



Music, Math, and Literacy in Elementary School

MATH

Sets, Numbers and Fractions, Symbols, and Algebraic Expressions

- **Music Class Is Fun** – Students are always listening to music outside school
- **Music And Math Are Associated** – Students who learn music are better at math
- **Music Gives Math Class Relevance** – Students don't know they are learning math

Sets

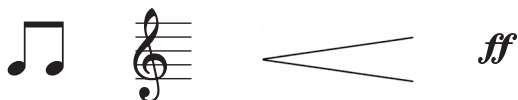
- Logically Related Objects
- Pattern Recognition
- Measures In Music Are Sets
- Patterns Include Strong Beats And Weak Beats
- Ostinatos – Repeated Musical Phrases

Numbers and Fractions

- Counting
- Whole Numbers and Fractions
- Counting Beats in Measures
- Counting Intervals in pitches: 3rd, 5th, 7th
- Understanding Fractions: Whole, Half, Quarter, Eighth, and Sixteenth Notes

Symbols

- Recognizing Abstract Symbols
- Understanding Symbol Meaning
- Musical Notation



Algebraic Expressions

- Addition and Subtraction
- Multiplication and Division
- Formulas
- Time Signature – Beats Per Measure
- Tempo – Beats Per Minute
- Frequency – Sound Waves Cycles Per Second

The Beat Remains Steady 3 / 4

1 - 2 - 3 - 4

Meter of 4

1, 2, 3, 4, 5, ONCE I CAUGHT A FISH A...

LYRICS

Six, seven, eight, nine, ten,

7

Baba Oo La La

Recorder Score

Track with Recorder Track without Recorder

Algebraic Expressions

- Music Composition
 - Filling in Notes in Measures
 - Requires Addition & Subtraction
- Music Ratios
 - Requires Division



LITERACY

Read, Write, Speak, and Listen

- Studies Link Music To Literacy Achievement
- Many ELLs learn English through Music
- Music improves brain development

Reading – Song Lyrics

- Vocabulary – Learning New Words
- Phonemic Awareness – Identifying Sounds
- Word Recognition – Combining Phonemes
- Comprehension – Understanding Word Meaning
- Seeing Lyrics Highlighted
- Understanding How Lyrics are Phrased
- Learning New Words

Writing – Composing Song Lyrics and Melody

- Spelling – Spelling Words Correctly
- Grammar – Forming Verses and Choruses
- Punctuation – Using Proper Symbols
- ABC Song – Learning Alphabet
- Composing Melodies
- Seeing How Lyrics Are Composed

Speaking – Singing

- Pronunciation – Pronouncing Words Correctly
- Completing Thoughts – Logical Statements
- Tonal Vowels and Consonants
- Pronouncing Lyrics Correctly
- Understanding Verses and Choruses

Listening – Music

- Hearing – Paying Attention
- Comprehension – Understanding Message
- Listening to Lyrics to Memorize Them
- Understanding Emotion in Lyrics
- Connecting Lyrics and Melody

