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Welcome

Dear Student and family

Welcome to the Composers’ Bridge!

The fact that you are being given this book means that we already value you as a composer and a creative artist-in-training.

What this book contains are some magic keys to your independence and further growth as an Artist going out into the real world. This book is for all Bridge classes - Bridge I, II, and Post-Grad, so there will be some work that you already know quite well, and some material that is overwhelmingly difficult. Not to worry: your TA will help guide you through it all!

There are few joys in life greater than the creating of music; it is what makes the necessary hard work easier to bear. So it is with Bridge: it is both a privilege and yet it should be every young person's right to be empowered musically. We are grateful to the Philharmonic and to our donors for giving us this opportunity. There is no way to 'grade' creativity; all that we ask in return are two basics:

1) that you try your best,
2) and that you show up (i.e, you come to class regularly!)

A final note: words in purple are explained in the glossary at the back of your workbook. You should pay special attention to words in bold when you are doing the exercises.

Happy composing!

Dear Teacher

This book is designed as a companion work to the Very Young Composers’ Bridge Program. It is not a textbook, or even a curriculum, but rather a starting point or springboard that we hope will provide a range of inspirations and ideas to help your student through the program.

The most important thing about this book is that it is both optional and evolving. Each Teaching Artist Associate or Teaching Artist Intern should make use of it as they feel it is needed based on the progress of the individual student. The workbook is by no means complete but is rather a “beta” version that will evolve with improvements and reconfigurations. We intend to improve and reconfigure based on the responses you document.

We hope The Composers’ Bridge Workbook helps you and your students grow together, and to become better composers, thinkers, and humans.

Jon Deak, Angélica Negrón, Molly Herron, Daniel Felsenfeld
Team Bridge
1. What do you think these would sound like? Try singing or playing each line with your small group. Try combining some lines to see what they sound like together.
Graphic notation, continued

2. How about this one? Try it out with your small group.

3. And this last one? Try it out with your small group.

4. Here are some pieces that use graphic notation.
   
   a. Try playing them yourself
   b. Listen to the recordings (you can find each of them on YouTube)

Cathy Berberian - Stripsody, 1966 https://www.youtube.com/watch?v=pmPbyyZwh4s
Graphic notation, continued

John Cage - Aria, 1958  https://www.youtube.com/watch?v=DuD9_yX3dAI

Student work, Very Young Composers Korea
Graphic notation, continued

Angélica Negrón - Technicolor, 2008

Student work, Very Young Composers Korea
My graphic notation

1. Write your own short piece using graphic notation.
2. Practice your new piece with your small group.

Title: ________________________________
Clefs

1. Practice drawing treble and bass clefs on the staves below.
Note lengths

Musical equations

1. Complete the following musical equations:

\[
\begin{align*}
\text{\( \text{\textbullet} \) + ________ = \text{o} }& \\
\text{\( \text{\textbullet} \text{\textbullet} \) + ________ = \text{o} }& \\
\text{\( \text{\textbullet} \text{\textbullet} \text{\textbullet} \) + ________ = \text{o} }& \\
\text{\( \text{\textbullet} \text{\textbullet} \) - ________ = \text{o} }& \\
\text{\( \text{\textbullet} \text{\textbullet} \) - ________ = \text{o} }& \\
\text{\( \text{\textbullet} \text{\textbullet} \text{\textbullet} \) + ________ = \text{o} }& \\
\text{\( \text{\textbullet} \text{\textbullet} \text{\textbullet} \text{\textbullet} \) + ________ = \text{o} }& \\
\text{\( \text{\textbullet} \text{\textbullet} \text{\textbullet} \text{\textbullet} \text{\textbullet} \) + ________ = \text{o} }
\end{align*}
\]
Musical equations, continued

2. Make up your own musical equations.

+ = 
   + = 
   - = 
   + = 
   - = 
   + = 
   - = 
   + = 
   - =
Rhythm

My rhythm

1. Compose a short 1-measure rhythm in 3/4 or 4/4 for your small group to clap with you. Your rhythm should include:
   - syncopation
   - some rests
   - dotted notes or ties

2. Write down your rhythm below:

   

3. When you worked on clapping your rhythm with your small group, what was challenging?

   

4. What was fun?

   

5. What would you like to try next in a new rhythm?
Rhythmic dictation

Your TA will perform a short rhythm for you. They will perform the rhythm with their voice and clap the beats with their hands. The vertical lines below represent beats. The ovals are where a new note starts, and the X is where there might be a rest. Don’t worry about the exact rhythm your TA is performing. Just ask yourself:

- Where does the rhythm (sung) line up with the beats (claps)? Make an oval right under the beat line.
- What parts of the rhythm happen between the beats? Draw the right number of ovals before the next beat line. Don’t worry about showing if something is long or short.
- Are there any claps that are empty (don’t have a rhythm at the same time)? Mark an X on that spot as you hear them so you know that it is empty.

Your dictation might look something like this, but it doesn’t have to. Write down the beats however makes sense to you:

```
|   |   |   |   |   |
```

```
  o   o o o o o o X o o o o
```

1. Now you try a few! Your TA will tell you how many beats there are in the dictation so you can mark them down. You can use the next page as well.

```
|   |   |   |   |   |
```

```
```

Remember! Your rhythm doesn’t end on the last beat, it ends after it! Make sure you leave space after your last beat line to complete the rhythm.
This box is for your rhythmic dictations
Record a rhythm and notate it

1. Think of a short rhythm and sing/tap it to yourself a few times until you can repeat it consistently. It can have a melody with it, but it doesn’t have to.
2. Once you have your rhythm, record yourself singing or tapping it into a phone or other recording device.
3. Listen back to the recording and tap out the beats. If you have trouble finding them, ask your small group leader for help.
4. Have your small group leader help you put the rhythm into the boxes on this page. Each box is one beat. Think about what goes “inside” each beat.
5. If you created a melody, can you think of a way to write it down for yourself so you can remember it later?

Remember! You can make your own boxes on a new page if you run out of space or the ones below don’t work for you.
Rhythm salad

1. In the spaces below write some ingredients that could go in a salad:

   a) \underline{Tomato}\____________________
   d) __________________________

   b) __________________________
   e) __________________________

   c) __________________________
   f) __________________________

2. Now come up with two different rhythms for each one of these words. Use both \textit{syncopation} and rests in a few of the rhythms.

\begin{tabular}{|c|c|c|}
\hline
\textbf{Word} & \textbf{Rhythm 1} & \textbf{Rhythm 2} \\
\hline
\textit{Tomato} & \includegraphics[width=1.5cm]{tomato_rhythm1.png} & \includegraphics[width=1.5cm]{tomato_rhythm2.png} \\
To - ma - to & To - ma - to & \\
\hline
\end{tabular}
Rhythm fun

1. Be creative and fill in the missing beats with your own rhythm:

\[
\begin{array}{cccc}
\cdot & \cdot & | & \\
\end{array}
\]

2. Answer this rhythm:

\[
\begin{array}{cccc}
\cdot & \cdot & \cdot & \cdot & | & \\
\end{array}
\]

3. Create an exciting 4 measure rhythm in any time signature

\[
\begin{array}{cccc}
\end{array}
\]

4. Create a relaxing 4 measure rhythm in any time signature:

\[
\begin{array}{cccc}
\end{array}
\]
Rhythm Fun, continued

5. Create an **anxious** 4 measure rhythm in any time signature:

6. Create a **fun** 4-measure rhythm in any time signature. End your rhythm with a **surprise**:
Pitch

Pitch-shape game

1. On the staves below:
   a. Find all the Cs and circle them
   b. Find all the Fs and make a triangle around them
   c. Find all the Bs and make a square around them

   ![Remember! Look carefully at the clef.]

2. Spell the secret words below:

   ____   ____   ____   ____   ____   ____   ____   ____

   ____   ____   ____   ____   ____   ____   ____   ____
Name the pitches - part one

1. Name the pitches below in **treble clef**:

   ![Treble Clef Example]

2. Name the pitches below in **bass clef**:

   ![Bass Clef Example]

3. Name the pitches below in **treble clef**:

   ![Treble Clef Example]

4. Name the pitches below in **bass clef**:

   ![Bass Clef Example]
Name the pitches - part two

1. Name the pitches below in treble clef:

   \[ \text{Treble Clef Diagram} \]

2. Name the pitches below in bass clef:

   \[ \text{Bass Clef Diagram} \]

3. Name the pitches below in treble clef:

   \[ \text{Treble Clef Diagram} \]

4. Name the pitches below in bass clef:

   \[ \text{Bass Clef Diagram} \]
Accidentals

Pitches are indicated by where the note-head is on the lines and spaces of the staff, but that isn’t all.

Piano key activity

1. Sit down at a piano and find these notes on the keyboard:

   On the staff you have played every line and space, but have you noticed that there are notes on the piano that you skipped over? All the black keys! How do you notate one of those keys?

   With accidentals!

   There are three types of accidental:

   #  b  ♭
   SHARP  FLAT  NATURAL

   Accidents go before the note they are changing, but when we say the note name out loud we put the accidental after the note name, which can be confusing.

   This note is written:

   And we say: “B flat”.

   A b (flat) means that the note it is a half step lower than it would be without the flat.

   It might help you to remember that the symbol for a flat sort of looks like someone has squished a ‘b’ until it was flat. Things that are flat go down, like a flat tire on your bike.
Piano key activity, continued

- A # (sharp) means that the note is a half step higher than it would be without the sharp.

One way to remember this is that the sharp symbol looks like it might be pointy and sharp if you touched it. Things that are sharp stick up.

- A ♭ (natural) either cancels any sharp or flat that was attached to a note earlier in the measure or reminds you that the note is not sharped or flatted.

This can be especially helpful if you are writing in a key, but also want to hear notes that are outside of that key. Accidentals last all the way through the measure.
Accidental practice

Accidentals always go to the left of the note they are changing and share the same line or space as the note head, like this:

1. Practice adding sharps or flats to the following notes.
   a. Make all the Bs on this staff B♭s:

   ![Sheet music example]

   b. Make all the Fs on this staff F♯s:

   ![Sheet music example]

2. Can you add the correct accidents to make this example a melody in D major? (Put the accidentals next to each note, not in a key signature at the beginning).

   ![Reminder]

   Remember to be careful to put the accidental on the same line or in the same space as the note-head.

3. Can you play the last melody on a piano or keyboard? Play it first without the accidentals and then with them. How does the melody change when you add the accidentals? If they were two different colors or feelings, what would they be?
Enharmonics: two names, one note

You may have noticed that when you start going up and down a half step from the white notes to find notes like A flat, F sharp, C sharp etc., sometimes the notes overlap.

1. Find a C on the keyboard image below (there are two of them, either one will do!)

2. Now move up one half step to find C♯ (hint, it will be a black key!).

3. Now find a D on the keyboard.

4. Move down a half step to find D♭.

Did you notice that you landed on the same key that was C♯ before?

There are some keys on the keyboard that have more than one name. We call these enharmonics.

5. See if you can figure out an enharmonic for each of the pitches below:

   a. C♯ = ________
   c. B♭ = ________

   b. G♭= ________
   d. D♯ = ________

Here is an extra hard bonus one! E♯ = ________
Intervals

Fantasy intervals

Your TA will play a single interval melodically, then in unison.

1. Describe what you think might be happening in a story based on the sound of this one chord:

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

2. If this were the start of a piece of music, what do you think might happen next?

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

3. If this were the end of a piece of music, what do you think might have happened before?

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

As a variation, you can play your own chords or chord sequences at the piano, and answer the questions above.
Natural half steps

When we add **accidentals** to notes, like ♭,♯, or ♮, it changes the note’s name.

- The distance from G to G# is a **half step**.
- The distance from G to A is a **whole step**.
- Most notes without accidentals are a **whole step** apart.

There are also some places on the staff where there is a half step distance between two notes that are naturals! Do you know them already?

There is always a half step between:
- the notes **B** and **C**
- and between the notes **E** and **F**

Can you think of a **mnemonic** sentence that would help you remember this? How about “**Everyone has Fun Being a Composer**”?

1. What’s your mnemonic?
Interval number

There are two parts to identifying any interval:
- First interval number
- Then interval quality

Identifying number

Interval numbers are easy! Don’t let them fool you. Here’s what you do:

1. An interval is always between two notes, right? Pick one of them to start on. Either the top or the bottom. It doesn’t matter!
2. Count up or down from the starting note towards the second note counting each line and space (this is the hardest part! Make sure you don’t skip any lines or spaces. It helps to point with the tip of your pencil or finger as you go.)
3. Once you reach the second note of the interval you are counting, count that note too. The number you end with is your interval!

Summary: Count the note you start with and the note you end with, and every line and space in between.

If there are any accidentals (sharps, flats, naturals) next to the notes you are counting, just ignore them! We’ll factor them in when it comes to determining quality.

Let’s practice!

1. Identify the following melodic intervals with a number:

![Melodic intervals]

2. Identify the following harmonic intervals with a number:

![Harmonic intervals]
Interval quality

Now that we understand interval number, let’s build on that and add interval quality.

Because we have natural half steps, there are times when the distance between two notes on the staff is bigger or smaller, even though the interval has the same number (go back to page 27 if you don’t know what natural half steps are!).

1. You can hear this for yourself! Let’s experiment with different kinds of thirds:

   a. Find a piano or keyboard.
   b. Either you or your TA can find two natural notes (white keys) that are a third apart. They will be two white keys that have just one white key between them. Have your TA help you find different kinds of thirds that use the black keys too.
   c. Experiment with different thirds. Listen closely to hear what the difference is between the different intervals that are all a third apart.
   d. Why do you think the thirds sound different? Describe the difference between the thirds you hear. If you were to give them a color or a feeling, what might you say?

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

2. Your TA will play all one kind of third or all the other. Can you guess which type of third you are hearing? Why do you think we call this difference “quality”?  

____________________________________________________________________________________
____________________________________________________________________________________
Interval quality identification

Two different intervals that have the same number but sound different have a different quality. One of them will be bigger and one of them smaller. The difference between the bigger and the smaller interval will be one half step.

How do we tell which is which by just looking at the page? The secret is in finding where those natural half steps are. (Go back to page 27 if you don’t know what natural half steps are!)

For the moment, ignore the accidentals. We’ll factor them back in in a moment!

1. Does this interval have a natural half step anywhere inside it?

   a. Is there a natural half step somewhere between these notes? _________________

   b. Without the accidentals, what is the quality? _______________________________

   c. With the accidentals, what is the quality? _________________________________

2. Does this interval contain a natural half step?

   a. Is there a natural half step somewhere between these notes? _________________

   b. Without the accidentals, what is the quality? _______________________________

   c. With the accidentals, what is the quality? _________________________________

   • If there is a natural half step, that means the interval is a minor third without any accidentals.

   • If there isn’t a natural half step, that means the interval is a major third, without any accidental. Go back and label the previous intervals minor or major (that’s the quality).
Interval quality identification, continued

Now, let’s factor in the accidentals.

3. Use your two hands (one representing each note) to show the size of the interval without accidentals, then move each hand either up or down (up for a sharp, down for a flat) to show how the interval changes with the accidentals.

   1. Did it get **bigger**? It went from minor to **major**!
   2. Did it get **smaller**? It went from major it **minor**!
Interval quality practice

Thirds

1. Label these intervals minor (m) or major (M):

Fourths and Fifths

2. Label these fourths and fifths: perfect (P), augmented (A), or, diminished (d):
Melody

My melody

1. Compose a short melody for your favorite instrument. Find a way to write it down so you can share it with the class next week. You can use traditional notation, shapes, numbers, letters or anything that helps you remember it.

2. My melody is for the ________________________________________ (instrument).

Title: _____________________________________________________________
Emotion melodies
If you would like, you can use staff paper go to the end of this workbook to complete this exercise.

1. Write a melody that might make someone laugh:

2. Write a melody that might make someone cry:

3. Write a melody that might scare someone:
Emotion melodies, continued

4. Write a melody that might surprise someone:

5. Write a melody that might make someone feel ___________________________ (write any emotion you want here!):
Listening to melodies

1. Listen to the melody of the following pieces and write a couple of words about what you notice when you listen to each of these melodies.

a. **Erik Satie** - *Gymnopédie No. 1* [https://www.youtube.com/watch?v=eW33wN2EufY](https://www.youtube.com/watch?v=eW33wN2EufY)

b. **Messiaen** - 5th Movement (*Praise to the Eternity of Jesus*) from *Quartet for the End of Time* [https://www.youtube.com/watch?v=UeSVu1zbF94&t=1083s](https://www.youtube.com/watch?v=UeSVu1zbF94&t=1083s)

c. **Ravel** - 2nd Movement from *String Quartet in F Major* [https://www.youtube.com/watch?v=O2KUTa6P6IM](https://www.youtube.com/watch?v=O2KUTa6P6IM)

d. **Camille Saint-Saëns** - *The Swan* from *The Carnival of the Animals* [https://www.youtube.com/watch?v=3qrKjywjo7Q](https://www.youtube.com/watch?v=3qrKjywjo7Q)

e. **The Beatles** - *Eleanor Rigby* [https://www.youtube.com/watch?v=HuS5NuXRb5Y](https://www.youtube.com/watch?v=HuS5NuXRb5Y)

2. Write down the name of a piece or song that you really like the melody of:

3. Why do you like it?
Variation and development

Things you can do with a musical idea

- Repeat it exactly
- Change some of the notes
- Transpose it (make it higher or lower)
- Throw it away!
- Play it backwards
- Add harmony to it
- Change the instrument
- Add a beat
- Take something away from it
- Speed it up or slow it down
- Change the rhythm
- Change the shape (contour) of the melody
- Change the mood
- Change the mode (ex. from Major to minor)
- Change the intensity
- Change the texture
- Add rests

1. Add your own ideas:

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

2. Perform at least three of the “Things you can do with a musical idea” to your melody.

3. Use the same melody you composed on page 33 or you can compose a new one.

My original melody
Things you can do with a musical idea, continued

Variation one

Variation two

Variation three
Harmony basics

Harmony is the presence of more than one note sounding together. It can be just two notes, can be dissonant or consonant; it can be triads or chords, and it can work within a key (what is called functional harmony) but it doesn’t have to!

Counterpoint is the idea of two melodic lines moving together with a sound that is harmonious.

Two notes stacked up is called a dyad.

Three notes stacked up—with the notes being a third apart—is called a triad.

Any number of notes occurring at the same time is called a chord. One way to think of chords is that they are just melodies formed into a block.

Improvisation
1. Partner one: play two chords or a melody on the keyboard.
2. Partner two: listen to the other person’s melody or chords very carefully. Create chords or a melody in response.
Ear fantasy

Your TA will play three different chords. Each chord will be repeated three times. Write down what you think of when you hear each chord.

1. When I hear this chord I think of:

   a. _______________________

   b. _______________________

   c. _______________________

   d. _______________________

   e. _______________________

2. Come up with a chord of your own that you really like. Write it below and give it a unique name:

   My chord

   Name:

   _______________________
Counterpoint

This way and that

There are three types of motion: **Contrary, Oblique, and Parallel**.

1. In pairs, stand next to each other with a little space between you.
   a. Move in contrary motion
   b. Turn around and move in oblique motion
   c. Turn around and walk in parallel motion
Chord game

Your TA will play a single chord that is not a major, minor, augmented, or diminished triad.

1. What might be happening in a story based on this chord?

___________________________________________________________________________
___________________________________________________________________________

2. If this were the start of a piece of music, what do you think might happen next?

___________________________________________________________________________
___________________________________________________________________________

3. If this were the end of a piece of music, what might have happened just before the chord?

___________________________________________________________________________
___________________________________________________________________________
1. Draw a line between the names of the instruments and the orchestral family to which it belongs:

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Orchestral Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flute</td>
<td>Woodwind</td>
</tr>
<tr>
<td>Gong</td>
<td>Brass</td>
</tr>
<tr>
<td>Contrabass</td>
<td>Brass</td>
</tr>
<tr>
<td>Violin</td>
<td>Percussion</td>
</tr>
<tr>
<td>Bass Trombone</td>
<td>Strings</td>
</tr>
<tr>
<td>Bass Clarinet</td>
<td>Strings</td>
</tr>
<tr>
<td>Glockenspiel</td>
<td>Winds</td>
</tr>
<tr>
<td>Piccolo Trumpet</td>
<td>Percussion</td>
</tr>
</tbody>
</table>
Orchestral families, continued

2. Circle the instrument with the higher range: Violin Clarinet
3. Circle the instrument with the lower range: Piccolo Violin
4. Circle the instrument(s) that can play more than one note: Marimba English Horn
   Violin Contrabassoon
   Harp

5. Circle the one of the following does not belong to the string family:
   Double Bass Double Reed Cello Viola

6. Numbering 1-14, please place the following instruments in score order (i.e. top to bottom, where you would find them on an orchestral score)
   ☐ Tuba ☐ Contrabass ☐ Violin
   ☐ Clarinet ☐ Trombone ☐ Oboe
   ☐ Viola ☐ French Horn ☐ Trumpet
   ☐ Bassoon ☐ Percussion ☐ Cello
   ☐ Flute ☐ Harp

7. Which of the following instruments uses the alto clef?
   Violin Mezzo Soprano Viola Clarinet

8. Which of the following are not percussion instruments?
   Marimba Theremin Tuba Crotales
   Glockenspiel Harpsichord Oboe
   Tubular Bells Rototoms
Orchestral families: Winds

Flute
1. The lowest note of the flute is ____________________________________________

2. …and the highest note is (around) _________________________________________

3. Composers write for the flute in the _________ clef(s)

4. A flute player in an orchestra usually also plays the ___________ and the ___________

5. Flutes are particularly good at going back and forth between two notes, and the fancy word for this technique is ________________________________

6. Two words that describe the sound of the upper register of the flute are:
   _____________________________________________

7. Two words that describe the sound of the middle register of the flute are
   ___________________________________________ and _____________________________________

8. Two words that describe the sound of the lower register of the flute are
   ___________________________________________ and _____________________________________

9. The sound of the flute reminds me of _________________________________________

10. The flute is good at _______________________________________________________

Listening
- Jacques Ibert, Flute Concerto https://www.youtube.com/watch?v=kxKb6wnOblA
- Elliot Carter, Scrivo in Vento https://www.youtube.com/watch?v=xgyv3AH4RMY
- Edgard Varèse, Density 21.5 https://www.youtube.com/watch?v=SzyaPeihCnI
- Claude Debussy, Syrinx https://www.youtube.com/watch?v=YEyKM13yf_4
- Ruth Crawford, Diaphonic Suite No. 3 https://www.youtube.com/watch?v=EqOpkCd7lg8
Orchestral families: Winds, continued

**Oboe**

1. The lowest note of the oboe is ________________________________

2. ...and the highest note is (around) ________________________________

3. Composers write for the oboe in the _______ clef(s)

4. An oboist in an orchestra usually also plays the a) __________, which is b) **higher** / **lower** than the oboe

5. Two words that describe the sound of the upper register of the oboe are 
   ________________________________ and ________________________________

6. Two words that describe the sound of the middle register of the oboe are 
   ________________________________ and ________________________________

7. Two words that describe the sound of the lower register of the oboe are 
   ________________________________ and ________________________________

8. The sound of the oboe reminds me of ________________________________

9. The oboe is good at ____________________________________________

**Listening**

- Heinz Holliger, *Studie über Mehrklänge*  
  [https://www.youtube.com/watch?v=cr3_fzwtfgo](https://www.youtube.com/watch?v=cr3_fzwtfgo)

- Antonio Vivaldi, *Sonata for Oboe and Continuo*  
  [https://www.youtube.com/watch?v=E-pludhSCSg](https://www.youtube.com/watch?v=E-pludhSCSg)

- Carl Philipp Emanuel Bach, *Oboe Concerto in B flat major*  
  [https://www.youtube.com/watch?v=B1wUagaw1dg](https://www.youtube.com/watch?v=B1wUagaw1dg)
Orchestral families: Winds, continued

Clarinet

1. The lowest note of the B♭ clarinet is ________________________________

2. ...and the highest note is (around) ________________________________

3. Composers write for the clarinet in the _______ clef(s)

4. A clarinetist in an orchestra usually also plays the a) ____________, which is b) higher / lower than the clarinet

5. The clarinet has a break note at ____________

6. Two words that describe the sound of the upper register of the clarinet are
   ________________________________ and ________________________________

7. Two words that describe the sound of the middle register of the clarinet are
   ________________________________ and ________________________________

8. Two words that describe the sound of the lower register of the clarinet are
   ________________________________ and ________________________________

9. The sound of the clarinet reminds me of________________________________________

10. The clarinet is good at ________________________________

Listening
- Mozart, Clarinet Quintet in A Major (K. 581)
  https://www.youtube.com/watch?v=_8fX1LmqG8s
- Aaron Copland, Clarinet Concerto
  https://www.youtube.com/watch?v=9GnJBLwOjFo
- Igor Stravinsky, Three Pieces for Clarinet
- Brahms, Clarinet Quintet in B Minor (Op. 115)
- Joan Tower, Wings
  https://www.youtube.com/watch?v=aAuAuDE2OnE
Orchestral families: Winds, continued

**Bassoon**

1. The lowest note of the bassoon is ________________________________

2. ...and the highest note is (around) ________________________________

3. Composers write for the bassoon in the _______ clef(s)

4. A bassoonist in an orchestra usually also plays the a) __________, which is b) **higher** / lower than the bassoon

5. Two words that describe the sound of the upper register of the bassoon are
   ________________________________ and ________________________________

6. Two words that describe the sound of the middle register of the bassoon are
   ________________________________ and ________________________________

7. Two words that describe the sound of the lower register of the bassoon are
   ________________________________ and ________________________________

8. The sound of the bassoon reminds me of______________________________

9. The bassoon is good at ____________________________________________

**Listening**

- Georg Philipp Telemann, *Sonata in F Minor*  
  [https://www.youtube.com/watch?v=DBFjNhdmLX4](https://www.youtube.com/watch?v=DBFjNhdmLX4)
- Johann Nepomuk Hummel, *Grand Concerto for Bassoon in F*  
  [https://www.youtube.com/watch?v=t_kLVpBf2DI](https://www.youtube.com/watch?v=t_kLVpBf2DI)
- Luciano Berio, *Sequenza XII*  
  [https://www.youtube.com/watch?v=de1mwOaW8Dc](https://www.youtube.com/watch?v=de1mwOaW8Dc)
- Igor Stravinsky, *Rite of Spring* (opening)  
  [https://www.youtube.com/watch?v=NOTjyCM3Ou4](https://www.youtube.com/watch?v=NOTjyCM3Ou4)
Orchestral families: Winds, continued

1. Which wind instrument do you feel is closest to your voice? Why?

____________________________________________________________________________________
____________________________________________________________________________________

Very advanced wind orchestration

1. Listen to the wind section in these pieces

**Stravinsky: Symphonies of Wind Instruments**
https://www.youtube.com/watch?v=F68BMpyGecs&list=RDF68BMpyGecs#t=0

**Piano version**
https://www.youtube.com/watch?v=EwpCaLScy8

2. Orchestrate the first eight measures of the piano version for winds and compare with Stravinsky’s (NB. Include horns!)
Orchestral families: Brass

Horn

1. The lowest note of the horn is ________________________________

2. ...and the highest note is (around) ________________________________

3. Composers write for the horn in the _______ clef(s)

4. When a horn player sees con sord. or mute, they will change the sound of the horn by ________________________________

5. Two words that describe the sound of the upper register of the horn are
   ________________________________ and ________________________________

6. Two words that describe the sound of the middle register of the horn are
   ________________________________ and ________________________________

7. Two words that describe the sound of the lower register of the horn are
   ________________________________ and ________________________________

8. The sound of the horn reminds me of ________________________________

9. The horn is good at ________________________________

Listening

- Brahms, Horn Trio in E-flat Major (Op.40)
  https://www.youtube.com/watch?v=ORvvsRawgDo

- Gyorgy Ligeti, Trio for Violin, Horn, and Piano
  https://www.youtube.com/watch?v=gQTNEx4P3qU

- Richard Strauss, Horn Concerto
  https://www.youtube.com/watch?v=EQH0C5yB6Jl

- Poulenc, Elegie for Horn and Piano
  https://www.youtube.com/watch?v=wlvOk42c5WE
Orchestral families: Brass, continued

Trumpet

1. The lowest note of the trumpet is _________________________________

2. ...and the highest note is (around) _________________________________

3. Composers write for the trumpet in the ______ clef(s)

4. When a trumpet plays flz. (short for flutter-tongue), it sounds like
   ___________________________________________________________________

5. Two words that describe the sound of the upper register of the trumpet are
   _______________________________ and _______________________________

6. Two words that describe the sound of the middle register of the trumpet are
   _______________________________ and _______________________________

7. Two words that describe the sound of the lower register of the trumpet are
   _______________________________ and _______________________________

8. The sound of the trumpet reminds me of_______________________________

9. The trumpet is good at ___________________________________________________________________

Listening

- Miles Davis, So What
  https://www.youtube.com/watch?v=zqNTItOGh5c

- Sofia Gubaidulina, Trio For Three Trumpets
  https://www.youtube.com/watch?v=dvB6MDTdhFU

- Benjamin Britten, Fanfare for St. Edmundsbury
- Stravinsky, Fanfare for a New Theatre
- Eric Ewazen, Sonata for Trumpet and Piano
- Alison Balsom, Haydn Concerto no. 3
Orchestral families: Brass, continued

**Trombone**

1. The lowest note of the trombone is ________________________________

2. ...and the highest note is (around) ________________________________

3. Composers write for the trombone in the ______ clef(s)

4. Two words that describe the sound of the upper register of the trombone are ____________________________________ and ____________________________________

5. Two words that describe the sound of the middle register of the trombone are ____________________________________ and ____________________________________

6. Two words that describe the sound of the lower register of the trombone are ____________________________________ and ____________________________________

7. The sound of the trombone reminds me of ________________________________

8. The trombone is good at ______________________________________________

**Listening**

- Christopher Rouse, *Trombone Concerto*
  https://www.youtube.com/watch?v=Bbxe4uut0AQ

- Paul Hindemith, *Trombone Sonata*
  https://www.youtube.com/watch?v=i7G6RkgHpuY
Orchestral families: Percussion

There are hundreds of different percussion instruments. We can think of them in two groups: **pitched percussion** and **unpitched percussion**.

1. Three pitched percussion instruments are a) ________________________________
   
b) ________________________________ and c) ________________________________

2. Three unpitched percussion instruments are a) ________________________________
   
b) ________________________________ and c) ________________________________

3. ________________________________ is a metal percussion instrument.

4. ________________________________ is a wooden percussion instrument.

5. ________________________________ is made of skin.

Listening

- Tania León, *A la Par* for piano and percussion  
  https://www.youtube.com/watch?v=My-WQB-2aSI

- Silvestre Revueltas, *Toccata for percussion*  
  https://www.youtube.com/watch?v=SFRbtN8ovhc

- John Cage, *Third Construction*  
  https://www.youtube.com/watch?v=j27UldYJZ0o

- Michael Gordon, *Timber*  
  https://www.youtube.com/watch?v=qMfPzWuQCFA

- Gil Evans, *Nobody’s Heart*  
  https://www.youtube.com/watch?v=bofEME8CzAE
Orchestral families: Strings

Violin
1. The four open strings of the violin are _____, _____, _____, and _____
2. My mnemonic for remembering the strings is ____________________________________
___________________________________________________________
3. The lowest note on the violin is _____
4. …and the highest note is (around) _____
5. Composers write for the violin in the _______ clef(s)
6. Two words that describe the sound of the upper register of the violin are
   ___________________________ and ___________________________
7. Two words that describe the sound of the middle register of the violin are
   ___________________________ and ___________________________
8. Two words that describe the sound of the lower register of the violin are
   ___________________________ and ___________________________
9. The sound of the violin reminds me of ___________________________________
10. The violin is good at ______________________________________________________

Listening

- Felix Mendelssohn, Violin Concerto E Minor
  https://www.youtube.com/watch?v=o1dBg__wsuo
- Béla Bartók, Duets for 2 Violins
  https://www.youtube.com/watch?v=PyUhEnXxdl
- Arvo Pärt, Fratres
  https://www.youtube.com/watch?v=rVQTbm_f-tw
Orchestral families: Strings, continued

Viola

1. The four open strings of the viola are _____, _____, _____, and _____

2. My mnemonic for remembering the strings is __________________________________________________________
   _______________________________________________________________________________________

3. The lowest note on the viola is _____

4. …and the highest note is (around) _____

5. Composers write for the viola in the ______ clef(s)

6. Two words that describe the sound of the upper register of the viola are
   _______________________________________________________________________________________
   _______________________________________________________________________________________

7. Two words that describe the sound of the middle register of the viola are
   _______________________________________________________________________________________
   _______________________________________________________________________________________

8. Two words that describe the sound of the lower register of the viola are
   _______________________________________________________________________________________
   _______________________________________________________________________________________

9. The sound of the viola reminds me of_________________________________________________________

10. The viola is good at ____________________________________________________________

Listening

- Georg Telemann, *Viola Concerto in G major*
  https://www.youtube.com/watch?v=yMpzPMkrALM

- Paul Hindemith, *Sonata for Viola and Piano in F major*
  https://www.youtube.com/watch?v=IDC9HIpreK8

- Béla Bartók, *Viola Concerto*
  https://www.youtube.com/watch?v=DffdximbKSY
Orchestral families: Strings, continued

Cello
1. The four open strings of the cello are _____ , _____ , _____ , and _____
2. My mnemonic for remembering the strings is __________________________________________
   __________________________________________
3. The lowest note on the cello is _____
4. …and the highest note is (around) _____
5. Composers write for the cello in the ______ clef(s)
6. Two words that describe the sound of the upper register of the cello are
   __________________________________________ and __________________________________________
7. Two words that describe the sound of the middle register of the cello are
   __________________________________________ and __________________________________________
8. Two words that describe the sound of the lower register of the cello are
   __________________________________________ and __________________________________________
9. The sound of the cello reminds me of_______________________________________________
10. The cello is good at ____________________________________________________________

Listening

- J. S. Bach, Cello Suites
  https://www.youtube.com/watch?v=wqhR37qSUMA

- Benjamin Britten, Cello Suite No. 1
  https://www.youtube.com/watch?v=Nr4ItL3Z8kQ

- George Crumb, Sonata for Solo Cello
  https://www.youtube.com/watch?v=19O3Dq4940

- Sofia Gubaidulina, 10 Preludes for Solo Cello
  https://www.youtube.com/watch?v=mD2bV-tiX58
Orchestral families: Strings, continued

**Bass**

1. The four open strings of the bass are _____, _____, _____, and _____

2. My mnemonic for remembering the strings is _____________________________________________
   __________________________________________________________________________________

3. The lowest note on the bass is _____

4. …and the highest note is (around) _____

5. Composers write for the bass in the ______ clef(s)

6. Two words that describe the sound of the upper register of the bass are
   ___________________________________________ and ___________________________________________

7. Two words that describe the sound of the middle register of the bass are
   ___________________________________________ and ___________________________________________

8. Two words that describe the sound of the lower register of the bass are
   ___________________________________________ and ___________________________________________

9. The sound of the bass reminds me of____________________________________________________

10. The bass is good at _______________________________________________________________

**Listening**

- Giovanni Bottesini, *Concerto for Double Bass No. 2 in B minor*  
  [https://www.youtube.com/watch?v=QgZ_-f7pV Horton](https://www.youtube.com/watch?v=QgZ_-f7pV Horton)

- Jon Deak, *B. B. Wolf*  
  [https://www.youtube.com/watch?v=nTGQcUaDCSU](https://www.youtube.com/watch?v=nTGQcUaDCSU)
Orchestral families: Strings

String family
1. The four string instruments from highest to lowest are ____________________________ , ____________________________ , ____________________________ , and ____________________________ .

Listening

- Ruth Crawford, *String Quartet III. Andante*  
  https://www.youtube.com/watch?v=7XFu8GI74wc

- Dmitri Shostakovich, *String Quartet No. 8*  
  https://www.youtube.com/watch?v=-0nKJoZY64A&t=115s

- Arvo Pärt, *Cantus in Memory of Benjamin Britten*  
  https://www.youtube.com/watch?v=f3B4YWCj1a4

- Alberto Ginastera, *String Quartet No. 1*  
  https://www.youtube.com/watch?v=5XXe7P1DrcM

- Julia Wolfe, *Cruel Sister*  
  https://www.youtube.com/watch?v=eJEWOPugcYo
## String instruments: special techniques

<table>
<thead>
<tr>
<th>Technique</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double stop</td>
<td>The technique of playing two notes simultaneously on a bowed stringed instrument.</td>
<td></td>
</tr>
<tr>
<td>Tremolo</td>
<td>A trembling effect created by moving the bow from side to side rapidly using a very small amount of bow.</td>
<td></td>
</tr>
<tr>
<td>Sul ponticello</td>
<td>Bowing very close to the bridge to create a harsh or glassy tone.</td>
<td></td>
</tr>
<tr>
<td>Sul tasto</td>
<td>Bowing over the fingerboard to create a muted tone.</td>
<td></td>
</tr>
<tr>
<td>Col legno</td>
<td>Striking the string with the wood of the bow.</td>
<td></td>
</tr>
<tr>
<td>Scratch tone</td>
<td>Applying very hard pressure to the bow while bowing the string.</td>
<td></td>
</tr>
<tr>
<td>Pizzicato (pizz.)</td>
<td>Plucking the strings with the finger.</td>
<td></td>
</tr>
<tr>
<td>Bártok pizz. (snap pizz.)</td>
<td>Plucking the string away from the fingerboard with sufficient force to cause it to snap back and strike the fingerboard creating a snapping sound.</td>
<td></td>
</tr>
</tbody>
</table>
### Natural Harmonics
There are two types of string harmonics — natural and artificial. A natural harmonic is the pitch (resultant) that is produced by lightly touching an open, vibrating string (the fundamental) at one of the nodes located at 1/2, 1/3, 1/4, etc. the length of the string.

### Artificial Harmonics
An artificial harmonic is a harmonic whose fundamental must be artificially created by stopping (shortening) the string to the desired fundamental. This is done by pressing strongly with a lower finger and then obtaining the resultant by touching lightly with a higher finger one of the nodes at 1/2, etc. the length of the shortened string.

### Glissando (gliss.)
A glide or slide from one pitch to another.

### Trill
Rapidly alternating between two pitches either a half or whole step apart. The performer trills up one note from the written pitch.

### Tapping on the instrument
String instruments can be tapped just about anywhere. The body of a string instrument, since it is a resonant cavity, can resound quite loudly when struck with the fingers.

### Sordino (Con Sord.)
Means “Muted” or “with mute”. A mute is a device attached to the bridge of the instrument, dampening vibrations and resulting in a softer sound.

### Successive up bows
Consecutive up bow strokes

### Successive down bows
Consecutive down bow strokes
Voice: text setting

1. Listen to:

Charles Ives: Memories
https://www.youtube.com/watch?v=CYQYcAprDU

Here's the text:

MEMORIES (Text by Gary Bachlund)
i. Very Pleasant
We're sitting in the opera house;
We're waiting for the curtain to arise
With wonders for our eyes;
We're feeling pretty gay,
And well we may,
"O, Jimmy, look!" I say,
"The band is tuning up
And soon will start to play."
We whistle and we hum,
Beat time with the drum.

ii. Rather Sad
From the street a strain on my ear doth fall,
A tune as threadbare as that "old red shawl,"
It is tattered, it is torn,
It shows signs of being worn,
It's the tune my Uncle hummed from early morn,
'Twas a common little thing and kind 'a sweet,
But 'twas sad and seemed to slow up both his feet;
I can see him shuffling down
To the barn or to the town,
A humming.

2. How does the composer illustrate the words with the music?

________________________________________________________________________
________________________________________________________________________

3. What role does the piano play?

________________________________________________________________________
________________________________________________________________________
Voice: text setting, continued

4. How does the composer make use of the instruments to tell the story?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5. Can you compare this to any music you have heard before? If yes, what music? If not, what sets it apart?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

6. Can you describe the sound of the voice in three words?

________________________________________________________________________

**Aikalisä, ("Timeout"),** a fully-staged, one-act Opera with chamber orchestra, was presented in six performances 12-15 April, 2016 by the Finnish National Opera in Helsinki. The libretto was written, the music composed and orchestrated, entirely by 10 kids ages 12-17 from the *Kuule, Minä Sävellän* (our Finnish VYC) and by 4 from the New York Philharmonic’s Very Young Composers/Bridge program
Voice: text setting, continued

1. Listen to:

**George Gershwin:** A Foggy Day
https://www.youtube.com/watch?v=jo2RaKyo5c&feature=youtu.be

Here’s the text:

*A Foggy Day* (Lyrics by George Gershwin & Ira Gershwin)

I was a stranger in the city
Out of town were the people I knew
I had that feeling of self pity
What to do, what to do, what to do?
The outlook was decidedly blue
But as I walked through the foggy streets alone
It turned out to be the luckiest day I’ve known

A foggy day in London town
It had me low and it had me down
I viewed the morning with much alarm
The British museum had lost its charm
How long, I wondered, could this thing last?
But the age of miracles hadn’t passed
For, suddenly, I saw you there
And through foggy London town
The sun was shining everywhere

A foggy day in London town
It had me low and it had me down
I viewed the morning with much alarm
The British museum had lost its charm
How long, I wondered, could this thing last?
But the age of miracles hadn’t passed
For, suddenly, I saw you there
And through foggy London town
The sun was shining upside-down!

2. How does the composer use the voice in this piece?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Voice: text setting, continued

3. Are there "special" moments or things that happen only once or happen only surrounding certain words? What are those words?

________________________________________________________________________
________________________________________________________________________

4. What emotion or story do you think the composer is trying to communicate with this piece?

________________________________________________________________________

5. Can you describe the sound of the voice in three words?

________________________________________________________________________
Voice: text setting, continued

Writing vocal music almost always means you are dealing with a text that someone else wrote—a poem, a play, some prose. But as you take the words and set them to music, there is a lot to think about. For one, there is the idea of which word you **emphasize**, because changing emphasis can very easily change the meaning - much like how actors say their lines. Take the following common sentence:

**I love you.**

We all know what this means, to a certain extent, but just by shifting the emphasis we can change the meaning.

I love you  or  I love you  or  I love you.

1. Say them out loud three times. They tell different stories.
   a) The story of the first reading (I love you) is:

   ______________________________________________
   ______________________________________________

   b) The story of the second reading (I love you)

   ______________________________________________
   ______________________________________________
   ______________________________________________

   The story of the third reading (I love you):

   ______________________________________________
   ______________________________________________
   ______________________________________________

Often the texts we set are longer, and more subject to interpretation. And as composers we have the pleasure of making them ours, by managing the interpretation.
Here is a poem called “The Sick Rose” by William Blake

O Rose, thou art sick:
The invisible worm,
That flies in the night
In the howling storm,

Has found out thy bed
Of crimson joy;
And his dark secret love
Does thy life destroy.

1. Read the poem out loud three - five times to find the **music** built into the words.

2. What is **happening** in this poem?

3. What is the **most important word** of this poem? Why?

4. What is the overall **mood** of this poem?

5. If you were to set it to music, how would you begin?

---

**Voice: text setting, continued**

Here is a poem called “The Sick Rose” by William Blake
Voice: timbre

1. Listen to:

Meredith Monk: Gotham Lullaby  
https://www.youtube.com/watch?v=SSf0FmXB_6M

2. How does the composer use the voice in this piece?

___________________________________________________________________________  
___________________________________________________________________________

3. Can you compare this to any music you have heard before? If yes, what music? If not, what sets it apart?

___________________________________________________________________________  
___________________________________________________________________________  
___________________________________________________________________________

4. In what way do the instruments interact with the singer?

___________________________________________________________________________  
___________________________________________________________________________  
___________________________________________________________________________

5. What emotion or story do you think the composer is trying to communicate with this piece?

___________________________________________________________________________  
___________________________________________________________________________  
___________________________________________________________________________

6. Can you describe the sound of the voice in three words?

___________________________________________________________________________  
___________________________________________________________________________  
___________________________________________________________________________
Tips for writing for voice

- Know the range of your singer
- Try to sing it yourself
- Remember breathing
- Think about natural rhythm of words (Ex. *I was walking down the street...*) - stressed syllables
- To use text or not to use text? (vocalise - no articulated text)
- How to use the text? (straightforward, pauses, repetition, emphasize words, etc.)
- Mark your text (circle or important words, mark pauses, etc.)
- Ask yourself what does the text mean to you and what you want to express with the text (this will be different for everyone)
- **Vibrato** or **non-vibrato** (straight tone or small vibrato)
- Extended vocal techniques (spoken, whisper, percussive effects, gliss., whistle, *ululation*)

Extended techniques

1. What are some percussive effects for the voice?

2. What are some other sounds you could make with your voice?
### Tips for writing for voice, continued

<table>
<thead>
<tr>
<th>Image 1</th>
<th>Image 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fizzgiggious Fish, who always walked about upon Stilts, because he had no legs.</td>
<td>The Enthusiastic Elephant, who ferried himself across the water with the Kitchen Poker and a New pair of Ear-rings.</td>
</tr>
<tr>
<td>The Bountiful Beetle, who always carried a Green Umbrella when it didn’t rain, and left it at home when it did.</td>
<td>The Tumultuous Tom-tommy Tortoise, who beat a Drum all day long in the middle of the wilderness.</td>
</tr>
</tbody>
</table>

1. Pick one drawing from above
2. Look at your drawing and think about who’s your character and what it is doing
3. Read the text below the drawing you choose
4. Circle any important words or words that you find particularly musical
5. Find a way to sing your text (could be a melody but feel free to play around with other ideas)
6. Write it down in a way you can remember
7. Practice your line
8. Share with the rest of your small group
Ideas for instruments

1. Imagine three sounds that you would like to hear on the percussion. Write them down here:


2. Imagine three sounds that you would like to hear on the flute. Write your sounds down here:


3. Imagine three sounds that you would like to hear on the cello. Write your sounds down here:


4. Imagine three sounds that you would like to hear on the trombone. Write your sounds down here:


Discovering instruments from around the world

1. Research three instruments that are not included in the symphony orchestra and complete the table below. You can start by researching folk instruments from your own culture or other cultures you’re curious about.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Country of origin</th>
<th>What it sounds like</th>
<th>Interesting fact</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

2. If you had to write a piece using these three instruments it would be titled

3. Because
Articulation and dynamics

Articulation

1. Write next to each articulation its name and what effect it has on the note:

<table>
<thead>
<tr>
<th>Name</th>
<th>Effect</th>
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2. Example #1 is a tie. Example #2 is a slur.

What’s the difference between a tie and a slur?
Dynamics

\textit{PPP} Extremely soft
\textit{PP} Pianissimo, very soft
\textit{P} Piano, soft
\textit{mp} Mezzo-piano, moderately soft
\textit{mf} Mezzo forte, moderately loud
\textit{f} Forte, loud
\textit{ff} Fortissimo, very loud
\textit{fff} Fortississimo, extremely loud

\textit{cresc.} (crescendo) – grow progressively louder
\textit{dim.} (diminuendo) – grow progressively softer
\textit{poco a poco} – little by little
\textit{subito} – suddenly
“Muddling through your music” (Reading the score on piano)

1. Listen to the following piece three times, once without the score (shut your eyes!), then twice with the score!

**Britten:** *Cradle Song (from A Charm of Lullabies)*
https://www.youtube.com/watch?v=nFPMwiCnvFY

**Mahler:** *Adagietto*
https://www.youtube.com/watch?v=Q8-kz5pHM-E

**Bartók:** *String Quartet No. 4*
https://www.youtube.com/watch?v=mTnbrLXEGjl

**Brahms:** *Symphony No. 4*
https://www.youtube.com/watch?v=pT6SN4tPbv8

1. It can be very difficult to learn a piece of music written on multiple lines and in multiple clefs, but as composers it is essential that we not only listen a lot - listen to a lot of music, and the same pieces multiple times--but that we are able to “get under the hood” of how certain pieces of music work. Sometimes we have a recording, but it is helpful to get the music “under our fingers” at a piano, which, unless you are a very great pianist, can be challenging.

2. Just examining a few measures can be helpful to create strategies for “listening with your fingers.” Here is the opening to a famous piece by Mozart, his 19th String Quartet, often called the “Dissonance Quartet.”

![Sheet music of Mozart's 19th String Quartet](image)
"Muddling through your music", continued

3. Before you jump in and play the piece, ask yourself a few questions.

4. Does the title tell us anything we need to know before playing?
   - What is the tempo?
   - What are the clefs?

5. Once you have answered those questions, try a few tricks:
   - Just play the bottom-most line. Maybe a few times until you have it
   - Try to play the bottom-most line and top-most line together. Repeat.
   - Try adding one or two lines but don’t worry about getting it perfect, just get through it
   - Start slow and get faster each time!

   **Remember**: you aren’t aiming to play the piece at a concert level, or even at a level where all the notes are heard. In fact, there may be too many notes for your ten fingers to manage. This is not about playing the music perfectly - although the more aspects of the music that you can feature (i.e. dynamics, articulations, phrasings) the better - but about using the piano as a tool for deepening your understanding.

   Play two of the voices while your student plays the other two; switch.
"Muddling through your music", continued

1. Now that you have worked your way through the Mozart example on page 74, try your hand(s) at this famous song "Ich grolle nicht" from Robert Schumann’s *Dichterliebe*.

2. Being a different piece of music by a different composer of a different era, some other questions arise:
   - Is there a chord I recognize?
   - What about the top line is different from the middle or bottom lines, notation wise?

**Remember!** The same questions we asked ourselves above apply to this (and every) piece of music. But are there things on this score whose meaning you do not immediately understand? If so, please look them up.

**Extra:** Can you sing the top line and play the bottom? Can you play just the middle two lines?
"Muddling through your music", continued

Now that you want a super extra-advanced challenge, try this score to Beethoven’s *Third Symphony “Eroica”*.  

There will be additional challenges here. For one, some of the instruments are in a different key. But the same rules apply: try individual lines, go slow, and make a full assessment of the music before you jump in and play.
Making scores and parts

The score

When you music is all down on the page just the way you want it with all the different instruments represented, this is called a score. A score is what a conductor would look or what a student would look at to follow along and see everything that they are hearing in the piece.

Parts

Musicians don’t usually look at a score when they play a piece. They usually look at a part. A part only has the music that that one musician is playing. Each musician needs a part to play off of with just her or his music on it. If you have a piece for five instruments, you will also need five parts! You will sometimes need to make cues for performers if they have many bars of rests.

If you are writing you music out by hand, make sure you carefully copy each part from the score with no mistakes. Check it over carefully to make sure.

If you are writing your music using a computer program, you can pull the parts out automatically. See page 89.

While you are making parts, take the time to think about what each instrument is doing. Actually pretend that you are the person playing that part.

- Do you have all the information you need?
- Is that double stop actually playable?
- Do you have enough space to take a breath? Is that page turn going to work?

You’ll be amazed by the number of mistakes you can catch this way.
Common notational errors and how to catch them

Every single note on the page has:

- Pitch (with the exception of non-pitch percussion instruments. They do actually have pitch! We just don’t notate it.)
- Rhythm
- Volume
- Articulation
- Timbre (which we don’t notate, but we have to anticipate)

Every notational aspect of your piece has to have a real, clear, practical application. It also needs to be the clearest way you know to convey what you are thinking to the performer. Notation is just instructions. Don’t let it trap you and don’t let it make decisions for you!

Some common notational mistakes:

1. Lack of information
2. Mistakes about the instrument’s capacities
3. Enharmonics
4. Failure to clearly show the beat

What to do to prevent these mistakes

1. Make a checklist of things that you commonly miss in your scores.
2. Think of your score in layers. Dynamics are a layer. Instrument capabilities are a layer. When you look through your score, look it through one layer at a time.
3. Go through instrument part imagining yourself playing it in whatever way you can.
4. Ask performers questions whenever possible.
5. Don’t let yourself burn out. Leave yourself time for the editing process in addition to the composing process. Let yourself rest for a day or two after you have composed so that you can go over things with fresh energy.
6. Remember, notating is not composing and composing is not notating! They require different parts of your brain to do.
Program notes

A program note is a brief written statement from the composer that gives the listener some kind of context for a work. It can describe the piece, give context for it, detail your thought process as you created it, give information about why/when/with whom the work was created, etc. This is a place for you to give your audience whatever information you think they should have in order to understand you and your work better.

These are almost always required for concert programs and grant applications. Here are some real life examples by real life composers!

Chris Cerrone Memory Palace
Memory Palace is a kind of paean to places and people that have deeply affected me. The title refers to an ancient technique of memorization that helped orators remember very long speeches by placing mental signposts in an imaginary location and ‘walking’ through it. In this piece, the palace is my life. The crickets in the first movement, “Harriman,” were recorded on a camping trip with two old and dear friends. The recording of wind chimes in the third movement was recorded at my parents’ house in their backyard. The sounds in the piece are signposts; they help me remember—and more important, understand, who I am.

Mary Kouyoumdjian Children of Conflict
Inspired by the work of American Pulitzer-nominated war photographer Chris Hondros, who captured images of children in wars around the world, the Children of Conflict series is a collection of sonic portraits based off of Hondros’ intimately revealing photography with hopes to continue the storytelling and dialogue of his work prompts. "Shards and Shrapnel" is a portrait of an eleven year old boy who peeks through a hole in a window left behind by the bullet of an Israeli sniper who killed his mother. It is my hope that this piece contributes an awareness of what individuals go through during outbreaks of violence and to emphasize a child's right to life, to a safe and nurturing environment, and to the opportunity to simply be a kid.

Sam Pluta Modules
Jeff Snyder and I have been composing and improvising together since 2006, when we made our first album as exclusiveOr. In 2013 we were commissioned by the International Contemporary Ensemble for their ICELab commissioning series. The result is MODULES, a concert length work for brass quartet, analog synthesizer, live electronics, and percussion. The goal for the project is to tap exclusiveOr’s and ICE’s improvising talents, combining this with strictly notated scores, to create a concert-length barrage of notes, sounds, and noises.
Program notes, continued

We wanted to create a work that is both a solid piece of composed music and a solid piece of improvisation, where these two opposing methodologies seamlessly intersect, complement each other, and imitate one another to create a unified whole.

**Caroline Shaw** *Ritornello*
Sometimes it is the smallest things that return. Again and again, and again. Sometimes repetition enhances meaning. Reinforces meaning. Depletes it, warps it. Envelopes it. The simplest words, when repeated aloud, develop a strangeness that is delightful and chilling at the same time. Repetition folds and unfolds a signifier until the relationship between the signifier and the signified breaks down, articulated best in fragments and distilled to something non-verbal. Elusive semiotic theory aside, this, I think, is where some of our music comes from. And maybe this is why some music keeps coming back.
Composer Name

TITLE

for flute, clarinet, violin, cello, and piano

(2016)
TITLE (2016)
for flute, clarinet, violin, cello, and piano
Composer Name

PROGRAM NOTES

Pri ne vocent virtute indoctum, ignota omnium appetere ne pri. Nam ad erroribus abhorreant adversarium. Tamquam volumus comprehensam eam ei, in ipsum facilis vis. At duo pertinax adolescens definitionem, latine tibique nostrum eam ea.

PERFORMANCE NOTES
Any information that the performers will need in addition to the score should go here, like:

An 'E' above a cymbal indicates tapping the cymbal on its edge with the mallet stick.
An 'R' above the floor tom indicates ricocheting the mallet stick on the rim of the drum.

At rehearsal letter 'D' at the indication "Spoken insert" all the performers should begin reading aloud quietly from the text document indicated for his/her instrument. Wait until all the readings are finished before returning to the score in the following measure.

PREMIERE INFORMATION
Premiered by Hotel Elefant on May 24, 2016 in the Helen Hull room at David Geffen Hall in New York, NY
performer, flute
performer, clarinet
Performer, violin
Performer, cello
Performer, piano
Form

Form analysis

1. Do a basic **analysis** of a piece of music you like, of any genre. Remember, analysis is just as creative as composing!

Title of the piece: ______________________________________________________

Composer: _____________________________________________________________

   a. What are the basic **elements** of the music (i.e. instruments, voices, specific sounds)?

   b. In what order does the composer put these elements?

   c. Are there **special** moments, things that happen only once or happen only surrounding certain words?

   d. If there are words, in what way does the composer use the music to make them happen?

   e. Can you make a picture out of the piece? A chart?
Rehearsal and concert

Presenting your music in front of an audience

Speaking
When your music is presented on a concert, whether it is in your Bridge classroom or on the main stage at the Philharmonic, you will be asked to introduce yourself and your music before the piece is performed.

About yourself
Say:
- Your name
- Your age
- The name of your school.

If there is anything else you think the audience should know about you, say that too!

About your piece
This is really up to you! Some things you might want to say:

- What you were thinking about when you wrote it.
- Something specific you want the audience to listen for ("in the middle the flute gets much faster. That is the part where the cat grabs the ball of string", “at the end the whole ensemble gets really loud and cuts off. I thought that would be a dramatic way to end a piece.")
- Something you are proud of about this piece (“I had never written for percussion before and I wanted to try to make it add a shimmery sound to the group. I like the way it turned out!”, “I like the way the cello sounds when it plays the melody right after the French horn has just played it”
- Is there a story that you tell or a feeling you express? Tell us if you want to!

The performance
You might be asked to sit on stage or just to the side during the performance of your piece. Sit quietly and listen. It is hard to sit there and feel like you are being watched while everyone listens to your music. We know! We’ve been there too (sigh). It gets better the more times you do it, we promise. It really helps the audience connect to your music and it is important for you to do it.
Presenting your music in front of an audience, continued

Sometimes it will happen that you will hear your music differently in front of an audience. This can be a really cool and helpful experience. See if it happens to you! Talk to your TA about it if you can express your thoughts.

Taking a bow and thanking the musicians
At the end of the piece you will take a bow facing the audience. Take a moment and look at all those smiling faces! Turn around and thank the musicians. You might shake their hands. If it is a large ensemble, just shake the hand of the first violinist.
Working with performers

Congratulations! You are having a piece performed by some very excellent professional musicians. This is maybe the first time you are having a piece performed, or maybe you have had many pieces performed. It is always an exciting and scary moment and it’s always good to remind yourself of a few things to keep in mind.

- When a musician performs your music, it is a gift. Treat them the same way you would treat someone giving you a present on your birthday. Say thank you! Show them that you appreciate their work in whatever way makes sense to you.

- Did something sound different than how you expected to hear it? It is okay to tell them that. Just find a way to do it that shows them that you appreciate their effort. This is your piece and it is important to get it right. The musicians you are working with know that and they are there to help. Do you feel uncomfortable telling them a change you want to make? That a normal thing to feel! Whisper your comment to your teacher and she or he can help.

- Remember, they are playing what is on the page, not what is in your head. Writing our music down just as we want to hear it is a huge challenge! Adults have trouble with it too. This time you have to spend with a real musician is a great chance to learn about ways that your writing can reflect exactly what you want.

What if the musician really, really, really did make a mistake and you are sure of it? It is still your job to be polite. How might you correct an error in someone who had just given you a gift? You might say:

- “I’m not sure if I heard this right, but I thought I maybe heard an E natural in there somewhere. I just want to point out that all those E’s should be flat.”

- “I had imagined that horn part being louder. Is that something that is possible for you with those pitches or are they too low?”

- “I know those notes jump around a lot. Is it possible to play that faster or would you need time to rehearse it?”
Working with performers, continued

It is okay to feel sad or disappointed after a performance. Many of us do! It isn’t ok to tell the performers that you feel sad or disappointed.

- Say thank you to them and find a positive comment if there is time.
- When you have time alone or with your small group leader, find some time to talk about why you were disappointed. Was there a specific technical problem? Is there something you can do differently in the future that will fix the problem?

Many times we feel disappointed for no specific reason, but just because something is over or wasn’t quite as we had envisioned it. It’s okay to feel however you feel.

By Charlotte Pinney
Using the computer

You can always use your phone or computer to record any ideas you have for a piece by singing, playing an instrument, tapping or clapping a rhythm or anything that helps you remember your idea.

Another helpful use of the phone or computer is to record a melody or rhythm that’s challenging for you to notate. You can then listen to the recording multiple times while you notate it and hear the playback to make sure your notation is accurate. If you need help writing down any ideas you can always record them and bring them to your TA. They’ll be able to help you write down your ideas on paper.

You can also record found sounds from your environment either on your phone, computer or a small personal recorder and edit them in a software like Audacity, Garageband, WaveShop or any other audio editing software. Then you can play around with the order, layering and organization of those sounds to compose a piece.

1. What is another thing you could do with your phone or computer that would be helpful for your music? Write it down below:

Computer notation: Noteflight

Noteflight is a great tool for copying your music and for listening to your harmonies and rhythms. However, we want to make sure that you’re always in control of your music!

The default tempo in Noteflight is "120". If you really want to use a tempo of "120" for your piece we want you to choose the tempo "121" rather than the default "120" so that we know that's your choice and not the computer's.

Always remember that music must come first out of the body, and not out of the computer. If you have any questions about Noteflight please visit first the "Help" section on their website and take a look at their "Users Guide" and "Frequently Asked Questions".
Computer notation: Noteflight, continued

1. Copy your “Emotion Melodies” from page 35 into Noteflight and bring them to class. Choose any instrument(s) you feel would work well for your “Emotion Melodies”. Share with your TA and small group what challenges you experienced while notating your melodies into Noteflight.

2. Copy the following short piece from Béla Bartók’s Mikrokosmos - Vol. II. Include all details in the music (key signature, time signature, rests, articulations, dynamics, tempo, etc.). Bring it to class share with your TA and small group what challenges you experienced while notating this excerpt.

![Music notation image]
Computer notation: Noteflight, continued

3. Copy the following short piece from Béla Bartók’s *Mikrokosmos - Vol. II*. Include all details in the music (key signature, time signature, rests, articulations, dynamics, tempo, etc.). Bring it to class share with your TA and small group what challenges you experienced while notating this excerpt.

4. Advanced Challenge: Copy the following excerpt from Beethoven’s *String Quartet No. 11*. The time signature is 2/4. Include all details in the music (key signature, time signature (including change in last measure), rests, articulations, dynamics, tempo, trills, fermata, etc.).
Sound exploration

My favorite sounds

1. Write a list of your favorite sounds below. You can include instruments but also anything else that makes a sound!

<table>
<thead>
<tr>
<th>Favorite Sound</th>
<th>Why I like it</th>
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Music in words and sentences

Just like music, the words we speak have melodies and rhythms. As composers, we can use these melodies and rhythms.

1. Say the following worlds out loud. Is one syllable emphasized more than the other? Does your voice go up or down when you say them? Do the words feel sharp or soft?

<table>
<thead>
<tr>
<th>Rainbow</th>
<th>Celery</th>
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<tbody>
<tr>
<td>Cat</td>
<td>Tiger</td>
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<tr>
<td>Blob</td>
<td>Baloney</td>
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2. Read the following sentences out loud and mark the emphasized syllables. Draw a line that shows the melody you hear when you say the sentence. There are no wrong answers!

In the light of the moon, a little egg lay on a leaf.

On Thursday, when Imogene woke up, she found she had grown antlers.

There was a boy called Eustace Clarence Stubb and he almost deserved it.

Thunder crashed, louder than anything Hollyleaf had heard before.

3. a) Make up your own sentence b) Mark the syllables and “melody”

4. Do you speak a language other than English? Write down a sentence in that language below and mark where the syllables and the “melody”
Music in words and sentences, continued

5. Write the same sentence, but this time in English. Mark the syllables and melody

6. How are the two sentences different? How are they the same?
**Word painting**

Words have their own music to them. When we use them to compose our own music, we can work with that melody and meaning, we can work against it, or something in between.

For instance, if you were setting the word “high”, you could chose a note that was higher than the other notes in your piece. What if you set it as a low note or the same pitch as the words surrounding it? How does that feel? How does it affect the meaning of the word?

1. Below are a few sentences. Read them silently and then out loud. Mark down the stressed syllables and underline one or two words that you feel are especially important in the sentence without thinking about it too much.

The leaping leopard crashed through the bushes, pinning the howling monkey to the ground.
I told my mother that I needed more time to myself, but she didn't listen to me!
Glittering and gleaming, the smooth crest of moon pushed above the horizon of the broad brimming ocean.
Listen! Do you hear the cool cooing of an owl in the twilight?

2. Now read the sentence out loud 10 times finding slightly different ways to read it each time. Do different meanings emerge? Do you want to change or add to the word or words you think is/are most important?

3. Now sing the sentence out loud without thinking too much about it. Write down a line that reflects the melody you sang.

4. Now sing it a different way. Write down that “melody line” too.

5. Did you change the meaning of the words at all?

6. Sing it again and change something else?

Sing every syllable the same length and at the same pitch.
Found sound improvisation

1. Create a short improvised piece using found sounds from your house (pots, pans, pencils, anything you can think of!).

2. Record your piece (could even be on a phone) and bring it to next class to share with everyone.

If you don’t have anything to record your piece, be ready to perform your short improvisation for everyone in class next week.

Title of my Found Sound Improvisation: ____________________________

Sounds I used:

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________
Found sound composition

1. Record individual found sounds from your environment either on your phone, computer or a small personal recorder.

2. Edit your individual sounds in a software like Audacity, Garageband, WaveShop or any other audio editing software.

3. Create a folder to organize your found sounds. Label each sound with a file name that will help you remember the source you recorded.

4. Use any audio editing software to compose a short piece using some of these sounds. Play around with the order, layering and organization of the sounds.

Title of my Found Sound Composition: ____________________________________________
1. Sounds I used:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Describe your process for composing this piece:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
# Listening journal

Use this journal to keep a list of all the music you hear during the day.

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Artist(s)</th>
<th>Where I heard it</th>
<th>Things I noticed</th>
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Glossary

Accidental a musical symbol (sharp, flat or natural) that appears before a note to raise or lower its pitch chromatically

Analysis to examine carefully and in detail so as to bring out the essential elements

Augmented interval an interval one half step larger than a major or perfect interval

Break note the end of the first register and the second register

Con sordino a musical direction to play with a mute (sometimes shortened to con sord.)

Contrary motion motion in which two voices move in opposite directions

Diminished interval an interval one half step smaller than a minor or perfect interval

Elements a part or aspect of something abstract, especially one that is essential or characteristic

Excerpt a short extract from a piece of music

Fifth the distance spanned by five consecutive letter names

Flutter-tongue a wind instrument tonguing technique in which performers flutter their tongue to make a characteristic “FrrrrFrrrrr” sound

Fourth the distance spanned by four consecutive letter names

Half step the musical space between a pitch and its next-closest pitch on the keyboard

Interval the musical space or distance between two pitches

Non-vibrato pure tone with no vibrato

Oblique motion motion in which one part repeats the same pitch while the other moves by leap, skip or step

Parallel motion motion in which both parts move in the same direction by the same generic interval

Perfect the intervals of a unison, forth, fifth and octave

Pitched percussion a percussion instrument used to produce musical notes of one or more pitches (ex. xylophone, glockenspiel, timpani)

Pitches tones sounding in a particular octave

Syncopation a shifting of the normal accent, usually by stressing the normally unaccented beats

Triad a chord made from two stacked thirds

Ululation a long, wavering, high-pitched vocal sound resembling a howl with a trilling quality

Unpitched percussion a percussion instrument played in such a way as to produce sounds of indeterminate pitch (ex. snare drum & cymbals)

Vibrato a rapid, slight variation in pitch in singing or playing some musical instruments, producing a stronger or richer tone

Vocalise the singing of melody with vowel sounds or nonsense syllables rather than text

Whole step the combination of two adjacent half steps.