

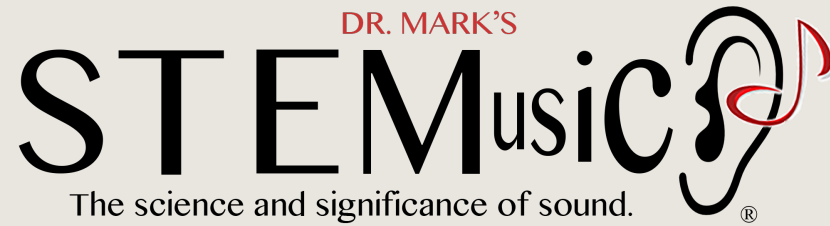


DR. MARK'S
STEMMusic 

The science and significance of sound. ®

**EXPLORATIONS IN
SOUND FOR TWEENS
AND TEENS.**

Experiences that support mathematical and scientific thinking.



OBJECTIVE

To reconnect adolescents' cognitive development to kinesthetic experience through mechanical manipulation of sound waves.

NATIONAL STANDARDS IN MATH

Grade 6

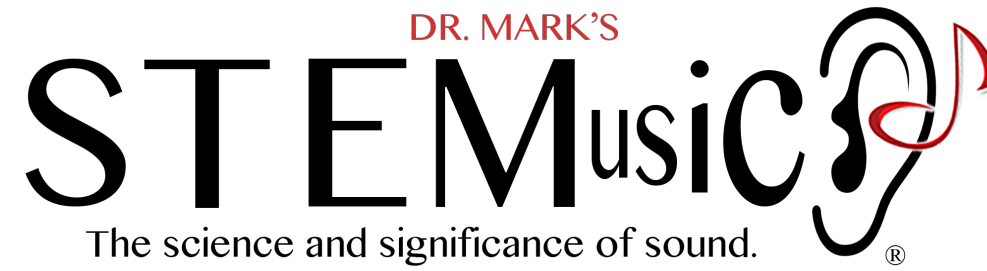
Ratio and Proportional Relations
Dependent and Independent
Variables

Grade 7

Analyze proportional relations
Random Sampling

Grade 8

Proportional relations, lines, and
linear equations.



SCIENCE

- Dependent Variables
- Independent Variables
- Measurement

Aerophone Build

Ratio, measurement, collecting data, proportion, graphing data, expressing relations mathematically, & symbolizing the music created.

Music Puzzles

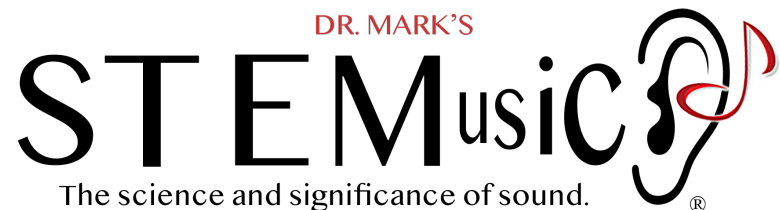
Perseverance, persistence, ratio, attention to detail, proportion, assembling music from its parts to create a new whole.

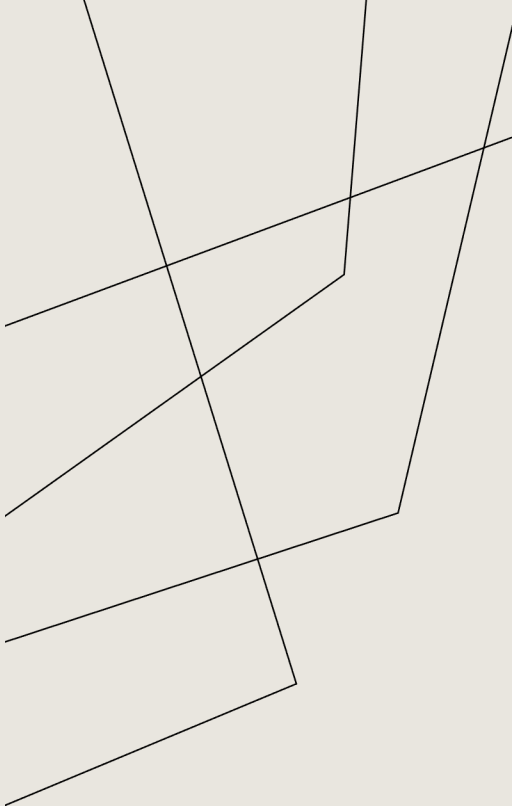
Puzzle Permutations


Scientific method, collecting data, sampling, creating permutations of a well-known song, asking questions, data analysis, and reporting findings.

Under development

- Gearhead Music
- Boomwhacker® Manipulations
- Musical Saws





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SUMMER TRAINING OPPORTUNITIES

BE A KID AGAIN,

AND PLAY, EXPLORE, DISCOVER,
EXPERIMENT, AND CREATE WITH SOUND.



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THANK YOU

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