet

- Clarinets are part of the woodwind family.
- Clarinets are made in several keys, but the one pitched in B flat is the most frequently used.
- The clarinet has a range of more than three octaves.
- Clarinets have a thin reed attached to the mouthpiece. The breath and the tongue of the player strike the edge of the reed and set it in vibration. These vibrations travel down through the tube, producing the tone.
- One of the pieces of the clarinet is called the ligature. The ligature connects the reed to the mouthpiece.
- The clarinet was invented in Germany.
- Most clarinets are made of wood, but in some cases they are plastic.



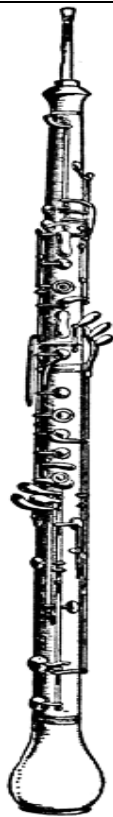
Bass Clarinet

- The bass clarinet is a member of the woodwind family.
- The bass clarinet is twice as long as the B-flat clarinet and sounds an octave lower.
- The bass clarinet is a single-reed instrument.
- The bass clarinet can be very heavy for the player and is often supported with a neck strap or small peg attached to the body.
- The bass clarinet is mostly made of wood, but contains a metal neck and an upturned metal bell.
- While the bass clarinet and the saxophone resemble each other, the instruments are drastically different, both in their musical use and construction.



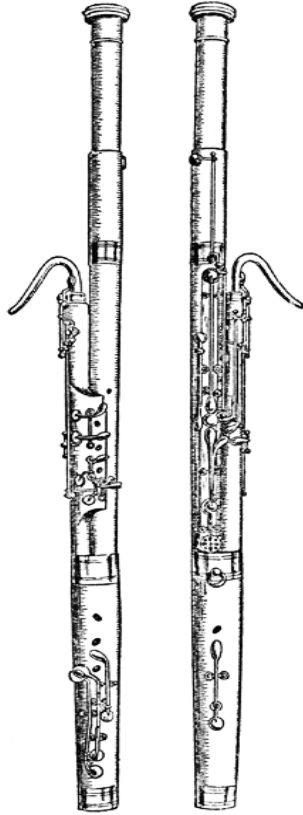
Oboe

- The oboe is part of the woodwind family.
- When a symphony orchestra tunes up, it is the oboe that first sounds the “A.”
- The oboe is about two feet long – the same length as the flute.
- The oboe is a double-reed instrument. This means the mouthpiece consists of two small reeds bound together tightly with a string.
- Air is blown through the small opening between the two reeds to produce the characteristic nasal tone of double-reed instruments.
- The origins of the oboe date as far back as 2800 BC.
- Most oboes are made of wood. Occasionally, they are made of plastic.
- Oboes have a range of more than three octaves.



English Horn

- The English horn is part of the woodwind family.
- The English horn acts as an alto oboe in the orchestra and can sound a fifth lower.
- The English horn is a double-reed instrument.
- In a symphony orchestra there is usually only one English horn.
- Despite its name, the English horn is not English and is not a horn. The French named it the “cor anglais,” which means “angled horn.” “Cor anglais” was misunderstood by the English to mean “English horn.”
- The English horn has a pear-shaped bell, which gives it a soft, mellow-sounding tone.



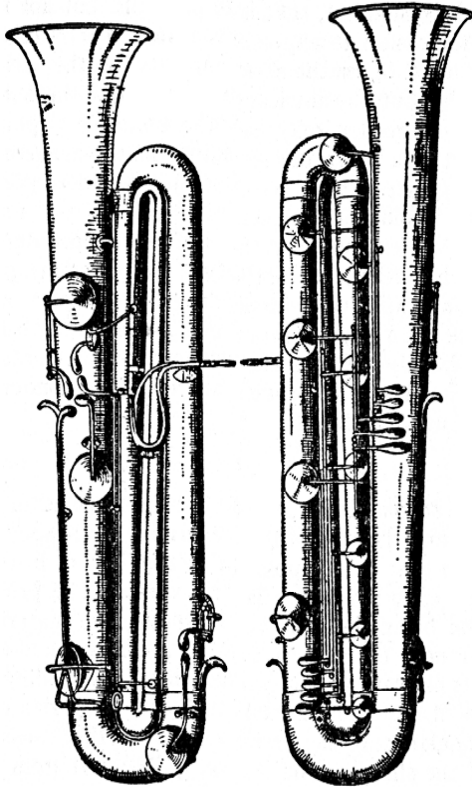
Bassoon

- The bassoon is a member of the woodwind family.
- The bassoon is a double-reed instrument.
- The bassoon includes a part called the “bocal,” which attaches the reed to the body of the instrument. It can also be called the “crook.”
- The bassoon has a range of three and a half octaves.
- The bassoon appeared in the form that we know it today in the 1800s. Prior to the changes made in the 1800s, the bassoon did not have the ability to play as many notes as it does presently and had difficulties being heard in concert halls.
- Most modern orchestras consist of two bassoons, with a third player on the contrabassoon. Some pieces call for as many as five or six bassoons.



Saxophone

- The saxophone is a member of the woodwind family.
- The saxophone is made of brass.
- Saxophones are regularly used in bands and jazz ensembles, but they are only used in the symphony orchestra on special occasions.
- The saxophone is a single-reed instrument. The thin reed is attached to a mouthpiece, which is fastened to the end of the tubing.
- Most instruments were invented hundreds of years ago and evolved over time. The saxophone is the rare exception to this fact. It was invented in 1840 by Adolphe Sax.
- There are four types of saxophone: soprano, alto, tenor and baritone. The most widely used of these is the alto saxophone.



Contrabassoon

- The contrabassoon is a member of the woodwind family.
- The contrabassoon is a double-reed instrument.
- The contrabassoon sounds an octave lower than the bassoon.
- The contrabassoon was developed in the mid-17th century.
- The contrabassoon is constructed of a tube that is 16 feet long when unraveled. The tubing doubles over itself four times to make the shape of the contrabassoon.
- The contrabassoon can sound the lowest note of the orchestra.
- Contrabassoons do not always look the same because some of the makers place the bell differently.
- The contrabassoon is also referred to as the double bassoon.



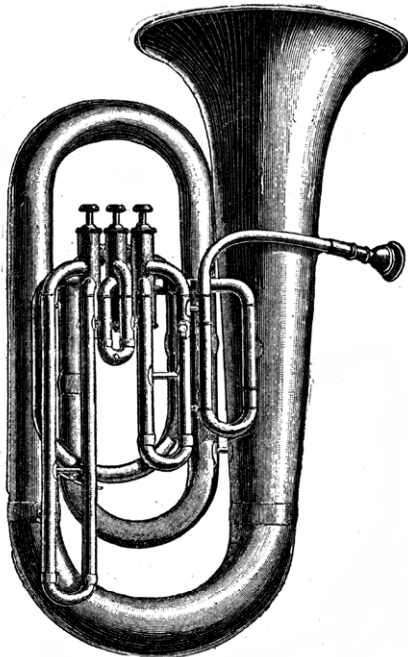
Trumpet

- The trumpet is a member of the brass family.
- The trumpet is the smallest of the brass instruments and therefore produces the highest pitches.
- Brass instruments were developed hundreds of years ago when hunters realized that blowing through the horn taken from an animal would produce sound. The trumpet evolved from these instruments.
- The trumpet has valves that route the air through the tubing.
- The trumpet has a cup-shaped mouthpiece. A musical tone is produced by the player buzzing with his or her lips into the mouthpiece.
- The trumpet is constructed of brass tubing.



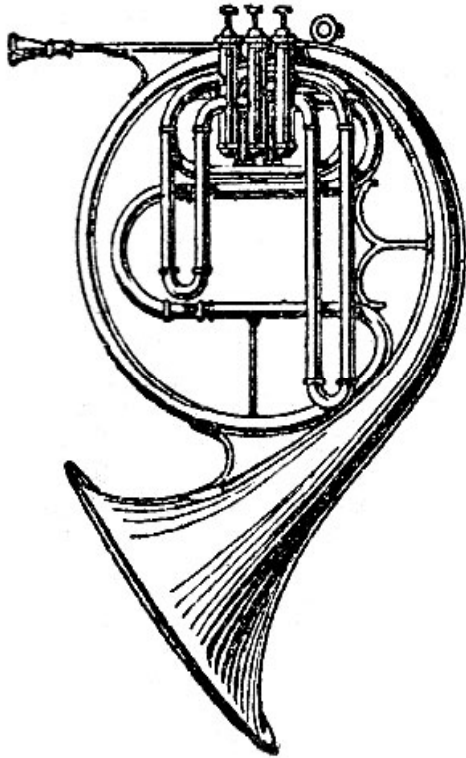
Trombone

- The trombone is part of the brass family.
- The word trombone is from Italian roots literally means “big trumpet.”
- The trombone contains a slide, which allows the player to change the pitch by extending the amount of tubing.
- The earliest form of the trombone was called the “sackbut.”
- The trombone has a key called the “water key.” Also called a “spit valve,” its purpose is to release moisture accumulated in its tubing.
- The trombone plays in bass clef.
- Most trombone players use tuning slide grease or oil to lubricate the trombone’s tubes and facilitate easier playing.



Tuba

- The tuba is a member of the brass family.
- The tuba is the largest member of the brass family and plays the lowest notes.
- The tuba consists of 16 feet of tubing wound and curled into a convenient shape for playing.
- Most tubas have three or four valves.
- Tubas can have either piston or rotary valves.
- Most symphony orchestras have only one tuba.
- The tuba was introduced to the orchestra in the middle of the 19th century.
- Tubas are made of brass but can often be lacquered with nickel, gold or silver.



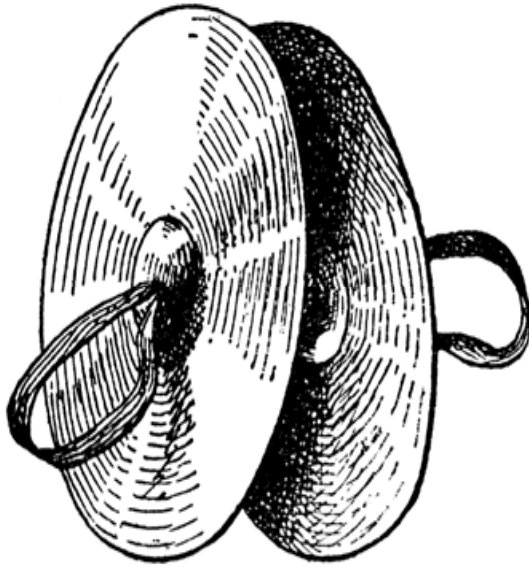
French Horn

- The French horn is a member of the brass family.
- The French horn is commonly referred to as a “horn.”
- The tone of the French horn is more mellow than that of the other brass instruments.
- Players of the French horn can change the pitch of the instrument by the use of their lips and by pressing valves.
- French horns have 12 feet of coiled brass tubing that ends in a flared, bell-shaped opening.
- Most modern French horns are made so the bell can be detached. This is to make traveling with the French horn less cumbersome.
- The French horn has many variations, including the single, double and triple horn.



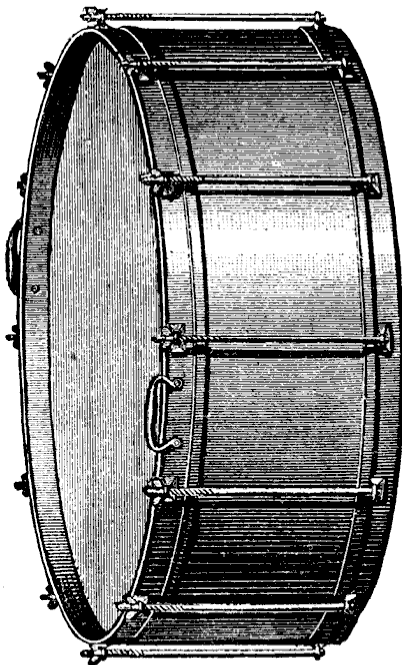
Piano

- Pianos are members of the percussion family because mallets hit the strings inside to produce sound. However, some musicians consider them members of the string family.
- The keys of the piano are usually made of plastic. In years past, the keys were made of ebony and ivory.
- The full name of the piano is the “pianoforte.” This literally means “soft-loud” because at the time of its invention, the piano was one of few similar instruments that could play both loud and soft.
- The piano is available in two main configurations: grand and upright. Grand pianos are usually used in concerts. Upright pianos are usually found in private homes.



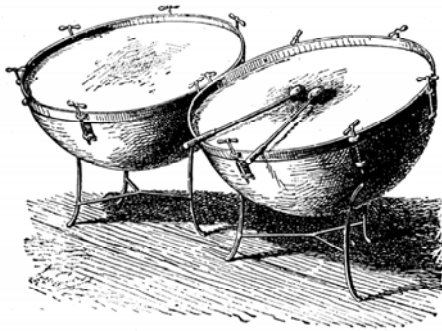
Cymbals

- Cymbals are a member of the percussion family.
- Cymbals can be traced back to prehistoric times.
- Cymbals are made from two large circular brass plates of equal size.
- When the cymbals are struck together, the tone may be allowed to ring indefinitely, or it may be controlled and stopped completely by touching the cymbals to the body of the player.
- Most modern cymbals are of an indefinite pitch. Tuned sets have been manufactured but they are rare.
- There are three sections of a cymbal: the bell, the bow and the edge.
- The word “cymbal” derives from a Latin word meaning “small bowl.”



Bass Drum

- The bass drum is a member of the percussion family.
- Mallets for the bass drum can often be made of lamb’s wool or felt. The number of mallets depends on the player and piece but can either be one or two mallets.
- The mallets can sometimes be called “beaters.”
- When the percussionist wants to dampen the sound of the bass drum, they use one hand to play and the other to reduce the sound. When two mallets are used for the bass drum, the percussionist can use either his/her knee or forearm to dampen the sound.



Timpani

- Timpani are a member of the percussion family.
- Timpani can be referred to as kettle drums.
- Unlike most drums, timpani are capable of producing a tuned pitch.
- Timpani have a pedal that controls their tuning and the range of notes they play.
- The singular form of timpani is “timpano.” Since timpani are usually found in pairs, the singular form is rarely used.
- The bowl of the timpani is often made of copper or fiberglass with a head of stretched skin over the top.
- Timpani are played with a specialized drum stick called a timpani mallet.
- Timpani evolved from military drums to become a staple of the modern orchestra.

SYMPHONY BEHAVIOR

Megan Jadro
Sunnymead Elementary School
Hillsborough, New Jersey

<p>Music Selection: None Composer: N/A</p> <p>Grades: K-6 NJCCCS: 1.1.A (1), 1.1.A (2), 1.5.A (1) Introductory Lesson</p>	
<p><i>Essential Question(s):</i> Why is important to demonstrate proper etiquette when attending the symphony?</p>	
<p><i>Students will know that:</i></p> <ul style="list-style-type: none"> • There are specific standards the audience of a symphony must adhere to in order to make the experience successful 	<p><i>Students will be able to:</i></p> <ul style="list-style-type: none"> • List and demonstrate proper symphony etiquette
<p><i>Procedure:</i></p> <ol style="list-style-type: none"> 1. Write “SYMPHONY” on the board; bring to mind the orchestra (previous introductory lesson) and the number of live musicians on stage. Begin a discussion by asking, “It is proper etiquette (behavior) to be silent during a symphony performance. Why do you think this is the expectation?” Engage in a class discussion. “Being quiet does not only mean controlling your voice– what are some other things we could do that make noise and therefore should avoid during a performance?” Make a list of Do’s and Don’ts on the board. Add in any that the students did not come up with on their own. 2. Discuss that these Do’s and Don’ts are the audience members’ “job.” And tell students they need to work hard to display good etiquette. That may mean holding in a cough, sitting perfectly still and not flipping through the program. 3. Project: Divide the class into groups. Each group is to create an etiquette poster of Do’s and Don’ts that you would want displayed before entering the symphony hall. 	
<p><i>Assessment Evidence:</i> Etiquette poster: Does the poster list all of the important rules of etiquette when attending the symphony?</p>	
<p><i>Resources:</i></p> <ol style="list-style-type: none"> 1. www.en.wikipedia.org/wiki/Concert_etiquette 2. Visit www.bso.org. Click “tickets,” then “Attending a performance,” then “Symphony hall etiquette,” for a nice overview. 3. www.pacificsymphony.org/attending_the_symphony/etiquette.php 	

THEATER ARCHITECTURE

Olga Zacharko
Sunnymead Elementary School
Hillsborough, New Jersey

Music Selection: None

Composer: N/A

Grades: 4–6

NJCCCS: 1.5.4.A (2), 3.4.4.A (1), 3.4.4.B(3)

Introductory Lesson

Essential Question:

How does a theater’s architecture impact theatrical performances?

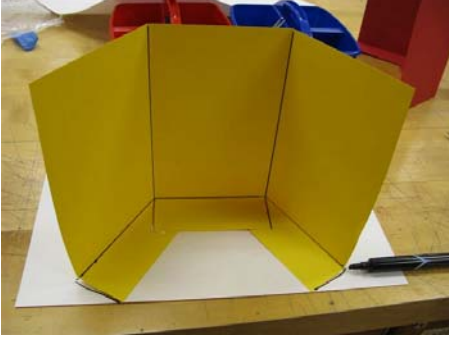
Students will know that:

- An architect plans and designs buildings such as theaters
- The parts of a theater are the auditorium, stage, seating area, performance area and backstage area
- The auditorium is the part of the theater for the audience to watch the performances
- There are different types of performance stages:
 - A picture frame or “proscenium stage”
 - The open stage
 - The theater-in-the-round
- The stage setting that we are most familiar with is much like a picture frame where the performance is seen only from the front. This frame is called a “proscenium arch”
- The proscenium stage may have a curtain that can be used to conceal or reveal the stage. The curtain may be closed to permit a change in scene, to indicate the passage of time or to mark the act
- A stage that is designed to be in the middle of the auditorium is referred to as theater-in-the-

Students will be able to:

- Identify and create a 3-dimensional interior view of a theater and stage from construction paper that is symmetrically balanced with floor-level seats and box seats
- For future discussion: Other than an architect, list some other jobs you feel might be associated with the theater

<p>round or arena stage. Here, the audience sits around the stage to watch the performance.</p> <ul style="list-style-type: none"> • Stages where the seats are arranged around three sides of a raised platform extending into the auditorium are called “open stages.” An example of this type would be a runway or a walkway for models to walk down during fashion shows • The architect might design box seats along the side walls at different levels, tiers with rows of seats at different levels and a balcony making it possible to view the stage from any seat 	
<p><i>Procedure:</i> Before starting, draw some ideas in a sketchbook or on scrap paper.</p> <p><i>Materials:</i></p> <ol style="list-style-type: none"> 1. One sheet of 12” x 18” construction paper, any color, for each student 2. One sheet of 6” x 9” construction paper 3. One sheet of 8.5” x 11” construction paper 4. Scissors 5. Glue 6. Ruler 7. Scraps of paper to embellish theater designs <p><i>Instructions:</i></p> <ol style="list-style-type: none"> 1. Holding the paper horizontally, use a ruler to mark a dot at 6” and 12.” 2. Turn the paper vertically, and with the ruler draw a straight line through the 6” dot and the 12” space dot, leaving you 3 rectangles on the paper. 3. Place the ruler on the bottom edge of the paper and measure 2” up. 4. Draw a horizontal line through the 2” mark across the entire paper. 5. Fold right rectangle on the vertical line toward the center rectangle, then open and do the same with the left rectangle. 6. Fold the bottom 2” section up on the horizontal line, crease it, then open it. 7. With scissors, cut the two short vertical lines below the horizontal line. 8. Stand the paper up and fold the bottom right and left sections diagonally under the center. You will glue these at an angle to give the appearance of the auditorium. Now, you have the beginning of a theater. 	



9. To make the floor, place the theater on the bottom edge of a piece of paper and trace it. You don't need to trace the front.
10. Lift the theater off the paper.
11. Cut the floor out.
12. Slide the floor into place.



13. Glue it inside to secure the walls.
14. Take a 6" x 9" piece of paper to create the stage. First, draw a horizontal line about 3" from the bottom of the paper with pencil. You will be drawing a trapezoid for the floor of the stage.
15. With the ruler, connect a vertical line from the back corner of the trapezoid on the left and right to create the illusion of the back wall and an entrance/exit wall on each side of the stage.
16. Glue the stage to the center rectangle.
17. With a ruler, measure the distance from the stage floor to the top of the paper to make curtains for both sides of the stage.
18. Use scraps of tissue paper or scraps of fabric or paper for curtains.
19. Find a piece the length that you measured, and then cut it in half for 2 panels.
20. Use a fan fold to make the pleats in the curtains. This is done by folding a small section forward, then folding back and repeating this step until the panel is complete. Do the same for the second panel.
21. Add glue to the top of each curtain to keep it together.
22. Glue the curtains to the stage.
23. Here, we start the box seats on both sidewalls. You can decide how many you would like to make, but remember to keep both walls symmetrical. The paper scraps should be about 3" x 4."
24. Take the 3" x 4" paper and fold it up three times. When you open it, there will be

- 4 rectangles. The first section is the front of the box seat, the second is the floor of the seat, the third is the back of the seat and the fourth is the cover of the seat.
25. Spread glue on the third section or what would be the back of the seat.
 26. Glue the box seat to one wall, then add as many box seats to this side as you want. Repeat the same for the second wall.



27. Now, make the seats for the bottom of the auditorium. Take 1" x 3" pieces of paper. (The amount depends on how many seats you want to make.) With scissors, round off the top corners to form the top curve of an auditorium seat. Create a fan fold to make a seat and begin to glue one seat at a time along both walls first. Then, start with 2 seats side by side in front of the stage, then a row of three behind them, then four, and so on.
28. Add details to complete the theater with markers, crayons or color pencils.
29. To make a ceiling/roof for the theater, repeat the same steps you used to make the auditorium floor (steps 10 to 13).
30. Glue the ceiling or tape it to the back and sides. Finally, with scrap paper, make a chandelier to hang above the audience.



Assessment Evidence:

	2 Above Average	1 Average	0 Not Evident
Student understood design problem.			
Student achieved symmetrical balance through arrangement of paper forms.			
Student carefully constructed and securely glued paper forms to its background.			
Student shows self satisfaction with the quality of work.			

Resources:

1. Ragan, Rosalind, Ph.D., Senior Author and Willis Bing Davis, Tina Farrell, Jane Rhoades Hudak, Ph.D., Gloria McCoy, Bunyan Morris, Nan Yoshida. "SRA Art Connections."
2. www.worldbookonline.com (website requires a paid subscription)

ORCHESTRA TUNING

Patricia Merlucci
 Albert Peyson Terhune School
 Wayne, New Jersey

<p>Music Selection: None Composer: N/A</p> <p>Grades: 4–6 NJCCCS: 1.3.4.2, 1.3.6.1, 5.1 4.6 (A), 5.1.4.6 (B), 5.2.4.6 (A), 5.7.4.6 (B) Introductory Lesson</p>	
<p><i>Essential Question:</i> How does the tuning process impact the sounds of an orchestra and how we hear it?</p>	
<p><i>Students will know that:</i> In order to play in tune, an instrumentalist needs to carefully listen to pitch and know how to adjust the sound on his or her instrument accordingly</p>	<p><i>Students will be able to:</i> Experience the orchestral process of tuning to an "A"</p>
<p><i>Procedure:</i></p> <ol style="list-style-type: none"> 1. Play the video on tuning to introduce the orchestral process – www.exploratorium.edu/music/movies/tuning_hi.html <ul style="list-style-type: none"> • Tune - To adjust the pitch of an instrument (The New Harvard Dictionary of Music) • The full orchestra tunes to an “A” because the note appears as an open string on every string instrument and because it occurs close to the middle of the range on all instruments. Typically, the oboe provides the “A” since it offers a clearly perceptible sound. (Orchestral Performance: A Guide for Conductors and Players) 2. With the students’ help, adjust an “A” on an auto-harp, using a tuning fork or an electronic tuner. Also demonstrate tuning a flute or brass instrument if available. 3. Review with students the mechanics of tuning in each family, such as: <ul style="list-style-type: none"> • clarinet and flute families adjust the instruments’ barrell • double-reed instruments adjust the reed at the point in which it enters the body of the instrument • brass instruments adjust their tube lengths via the slides <p>Complete the following group activity for matching pitch before answering the questions for assessment evidence.</p> <p><i>Materials:</i></p> <ul style="list-style-type: none"> • tuning fork • piano • electronic device for tuning 	

- autoharp or other string instrument
- glass of the same size and style for groups of 4
- a mallet
- bottle of water
- assessment handout.

Activity:

Place a glass between 3-4 students. Provide each group with the same size glass, a bottle of water, a mallet and a tuning device (tuning fork, electronic tuner, piano). Ask students to pour water slowly into the glass and to listen to the change in pitch. Match the pitch of the glass with water to the sounding A.

Assessment Evidence:

1. What instrument was used for tuning the glass of water to an “A?” Was it a piano, a tuning fork, an auto-harp, or other?
2. Which group does your tuned “A” sound like?
3. Does the sound of the pitch become lower or higher with more water?
4. What conditions in the environment do you imagine would alter the pitch of an instrument? (ex. wind, temperature)
5. What part of the instrument controls pitch?

Resources:

1. www.dsokids.org
2. www.playmusic.org
3. Adey, Christopher, “Orchestral Performance: A Guide for Conductors and Players.” London and Boston: Faber and Faber Limited, 1998.

LISTENING PREPARATION: THE EVOLUTION OF MUSICAL INSTRUMENTS

Cameron Hatami
West New York PS #5
West New York, New Jersey

<p>Music Selection: Excerpts of Bach, Vivaldi, Stravinsky, the Beatles, and Stevie Wonder Composer(s): Varied</p>	
<p>Grades: 4–8 NJCCCS: 1.1, 1.2, 1.3, 1.4, 1.5 Introductory Lesson</p>	
<p><i>Essential Question:</i> How will musical instruments continue to evolve?</p>	
<p><i>Students will know that:</i> The very first musical instruments were invented some 30,000 years ago in the form of bones. Students will follow the evolution of musical instruments from the age of antiquity to the first symphonic orchestras to present-day popular music.</p>	<p><i>Students will be able to:</i> Compare and contrast some instruments of the orchestra such as harpsichord, violin and timpani to their counterparts of the rock band: electronic keyboard and/or synthesizer, electric guitar and drum set. Students will also discuss the historical importance of each instrument and how each affected the music of its time period.</p>
<p><i>Procedure:</i></p> <ol style="list-style-type: none"> 1. First play a short piece by J.S. Bach that contains a harpsichord solo. 2. Compare it one or two voices from a synthesizer/keyboard 3. Next, play a violin solo from Vivaldi’s <i>Four Seasons</i> and compare it to the sound of an electric guitar solo from Beatles song “Can’t Buy Me Love.” 4. Finally, play an excerpt from Stravinsky’s <i>The Firebird</i> suite in which the timpani is displayed. 5. Compare with any Beatles song that utilizes the drum set. 6. Ask students to compare the timbre, dynamics, range and sonority of all the instruments. 	
<p><i>Assessment Evidence:</i> Students can be collectively or individually assessed on their knowledge of the instruments, both written and orally.</p>	
<p><i>Resources:</i></p> <ol style="list-style-type: none"> 1. “The Story of the Orchestra” by Robert Levin 2. DVD <i>Music and Man</i> narrated by Yehudi Menuin 3. YouTube.com- Search “Orchestral Works” 	

UNDERSTANDING THE NJPAC CONCERT HALL

Warren Gramm
Academy 1 Middle School
Jersey City, New Jersey

<p>Music Selection: None Composer: N/A</p> <p>Grades: 6–8 NJCCCS: 1.1.8.A (1), 1.1.8.B, 1.5.8.A, 1.5.8.B Introductory Lesson</p>	
<p><i>Essential Question:</i> What does the NJPAC mean to Newark?</p>	
<p><i>Students will know that:</i> The riots in Newark in 1967 eventually led to the urban renewal of the area with the building of NJPAC in 1997.</p>	<p><i>Students will be able to:</i> Understand why NJPAC was built where it was and what led to its development.</p>
<p><i>Procedure:</i> This is an interactive lesson that involves visiting certain websites in order and putting together a timeline of Newark, NJ that displays the events that led up to the construction of NJPAC.</p> <ol style="list-style-type: none"> 1. Start with the students beginning their timeline when Newark was first born. Visit www.thirteen.org/newark/history.html. Have them construct their timeline in various forms noting the important evolutionary events that took place in Newark. 2. Put focus on the riots in 1967 that crippled the city. Instruct the students to visit www.67riots.rutgers.edu, as well as work with the “thirteen” website. Both have a lot of information. 3. Students should take note of how Newark was affected by the riots in the time period of 15–20 years after the riots. 4. Students should finish their timeline with visiting the following websites and gaining information about NJPAC and what it means to Newark. <ul style="list-style-type: none"> • www.newarkmetro.rutgers.edu/reports/display.php?id=126 • www.njpac.org 	

Assessment Evidence:

Students should be able to address the key points in Newark's history. They should be able to tell what the main causes of the riots of 1967 were and how they affected Newark. Students should have developed a timeline rich with Newark's history and the key turning points that the city has faced. Based upon the prior knowledge of Newark's history, students should also be able to give an educated opinion as to where they think the city will go in the future. The students should also have an answer to the essential question of "What do you think NJPAC means to Newark?"

Another Assessment Evidence question is: "How do the arts fuse cultures together?" Pose the question to the students, "Why has it taken Newark such a long time to experience renewal?"

Resources:

1. www.njpac.org
2. www.newarkmetro.rutgers.edu/reports/display.php?id=126
3. Computers and internet access to various websites, paper or large poster-board for drawing out a timeline

DYNAMIC EFFECTS!

Dan Landis

Long Valley Middle School

Long Valley, New Jersey

<p>Music Selection: TBD by Teacher Composer: Varied</p> <p>Grades: 6–8 NJCCCS: 1.2.8.B (1), 1.2.8.B (2), 1.2.8.B (2.2), 1.3.8.A (2.2), 1.4.8.C (1) Introductory Lesson</p>	
<p><i>Essential Question:</i> What are dynamics and what role do they (and amplitude more generally) have in the compositional process? What effect do they have on a listener?</p>	
<p><i>Students will know that:</i> Composers understand how dynamics are manipulated to maximize a desired effect of a musical work upon the audience.</p>	<p><i>Students will be able to:</i> Utilize within their own compositions the tools of a given Digital Audio Workstation (or DAW) to produce crescendo, decrescendo and other effects pertaining to the use of amplitude for the purposes of musical dynamics.</p>
<p><i>Procedure:</i></p> <ol style="list-style-type: none"> Perhaps without any verbal introduction at all, the instructor will play a short work (or excerpt) that capitalizes on dramatic use of dynamics (e.g., Strauss' <i>Thus Sprach Zarathustra</i> or Copland's <i>Fanfare for the Common Man</i>). The students should be questioned immediately upon the conclusion of the piece for their comments and observations as to what made the work effective and how the use of changing amplitude added to the composition. The educator will discuss the concept of dynamics and define the same for the students. Mention should be made of the use of the musical symbols for the various dynamic levels and effects. Load one short (32 measure or so) sequence into the DAW of your choice (e.g., Sonar, ACID, Live, Digital Performer, Logic, etc.). The sequence may have instrumentation as per the desire of the instructor, but it may be helpful to confine the style of the work to an orchestral style. Often in contemporary pop genres, dynamics are more the result of a thinning of the instrumentation rather than a manipulation of the levels of individual instruments within the song. If an educator does not prefer to develop sequences, there is a selection of classically oriented standard MIDI sequences available on the internet. Many of these are offered without fee. Demonstrate the use of the volume envelope for the students using whatever DAW you use with the students. (Check your manual if there is a question about this function, but often, envelopes are easily drawn with a right click on a given event within the sequencer and highlighting the appropriate command within a drop-down box. Points [or nodes] are added on the envelope line similarly. 	

<p>Remember that with “Select All,” one can apply envelopes to all tracks in the sequence.) Direct the students to observe the rule of “unity gain” (mixing to 0.0 db) as reflected in your DAW’s master level meters.</p> <ol style="list-style-type: none"> 4. Be precise in the first example to require definite dynamic levels at certain places in the sequences (e.g., “Place a simple crescendo from mezzo piano to fortissimo between measures 17 and 21,” and “Insert a pianissimo at measure 9,” etc.). This first example should be rather concrete in its requirements to assure that all students have the ability to demonstrate the techniques of the DAW’s envelope capabilities. Require a variety of different levels within the work as appropriate to the composition with section, tutti and solo dynamics as per the musical demands of the work. 5. Load a second sequence. Again, orchestral works will be advantageous to the goal of the lesson, but alternatively, students may edit a sequence that they have previously composed. In this sequence, students should be encouraged to explore the use of dynamics creatively, without concern for matching a predetermined template of dynamic assignment, but making sure to use different volume levels to enhance the music. The instructor should require a minimum number of changes to the dynamics. The students should offer a short written rationale for their decisions in the sequences. 6. Before submitting work for evaluation, students should peer conference to receive feedback on their efforts on both works. 7. This exercise can be easily adapted to a music processor (Finale, Sibelius) by having the students input the dynamic markings and playing back the changes.
<p><i>Assessment Evidence:</i></p> <ul style="list-style-type: none"> • In the first exercise, visual confirmation of the student’s use of the required techniques should be readily apparent. • In the second exercise, evaluation proceeds based on the student’s performance regarding how closely he/she fulfilled the submitted rationale and minimum required credits.
<p><i>Resources:</i></p> <ol style="list-style-type: none"> 1. Computer Music Lab w/ DAW and any required material. 2. Sequences and/or material with which to construct the same. 3. Smartboard or LCD for demonstration. 4. Classical MIDI files listed at: www.harmony-central.com/MIDI/files.html