Welcome to

Lynndale Elementary School

Math Night

February 28, 2012

Parents as Math Partners

Dear Families,

Children learn in different ways, and our commitment is to provide <u>all</u> Lynndale students with the opportunity to become mathematically competent *and* confident. We strive to teach in such a way that children understand what they are learning and can apply these new skills in today's technologically-driven world. In the classrooms we use manipulatives, games, activities, "skill drills," problem-solving strategies and small-group work to build a variety of math skills.

<u>You</u> are an essential partner in this work. We hope tonight's activities and the following pages will help build skills in the following areas:

Computation
Computation is the act of using mathematical concepts and symbols with ease and quickness. It involves a deep understanding of numbers and ways of representing numbers, and relationships between numbers and number systems. Students should be able to understand the meaning of operations at their grade level (which can include adding, subtracting, multiplying, and dividing), and how these operations relate to one another--for example, that multiplication is repeated addition, and division repeated subtraction.

Fluency
Fluency is the skill by which a student can quickly and efficiently complete grade-level computations. Strong fluency allows students to complete tasks quickly. For example, knowing one's multiplication facts improves a student's ability to solve *any* division problem.

Communication
Today it is vital for students to be able to communicate <u>how</u> a result was achieved. Correct answers are important, and we want our future architects, engineers and scientists to be able to arrive at the correct solution for any specific project. At the same time, communicating to others <u>how</u> the answer was derived demonstrates deep and thorough understanding of both product and process, and a better yield of correct answers.

Lynndale Elementary School's Math Goal for 2011-2012

Lynndale students will increase fluency in math computation and number sense in order to reason, solve problems, and communicate results.

We hope you find Math Night helpful, and we encourage you to use the activities in this booklet at home with your students.
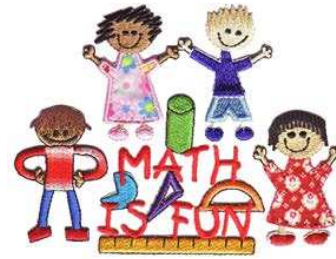
Thanks for your continued partnership and commitment to <u>all</u> of our children!

Sincerely,

The Lynndale Elementary Staff

Helping Your Child Learn Mathematics
Grades K-2

**As a parent, you can make a
significant difference in your child's learning!**

Statistics

- ❖ Find two similar objects such as a sneaker and a boot. Take turns describing how the two things are the same and how they are different.
- ❖ Have your child help sort laundry, items for recycling, groceries, hardware, and spare change.
- ❖ If your child collects something, work together to organize or sort the collection in different ways.
- ❖ Discuss graphs you find in print. What is it showing a reader?

Algebraic Sense

- ❖ Look for and talk about patterns in the environment (e.g., use of color, size, position, or quantity).
- ❖ Try physical pattern routines with motions, such as clapping your hands and tapping your knees in a repetitive pattern. Translate these patterns into other representations (e.g., shapes, clap, stomp
- ❖ translates to ABC).
- ❖ Make patterns together using household items (e.g., buttons, caps and bottle tops, coins, and keys). You can also take turns adding to another's pattern.
- ❖ Encourage your older student to solve for unknowns using addition and subtraction (e.g., 6 + ? = 11; 11 = ? + 6).

Measurement

- ❖ Collect a small group of objects and compare weights and lengths. Ask your second grader to explain when a unit is smaller, why it takes more to measure an item than if the unit is larger.
- ❖ As you are cooking and baking, ask your child to help with filling, measuring, and leveling off measuring cups and spoons. Talk about and compare ounces and cups.
- ❖ Do experiments at home comparing the capacity of different containers (e.g., a glass and a mug). Guess which holds the most before measuring.
- ❖ Compare heights of family members. Establish a place where heights can be marked off and compared.
- ❖ Mention what time it is at meaningful times of the day (e.g., the time your child wakes up, the beginning of school, a favorite television show, or bedtime).
- ❖ Ask your child to determine how much change is in your pocket.
- ❖ Ask your child to find things that are similar in size (e.g., find things that are as long as one pencil).

Number Sense and Computation

- ❖ Look for things in your everyday life that you can count with your child (e.g., the number of windows in our house).
- ❖ Look for chances to compare amounts (e.g., amount of forks and spoons on the table).

- ❖ Look for and talk about addition and subtraction situations at home (e.g., add the number of oranges, apples, and bananas in the fruit bowl).
- ❖ Encourage your child to use his or her own strategies for addition or subtraction.
- ❖ Encourage your student to practice the math facts he/she understands.
- ❖ Read math-related literature such as Teri Sloat's, "From One to One Hundred." As Look for patterns or designs made from different shapes.
- ❖ Spend time with your child drawing shapes you see around your home. Encourage your child to use correct vocabulary to describe the shapes.
- ❖ Take walks with your child and talk about the different shapes you see. Look for both two-dimensional and three-dimensional shapes. Encourage your child to look closely at and describe each shape and name it (e.g., a stop sign is an octagon).
- ❖ Make geometric shapes with clay, building blocks, drinking straws, or yarn (e.g., triangles, squares, and circles).
- ❖ Ask your student to describe the location of a number on the number line (e.g., 65 is closer to 50 than 100.

Keeping the love of Math alive!

DICE THROW GAME
Kindergarten

What you need:
2 dice
Game Sheet (below)
Small markers (things like dried beans, pennies, buttons)

Object of the game:
The object of the game is to be the first to fill one column all the way to the top.

Directions:
Player throws the dice and adds up the numbers on the two dice. They take a marker and put it above the corresponding number on the game board. (For example, if they threw a 2 and a 3, a marker would be put above the five. The winner is the first person who gets one column filled all the way to the top. If playing alone, once you fill one column, you win!

DICE THROW GAMEBOARD

2	3	4	5	6	7	8	9	10	11	12

BUMP
Kindergarten

What you need:
One Gameboard (below)
Pair of dice
10 markers per player (2 different colors)
2 Players

Directions:

Players take turns rolling the dice. After each roll, the player finds the sum of the dice numbers and then adds on the third number (for example, sum + 2). The player then places a chip on the final sum.

If a player gets the same sum as the opponent, he or she bumps the opponents chip off the board.

If a player gets the same sum he or she rolled before, he or she places another chip on that number and that number is then frozen and cannot be bumped. However, the owner of the frozen number can continue to place chips on that number.

The first person to get rid of all chips is the winner.

6   11   4

8   10   9

12   5   13   14   7
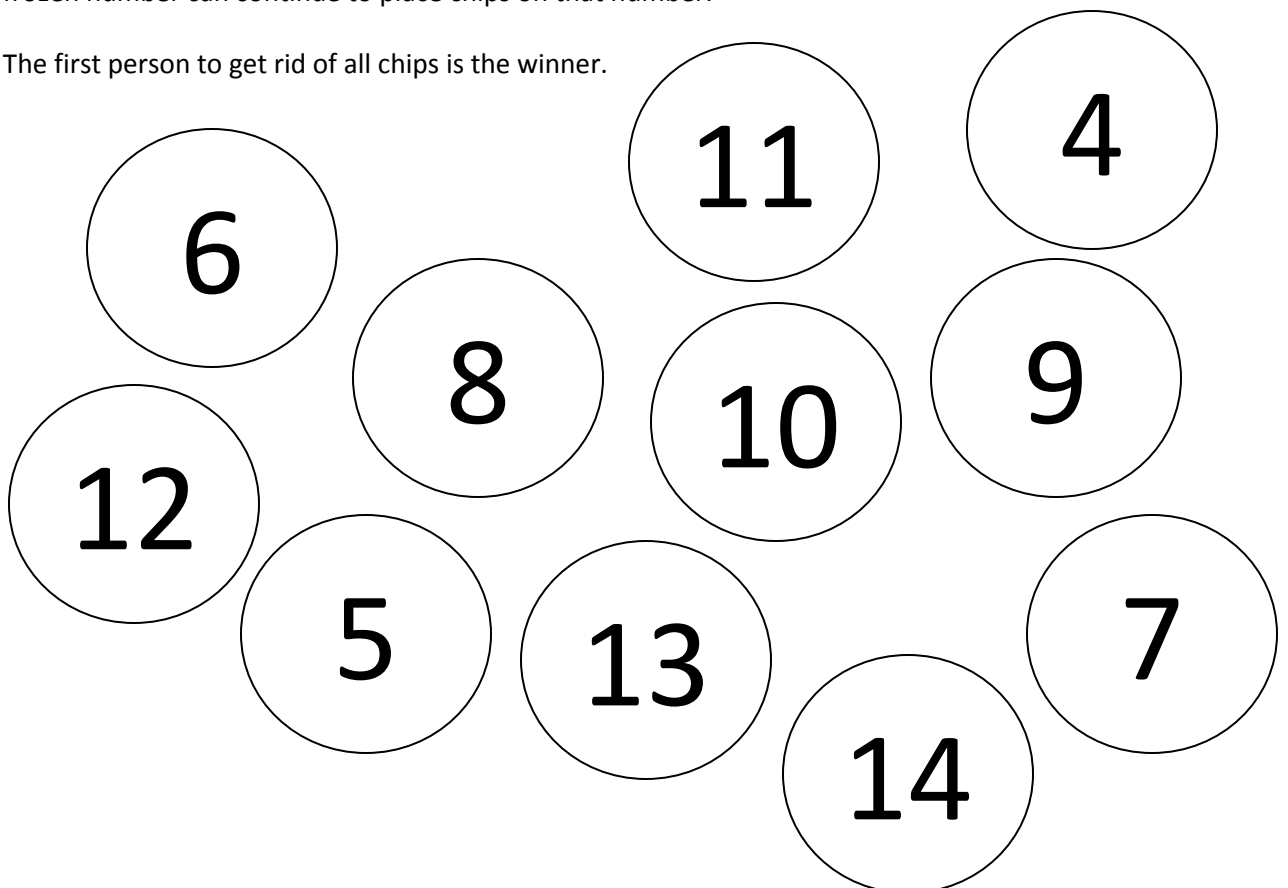
EGGHEAD
Kindergarten

What you need:
2 dice
Game Sheet (below)
1 small marker per player

Object of the game:
The object of the game is to move your marker from egg to egg by finding sums.

Directions:
1. Put your markers on START.
2. Roll the dice to see who begins. Whoever rolls the greater sum starts.
3. Roll the dice. If the sum of the two numbers you roll is in the first egg, move your marker to that egg. Otherwise, stay on START.
4. Take turns rolling the dice.
5. After each roll, try to move your marker to the next egg by finding the sum of the numbers you roll.
6. You may only move your marker if the sum of the numbers you roll is in the next egg.
7. Continue the game until a player lands on the EGGHEAD.
8. The first player to land on the EGGHEAD is the winner.
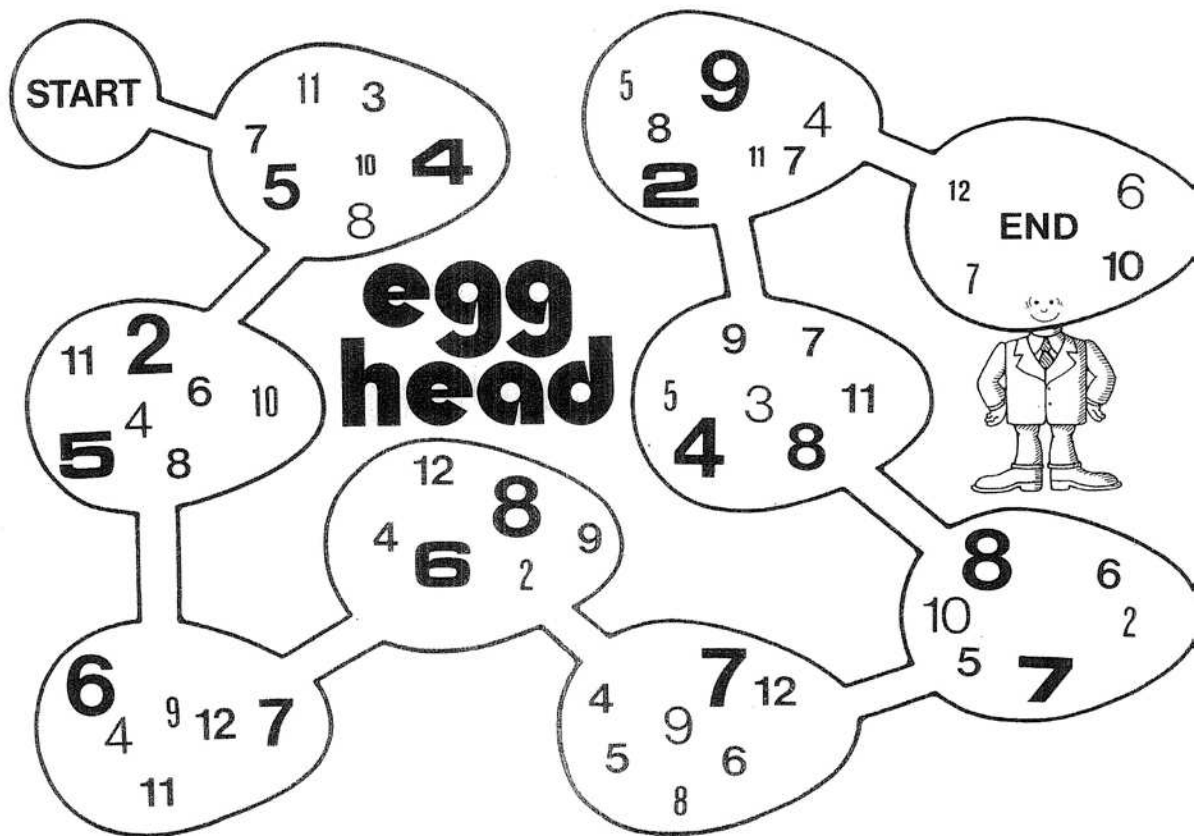
WHAT DO YOU THINK?
Grade 1

What you need:
Counters
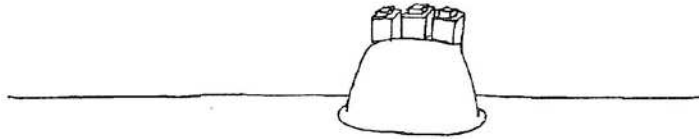Plastic Bowls or Containers with Flat Bottoms

Directions:
Place some counters under a container and some on top of it and have the children determine the total.
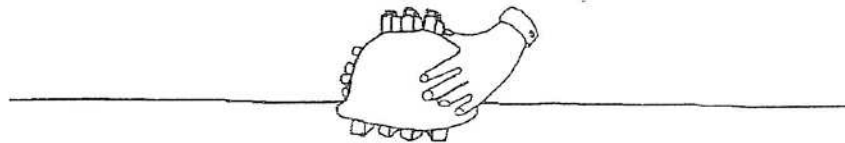
For example:

Addition

Place some counters under a margarine tub and some on top of it and have the children determine the total number. For example:

How many on top?

Three.

Lift the tub. How many underneath?

Four.

What is three plus four?

Six.

Seven.

I don't know.

Who can tell me how they figured it out?

I just remembered that three and four is seven.

I thought three plus three is six, so three plus four must be seven.

NUMBERBOW
Grade 1

What you need:
Gameboard (distributed at Math Night)
Smaller gameboard copied below
Markers (different colors for each player)
Dice

Directions:
Roll the dice. Add the numbers of both together. Place a marker on the sum. Take turns rolling the dice until each number in the Number Bow is covered. After all the numbers are covered, the player who has covered the most numbers wins.

Other ways to play:
Trace or draw a Numberbow like the one on this page. Roll the dice. Add the dots together. Color in the number that is the sum. Keep going, using different colors, until all the numbers have been colored.
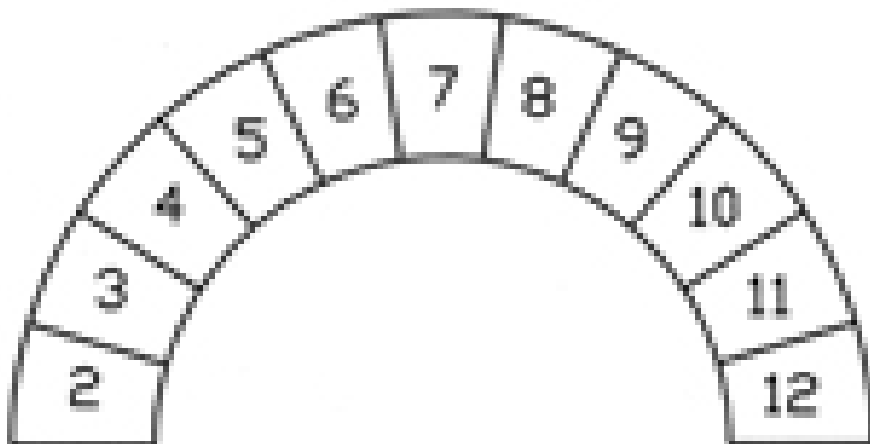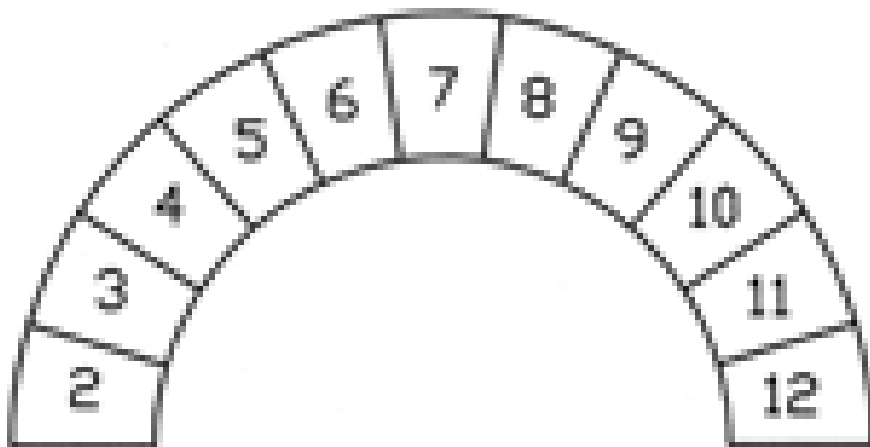
MELON MONSTER
Grade 1

In Grade 1, the Melon Monster game provides the opportunity for the whole class to practice partners and totals. Line up 8 paper plates along the ledge of the board. Invite children to pretend that the plates are watermelons. Explain that there is a "Melon Monster" on the loose who loves to eat watermelons.

Let one child be the Melon Monster for the first meal. The others cover their eyes while the Melon Monster removes and "eats" some of the melons. (Hide the "eaten" melons.)

Then the Melon Monster says, "M-m-m, what delicious melons!" Children uncover their eyes and count the remaining melons. They use Stair Step 8 and the Break-Apart Stick to discover how many melons were "eaten."

For example, show 5 plates on the board ledge.

Suppose there are 5 melons left. How many melons did the Melon Monster eat? Let's find the unknown partner by using the Stair Step.

Count 5 and place the Break-Apart Stick. What is the unknown partner? (3)

How many melons did the Melon Monster eat? (3)

Play several more rounds of the game, with a different child playing the role of the Melon Monster each time. Start with 8 melons for each round.

PARTNER PAIRS
Grade 1

Goal:
Find the unknown 10-partner or 100-partner.

Materials:
Demonstration Secret Code Cards

Two student leaders are needed for this activity. The first leader has the 1-digit cards, and the second leader has the two-digit cards. They take turns holding up a card and asking the class for the 10-partner or 100-partner. The class responds with the correct number.

10-partner   100-partner

Class: 6   Class: 30
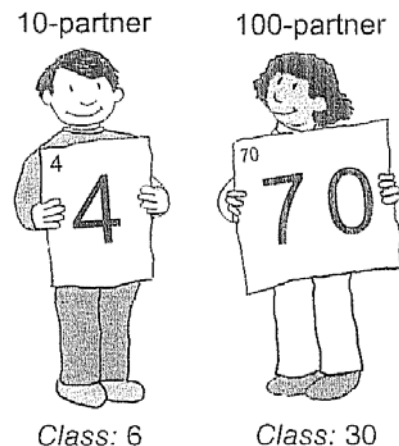
LEAPING LAMBS
Grade 1

What you need:
5 counters per student
Cloverfield Game Mat (distributed at Math Night)

Activity:
Have each student put 5 counters on one side of the center line. Explain that the 5 counters are 5 lambs playing in a clover field and the line is a fence.

Teach children the first verse of the poem below. Children can jump 1 lamb counter over the fence in the second line of the poem.

"Five little lambs playing in clover
One saw the fence and jumped right over.
Now four little lambs are in the clover,
And one little lamb is over."

Write 4 + 1 on a piece of paper. As the lambs jump the fence one at a time, continue to record the various 5-partners.

OH NO, 99!
Grade 2

What you need:
Deck of cards with Jokers removed
Queens can be removed or used as Wild Cards
2 players

Partners take turns mentally adding the value of the card they play to the accumulating score.

To win a game, a player must make his/her opponent go over the score of 99.

Aces = 1   Jacks = minus 10   Kings = 0   All other cards (2-10) are counted at face value
Queens can either be taken out of the deck, or used as Wild Cards and given the value of any other card.

1. Partners begin by shuffling a deck of cards.
2. Each player takes 4 cards, placing the remaining cards in a stack on the table, face down.
3. Players take turns playing one of their cards, each time adding the value of the card they play to the accumulating score. After playing a card, a player must pick a new card from the stack so that he/she always has 4 cards in hand.
4. The player who forces his/her opponent to go over 99 is the winner.

ADDITION WAR
Grade 2

What you need:
Deck of cards with Aces, Jokers and Picture cards removed
2 players

Players divide cards evenly between themselves. Each player turns over 2 cards and adds them together. The highest sum gets all the cards. In the event of a tie (each player has the same sum), WAR is declared.

Each player deals out three more cards face down and then turns over two more cards. These two cards are added together. The highest sum wins all of the cards.

Play continues until one player has collected all of the cards. If times runs out, whoever has the most cards, wins!

Want a challenge?
Use 3 cards per player to add 2 digit and 1 digit numbers together, or use 4 cards per player to add two 2 digit numbers together.

PYRAMID
Grade 2
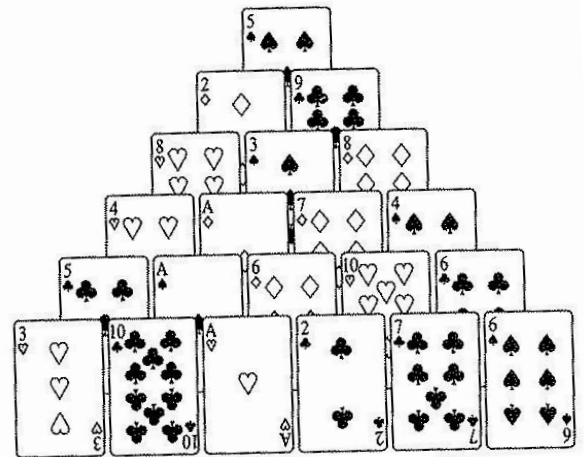
What you need:
Deck of cards with
Picture cards and Jokers removed

Goal is to remove as many cards from the Pyramid as possible.
Two things must happen before you can remove a card.

1. A card must be fully exposed (not covered up by another card.) When the game starts, only the six cards in the bottom row meet this requirement.
2. You can only remove two fully exposed cards whose sum equals 13.

For example, in the Pyramid above, you can take out four cards. The 7 of Clubs and the 6 of Spades can be removed, since their sum equals 13. You can also take the 10 of Spades and the 3 of Hearts, since their sum equals 13.

After you remove those cards, you will see that two new cards, the 5 of Spades and the 5 of Clubs are fully exposed. There are now five exposed cards, but none of them can be combined to make 13. Therefore, you can't remove any other cards.

The game isn't over, though! Your playing deck consists of 19 more cards that are not part of the Pyramid. You turn these cards over, one at a time. When you turn a card over, you can use it to match any fully exposed card in the Pyramid. Cards that don't form matches are put, face up, in a discard pile. You can go back to the discard pile any time you want and use the top card in the pile, but none of the other cards.

The game ends when you've turned over all 19 cards that weren't part of the original Pyramid. Your score is the number of cards remaining in the Pyramid. The smaller your score, the better.

Other versions:

➢ Instead of trying to make 13, try to make 10.

➢ Try to make 9, but remove Picture cards, Jokers, and Tens from the deck.

➢ Try to make 8, but remove Picture cards, Jokers, Tens and Nines from the deck

Helping Your Child Learn Mathematics
Grades 3 - 4

**As a parent, you can make a
significant difference in your child's learning!**

Statistics
❖ Work with your child to collect data (e.g., find the most common bike, dog, or car on your street).
❖ Help your child categorize information (e.g., categorize their toys by color, type, or size).
❖ Look for items from the newspaper and magazines that show how things change (e.g., weather maps). Look for graphs and charts to interpret with your child.

Algebraic Sense
❖ Look for patterns and how your child describes how they repeat (e.g., patterns in a rug).
❖ Take a walk and collect a variety of leaves. Then have your child look at the pattern and create a way to organize the patterns.
❖ Give your child a number sequence and have him/her try to find the next number
❖ (e.g., 9, 18, 27, ?).
❖ Talk with your child about different patterns of change (e.g., walking at a constant speed, speeds that increase or decrease).
❖ Using blocks, build towers with your child. Talk about the relationship between the
❖ numbers of faces showing.

Number Sense and Computation
❖ Help your child develop their fluency with addition and subtraction as he/she learns
❖ multiplication and division.
❖ Talk with your child about how "wholes" come apart into fractions and how fractions
❖ fit together as wholes (e.g., doubling or cutting recipes).
❖ Work with your child to estimate amounts using large numbers (e.g., cost of food at the
❖ grocery store).
❖ Help your child learn the basic facts in multiplication and division.

Measurement
❖ Encourage your child to estimate and measure distances, temperature liquid, volume, and weight.
❖ Involve your child in your own measurement activities (e.g., hobbies like sewing or
❖ carpentry).
❖ Work with your child to read and write time from both digital and analog clocks. Also
❖ help your child calculate elapsed time.
❖ Help your child learn different values of coins and paper money.
❖ Make up riddles about coins such as, "I have three coins in my pockets. They are worth 16 cents. What do I have?"
❖ Encourage your child to estimate the weight of produce you are purchasing. Weigh the
❖ produce to check the estimation.
❖ Talk about how long it will take to reach a destination when traveling by car. If it is 3:15 now and it will take 45 minutes to get to Aunt May's house, what time will we arrive?

❖ Invite your child to help prepare concentrated juices, choosing a large enough container and measuring water to add.

Geometric Sense
❖ Look for and talk about ideas in geometry that have to do with shapes, lengths, and angles (e.g., what shape is a stop sign or which side of this shape is longer).
❖ Talk with your child about directions for going places.
❖ Look for opportunities to talk about area as a measure of flat space (e.g., the number of square tiles covering the bathroom floor).
❖ Work with your child to visualize how different shapes fit in space (e.g., how the couch fits into a living room or up a stairway).
❖ Work with your child to find two dimensional and three-dimensional shapes (e.g., pyramids, cubes, and prisms).
❖ Encourage your child to work with building toys and materials you have around the house.
❖ Work with your child to make something from a set of plans. Together talk about and follow the instructions that come with it.
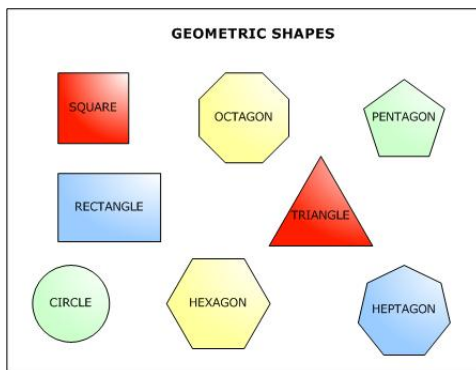
CIRCLES AND STARS
Grade 3

What you need: **Game Booklet:**
Game booklet made by student   **Paper**
Pencils   **Scissors (optional)**
2 dice   **Stapler (optional)**
Calculator (optional)
4 to 6 players

1. Students make Game Booklets

2. First student rolls dice. On page 1, the student will draw circles for whatever he rolled with one dice, and stars inside each circle for whatever he rolled with the other dice. For example, if a student rolled a 2 and a 3, he would draw 2 circles, with 3 stars in each circle.

Under the drawing, the student will write:
2 circles with 3 stars = 6 in all (2 x 3 = 6)

3. Then the next child takes a turn. Once each child has gone six times, he/she will add all six products to get their score and record it on the last page in their booklet.

Using Calculators:
Students may use calculators to add the products after they have completed their booklet.

Game Booklets:
Can be made from any available scratch paper, as many or as few pages as students choose.

GUESS YOUR FACTOR
Grade 3

What you need:
Deck of playing cards with face cards removed
3 players
A multiplication table, if you aren't sure of your multiplication facts (be;low)

Objective:
To get 5 points before your opponent does.

How to play:
1. Place deck of cards face down in the center of your play area.
2. Designate 2 players and 1 judge.
3. The 2 players each pick 1 card from the top of the pile and, without looking at it, put it on their forehead so that their opponent can see it, but they can't.
4. The judge looks at the two cards and multiplies them together, saying the product out loud.
5. The players then figure out their factor by looking at their opponent's factor, and say it out loud.
6. Judge has the final decision on who said the correct answer first.
7. Winner takes the two cards, and gets one point.

Example:
Player 1 puts an 8 card on his or her forehead.
Player 2 puts a 6 card on his or her forehead.
Judge announces "48" (8 x 6 = 48)
Player 2 calls out "6," before Player 1 says "8."
Player 1 wins.

After a player collects 5 points and wins the game, switch jobs, choosing a new judge. Continue until all players have had a turn being the judge.

MULTIPLICATION TABLE

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

MULTIPLICATION WAR
Grade 3 - 6

What you need:
Deck of playing cards with Tens and face cards removed.
Ace = 1, other cards 2 - 9
2 players
A multiplication table, if you aren't sure of your multiplication facts

How to play:
1. Shuffle cards after removing tens and face cards.
2. Players divide cards evenly between themselves, face down.
3. Players turn over two cards each, and multiply them.
4. The player with the largest product collects all four cards.

In the event of a tie, (i.e. the same product), each player deals three more cards face down. Two more cards are turned up and the player with the largest product collects all of the cards. Play continues until one player has collected all of the cards. Players may check the multiplication table if necessary.

Example:
Player 1 draws a 5 and a 7. (5 x 7 = 35)
Player 2 draws a 4 and a 9. (4 x 9 = 36)
Player 2 has the larger product, so Player 2 wins all four cards.

To increase the level of difficulty, increase the number of cards used.
3 cards = two-digit times one-digit
4 cards = two-digit times two-digit
5 cards = three-digit times two-digit
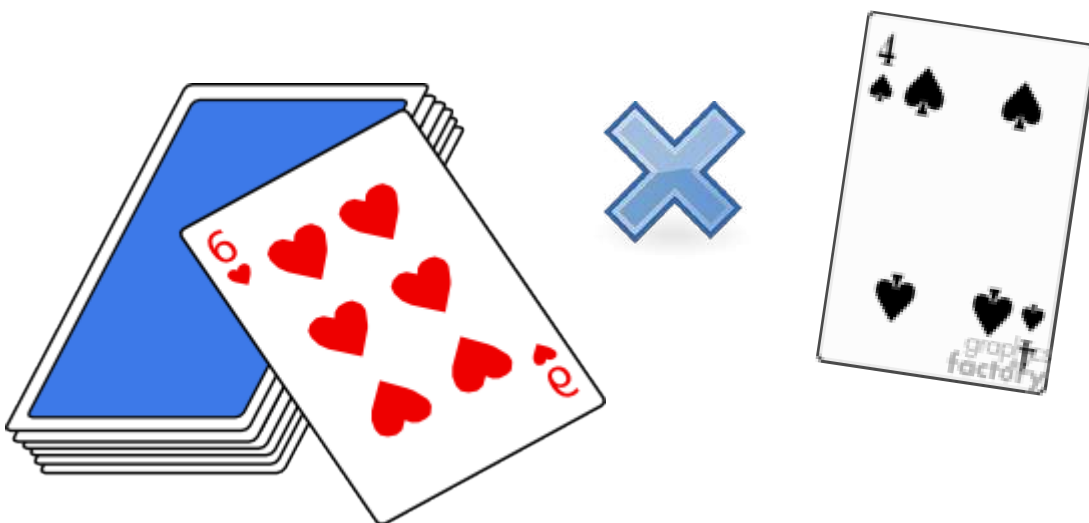
TIC TAC TOE PRODUCTS
Grade 4

What you need:
Game Board (below)
2 Paper Clips
Different markers for each player
2 Players

Object of the Game:
Get 4 products in a row vertically, horizontally, or diagonally.

How to play:

1. Determine which player will go first.
2. Player 1 selects two factors by placing a paper clip on the numbers (1 to 9) to multiply. The product is then covered by Player 1's marker.
3. Player 2 may move only ONE paperclip to make a new product. The product is covered by Player 2's marker.
4. Players 1 and 2 alternate moving one paper clip at a time until one player covers four products in a row.

1	2	3	4	5	6
7	8	9	10	12	14
15	16	18	20	21	24
25	27	28	30	32	35
36	40	42	45	48	49
54	56	63	64	72	81

1   2   3   4   5   6   7   8   9

REMAINDERS RACE
Grade 4

What you need:
Remainders Race Game Board (next page)
One marker for each player
Paper Clip and Pencil for Spinner
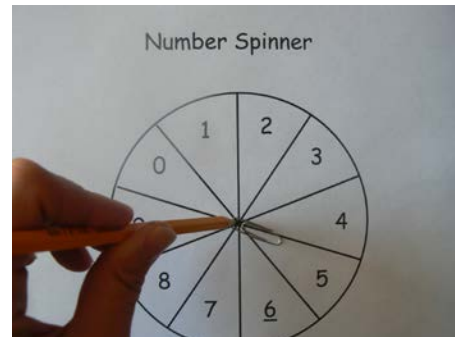
Number Spinner

How to play:
1. Each player begins by placing a marker on START. Numbers on the path are dividends. The number spun becomes the divisor.

2. The first player spins to determine a divisor for 43. The player then completes the division, states the resulting division problem with the answer, and moves ahead the number of spaces equal to the remainder.

   Example: If 7 is spun, the player says "43 divided by 7 equals 6 with a remainder of 1,"and moves one space.

   If a division problem yields a remainder of zero, the player is unable to move ahead for that turn.

3. Players alternate turns until one player reaches or goes beyond FINISH.

Making Connections

Promote reflection and make mathematical connections by asking:

➢ Which numbers did you prefer to spin? Please explain.

➢ Which numbers did you prefer to land on? Why?

REMAINDERS RACE GAMEBOARD

46	31	20
15		37
29		18
47		24
22		35
30		44

Start 43

49	38	45
28		57
19		21
42		50
31		34
23		48
51	27	41

16		
29		
44		
32		
25		
40	37	43

Finish 36

47
19
26
41
35
39
51
33
23
17

Spinner: 4, 5, 6, 7, 8, 9

Helping Your Child Learn Mathematics
Grades 5 - 6

**As a parent, you can make a
significant difference in your child's learning**!

Probability and Statistics
❖ Discuss with your child everyday experiences that relate to the likelihood of certain events (e.g., weather forecasting, the chances of a political candidate winning an election, or the likelihood of winning a cereal or soda contest).
❖ Look with your child for uses of data in magazines, newspapers, and on TV.
❖ Look at sports statistics with your child. Ask questions such as, "How can a batting average be used to help predict the likelihood of a player getting a hit their next time at bat? How can free-throw percentage be used to predict a player making a basket the next time they are at the free-throw line?"
❖ Play games that require predicting the likelihood of an event occurring (e.g., Yahtzee ®).

Algebraic Sense
❖ Help your child look for things that change in different ways and at different speeds. Can you find some things that change faster and faster? Can you find things that change steadily? Can you find anything that changes by gradually slowing down? Or by shrinking?
❖ Play games that require strategy and planning (e.g., chess, checkers, and dominoes).
❖ Share your problem-solving strategies and techniques, mental computation strategies, and estimation strategies. Have your child teach you some. Work on the same problem, then compare strategies as well as answers.

Number Sense and Computation
❖ Point out examples of how fractions, decimals, and percents are used in newspapers, magazines, and on TV.
❖ When eating in a restaurant with your child, ask him or her to estimate the total cost, tax, and what the tip should be.
❖ Help your children become fluent by reviewing their basic computation skills in addition, subtraction, multiplication, and division of whole numbers.
❖ Play mental math games that can challenge children to learn their computational skills (e.g., What is 5 x 5 + 3? What is half of 40? What number is half of 40 divided by 20?)

Measurement
❖ Help your child estimate lengths, distances, and areas (e.g., the span of your child's hand might be six inches, the distance from home to school might be one mile, the area of the kitchen may be twice the area of the bathroom).
❖ Have your child help you when a task requires measuring tools (e.g., figuring out how much carpeting would be needed for a room).
❖ Let your child plan meals and cook with you, figuring out how to double a recipe.
❖ Have your child practice reading thermometers, scales, and maps.
❖ Have your child estimate then determine by indirect measuring the volume of containers

Geometric Sense

- ❖ Help your child make a scale map of your neighborhood, labeling places and streets.
- ❖ Have your child show you lines of symmetry found in the environment.
- ❖ Have your child estimate then determine by indirect measuring the volume of containers.
- ❖ Look for opportunities to talk about shapes and angles. Most furniture has right angles. Why is this? If your child has game boards or spinners, look at their designs. Do they see any angles?
- ❖ Play games that require using a Hcoordinate grid system (e.g., Battleship ®).

KRYPTO
Grade 5

What you need:
Deck of cards
Paper
Pencil
1 to 30 players

Face Card Values
Ace = 21
King = 13
Queen = 12
Jack = 11

Objective:
Add, subtract, multiply or divide numbers to reach your target number.

4. Shuffle cards.
5. Place five cards face up on table.
6. Write down all five numbers on paper.
7. Choose a sixth card.
8. Write down the number of the sixth card and draw a circle around it.
9. The number with the circle around it is your TARGET NUMBER.
10. Add, subtract, multiply and/or divide the numbers on each of the five cards to reach your target number.
11. You may use each number only once.
12. You may use any operator (+ - x ÷) as many times as necessary to reach your target number.
13. You may put the numbers in any order. They do not have to be sequential.

Example:
You draw 1, 2, 4, 6, 13 and 21. Your target number is 5. You can add 1 and 4 to reach 5, but you haven't finished yet because you need to use all five numbers.

Try $21 - 13 - 4 + 6 - 1 = 9$. Nope! Not quite.

Try $13 - 6 + 21 + 1 - 4 = 25$. Nope! Keep trying!

FARKLE
Grade 5

What you need:
5 die (dice)
2 to 5 players

Objective:
Score 10,000 points by rolling different combinations of numbers.

SCORING
Roll a 1, score 100 points
Roll a 5, score 50 points
Roll three 1s all at the same time, score 1,000 points
Roll three 2s all at the same time, score 200 points
Roll three 3s all at the same time, score 300 points
Roll three 4s all at the same time, score 400 points
Roll three 5s all at the same time, score 500 points
Roll three 6s all at the same time, score 600 points

How to Play:

14. Roll five dice all at once. If you roll a 1 or a 5, you may start counting. If not, wait until your next turn and try again.
15. You must continue to score points on each roll or you lose all of your points.
16. Move the 1 aside and roll the remaining four dice.
17. You must score points or you lose all of your points.
18. You may keep your score or roll again to see if you can score more points.

Example:

On your first roll, you get a 1. You score 100 points. You may stop rolling and keep your 100 points, or you may roll the remaining four dice to see if you get any 1s or 5s or three of a kind. If you roll the four remaining dice and you get a 1 and a 5, you add 150 points to your original 100 points, making your score 250 points. You may roll the remaining two dice or keep your 250 points. If you decide to roll the remaining two dice and do not score any points, you lose your 250 points and have to start over.

The first person to reach 10,000 points wins.

PLACE THE DIGITS
Grade 5

What you need:

Pencils or pens
Paper
Spinner with digits 0 through 9
2 to 6 players

Objective:

To develop an understanding of place value and number position relationships, familiarizing players with opportunities to change the value of numbers by assigning digits to different positions.

How to play:

1. Players each draw three boxes on a piece of paper.
2. The leader spins and announces the number.
3. Each person places that number in one of the three boxes.
4. No changes are allowed after the digit is written down.
5. The leader spins two more times, and each time the players place digits in any empty box.
6. Each player reads his or her three-digit number. The player with the largest number wins.
7. Repeat the game as many times as you wish, taking turns being the leader.

More ideas:

Play to get the smallest number, or to get as close as possible to a particular number, say 500. Allow one extra spin and a reject box.
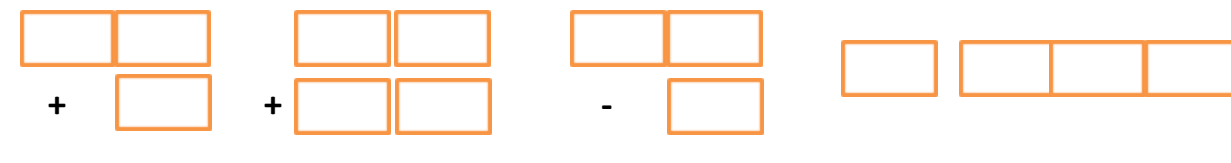
Reject Box

Play with more boxes to make a four or five digit number.

Make fractional numbers.

Use boxes that form an arithmetic problem.

PLAY BALL
Grade 6

What you need:

Game Board with Diamond and Scorebox
Dice
2 Players

Batter Up! It's time to play that "great American pastime." Challenge a classmate to a friendly game of multiplication baseball.

Rules
19. Player One rolls the dice, multiplies the numbers shown and moves a marker to the base that is listed on the chart.

20. Player One rolls the dice again, multiplies and moves the batter (second marker) the number of bases listed on the chart. The baserunners are also advanced the same number of bases as the batter.

21. The first player continues to roll the dice until he has three outs. Keep a record of the number of outs by crossing them off the scoreboard.

22. Player Two takes his turn at bat and repeats the steps outlined above until 3 outs occur.

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            HITTING CHART
36 = Homerun
30-35 = 3 Bases (Triple)
20-29 = 2 Bases (Double)
10-19 = 1 Base (Single)
1-9 = Strikeout
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TEAM		1	2	3	4	5	6	7	8	9	FINAL SCORE
	RUNS										
	OUTS	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	
	RUNS										
	OUTS	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	

THE GAME OF PIG
Grade 3 - 8

What you need:
Two dice
2 or more players
Paper and pencils to record scores

Object of the Game:
Be the first to score 100 points or more

How to play:

1. Players take turns rolling two dice.
2. On a turn, a player may roll the dice as many times as he or she wants, mentally keeping a running total score of the sums that come up. When the player stops rolling, he or she records the total and adds it to his or her scores from previous rounds.
3. If a 1 comes up on one of the dice before the player decides to stop rolling, the player scores 0 for that round, and it becomes the next player's turn.
4. Even worse, if a 1 comes up on both dice, the player's turn ends AND the player's total accumulated score returns to 0.
5. During play, a player can protect his or her score by drawing a line under the total and passing the dice to the other player. Then, if double 1's come up, the score returns to the last protected score instead of to zero.

TOP TEN MATH WEBSITES
Contributed by Grade 6 Teachers

1. **www.mathforum.com**
   This online community includes teachers, students, researchers, parents and educators who have an interest in math and math education. The site includes Ask Dr. Math, Problem of the Week, discussion groups and much more.

2. **www.AAAmath.com**
   Customized by grade level and topic, AAA Math features explanations of various mathematical topics, practice problems and fun, challenging games.

3. **www.coolmath.com**
   This fully interactive site allows the user to sharpen basic math skills, play games, and explore new math concepts.

4. **www.figurethis.org**
   Created by the National Council of Teachers of Mathematics, this site helps families enjoy math outside school through a series of fun and engaging challenges.

5. **www.mathcats.com**
   Math Cats provides playful explorations of important math concepts through games, crafts, and interactive projects. Include a magic chalkboard and art gallery.

6. **www.easymaths.org**
   This South African Community website for teachers, parents, and students is complete with lessons, tests, exams, worksheets, study skills and much more.

7. **www.bbc.co.uk/education/megamaths/tables.html**
   This lively, interactive website, based on the popular BBC Schools Television series, "Megamaths," is for practicing and testing times tables.

8. **www.mathleague.com**
   The Math League, designed for students in fourth grade through high school, specializes in math contests, books, and computer software. The "Help Facility" is a handy reference guide for math topics, complete with examples, definitions, and explanations.

9. **www.fleetkids.com**
   FleetKids games teach elementary children several different aspects of money management. Games include Windfall, where a child can run an imaginary business; and BuyLo/SellHi, where children can play the stock market. Students can sign up as individuals or as part of an elementary school team.

10. **www.funbrain.com/numbers.html**
    This site includes 17 original games based on soccer, car racing, and much more. Other games include Math Baseball, where a child can score runs with correct answers, and Operation Order, where students can build pyramids with their knowledge of algebra.

Your Gift is HERE!

THANK YOU AND ENJOY!

Dear Lynndale Families,

We are so excited to share with you a new online program that we purchased with money you raised in the Jungle Jog Walkathon last year! We were able to buy a subscription for EVERY student at Lynndale, thanks to you!

Most classroom teachers have sent home instructions with student user names and passwords. If you have not received yours, or have misplaced it, please email Chris Kratz at: KratzC@edmonds.wednet.edu and she will help you get logged in.

To get started, follow the four steps below:

1. Go to www.ixl.com/signin/lynndale

2. Enter your user name and password
   (you do NOT need to enter the @lynndale part of your user name when signing in to the Lynndale page.)

3. Click on the "Practice" tab and choose your grade level.

4. Click on a skill and start practicing math!

There is much more to explore by simply visiting the IXL homepage at: www.ixl.com
There are detailed user guides available at: www.ixl.com/math/userguides

Thank you, families, for a wonderful gift that will benefit every Lynndale student and family! We could not have afforded the subscription fee for this program without your generous support of the Jungle Jog Walkathon. You make so many things possible, and you make a wonderful difference!

THANK YOU FOR COMING TO MATH NIGHT TONIGHT!