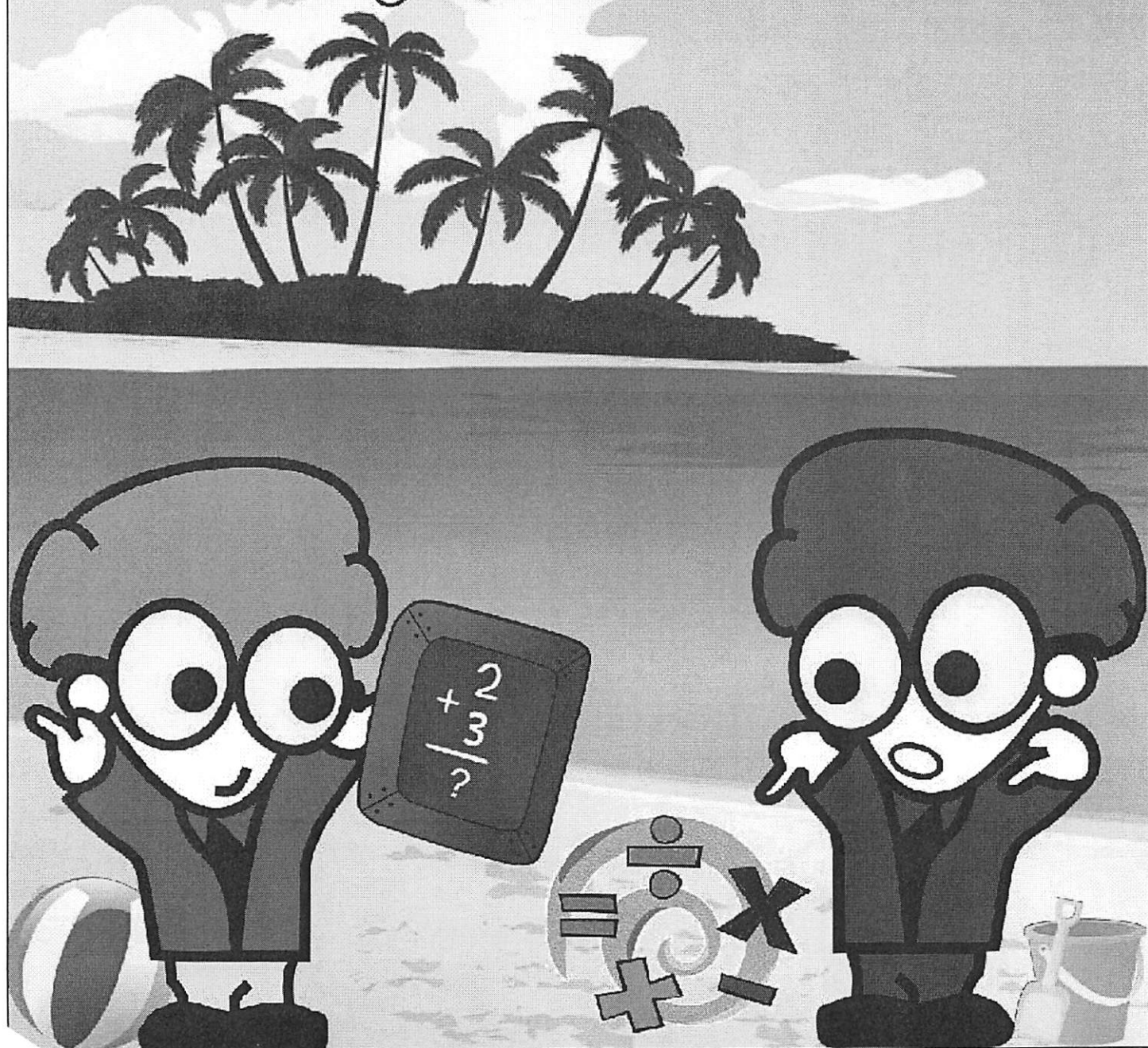


# Future 3rd Grader Summer Math Activities



Dear Parents/Guardians:

The Ewing Board of Education has endorsed the use of a Summer Mathematics Packet in order to keep your child's math skills honed and current through the summer break.

The attached packet includes two "bingo boards" of activities—one for July and the other for August. This formatting will allow for families to choose activities of interest to them. The goal is to complete four activities in a row, or the four corner boxes, on each board.

Each possible combination of four boxes on a board includes one of the following:

- **Family Activity:** These family activities are designed to take advantage of typical everyday activities and focus on the math involved. Suggested discussion questions are included in the description of each family activity for your convenience. Many of these activities are the same or nearly the same across the grade levels so that families with children of different ages may work together. For example, during a trip to the grocery store a younger child may work on keeping count of items in the cart while an older child tracks an estimate of the final cost of the items.
- **Story Problem:** These story problems focus on the major content that the students have worked on during the school year. Children may use numbers or drawings to keep track of their thinking as they work and should be encouraged to use strategies familiar to them. Only the final answer needs to be recorded in the bingo board box. If your child wishes to include his/her work, attach it to the board when it is returned to school.
- **Game to Practice Facts and Computational Skills:** The simple game directions are written in the bingo board boxes. Game play requires a deck of cards and dice. If you are unable to obtain these materials, please contact me via email or phone.
- **Free Choice Game:** Students may select from a variety of options to complete this task. Options include playing identified math games online or using the attached game boards. Options are listed on the back of this letter.

Please work with your child to complete four tasks on the July board and four tasks on the August board. Completed tasks should be circled. I suggest that your child do one math task a week, however, feel free to have your child work on additional tasks, marking the extra activities with a star. Sign both boards, and have your child return the bingo board page to his/her teacher on the first day of school.

Thank you for continuing to positively communicate that our students can be strong math thinkers by asking them questions, having them explain their thinking and reasoning, and working together to notice new things about mathematics. Your encouragement and support of your children's efforts in mathematics are vital in helping your children develop a love of math. If you have any questions regarding problem solving strategies your child is using, please feel free to contact me.



Don Wahlers  
District Supervisor for Curriculum & Instruction  
STEM, K-12

## Rising Third Graders' Summer Math Bingo

# FREE CHOICE GAMES

Choose from these options to complete the free choice games spots on the bingo boards. Once you've played the game, record the name of the game on the bingo board. Good luck!

**Free Choice Online Games**—Go to [www.mathplayground.com](http://www.mathplayground.com), scroll down, and click on Grade 2. Select from these games:

 Dolphin Feed Money

 Jet Ski Addition

 Puzzle Pics Clocks

 Puzzle Pics Addition Facts

 Puzzle Pics Subtraction Facts

**Free Choice Paper Games**—game boards on the next page

### Initials

**Materials:** game board (attached), three dice, a pencil

**Directions:** Player A rolls the three dice and adds the digits. He/she then puts his/her initials in a box labeled with that sum OR any two or more numbers with the same sum. Player B takes a turn. (Ex: Player A rolls 1, 6, 3 and adds those to find the sum of 10. She decides to put her initials in the boxes 1, 2, 3, and 4 because  $1+2+3+4=10$ . Player B rolls a 2, 2, and 4 and adds those to find a sum of 8. He puts his initials in a 6 box and a 2 box because  $6+2=8$ .) Players should plan their moves carefully because they do not want to be unable to put their initials because the boxes are already taken. Turns will become more difficult as play continues and more boxes are taken. Play continues until one of the players cannot make a move to represent his/her sum. At that time, count the initialed boxes for each player. The player with the most wins!

### Roundtrip

**Materials:** two dice, paper and pencil

**Directions:** The goal of the game is to be the player to reach 100 and then back to zero first. Player A rolls both dice and forms a two-digit number. For example, a roll of 3 and 5 could form 35 or 53. Player A records this number on a piece of paper. All other players take a turn. Players continue taking turns, forming two-digit numbers and adding them to their first numbers. Once a player has reached a sum of 100 (or larger), he/she continues to take turns but then subtracts the value of his/her roll. The last roll does not need to be exact, but the first player to reach back to zero (or below) wins. (Note: It is important that students use addition strategies they are familiar with, such as adding by place value, drawing a model, or recording on number lines. These are the skills they will need to succeed in Grade 3.)

### Target Addition

**Materials:** game board (attached), a handful of coins, beans, or Cheerios as markers

**Directions** are included on the top of the game board.

## Initials

[illegible]

# Target Addition

*A game for 2-4 players*

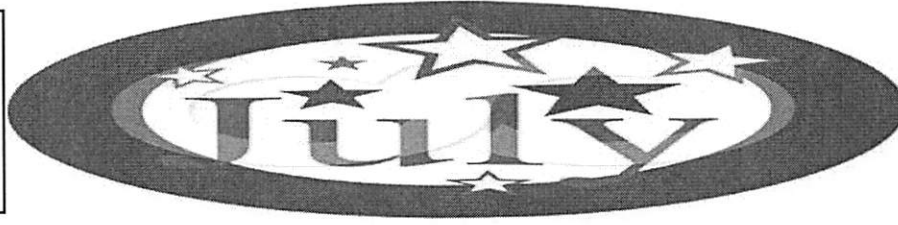
- Choose a target number between 25 and 55.
- Take turns placing a marker on one of the numbers on the board, each time announcing the running total of the covered numbers.
- For example, if the first player covered a 4 and the second a 3, the second player would announce the sum of 7 because  $4 + 3 = 7$ . If a third player covers a 2, he or she would announce the new sum of 9 because  $7 + 2 = 9$ . If a fourth player covered a 4, he or she would announce the sum of 13 because  $9 + 4 = 13$ .
- Each square may only be used once—if it is covered, another player may not use it.
- The player to reach the target number **exactly** wins. If a player goes over the target number, he or she is out and the game is over.

1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5

## Rising Third Graders' Summer Math Bingo

☺ Select and complete four activities in a row (or the four corners) on your bingo board for the month of July. Circle each box as you complete it. Draw a star on any extra activities you complete just for fun. ☺

Student Name:



Parent/Guardian  
Signature:

<p><b>Family Activity:</b> <b>Count Around the Family</b> Pick a number 2, 5, or 10. Take turns counting by that number around the family. Keep going until someone reaches 100. The person to say 100 wins! Discuss: Does someone always land on 100 exactly? Are the numbers always odd or even? What patterns do you notice? Try it with another number.</p>	<p><b>Over/Under 11 Game:</b> Split a deck of cards A-10 (A=1, no J, Q, K) between 2 players. One player is "under 11" and the other is "over 11". Each player flips one card. Add the cards. Both cards go to the player whose value it matches. (Ex: 7 and 2 are flipped, goes to "under 11" player because <math>7 + 2 = 9</math>.) A sum of exactly 11 needs a tie-breaker round. The player with most cards wins!</p>	<p><b>Free Choice Game:</b> Select and play a game from the list. Which game did you play? _____</p>	<p><b>Pocket Change Problem:</b> You have 2 quarters, 2 nickels, 2 dimes, and 2 pennies in your pocket. How much money do you have? _____</p>
<p><b>Free Choice Game:</b> Select and play a game from the list. Which game did you play? _____</p>	<p><b>Gummy Worms Problem:</b> Jen and Ben went to the candy store on vacation. Jen bought 56 gummy worms. Ben bought 35 gummy worms. They combined their gummy worms and then gave 23 to their brother Ken. How many gummy worms did Jen and Ben have then? _____</p>	<p><b>Family Activity:</b> <b>License Plate Math</b> Have a family contest. Each member selects a color of car. When you find a car of your color, add the digits on the license plate and subtract 1 for every letter. During your trip, keep track of who found the car with the largest resulting number. Ex: JRY-65T would be worth 7 pts. (<math>6 + 5 - 4 = 7</math>); W4Y-R36 = <math>4 + 3 + 6 - 3 = 10</math>.</p>	<p><b>Mind Reader Addition Game:</b> To play, you will need 1 dealer and 2 players. (A=1; J, Q, K = 10) The dealer gives each player a card face down, and then the players hold their card to their foreheads so that the other player can see it but they can't see their own card. The dealer calls out the sum of the cards. The player who names his own card first collects both cards. Most cards wins!</p>
<p><b>Popped Balloons Problem:</b> Bob blew up 97 balloons for the town fair. At the end of the fair, only 29 were left. How many balloons popped during the fair? _____</p>	<p><b>Free Choice Game:</b> Select and play a game from the list. Which game did you play? _____</p>	<p><b>Closest to 20 Game:</b> Deal each player 5 cards face up. Using 2 or more cards, add and/or subtract to reach the target number of 20. (A = 1; omit J, Q, K) The player closest to or exactly on 20 wins a point. If both players have the same value, each gets a point. For the next round, remove and replace only the cards used so that each player starts the round with 5 cards. First to 5 points wins.</p>	<p><b>Family Activity:</b> <b>Exercise Counts</b> Pick an exercise for your family members to do (jumping jacks, hop on one foot, etc.). Have everyone try it and count how many each family member can do. Discuss: What was the highest number? The lowest? How many did the family do in all? What was the difference between each member's exercise count?</p>
<p><b>Hamburgers Game:*</b> Deal out 4 cards to each player. Players arrange their cards in any way to make two 2-digit numbers, placing them face up in front of them with the smaller number on the left and larger on the right. Deal 2 more cards to each player. Anyone that can make a 2-digit number that falls between their numbers wins a point for that round. First to 5 points wins!</p>	<p><b>Family Activity:</b> <b>How do you use math?</b> Talk with the adults in your family. Discuss: How do you use math in your everyday life? (at home, at work, shopping, budgeting, etc.) What math tools do you use? _____</p>	<p><b>Soup Cans Problem:</b> Mr. Campbell was arranging soup cans in his grocery store for a display. He had 20 cans. Write an equation using equal addends to show how he could have arranged the soup cans. _____</p>	<p><b>Free Choice Game:</b> Select and play a game from the list. Which game did you play? _____</p>

\*For the Hamburgers game, only use cards A – 9. (A=1; omit 10, J, Q, and K)

## Rising Third Graders' Summer Math Bingo

☺ *Select and complete four activities in a row (or the four corners) on your bingo board for the month of August. Circle each box as you complete it. Draw a star on any extra activities you complete just for fun.* ☺

Student Name:

Parent/Guardian  
Signature:

*goodbye July. hello*  
**AUGUST**

<p><b>Family Activity: Grocery Store Math</b></p> <p>Take a trip to the grocery store together. As you shop, discuss the prices of the items. If you were to buy each item separately, what coins and bills might you use to pay? Find more than one way to pay for an item.</p>	<p><b>Race to 100 Game:*</b></p> <p>Player A rolls two dice, adds the digits, and records the product on a piece of paper. Player B takes a turn. Players continue taking turns, adding up their sums along the way. If you roll doubles, you get to take a bonus turn! The player to reach 100 first wins.</p>	<p><b>Free Choice Game:</b></p> <p>Select and play a game from the list. Which game did you play?</p> <p>_____</p>	<p><b>Picking Peaches Problem:</b></p> <p>Julie picked 3 more peaches than Lucy. Julie picked 25 peaches. How many peaches did Lucy pick?</p> <p>_____</p>
<p><b>Free Choice Game:</b></p> <p>Select and play a game from the list. Which game did you play?</p> <p>_____</p>	<p><b>FroYo Problem:</b></p> <p>The Scoop-Your-Own Frozen Yogurt Shop sells only 3 flavors. They sold 37 vanilla and 52 strawberry yogurt cups. If they sold a total of 98 yogurt cups, how many were chocolate?</p> <p>_____</p>	<p><b>Family Activity: Cooking Together</b></p> <p>Work together to prepare a favorite recipe. Have your child read the recipe and measure out the ingredients. Discuss: What units do we use (cup, tsp., etc.)? What tools do we use to measure the ingredients? How do we use these tools correctly?</p>	<p><b>Roll &amp; Add Game:*</b></p> <p>Each player sets up a recording sheet:</p> <p style="text-align: center;">____ + ____ + ____ = ____</p> <p>Player A rolls one die, decides where to place that digit in the addends, and records the number. Once a number has been placed it can't be moved. Player B takes a turn. After all the addend blanks are filled, players find their sums. (Children should use the addition strategies they have learned in Grade 2.) The player with the larger sum wins a point. First to 5 pts. wins!</p>
<p><b>Bye Bye Shells Problem:</b></p> <p>Jason and Jeremy put their shells on the sand. A wave came and took 35 shells away. Now they have 43. How many shells did they start with?</p> <p>_____</p>	<p><b>Free Choice Game:</b></p> <p>Select and play a game from the list. Which game did you play?</p> <p>_____</p>	<p><b>Sum What Dice Game:*</b></p> <p>Each player writes the numbers 1-9 on a piece of paper. Player A rolls 2 dice and crosses off either the sum of the roll or any 2 numbers that make the same sum. (Ex: If a sum of 9 is rolled, she can cross off 9, or 2 and 7, or 5 and 4, etc.) Player B takes a turn. Once a player can't make a move, he is out and scores a sum of all the numbers not crossed off. Other players continue until they're out. Lowest score wins!</p>	<p><b>Family Activity: Board Game</b></p> <p>Play a board game together, such as Monopoly, Yahtzee, Parcheesi, Trouble, Pay Day, Sorry!, Checkers, etc.</p>
<p><b>Odd/Even Wins Game:*</b></p> <p>Decide which player is "odd" and which is "even". Work together. Start at 20 and roll a die. <u>Add</u> that roll to 20. Roll again and <u>add</u> to the sum. Roll a third time and <u>subtract</u> that from the previous result. Roll a fourth time and <u>subtract</u> again. If the final result is even, the "even" player gets the point. "Odd" player gets it if the result is odd. First to 5 pts. wins!</p>	<p><b>Family Activity: Number Hunt</b></p> <p>Take a walk around the house, the neighborhood, or a place you are visiting. Discuss: What odd and even numbers do you see? Keep a tally of how many odd and how many even you find. What are the largest even and odd numbers you found?</p>	<p><b>Winning Tickets Problem:</b></p> <p>Manny and Luke went to the arcade. Manny won three 100 point tickets, two 10 point tickets, and eight 1 point tickets. Luke won three 100 point tickets, twelve 10 point tickets, and five 1 point tickets. Use numbers and &lt;, &gt;, or = to compare the boys' winnings.</p> <p>_____</p>	<p><b>Free Choice Game:</b></p> <p>Select and play a game from the list. Which game did you play?</p> <p>_____</p>

\*Use regular dice for these games. If you don't have dice, you can use cards Ace (1) through 6.