



Lesson: "It All Adds Up" Composition Project

OVERVIEW

Using *Pop!* by Tawnie Olson as an inspiration, students will compose a short original melody for their instrument that is created by the application of an additive process.

LEARNING GOAL

Students will:

1. Define and identify an additive process used in the development of a melody.
2. Express their creativity and demonstrate their understanding of an additive process through composing an original melody.

RESOURCES & MATERIALS

- Manuscript paper
- Computer musical notation program (optional)
- Student project handout

NATIONAL STANDARDS CONNECTIONS

Creating: Selecting and developing ideas for defined purposes and contexts

Anchor Standard #2: Plan and Make

PROCESS

Students will:

1. Read a handout that defines an additive process and provides a sample melody as an example.
2. Pick a scale or any group of selected pitches to use as the pitch set for an original melody.
3. Determine an initial order of the pitches from the scale to start crafting an original melody, play them on their instruments, and write them down on manuscript paper or computer notation software.
4. Experiment with adding repeated pitches to the melody before introducing the next new pitch. Continue to edit until satisfied with the final version.
5. Write down (or use musical notation software) the final original melody that demonstrates the use of an additive process.
6. Record the composition or perform it live for others.

ASSESSMENT

The following sample rubric is provided to demonstrate how the compositions may be graded.

CATEGORY	10	7	5	R - Redo
Music Score	Music Score is very neat and all required elements are included: instrument, clef, time signature, and key signature.	Music score is neat. One of the required elements is missing from the musical score.	Music score is legible. Two or more of the required elements are missing.	Music Score is illegible and many of the required elements are missing.
Music Notation	All notes are written neatly using proper barline placement.	Most notes are written clearly using proper barline placement.	Notes are mostly written clearly, and/or barline placement is not always correct.	Notes are written in a sloppy and illegible manner. Barline placement is not correct. Needs to be resubmitted.
Meter and Rhythm	All measures have the correct # of beats and a variety of rhythms are used. Included the use of both notes and rests.	85% of measures have the correct # of beats and a variety of rhythms are used. Included the use of both notes and limited rests.	50% of the measures have the correct # of beats. Rhythms are very basic and do not expand beyond quarter notes or eighth notes, and few rests are used or none at all.	Under half of the measures have the correct # of beats. Rhythms are made up of mostly the same note values (e.g. all quarter notes.) Composition needs to be edited and resubmitted.
Expressive Markings	Includes all of the following: tempo, volume, style, and articulation markings.	Includes some of the following: tempo, volume, style, and articulation markings.	Includes few expressive markings.	Includes no expressive markings.
Targeted Concept(s): Application of Additive process	The melody is a created in a way that demonstrates clear and consistent understanding of an additive process.	An additive process was attempted to be applied in the creation of the melody, but there were some deviations.	There was some indication of an attempt to construct a melody using an additive process, but there were several places where a use of the process was questionable.	The composer's work demonstrates no understanding of the purpose of the assignment.

“It All Adds Up” Composition Project

In the band piece *Pop!*, composer Tawnie Olson uses the pitches from the Bb Blues scale as the basis of her composition (See below.)



At rehearsal letter D in *Pop!*, she introduces a melody that is created by using something called an **additive process**. By using this process for composing, Olson is building a melody note by note. It is a technique commonly used in a type of music called minimalism, where a melody begins with a pitch or series of pitches that are repeated, each time adding on another pitch until the melody is fully developed in its entirety. Look at the melody displayed below in treble clef and in bass clef. By the end of this example, all of the pitches from the Bb Blues scale have occurred.



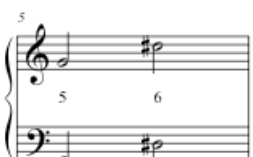
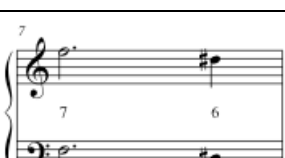
For her melody, Tawnie Olson used the pitches from the Bb Blues scale in this order:

Order that pitches are introduced	1	2	3	4	5	6
Pitches	Bb	Eb	Db	F	E natural	Ab

The numbers in the musical example above represent the order that each new pitch is introduced. Notice that some groups of pitches are repeated before adding the next new note:

- The melody begins with Bb (1), repeats Bb (1), and then follows with Eb (2) and Db (3).
- Then Bb Eb Db (1, 2, 3) are repeated twice.
- Then F (4) is added, and those four notes are repeated (1, 2, 3, 4).
- E nat. (5) and Ab (6) occur next and are both repeated.
- The melody ends by finally breaking away from the order of pitches used for the additive process - Bb Ab F (1, 6, 4), otherwise the melody ending on the Ab would have made it sound incomplete. To understand what is meant by incomplete, you can play the melody but stop on the Ab eighth note (the note after the rest) in the last measure. It will sound like an odd place for a melody to end.

Here is how this melody was built:

It starts with pitch #1, repeats it, and then moves on to pitch #2.	
Pitches #1 and #2 are repeated, and then pitch #3 is added.	
Pitch #1, #2, and #3 are repeated, and then pitch #4 is added. The third entire measure is repeated.	
The next measure moves on to adding pitch #5 and #6.	
Pitch #5 and #6 are repeated, using a different rhythm.	
Pitch # 7 is added then moves back to pitch #6.	
The last two measures finish the melody with pitches # 6 and #7.	

Now that you have seen two examples of a melody created using an additive process, it is time for you to create your original melody by following the same steps!

Follow these steps to compose your own original melody using an additive process:

Step 1:

Pick a scale or any set of pitches to use as your set of pitches that you will use to create your original melody and write them down here.



Step 2:

Decide the order that the pitches will occur in the melody. You do not have to use as many pitches as what there are numbered spaces provided.

Order that pitches are introduced	1	2	3	4	5	6	7	8	9	10
Pitches										

Step 3:

Play the pitches on your instrument to hear how the order sounds and make any changes that you think would make the basis for a melody you like.

Step 4:

Next, experiment with repeating individual or series of pitches within your basic melody. You may want to refer back to Tawnie Olson's melody as a model.

Step 5:

Keep experimenting, writing down, and editing your melody until you are satisfied with it. Remember to be sure that your melody was developed using an additive process, but also make sure that it sounds musical. Also, be sure to use a mixture of various rhythms and rests. Like Tawnie Olson did, you may break away from the additive process at the end of your melody if you think it makes the ending sound better.

Step 6:

Write down the final version on staff paper or using music notation software.

Step 7:

Either record yourself performing your piece or perform it live for others.

Use the following checklist to make sure your melody includes the following:

- | | | |
|------------------------------------|--------------------------------------|---------------------|
| _____ Clef | _____ Key Signature | _____ Barlines |
| _____ Time Signature | _____ Correct # of beats per measure | _____ Final Barline |
| _____ Clef | _____ Dynamics | _____ Articulations |
| _____ Mixture of rhythms and rests | _____ Use of an Additive Process | |

**HAVE FUN AND BE CREATIVE IN MUSICALLY MAKING
YOUR ORIGINAL MELODY "ALL ADD UP!"**