NCTM Annual Conference

Organizing an Interactive Family Math Night

Friday, April 25th, 2018
Session #520, 3:15-4:30

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Why Host a Family Math Night?

- Allow opportunities for families to interact with each other around MATH!
- Excellent way to educate families about the type of thinking we are asking students to do daily
- Reinforces skills and concepts taught
- Combats the “not a math person” thinking
- Gives families ideas for games and activities that they can do with their children at home
If we want families to interact around MATH then we need to...

- Have a clear expected outcome
  - Do we want families to play fluency based games?
  - Do we want families to play games focused on critical concepts covered at a grade level?

- Have a structure and organization to the night appropriate for the grade level
  - How will families travel from activity to activity?
  - How will they know when and where to go?

- Have physical spaces that encourage positive interaction
  - How will games be set up?
  - Who will be around to help if families have questions?
What to include

Fluency Games
Technology Center
Library Corner
Math in the special areas
Strategy Board Games
Extras
Game packets to take home
Early Planning is a must!

Form a planning committee
Invite everyone!

- Start early/pick meeting dates
- Set goals
- Discuss time/place/grade levels/time of year
- Assign jobs
- Publicity - posters, emails, talk it up in classes/PTO/Open House
Decisions

- **Location**
  - All in one location such as the gymnasium
  - Separated by grade bands

- **Time**
  - Early evening during the week
  - Friday night activity

- **Activities**
  - Fluency Games
  - Computer/IPad
  - Other
More Decisions

- Games
- Refreshments
- Publicity
- RSVP
- Registration
- Door Prizes and/or goodie bags
- Family Feedback Forms

Thanks for coming!

Please take a moment to rate your experience at our Family Math Night!

Preparation and Set up ★★★★★
Games offered ★★★★
Apps/Computer programs ★★★★
Enjoyment for my family ★★★★★
Overall experience ★★★★★

Comments
Planning Considerations

Organization

Example 1

2 grades sharing a space

Grade 2 games all color
Coded green on tables
Planning Considerations

Organization

Example 2

Each grade in a separate Space with some shared activities.

Shared activities
Examples of Flyer and Invitations

Save the Date
You are invited to Region 18’s Family Math Night
Come spend the evening engaged in math games and other hands-on activities that will be taught by your children.

Lyme School  October 13, 2016
6:30-7:30 p.m.

Mile Creek School  October 20, 2016
6:30-7:30 p.m.

More information coming.
Look for your invite coming soon!

Paperless Google Form
Joel Math Night Grades K and 1
Please use this form to sign up for Math Night on March 28th from 6-7:30pm. If you have already returned a paper copy you do not need to send this form.

Email address *
Valid email address

Student’s First and Last Name (If you have more than one K or 1st grader, there is an additional option at end to note their name and teacher’s name.)
Short answer text

Student’s Classroom Teacher *

Fire Up Your Math Skills
At Mile Creek’s Family Math Night
Thursday, October 20, 2016
6:30-7:30 PM
For Parents/Guardians and their K-5 Students.
Come join us for a celebration of math and enjoy an evening of hands-on activities and games.
It is sure to be a great time for your family!
You will leave with ideas for practice at home.
Please come one and return your RSVP by Tuesday, October 11, 2016

RSVP  Count us in!

Family Name: __________________________
Students’ Names: ______________________
Please circle grades: K, 1, 2, 3, 4, 5

Responses can be viewed as a Spreadsheet
### Examples of Menu Cards

**Welcome to Family Math Game Night!**

**Name:_________________________**

#### Grade 1

<table>
<thead>
<tr>
<th>Game</th>
<th>Rate It!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top It!</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Build A City</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Domino Parking Lot</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Pirate’s Treasure</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Addition Battle</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Bump</td>
<td>★★★★★</td>
</tr>
</tbody>
</table>

**Technology Stations**

- Apps on the Ipad:
  - Todo Math
  - Subitize Tree
  - Ten Frame Fill
  - Hungry Fish

Don’t forget to make your guess for the Estimation Jar!

Parents: Please complete the feedback form.

Once you have completed all the stations, head to the check out table and pick up your math games and a dice surprise!

**Math Rocks**

Thank you for coming!

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**Welcome to Family Math Game Night!**

**Name:_________________________**

#### Grade 4

<table>
<thead>
<tr>
<th>Games</th>
<th>Rate It!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salute</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Multiplication Bump</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Place Value Puzzle</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Whirl Away</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Wipe Out</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Number Tile Games</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Roll On Place Value</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Race to 10,000</td>
<td>★★★★★</td>
</tr>
<tr>
<td>I Spy Products</td>
<td>★★★★★</td>
</tr>
<tr>
<td>1001 and Out</td>
<td>★★★★★</td>
</tr>
</tbody>
</table>

**Technology**

- Apps on the Ipad:
  - Squeebles
  - Thinking Blocks
  - Math Tappers
  - Sushi Monster

**Games on the Computer:**

- Dreambox
- Thinking Blocks (Math Playground)
- Greg Tang

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**Math Rocks**

Thank you for coming!
Examples of maps
Fluency Games - POP

Great for any concept!

- Subitizing
- Addition
- Subtraction
- Multiplication
- Division
Fluency Games - BUMP

Welcome Back Bump

Big Bats Bump
Divide by 7 - Roll 1 10 Sided Dice and Cover an Equation

Games & Learning www.teacherspayteachers.com/Store/games-amp-learning  Theresa Evans 2013
Memory & Go Fish

Grade 2

6 + 6 = 12

Memory to 10 Directions

1. Place the number cards face down.
2. Pick a card and say the partner number to 10.
3. Pick another card and see if you get that number. If you get a match, keep those cards!
4. The next player picks.
5. The game ends when all cards have been picked. Then count your cards to see how many matches you made!

You can change Memory to make it any number. For example, you could play Memory to 5 or 20!

You can make your own version by writing down addition or subtraction facts and the answers on cards.
Fluency Games - Salute

Salute Directions

Three players. One general and two players.

1. The generals says, “Players Salute!”

2. The players draw and card and place it on their foreheads, number side facing out.

3. The general adds or multiplies the two numbers.

4. Each player has to figure out the number on their forehead.

5. Play through the deck and then pick a new general!
Fluency Games - with Dice!

Kids love different kinds of dice!

6-sided, 10-sided, 12-sided

Dice-in-Dice, 3 in 1 Dice in Dice

Add, Subtract and Multiply single, double or triple digit numbers

Yahtzee - adding, dice-in-dice and place value versions
Fluency Games - with Dominoes!

Many families have dominoes at home!

Math Night is a great time to show them ways to use them for fun practice at home..

Add, Subtract and Multiply

Domino Parking Lot for grades K and 1
Technology Center

Set up in the Computer Lab and at tables within your space

Chromebooks/Computers
- Starting Website
- Bookmarks
- List of Websites to visit

IPADS
- List with Pictures
- Math Night Folder by Grade Level

Math Websites for Math Night

http://gregtangmath.com/ - try Math Limbo, Ten Frame Mania, and Numtanga!
http://www.abcya.com/ - try Dino lines!
https://illuminations.nctm.org/activity.aspx?id=3564 - Practice on the 5 frame, Concentration,
www.Dreambox.com or any website your district subscribes to.
Math in the Special Areas

- Math in Music
- Math en Espanol
- Mandalas and Op Art
- Tessellations
- Addition Pyramid
Strategy Board Games

Encourages families to play more games together!

Checkers, Chess, Backgammon
Blokus, SET, 24, Four Way Countdown
UNO, Yahtzee, Chutes and Ladders
Extra Activities

Estimation Station (winner received ITunes gift card),

Headbanz

- K/1 - 10 Frames
- 2/3 - Name the strategy

Hallway of Numbers

Human Hungry Hippos

Glow in the Dark Geometry
Take Home Bags

Packets of games to play at home

Dice to take home (plan over time to have kids have a variety)

Game ideas to play with dice, cards and dominoes

10 frame with yellow and red counters
Or strategy explanations

Website and app lists
Final Thoughts

Translation for ELL students

Make nice with custodians

Stay after school to set up...Plan to eat with the TEAM before families arrive...order pizza or do pot-luck

Thank you’s and candy-(prep ahead - you will be tired the next day!)
Resources

Fluency Games - Pinterest - heidi4410
https://www.pinterest.com/heidi4410/

Greg Tang Jr. offers Family Math Nights
https://tangmath.com/products/family-math-night

Family Math Night - Website full of resources
http://www.familymathnigh.com/