



## Preventing Summer Slide: K-5 Math

**Kindergarten- 2nd grade** activities focus on foundational understanding of addition and subtraction. The choice board allows parents and children to choose the level of addition and subtraction they would like to practice. The grade level listed shows what grade this skill was taught.

| <p><b><u>Throw Snowballs to Make 10</u></b><br/>           Make “snowballs” from paper (or any way you like), then place them in a bucket at one end of the room. Start children out by having them toss snowballs into another bucket until they reach 10 (or any target number). Then, up the challenge by placing some snowballs in each bucket, and have kids figure out how many more they need to toss in to make 10 in each bucket.</p> <p style="text-align: center;">(K)</p>                   | <p><b><u>True/False</u></b><br/>           Write equations on different cards or sticky notes. Some of the equations should be true and some should be false. Ask your child to sort the equations into true and false stacks. Ask children to justify their answers.<br/>           Examples:<br/> <math>8 = 4 + 5</math><br/> <math>17 - 10 = 7</math><br/> <math>9 + 6 = 0 + 14</math></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="padding: 5px;">True</th> <th style="padding: 5px;">False</th> </tr> </thead> <tbody> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </tbody> </table> <p style="text-align: center;">(1st)</p> | True                                                                                                                                                                                                                                                                                                                                                                                                                                                        | False |  |  | <p><b><u>Is it Over or Under?</u></b><br/>           Choose a target number. Present addition/subtraction problems to children and ask them to determine if it's over or under the target number without solving it. Ask your child to explain how they know for each problem. Then, solve to practice the computation and prove the answer is correct. Change the target number and operation each round.<br/>           Example:<br/>           Target 200<br/> <math>37 + 15 + 75</math> (over or under?)</p> <p style="text-align: center;">(2nd)</p> |
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| True                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | False                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <p><b><u>Shake and Spill</u></b><br/>           This activity asks children to fill a plastic cup with 10 pennies. Shake the cup, and spill the pennies onto the table. The child determines how many heads and tails are showing. They record the answer using drawings or equations. Kids should shake and spill several times to show different pairs of numbers that add up to 10. You can repeat this activity with different target numbers and coins.</p> <p style="text-align: center;">(K)</p> | <p><b><u>Addition/Subtraction Top-It</u></b><br/>           Using a deck of cards (face cards = 10, ace = 1 or 11), each player turns over two cards and adds them together. The player with the greater answer wins all of the cards. In Subtraction Top It, each player turns over two cards and subtracts the smaller digit from the larger digit. The player with the smallest answer wins all of the cards. Continue until all the cards are gone.</p> <p style="text-align: center;">(1st)</p>                                                                                                                                                                                                               | <p><b><u>Closest to 500</u></b><br/>           Using a deck of cards (ace is 1, 10 is 0) or homemade digits 0-9, turn over 6 digits and select 5 digits to create an addition problem to try for an answer as close to 500 as possible without going over. Practice subtraction by trying to get the closest to 0. Ask your child to create a one or two-step word problem that matches the equations created.</p> <p style="text-align: center;">(2nd)</p> |       |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |



**3rd - 5th grade** activities focus on an understanding of multiplication and division. The choice board allows parents and children to choose the level of multiplication and division they would like to practice. The grade level listed shows what grade this skill was taught.

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| <p><b><u>Fixed Factor Keeps</u></b><br/>           For a twist on the traditional card game, remove the king and jack (ace = 1, queen = 0). Identify the factor (number) and place a card with that number face up in the middle. Players divide the rest of the cards equally and place them face down. At the same time, all players turn their card up and multiply it by the factor in the middle. The player who says the full multiplication sentence correctly and has the greater answer wins. Continue until all cards are gone. Change the fixed factor in each game.</p> <p>(3rd)</p> | <p><b><u>Higher or Lower Basketball</u></b><br/>           Label two baskets "Higher" and "Lower". Show a 4th-grade math problem (multiplication or division).<br/>           • EX: <math>73 \times 18</math><br/>           Write problems that could be used as estimates on different sheets of notebook paper.<br/>           • EX: <math>70 \times 20</math>, <math>75 \times 10</math>, <math>73 \times 15</math>, <math>75 \times 20</math><br/>           Your child predicts if the estimate answers are "Higher" or "Lower" than the original problem. Students crumple the paper and shoot for basket matching predictions. Points are given for correct answers &amp; justification.</p> <p>(4th)</p> | <p><b><u>Plan a Family Road Trip</u></b><br/>           You and your family want to take a week-long road trip. Give your child parameters for the trip and allow them to calculate the total cost of the trip. They need to calculate the total amount of gas, the cost of the lodging, and any sightseeing activities involved. Provide resources (online brochures, the miles per gallon on the family car, etc..) for them to determine the total cost. This includes using addition/subtraction of decimals and multi-digit multiplication/division.</p> <p>(5th)</p> |
| <p><b><u>Number Splash</u></b><br/>           This outdoor activity involves sidewalk chalk and water balloons! Draw circles and write out answers to any math facts or math practice, using sidewalk chalk. For third grade, it can be multiplication and division facts. Call out the equation and have your child throw the water balloon on the correct answer.</p> <p>(3rd)</p>                                                                                                                                                                                                             | <p><b><u>Design and Build a Math Game</u></b><br/>           Ask your child to choose their favorite or most challenging math concept for this year. Allow them to design and build a math board game, card game, or outdoor game to reinforce this concept. Play it as a family. If your child just finished fourth grade, encourage them to use multi-digit multiplication and division.</p> <p>(4th)</p>                                                                                                                                                                                                                                                                                                       | <p><b><u>Cooking with Fractions</u></b><br/>           You need to measure things whenever you follow a recipe. As you are cooking, ask your child to help you determine fractional amounts for different recipes. Encourage your child to multiply or divide (unit fractions by a whole) fractional amounts based on the servings needed.</p> <p>(5th)</p>                                                                                                                                                                                                                |