

DRUMTASTIC!

Carrie Ekins MA & Courtney Johnson MS



DRUM-TASTIC - Learning through rhythm and movement.

DRUMTASTIC utilizes the Drums Alive® / Academic Beats® methods and philosophies designed to provide a Brain & Body Workout! This unique program actively increases each participant's own learning and creative approach to rhythm, movement and cognitive connections. School administrators, health professionals, parents, and teachers gain essential knowledge and skills to implement “DRUMTASTIC” activities in math, language arts, social studies, science, and other content areas.

Educators have long understood the connection of movement and learning. Kinesthetic activities have the power to unlock cognitive processes which otherwise remained trapped or inaccessible. According to neurophysiologist Dr. Carla Hannaford, “Movement is an indispensable part of learning and thinking.” Children need to move and physically reinforce the content they learn in school in order to make content more comprehensible. Using Drums Alive DRUMTASTIC® ultimately elevates the learner's cognitive function, increases physical activity, and improves psychological wellbeing and most importantly, children prefer it.

The Drums Alive DRUMTASTIC® program is not about just hitting the stability ball for a fun workout, it is about teaching to the “whole individual” and adding the elements of rhythm, movement, cognitive education, socialization, team work and right and left brain activation. It also encompasses the elements found in a healthy physical fitness or health program. By integrating a cognitive process along with a physical process, balance occurs in the body, mind and spirit.

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Drums Alive DRUMTASTIC® integrates content instruction and focuses on the creative approach to rhythm, movement and cognitive connections.

Drums Alive DRUMTASTIC® strives to teach to the individual allowing time for creative expression and most of all, it's so much fun it feels like play! With programming like Drums Alive DRUMTASTIC®, we have an opportunity to reshape the way adults and children see exercise, making the journey so simple, accessible and adventurous that it becomes **something we can't wait to do instead of something we "should do"**.

DRUMTASTIC —Areas of Focus

- Understand engagement of learning through movement and rhythm.
- Explore relationships through kinesthetic and auditory experience.
- Elevate learners' critical thinking abilities.
- Discover the mystery behind drumming and brain research.
- Integrate movement and rhythm across the curriculum.
- Apply Inclusion Strategies – making Drums Alive DRUMTASTIC® accessible for "EVERYBODY".

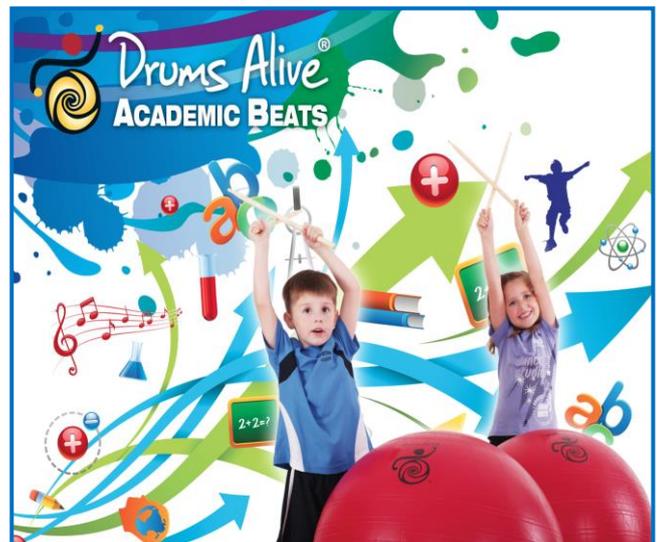
Components of today's workshop

***Physical Education in Motion:**

Provide the students with a fun and effective way to exercise, release stress, build self-confidence and social competence.

***Mathematics in Motion:**

Connecting the link between number relationships in kinesthetic, mental math, reverse thinking, and auditory experiences.



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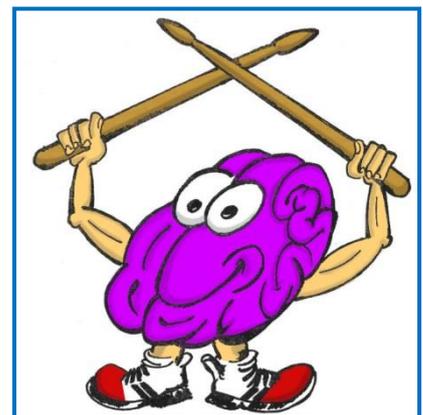
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Drums Alive DRUMTASTIC - Elements

- Cross Curriculum Program that supports school curriculum and fitness at the same time.
- Promotes health and fitness on multiple levels.
- Kinesthetic Learning Experience!
- Promotes concentration and involvement.
- Promotes language and speech development.
- Fosters social competence and group interaction and allows for creative expression!
- It also helps boost one's creativity by learning new ways to express yourself!
- This interaction with other children practices and develops sensitivity towards other children and a positive cooperation with another.
- Socially shy children use the drum to improve and develop a positive self-acceptance
- Drumming increases alpha wave amplitude which in turn increases the feelings of euphoria and self-acceptance.
- When children beat the drum, they experience a sense of energy, vitality, joy of life and are completely within themselves.
- Hyperactive children find peace when beating the drums playfully.
- Children are allowed to let loose and beat wildly to free aggression and stress!

A Brain & Body Program

- Exposure of music, rhythm and movement accelerates the forming of Neurological pathways, especially at a young age!
- Increases the entire learning procedure gradually
- Recent show that this phenomenon can be directly related to a person's IQ level.
- Coordination between left and right hemispheres is stimulated in a very high amount by using rhythm and music, like by drumming for example!
- The steady rhythms have a calming effect on the body, mind and soul.
- Research is showing that the most brain activity occurs when there are these elements present in the training:
 - Complex Skills
 - Polyrhythmic Application
 - Following commands



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A Scientifically Researched and Evidence Based Program!

In partnership with Chemnitz, Gloucestershire and Chichester Universities launched the first drumming studies for the fitness, therapy and educational markets.



THE DRUM BEAT – Chemnitz Drumming Project is a globally unique research project with focus on social and therapeutic elements. (www.thedrumbeat.de) Its center is drumming – indicating the fitness trend of *Drums Alive*. This was inspired by a joint project of the *University of Gloucestershire* and the *University of Chichester* [both UK], the so called **Clem Burke Drumming Project**, which analyses physiological stress on percussionists and the accompanying cognitive aspects for the first time ever. Together with an interdisciplinary team of scientists, musicians, teachers, therapists and local authorities, **THE DRUM BEAT** examines the common language of Drumming in connection with movement; it shows society its positive effects and so reflects the scientific core of the success of *Drums Alive*®.

Class Design

A safe and successful *Drums Alive DRUMTASTIC*® program depends on the instructor's ability to apply sound instructional principles and practices as well as understand the nature of learning. Following the American Council of Exercise (ACE) guidelines will help provide the instructor with a sound foundation of these principles and practices. In addition, the Kids Beats program should pay special attention to the following:

Creating fitness experiences for children that are challenging and fun at the same time will require careful planning. Instructors need to explore various rhythm-based skills that may be adapted for various abilities throughout each class section which are:

- Warm up Phase
 - Socialization and Team Building
 - Ice Breakers
 - Hand Clapping
 - Rhythm games
 - Cultural Drumming
 - Cardiovascular Phase
 - Fun Choreography
 - Drumming Strong
 - Wellness Drumming
 - Cool - Down Phase
- ✓ **Always involve cognitive and creative phrases throughout the program.**



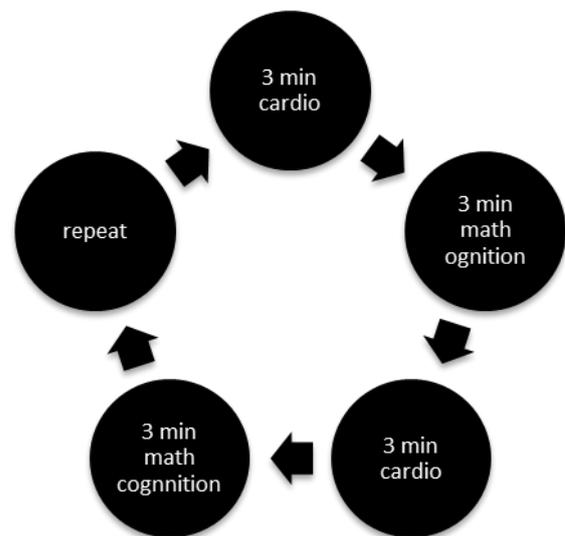
DRUMS ALIVE® - MATHEMATICS IN MOTION

Mathematics in Motion provides a Brain & Body Workout that expands mental powers to increase brain functioning. Bursts of high intensity drumming and movement interspersed with periods of recovery cognition (mental math) exercises, create an interval training experience that is fun and engaging for all ages.

Mathematics in Motion incorporates math computations into an interval drumming exercises, which enhance learning, increase creativity, reduces stress, and awakens intuition and other extrasensory perceptions. Linking math content with movement has a profound effect on student learning and provides teachers an avenue to ignite excitement in math. Mathematics in Motion helps students develop a positive attitude towards math.

Interval Training:

Mathematics in Motion lends itself to an interval-training program. Interval training involves alternating high-energy movements with rest or recovery cycles. During the rest cycles, students perform math cognition exercises while still moving at a slower rate. Cardio cycles involve higher intensity aerobic exercises. The advantages are twofold: 1. Students receive a fitness benefit and 2. Students improve their math skills.



Interval Cycles:

Alternating cardio and rest or math (cognition) cycles is what provides the interval training exercise component.

- Multiplication Objective
- Compute problems involving multiplication of whole numbers.



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Procedure:

Review with students how they show numbers in the ones place by clicking drums sticks above their head, tens place by tapping the top of ball, hundreds place by tapping the side of ball, and thousands place by tapping the floor.

Remind students that when they are representing a number such as 38, they are to tap 3 times on top of the ball and then click sticks 8 times. Again, if they had the number 6,283, they would in quick succession start with tapping the floor 6 times (representing 6 thousands), tapping the side of the ball 2 times (representing 2 hundreds), hitting the top of the ball 8 times (representing 8 tens), and clicking sticks 3 times (representing 3 ones).

Using numbers similar to those in the example problems below, present students with an equation, giving a few seconds of think time, and then cue students. Quickly move on to the next number.

Example Problems

- 3 x 5 = 15 (1 tap on top of ball, 5 stick clicks above head)
- 2 x 3 = 6 (6 stick clicks above head)
- 5 x 7 = 35 (3 taps on top of ball, 5 stick clicks above head)
- 12 x 6 = 72 (7 taps on top of ball, 2 stick clicks above head)
- 6 x 9 = 54 (5 taps on top of the, 4 stick clicks above head)
- 7 x 8 = 56 (5 taps on top of ball, 6 stick clicks above head)
- 9 x 3 = 27 (2 taps on top of ball, 7 stick clicks above head)

Primary: Be sure to give younger students plenty of think time. If necessary you may also want to visually post the equation for students to see. Adjust the difficulty of the numbers to accommodate your students' needs.

Intermediate: A faster pace can challenge older students. Increasing the tempo of the music can help. Using larger numbers will add a challenge to students. For example:

- 8 x 14 = 112 (1 tap on side of ball, 1 tap on top of ball, 2 stick clicks above head)
- 15 x 4 = 60 (6 taps on top of ball)

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Teachers could also challenge students by using multiple integers. The use of negative integers and exponents would be appropriate if students are ready. When doing this, be sure to call each number out slowly, leaving students think time between each integer given.

For example:

$2 \times 3 \times 4 = 24$ (2 taps on top of ball, 4 stick clicks above head)

$2 \times 3 \times -4 = -24$. (Yell “negative” while arms are folded, 2 taps on top of ball, 4 stick clicks above head)

$4 \times 3 \times 4 = 48$ (4 taps on top of ball, 8 stick clicks above head)

$23 \times 9 = 72$ (7 taps on top of ball, 2 stick clicks above head)

Extension Ideas: Have students take turns creating an equation for the entire class. The student giving the equation can face the class, say their equation, and cue students. They will enjoy watching as all students participate.



„It’s time to stop thinking of the drum as just a musical instrument, start thinking of it as a unifying tool for every family, a wellness tool for every retiree, and an educational tool for every classroom!” ---Remo Belli