

*Lesson: Pythagorean Theorem Blues*

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<b>Overarching Standards-based Concepts Guiding the Lesson Design</b>	<b>Evidence Demonstrating Students' Knowledge</b>	<b>Pre-Assessment of Students' Knowledge &amp; Skills</b>	<b>Assessment</b>	<b>Process</b>
<p>Enduring Understanding = THE BIG IDEA: Pythagorean Theorem Blues</p> <p><b>Standard(s) Addressed:</b> National Music Std.6a,b,e,f, 1a,b,2a,5a,b,7a,b,c,</p> <p><b>Knowledge and Skills Students Will Need/Demonstrate:</b> Students will practice in pairs or triads, possibly quartets to perform a blues stanza, either of their own composition or the teacher's about some aspect of the Pythagorean Theorem</p>	<p><i>In what way(s) will students demonstrate what they have learned? (e.g., the product or the performance)</i></p> <p>Students will perform in pairs or triads, possibly quartets to perform a blues stanza, either of their own composition or the teacher's about some aspect of the Pythagorean Theorem</p>	<p><i>What will you do to find out what students already know?</i> Ask them to jot down all they know about the Pythagorean Theorem and give them a sample problem. Brainstorm alone, then in pairs.</p> <p><b>Teachers Needs Assessment</b></p> <p>Given the data collected, decide if the students know enough about blues, and the Pythagorean Theorem to start making stanzas as a class, in pairs, or in groups of three or four.</p>	<p><i>What will be your final assessment of students, in which they demonstrate what they have learned? (consider formative and summative assessment)</i></p> <p>They will each hold the title, the theorem, or the diagram and jigsaw into groups. They will make a poster to hold and decide to either perform their own stanza they compose or one the teacher has composed or the class. The Rubric will include 5 points for including the main ideas of the Pythagorean Theorem, 5 for delivery and 5 for originality, and including the "humor in the face of hardship" in the fourth line of the 12 bar blues where the first two lines can repeat and the third turns the idea around.</p>	<p><i>How will students move toward achievement of the concept and standards?</i></p> <p><b>Learning Sequence:</b> <b>Pre-</b>Listening to the blues. Discussing and reviewing the Pythagorean Theorem after being taught it. <b>During-</b>writing or learning the 12 bar, three lines about</p> <ol style="list-style-type: none"> <li>1. the theorem</li> <li>2. squares that add to a third (golden triangles)</li> <li>3. practicing</li> <li>4. delivering</li> <li>5. doing rubrics that give supporting comments</li> </ol> <p><b>After-</b>possibly taping or photographing if deemed OK by participants</p> <p><b>Vocabulary:</b>12 bar Blues Slavery, coping, Pythagoras, Pythagorean Theorem, his music, shouts, spirituals, hollers, work chant, hypotenuse, squares of the legs.</p> <p><b>Equipment, Materials, Resources:</b> Overhead, pens, pencils or whiteboard, paper, markers, camera</p>

## BL 2 - Twelve Bar Blues Form

The 12 bar blues consists of **three phrases**. Each phrase is four bars long.

In its original vocal form :

the 1st phrase makes a statement,

the 2nd phrase repeats this statement,

the 3rd phrase resolves or completes the statement.

For example :

"From dawn to dusk I work the fields all day ....

Yeah, from dawn to dusk I work the fields all day ....

But when the sun is down I rush home to sweet Mae."

**Repetition** of melodic or rhythmic phrases or motifs is also very common in many instrumental blues, although it is not essential. Repeated motifs are commonly either 2 bars long or 4 bar long.

The blues can be played in any key. The most common keys are C, F, Bb, and G.

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