Glassboro Public Schools



MEMO

Date: February 20, 2014

To: Dr. Mark Silverstein, Superintendent of Schools

From: Danielle Sochor, Director of Curriculum and Personnel

Re: Monster Math Professional Development

Action Item- February 26, 2014 Board Meeting

Recommend Board Approval for the Monster Math Professional Development Program.

Monster Math Club is an intervention and enrichment program that may be used as a supplement to regular classroom instruction, enrichment for advanced students and intervention for struggling students. They may be used in whole group or small group/stations. The goals of these activities are to encourage all students to succeed in math beyond their expectations and build a foundation for success in rigorous middle and high school courses.

Monster Math focuses on building math foundations and uses the acronym CRAFT (Counting, Reasoning, Automaticity, Fluency, Tenacity) to help remember the parts of understanding that make up a strong foundation.

This program has no cost and the staff coordinators are Sandra Debes and Venetia Miner.

DMS/ed



MONSTER MATH CLUB

Dear Parents/Guardians,

Your child is being invited to an engaging after-school program that focuses and builds on math skills for remediation, reinforcement, and enrichment. During monster math club we will be playing games that are designed to get children thinking and reasoning about math concepts while having fun. The students will be participating in math as a sport.

The club will take place on Thursday afternoons from 3pm - 4pm. It will start on Thursday February 6^{th} and run until Thursday May 29^{th} . Space is limited so club admittance will be granted on a first come first serve basis. If you are interested please fill out the permission slip below and return to Mrs. Debes or Ms. Miner.

Student Name
Parent Name (print)
Parent Signature
Telephone
Email address
Teacher's Name



Time	Activity	Comments
0-10	Warm Up & Ice- breakers	This consists of one math activity like: • "follow me" or • "I'm thinking of a number" and a funny question like • "Would you rather"
15-30	Book	See attached book list
30-55	Mathemagic practice	See suggested order of practice
55-60	Wrap Up	Acknowledge students who stayed focused and on task. (We usually give a prize)

Week 1:

Suggested Warm Up – "I'm thinking of a number" and "Would you rather"

Suggested book – <u>Talley O'Malley</u>

 Have a discussion with kids about counting lots of objects and tracking through tallying.

Suggested activity - Counting Videos

Remember that the key is not to give the answers to the videos to the students!
 If they have the correct answer for the object that they are counting – simply tell them that they can now count another object (fruit, cars, animals or balls). Tell the students to NEVER reveal their answer (it is a secret). Students must count the same object until they have the correct answer.

Week 2:

Suggested Warm Up - "I'm thinking of a number" and "Would you rather"

Suggested book - Any

Suggested activity - Race to 21

Remember that the key is not to give the answers to the trick! Tell the students
that it will probably take the entire class for them to figure out part of the
problem. When a student thinks they know the "trick" have them race you. (You
may write down on the board when kids have figured out part of the trick. For
instance, students will figure out pretty quickly that the first person to get to 17
wins the game).

Week 3:

Suggested Warm Up - "Race to 21"

Suggested book - Any

Suggested activity - Race to 21

In this week you can reveal the "trick". Once students have the trick, have them
race you. We generally have the kids come up one-by-one to race us (this is a
really good way to see if students understand the trick and are good with their
math facts).

Week 4:

Suggested Warm Up - "Follow Me" and "Would you rather"

Suggested book – Any

Suggested activity – Practice Race to 21 and Multiplying 2-digit numbers by 11 (sums to 9 only)

- Practice this trick with students and ask them if they can figure out what you're
 doing. Write the answers on the board as you do them. The goal here is to train
 them to start seeing patterns.
- · Reveal the answer to the trick and have them practice on each other.

Week 5:

Suggested Warm Up – "I'm thinking of a number" and "Would you rather" Suggested book – Any

Suggested activity - Multiplying 2-digit numbers by 11 with regrouping

- Start with having students practice the trick without re-grouping. Then do the
 trick with re-grouping and see if they can figure out what you're doing. Once
 they've figured it out, have them practice the trick with a variety of numbers
 from 12 99.
 - o For kids who are advanced, ask them to figure out the trick for 3 digit numbers times 11 (give them paper and pencil and a calculator). They can prove that they know it by correctly answering tricks that you give them.

Week 6:

Suggested Warm Up – Any
Suggested book – Any
Suggested activity – Leapfrog Addition

This is an extension of the multiplying by 11 activity