

Enhancing Academic Achievement with Brain Based Movement Activities

- Paola Fontana; p.fontana@geomotiongroup.com
- Ann Goldade, A.B.D; goldade@mnstate.edu
- Lois Mauch, M.S.; mauch@mnstate.edu
- Dr. JoAnne Owens-Nauslar;
drjo@geomotiongroup.com

Objectives

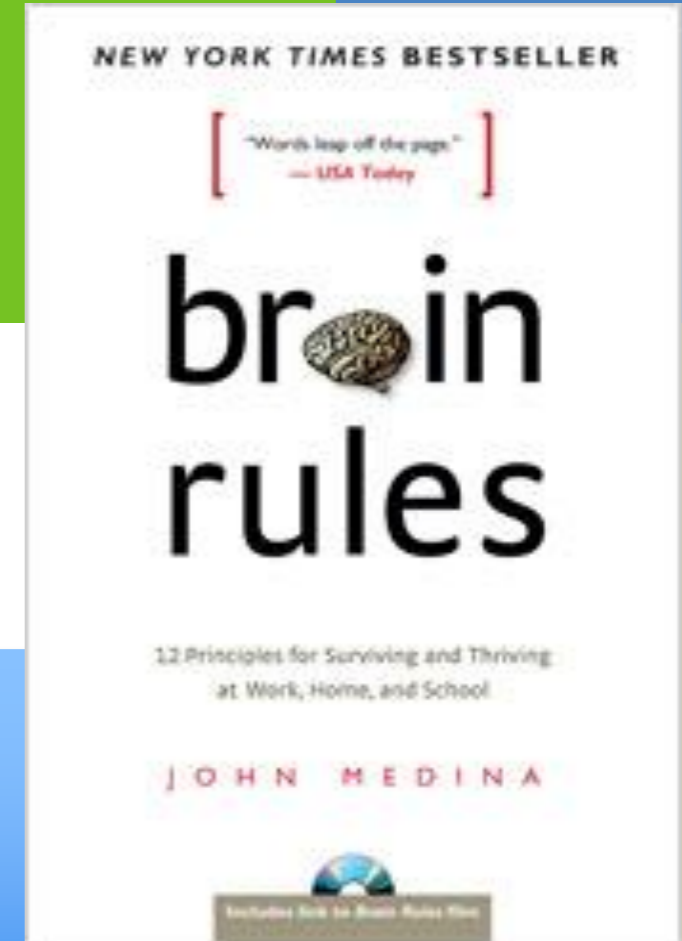


- Ideas for increasing physical activity in your school.
- Experience methods to integrate academics in an engaging learning environment that leads to personal success for all learners.
- Explore “Cognitive Candy”
- Discuss research that indicates the need and importance for physical activity to enhance brain functioning.

Getting Started

Setting the Hook

- Teachers and Students



Meeting the Author



It's Time to Move!! 😊

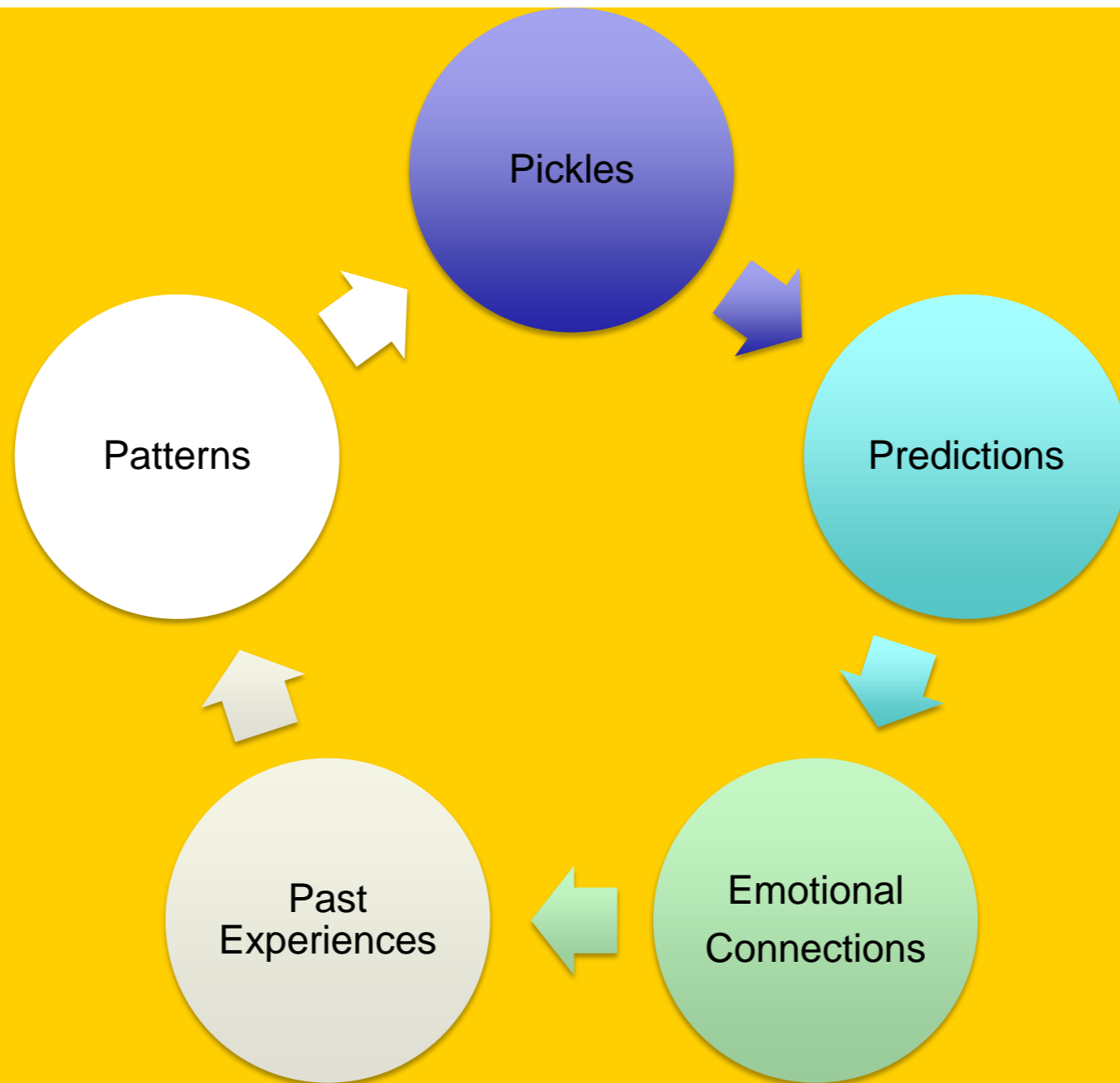




“Physical activity is cognitive candy”

(Medina, 2008, p.22).

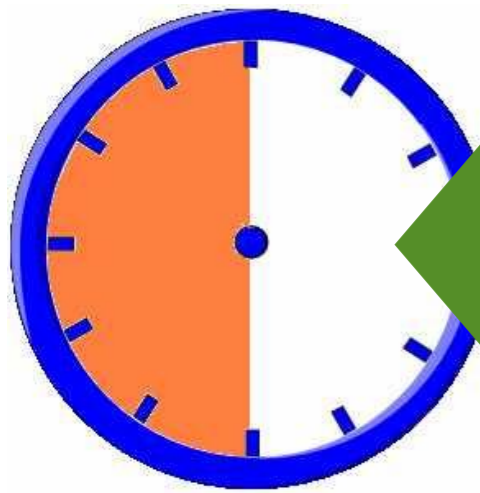
Attention Please!



It's Time to Move!! 😊



Instructional Design meets Brain Rules

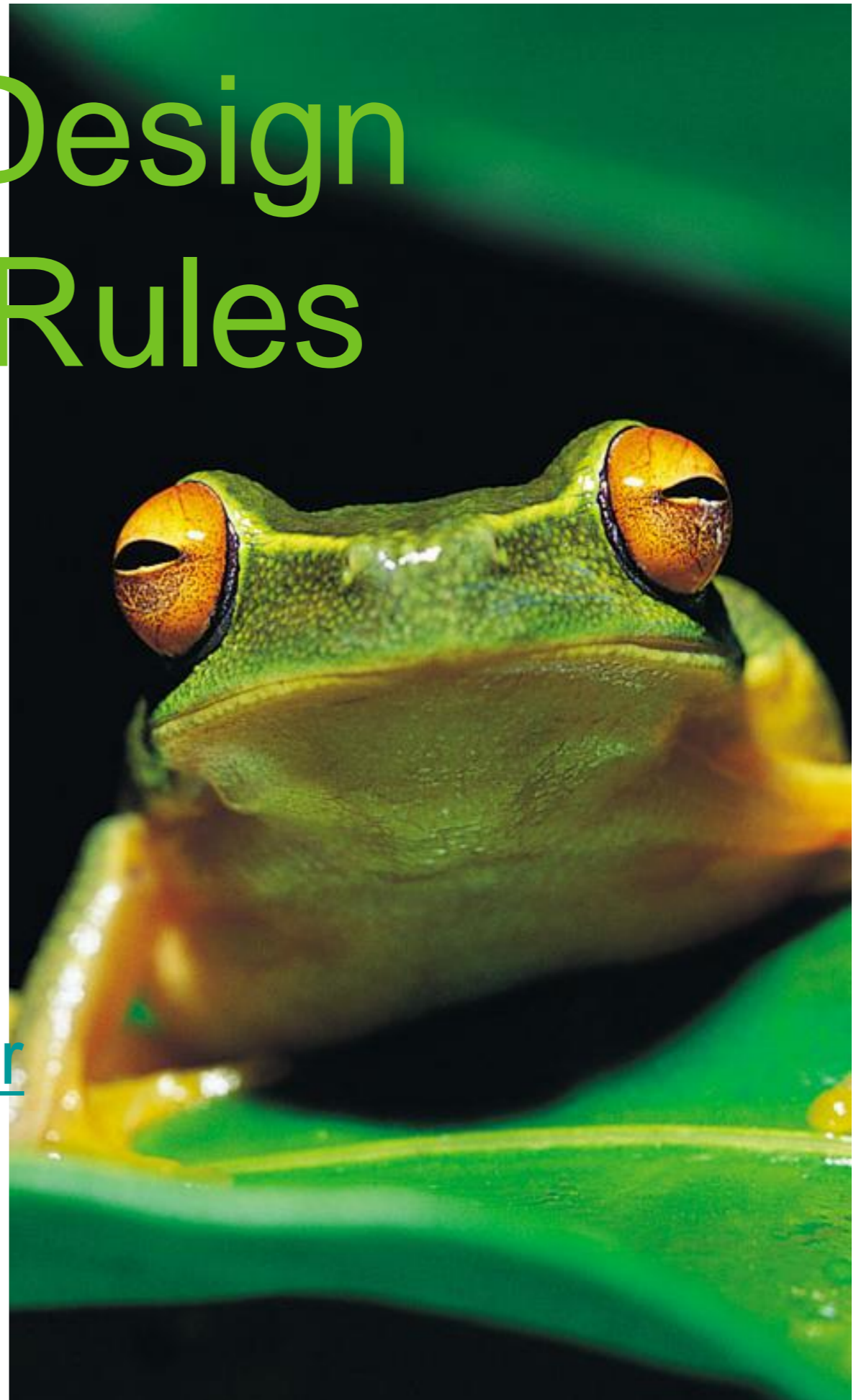


7 Pieces of
Information for
30 Seconds



Repeat to Remember

90-120 minutes



Spiraling Curriculum Daily

Hook! 30 Seconds

Attention Please!

20 Minutes

Content A: Show/Tell/Do

20 Minutes

Content B: Show/Tell/Do

20 Minutes

Content C: Show/Tell/Do

20 Minutes

Cardio/Activity

20 Minutes

Content A: Show/Tell/Do

20 Minutes

Content B: Show/Tell/Do

20 Minutes

Content C: Show/Tell/Do

20 Minutes

Cardio/Activity

20 Minutes

Content A: Show/Tell/Do

20 Minutes

Content B: Show/Tell/Do

20 Minutes

Content C: Show/Tell/Do



Make it Visual!

Our **Class Room** Rules

1...



2...



3...



Dress Appropriately!



Use Equipment with Care!



F
U
N



Move Carefully!



Respect yourself and your peers!

Does what we do, how we do it
and what we say matter?

“Even if you’re on the right track, you’ll get run over if you just sit there.”

Will Rogers

- You will remember:
- 10% -Read
- 20% -Hear
- 30% -See
- 50% -See & Hear
- 70% -Discuss
- **80% -EXPERIENCE**
- **95% -TEACH SOMEONE ELSE**



Linking Movement & Learning

- Brain Research= most of the brain is activated during physical activity – much more so than when doing seatwork.
- Jensen= sitting for more than 10 minutes at a stretch “reduces our awareness of physical and emotional sensations and increases fatigue.”
 - reduced concentration
 - discipline problems.
- Movement= increases blood vessels that allow for the delivery of oxygen, water, and glucose (“brain food”) to the brain. FUEL

How Many Steps – BMI Referenced Standards*

- How much activity separates normal weight from overweight/obese children
- 12,000 steps for girls
- 15,000 steps for boys
- Converted to time...
 - 107 minutes for girls
 - 137 minutes for boys

*Tudor-Locke, C., et.al. (2004). BMI-referenced standards for recommended pedometer-determined steps/day in children. *Preventative Medicine*

FAME-Fitness and Math Exploration

- Gavin Colquitt -gavin.colquitt@henry.k12.ga.us
- Les Hartnup lhartnup@henry.k12.ga.us
- McDonough, GA =Middle School Math and Physical Education Teachers partnered to increase math scores and physical activity time

It's Time to Move!! 😊

