

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



Goals for Family Math Night

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

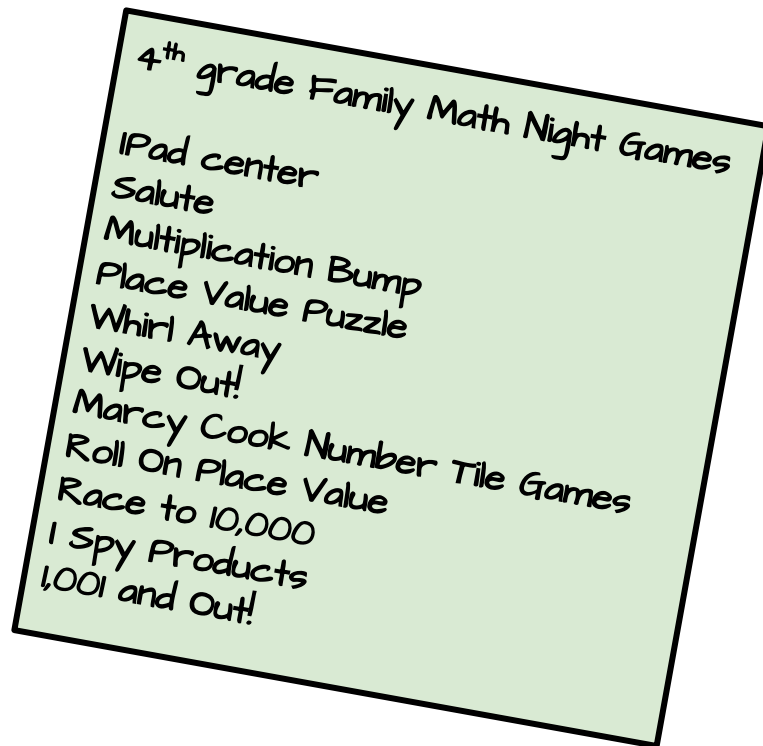
Library Corner

Math in the special areas

Strategy Board Games

Extras

Game packets to take home

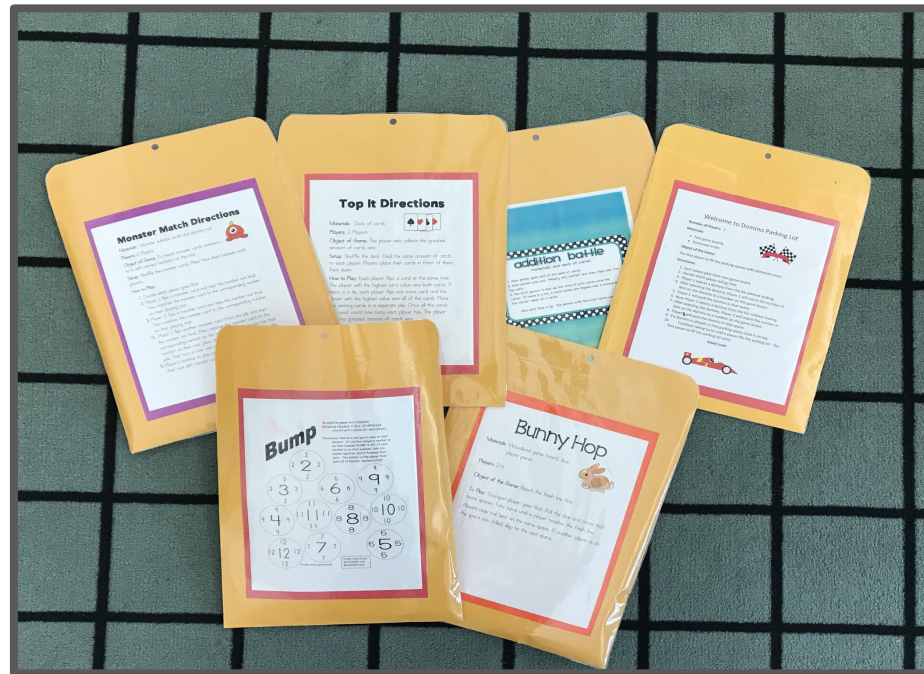


Early Planning is a must!

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

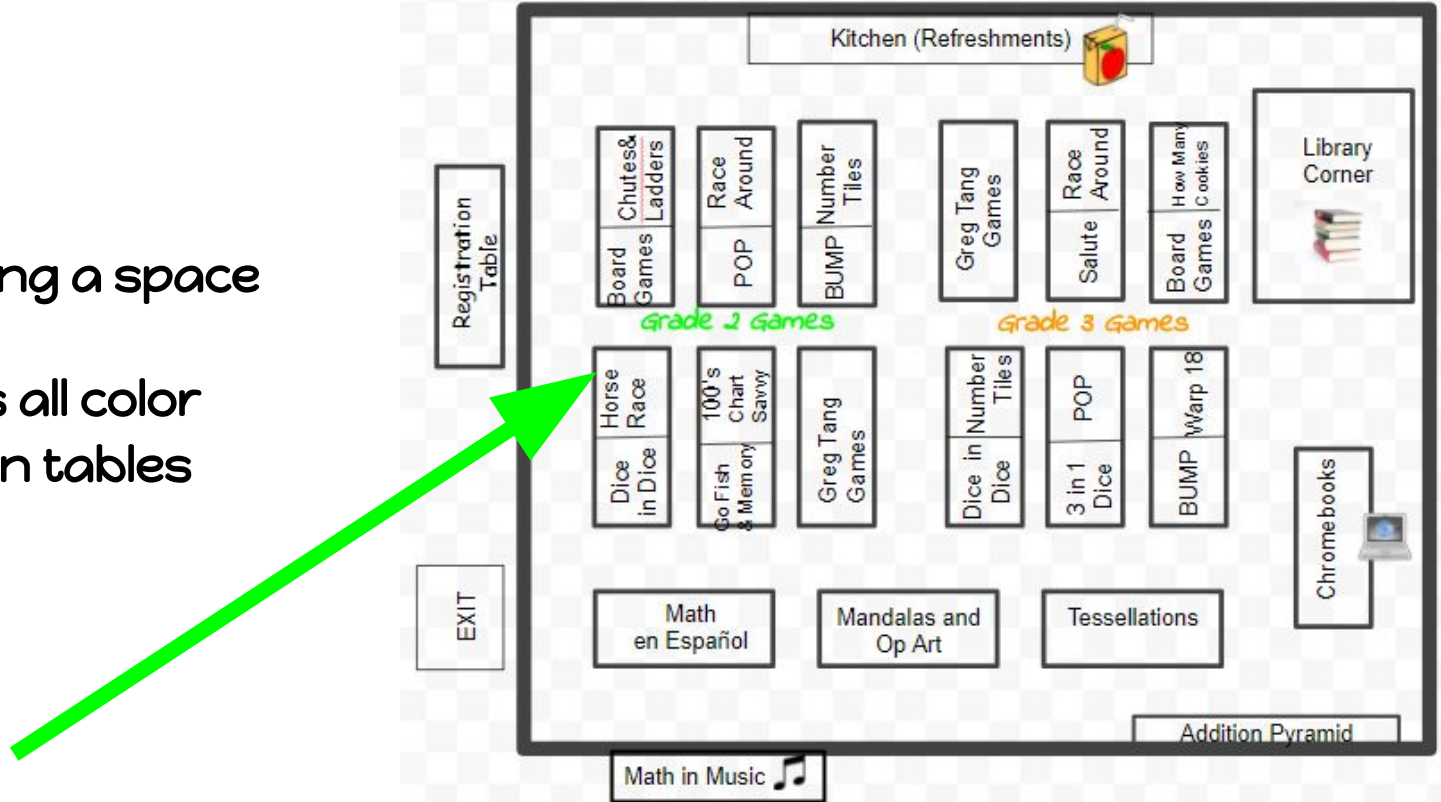
Planning Considerations

Organization

Example 1

2 grades sharing a space

Grade 2 games all color
Coded green on tables



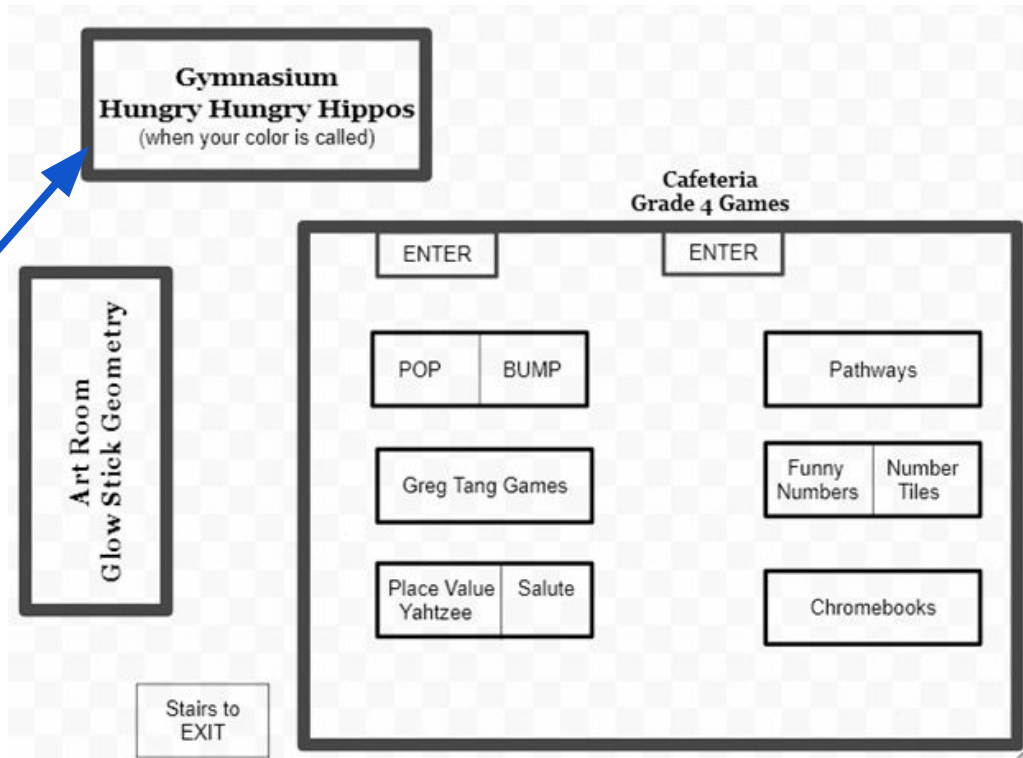
Planning Considerations

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

QUESTIONS RESPONSES

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


This form is collecting email addresses. [Change settings](#)


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 *

RESPONSES









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 complete, cut 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

mc10/20/16

Responses can be viewed
as a Spreadsheet

Examples of Menu Cards

Welcome to Family Math Game Night!

Name _____

Grade 1



Game	Rate It!
Top It!	☆☆☆☆☆
Build A City	☆☆☆☆☆
Domino Parking Lot	☆☆☆☆☆
Pirate's Treasure	☆☆☆☆☆
Addition Battle	☆☆☆☆☆
Bump	☆☆☆☆☆

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!

Welcome to Family Math Game Night!

Name _____



Grade 4

Games	Rate it!
Salute	☆☆☆☆☆
Multiplication Bump	☆☆☆☆☆
Place Value Puzzle	☆☆☆☆☆
Whirl Away	☆☆☆☆☆
Wipe Out	☆☆☆☆☆
Number Tile Games	☆☆☆☆☆
Roll On Place Value	☆☆☆☆☆
Race to 10,000	☆☆☆☆☆
I Spy Products	☆☆☆☆☆
1001 and Out	☆☆☆☆☆

Technology

Apps on the Ipad:

Squeebles
Thinking Blocks
Math Tappers
Sushi Monster

Games on the Computer:

Dreambox
Thinking Blocks (Math Playground)
Greg Tang



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

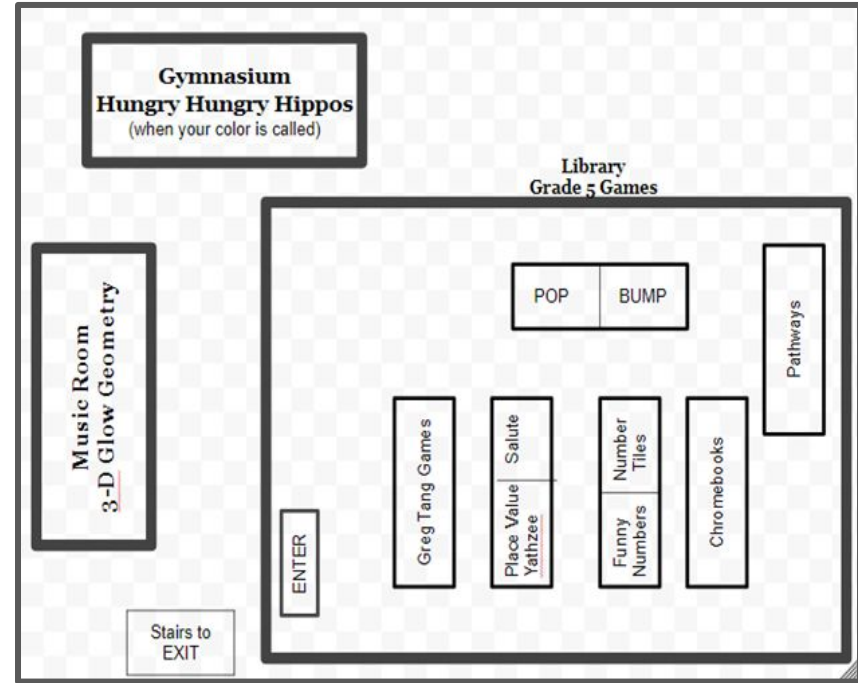
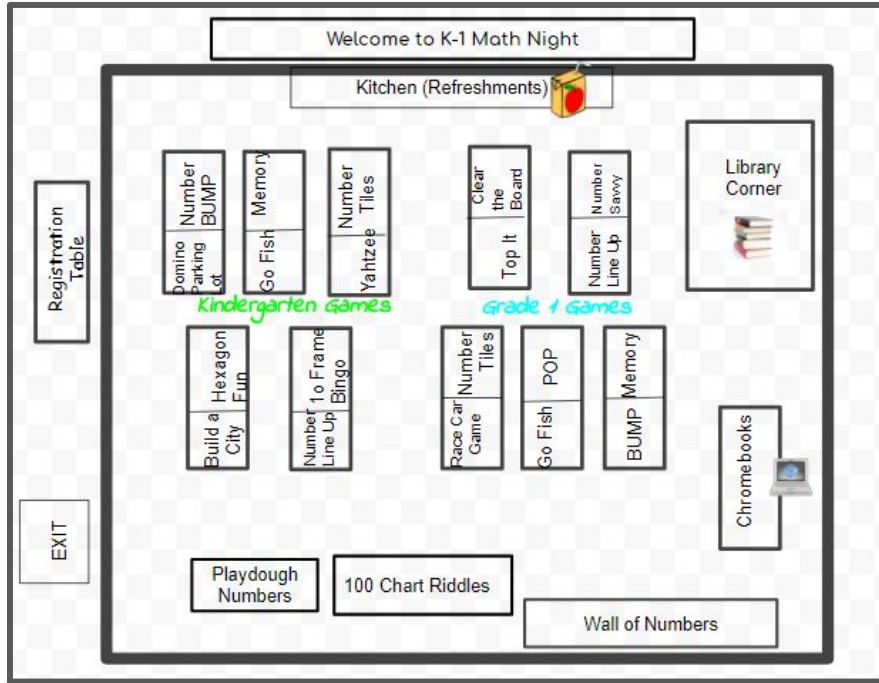
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Math Rocks

Examples of maps



Fluency Games - POP

Great for any concept!

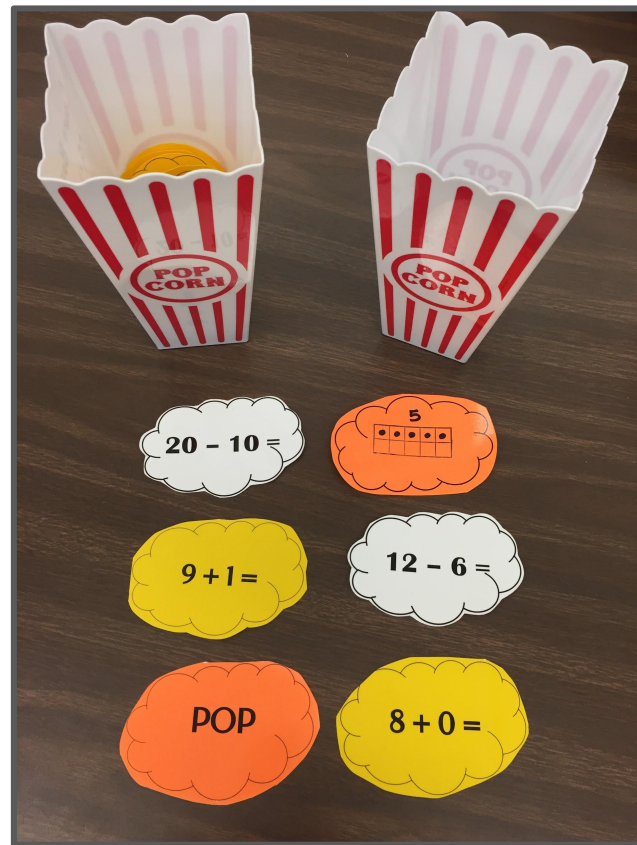
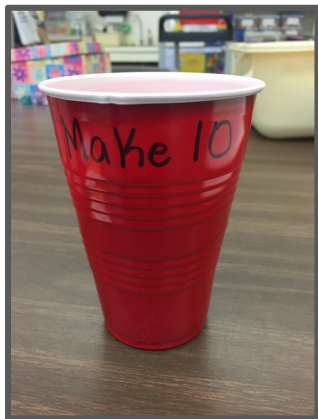
Subitizing

Addition

Subtraction

Multiplication

Division



Fluency Games - BUMP

Welcome Back Bump

addition

How to play: Roll three number cubes and add those numbers. Cover that space with your marker. You can bump your partner's color and take their space! If you cover a space with two markers stacked on top of each other, you took that space and it can't be bumped. The player to use all ten of their markers first is the winner!

Big Bats Bump

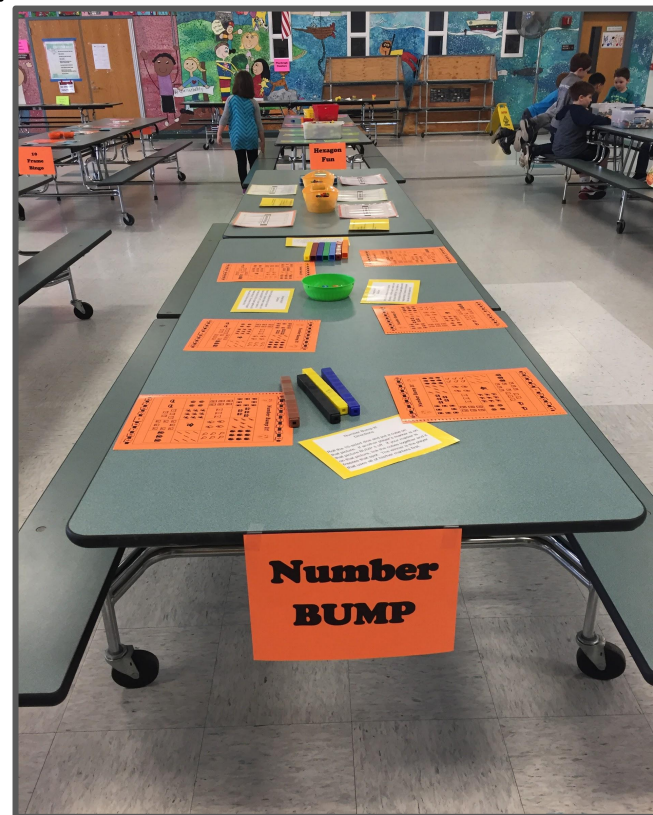
Divide by 7 - Roll 10 Sided Dice and Cover an Equation

a game for 2 players

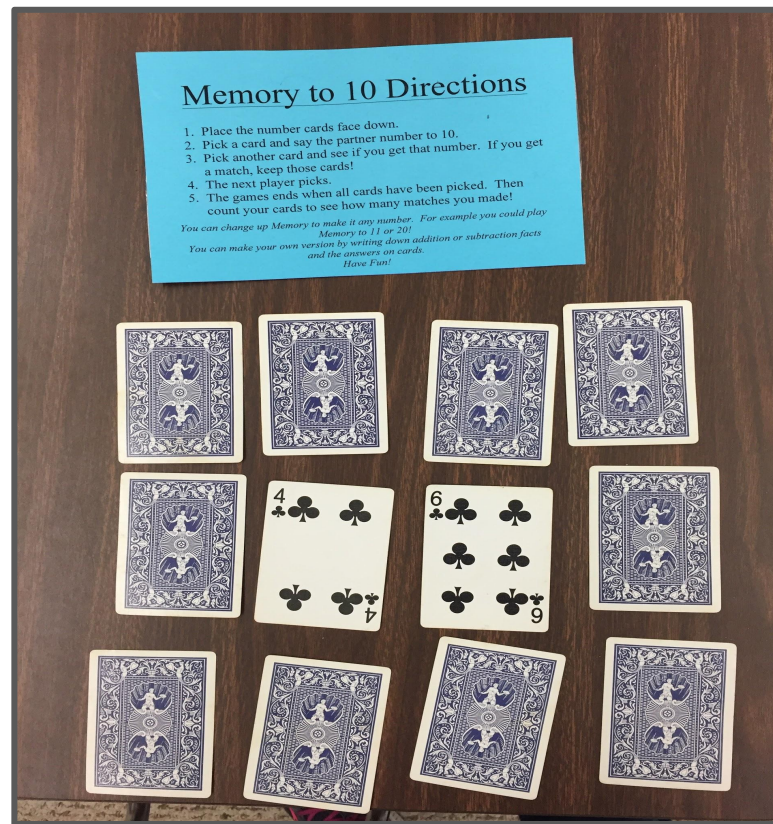
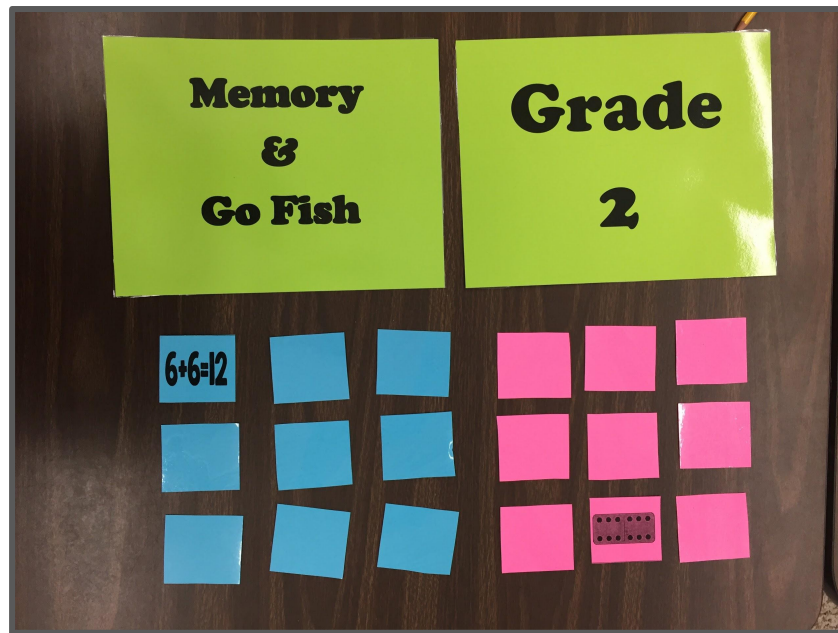
Need: 1 10 sided dice and 8 counters per player - each player uses a different color

To Play: Players take turns to roll the dice then find an equation that equals the number on the dice. Then they cover this equation with one of their counters, covering the large equation. If another player has covered that equation, they can bump that counter off and put one of their own counters on it. If that equation is covered by one of the player's own counters, they can add another counter on top and then they have won that space. You can only 'bump' when there is only one counter on the number. The winner of the game is the first player to use all 8 of their counters.

Games 4 Learning: www.teacherspayteachers.com/games4learning © Teresa Evans 2015



Fluency Games - Memory/Go Fish



Fluency Games - Salute

Salute Directions

Three players. One general and two players.

1. The general says, "Players Salute!"
2. The players draw a 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!

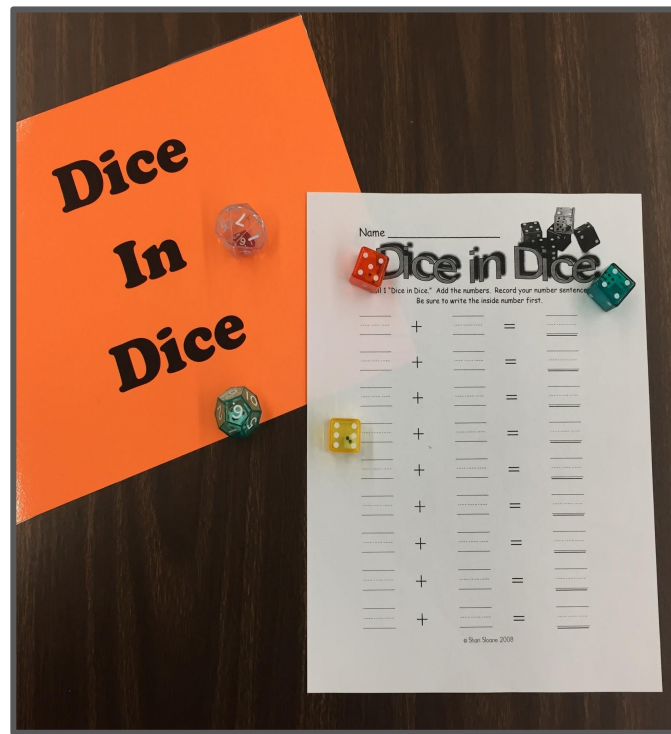
Kids love different kinds of dice!

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!

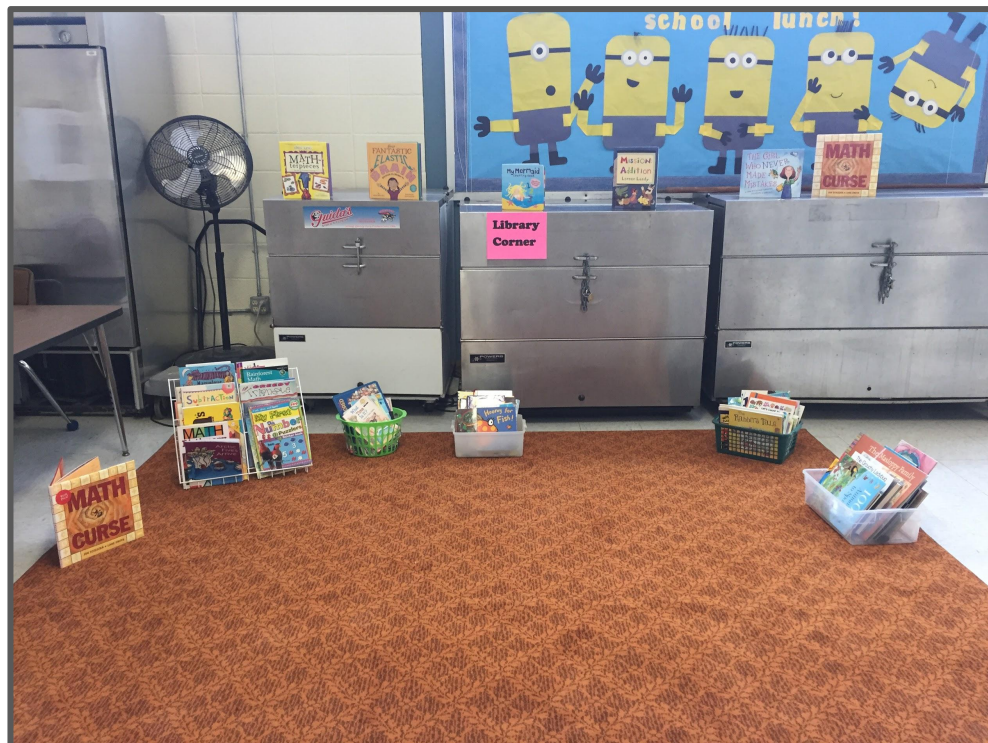
<https://illuminations.nctm.org/activity.aspx?id=3564> -

Practice on the 5 frame, Concentration,

www.Dreambox.com or any website your district subscribes to.



Library Corner



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!)

Thank you!
You helped make
Math Night
"ADD" up to a
great night!



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.familymathnight.com/>

