How Notes and Beats Go Together

The curriculum guide below is designed to help you use MPR Class Notes video How Notes and Beats Go Together as a tool to help teach the highlighted standards below. Young students often find the concept of the duration and value of notes, and how notes and beats interact in order to create rhythm—particularly challenging. This video offers a visual approach to understanding the interrelationships of note values. As you show the video to your students, the following guide is designed to help you enrich your students’ experience for your students.

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Below is a copy of the Minnesota Music Standards. The standards which are the focus of this video are highlighted in yellow.

**2008 Revised Minnesota Academic Standards in the Arts**
Perpich Center document adapted from MDE Minnesota Academic Standards in the Arts 2008
To download, visit [http://education.state.mn.us/MDE/Academic_Excellence/Academic_Standards/Arts/index.html](http://education.state.mn.us/MDE/Academic_Excellence/Academic_Standards/Arts/index.html)

<table>
<thead>
<tr>
<th>4-5</th>
<th>Music</th>
<th>4.1.1.3.1</th>
<th>1. Artistic Foundations</th>
<th>1. Demonstrate knowledge of the foundations of the arts area.</th>
<th>1. Describe the elements of music including melody, rhythm, harmony, dynamics, tone color, texture, form and their related concepts.</th>
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<tbody>
<tr>
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<td></td>
<td>4.1.1.3.2</td>
<td></td>
<td>2. Describe how the elements and their related concepts such as pitch, tempo, canon, and ABA are used in the performance, creation or response to music.</td>
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<tr>
<td>Music</td>
<td>4.1.2.3.1</td>
<td>2. Demonstrate knowledge and use of the technical skills of the art form, integrating technology when applicable.</td>
<td></td>
<td>1. Read and notate music using standard notation such as quarter, half and eighth notes and rests, the lines and spaces of the treble clef, and time signatures.</td>
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- [http://www.pcae.k12.mn.us/pdr/standards/standards.html](http://www.pcae.k12.mn.us/pdr/standards/standards.html)

**Full length works for further listening**

- Nicola Matteis: Ground after the Scotch Humour [https://www.youtube.com/watch?v=u_nSOVMXiyI](https://www.youtube.com/watch?v=u_nSOVMXiyI).

This trio includes the violin, cello and harpsichord.

Nicola Matteis (1670-1714) was an Italian Baroque composer who lived much of his adult life in London.

Pie Anyone?

The rhythm pyramid is one visual approach to help students understand note duration. Another approach is to use the concept of a pie as a measure in 4/4 time. You can teach fractions while students learn note values.

http://sarahbowling.me/2012/01/03/a-whole-note/

http://www.clipartbest.com/clipart-niEy7AriA

http://www.abcteach.com/free/q/quarter_note_bw.jpg


Fractions and Notes

If note values are taught in the music classroom at the same time that fractions are taught in students’ math lesson, both curricular areas will benefit from the reinforcement of these concepts, and student comprehension will increase. Share the video and resource guide with your colleagues. These interdisciplinary connections will support the music program, collegial relations, and student learning. Take extra care to distinguish between measure and beat. A half note can be half of a measure or half of a whole note which is different from half of a beat. This can also be confusing for kids.

<table>
<thead>
<tr>
<th>$\frac{1}{2} + \frac{1}{2} = 1$ or two half notes equal a whole note. You can also think of 2 beats + 2 beats = 4 beats</th>
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<tbody>
<tr>
<td>$\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$ or two quarter notes equal a half note. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 1$ or four quarter notes equal a whole note. You can also think of 1 beat + 1 beat + 1 beat + 1 beat = 4 beats</td>
</tr>
<tr>
<td>$\frac{1}{8} + \frac{1}{8} = \frac{1}{4}$ or two eighth notes equal a quarter note. $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = 1$ or eight eighth notes equal a whole note.</td>
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The jpgs below may give visual aid to these learning targets.

[Images of music notation and fractions]

http://www.bandnotes.info/rhythm/images/pyramid.gif

http://media-cache-e0.pinning.com/736x/49/d5/70/49d570fac66cefb163d6eb81526f78a5.jpg
Quarter equals one fourth

Students are sometimes be confused by inconsistencies in the English language. If we were to follow the sequence of the language, we would have the whole, half, **fourth**, and eighth note. Sometimes students will mistakenly call the quarter note the fourth note. By remembering that there are four quarters in a dollar, students have a memory aid to remember the quarter note.
Classroom activities that support the targeted standards:

Standard

Describe the elements of music including melody, rhythm, harmony, dynamics, tone color, texture, form and their related concepts.
Describe how the elements and their related concepts such as pitch, tempo, canon, and ABA form are used in the performance, creation or response to music.

1. How fast is your heart beating?

Ask students to find their pulse. For many students it may be easiest to feel their jugular vein. Others many find it in their wrist. Show them how to find their pulse. Then let them take turns clapping the tempo of their pulse for the class. Ask them if their pulse would be considered a whole, half, quarter, or eighth note. When a few students have had their turn, show them the tempo of your pulse. For most people, a resting pulse would be considered the length of a quarter note. Ask students to think about the tempo of their heartbeat when they have just run a great distance. What note value would represent that tempo? For many, that would be an eighth note. Ask students what note value might represent the speed of their heartbeat when they are sleeping. Some have a resting heart rate as slow as a half note. Let them know that composers have a broad range of tempos that can be associated with each note value. Some pieces have slower quarter notes and some pieces have faster quarter notes.

2. Find the Pulse:

There are many things that we come across in our daily life which have a steady beat that we could associate with a note value. Have your students name things they notice in their daily routine that have a pulse. Then ask them what type of note might that might be.
3. **Note Math Addition**

Create a series of note equations for students to correctly identify. These can be completed individually on a worksheet, or displayed on a chalkboard, white board, or projector—or on a Smart board for students to do in front of the class, facilitating group learning.