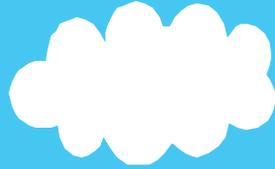


Name _____



Summer



**Stepping Up to
Fourth Grade**



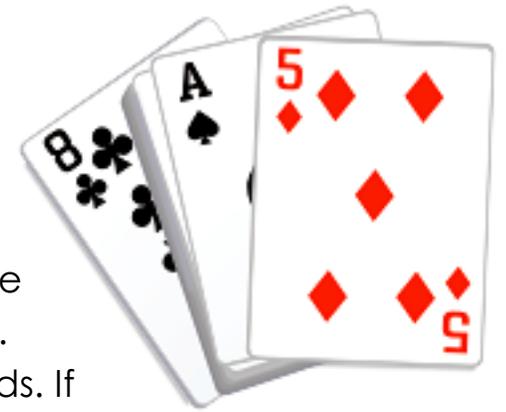
Summer Math Activities Calendar for Students Entering 4th Grade -

<p>1. Add $78 + 57$.</p> <p>Make an open number line and show two different ways to add these numbers.</p>	<p>2. In the number 2,395 what is the value of the 3? Write a 4 digit number that includes a 3 in the thousands place. Which 3 has a higher value? How much higher?</p>	<p>3. Look at a calendar. Count how many days until your first day of school. How many Saturdays are left? How many Tuesdays?</p>	<p>4. Go on a scavenger hunt in your house. Look for cylinders, cones, rectangular prisms and cubes. Make an organized list of what you found. Describe the attributes of each solid figure.</p>	<p>5. Play Coin Box on the computer at illuminations.nctm.org ♦ Click on ACTIVITIES. ♦ Select 3-5. Search.</p> <p>Coin Box is the 1st activity.</p>	<p>6. Use your hundred chart and follow these directions.</p> <p>Start at 2. Add 48. Subtract 25. Add 73.</p> <p>What number did you land on? Write the equation.</p>	<p>7. Draw place value blocks to represent this number:</p> <p style="text-align: center;">7,957</p> <p>Now write the number in expanded form.</p>
<p>8. You have \$4.75 to spend on you and two friends. If an ice cream cone cost \$1.60, do you have enough money to buy one for everyone?</p>	<p>9. Play the game TOP IT! (Variation) with a friend.</p> <p>The winner is decided at the end of the game.</p>	<p>10. Find a grocery store flyer. Look for 8 things you would like to buy. Make a list and record the values. How much money will you need?</p>	<p>11. Start at 180. Count backwards by 10s to 0. Now count back by 5s.</p>	<p>12. Play Deep Sea Duel at illuminations.nctm.org ♦ Click on ACTIVITIES. ♦ Select 3-5. Search</p> <p>Deep Sea Duel is the 3rd activity.</p>	<p>13. Take any 20 coins and sort them by their value. Add the coins together to find the total. Is your amount greater than or less than \$1.00? Is it greater than \$2.00?</p>	<p>14. Use the digits 5, 8, 4 and 7. Write the largest and smallest numbers you can make with these numbers.</p>
<p>15. If you saw 9 spiders, 6 crickets, and 5 ladybugs, how many legs would you see? What operation did you use? Can you use a different operation to solve this problem?</p>	<p>16. If you are looking at a clock and the minute hand is on the 4 and the hour hand is on the 8 what might you be doing?</p>	<p>17. Compare the fractions using the correct symbol. $=, >, <$</p> <p>$1/2$ _____ $2/4$ $2/3$ _____ $3/6$ $4/10$ _____ $4/1$</p>	<p>18. Play Equivalent Fractions at illuminations.nctm.org ♦ Click on ACTIVITIES. ♦ Select 3-5. Search</p> <p>Equivalent Fractions is the 5th activity.</p>	<p>19. Write a story problem for this number sentence.</p> <p style="text-align: center;">$189 - 63 =$</p>	<p>20. Pretend you go shopping and find a pail and shovel that costs 65 cents. You pay using three coins and get a dime for change. What coins did you pay with?</p>	<p>21. Use the digits 2, 7, and 8 to write one number. What is the smallest 3 digit number you can make? Draw the place value blocks that represents this number.</p>
<p>22 Record the day's temperature for the week. Take the temperature at the same time of day. Create a graph to display your data.</p>	<p>23. Write a story problem for this number sentence.</p> <p style="text-align: center;">$7 + 14 + 21 =$</p>	<p>24. Draw a square and divide it into 9 equal parts. Shade $1/3$ of the square. How much is not shaded?</p>	<p>25. Start at 96 on the hundred chart. Go up 4 rows and left 4 columns. What number did you end at? Write the equation. What operation did you use?</p>	<p>26. Time yourself adding doubles to $20+20$. Do it again and try to beat your score.</p>	<p>27. Draw a rectangle that has 4 cm and 6 cm sides. Divide the rectangle into two equal parts. What are the lengths of each side? What if you divide it the other way?</p>	<p>28. Take a survey of at least 12 people. Ask them their favorite movie. Make a graph to display your data.</p>

Summer Math Activities Calendar for Students Entering 4th Grade -

<p>1. Add 151-75.</p> <p>Make an open number line and show two different ways to subtract 75 from 151.</p>	<p>2. If you are looking at an analog clock and the hour hand is between the 12 and 1 and the minute hand is on the 7, what might you be doing if it is A.M.? What if it is P.M.?</p>	<p>3. Draw a square with 8 inch sides. Divide the square into 2 triangles. Can you divide another square into more than 2 triangles?</p>	<p>4. Draw 30 chocolate chip cookies. If you had to divide them between you and 4 friends how many would each of you get? What if you were sharing with 5 friends?</p>	<p>5. Play Coin Box on the computer at illuminations.nctm.org ♦ Click on ACTIVITIES. ♦ Select 3-5. Search.</p> <p>Coin Box is the 1st activity.</p>	<p>6. If you went to the store and bought a kite for \$2.86 and you gave the clerk the exact amount using two dollars and five coins, what coins did you use to buy the kite?</p>	<p>7. Name two solid figures that can roll. Name two solid figures that can slide. Name one solid figure that can only roll. Name one solid figure that can roll and slide.</p>
<p>8. If you were sharing 2 pizzas with 7 friends that were cut into 12 slices each, how many pieces would you all be able to eat? Remember to include yourself.</p>	<p>9. Play the game TOP IT! (variation) with a friend or two.</p> <p>The winner is selected at the end of the game.</p>	<p>10. If you are looking at a clock and the minute hand is on the 2 and the hour hand is on the 10, what might you be doing if it were A.M.? What if it were P.M.?</p>	<p>11. . Compare the fractions using the correct symbol. =, >, <</p> <p>1/3 _____ 1/4 2/5 _____ 4/10 6/1 _____ 5/5</p>	<p>12. Play Equivalent Fractions at illuminations.nctm.org ♦ Click on ACTIVITIES. ♦ Select 3-5. Search</p> <p>Equivalent Fractions is the 5th activity.</p>	<p>13. Practice counting on from numbers other than one. Count up 15 numbers. Start at 147..... Start at 219..... Start at 6889.....</p>	<p>14. Make a list of all the (3D) shapes you can think of. Go on a scavenger hunt looking for those shapes. Check off the shapes you find.</p>
<p>15. Have a grownup ask you math facts through 20. Name a strategy you use to help you remember the facts. For example, 8 + 9 is a doubles plus 1 fact.</p>	<p>16. If you cut a subway sandwich into 6 equal pieces and you ate ½ of the sandwich, how many pieces did you eat? Draw a picture to represent your thinking.</p>	<p>17. Create an array model to show these multiplication problems.</p> <p>5 x 6 9 x 4 2 x 16</p>	<p>18. Play Deep Sea Duel at illuminations.nctm.org ♦ Click on ACTIVITIES. ♦ Select 3-5. Search</p> <p>Deep Sea Duel is the 3rd activity.</p>	<p>19. Look at your hundred chart. Find the number 42. What number do you land on if you add on 48? Write the equation.</p>	<p>20. If you had 8 coins in your pocket, list 6 possible combinations that you might have and give the total value of each.</p>	<p>21. Eleven birds flew out of an old oak tree. If there were a total of 80 birds in the tree, how many birds are still there?</p>
<p>22 Start at 125. Subtract 33. Add 5, Subtract 7. Add 25, Subtract 65. What number did you end up at?</p>	<p>23. Write the numbers below in expanded form.</p> <p>8,551 95,201 2,476,199</p>	<p>24. Mary bought 5 notebooks and Joey bought 6. Mary spent a total of \$10.00 Joey only spent \$9.00. How could this be true?</p>	<p>25. Draw models to represent this number in 3 different ways.</p> <p>40,121,303</p>	<p>26. Play Geometric Solids at illuminations.nctm.org ♦ Click on ACTIVITIES. ♦ Select 3-5. Search</p> <p>Geometric Solids is the 9th activity.</p>	<p>27. If you bought a pack of pencils for \$3.55 and you gave the clerk a five dollar bill, would you get any change? If so, how much?</p>	<p>28. Take a survey of your family's summer favorite activities. Make a graph to show the results.</p>

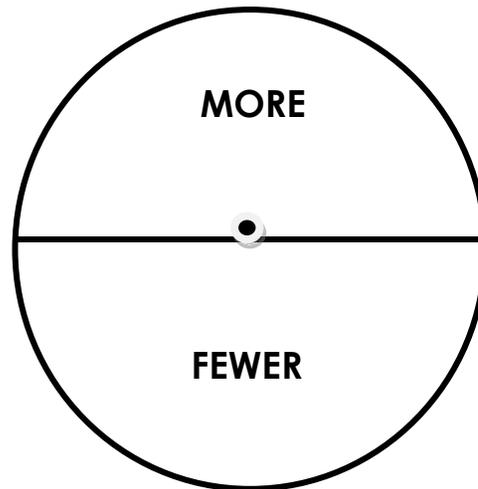
Top-It



Directions: This game can be played with 2-4 players. You can play with dominoes or playing cards. You will need one or two decks of cards depending on how many people are playing. Remove the Aces and all the face cards. Shuffle the cards and deal them all out. Children place their cards face down in front of them. Each player turns over their first card. The child with the highest card keeps the cards. If two players have the same card, they turn over their next cards until there is a winner. When all the cards have been played, children add up the number of cards they have left.

To determine the winner have one child use the spinner below with a pencil and paper clip. If the paper clip points to **MORE**, then the child who has more wins. If it points to **FEWER**, then the child who has fewer cards wins.

Variation: Children can add the cards that are played. The first child to add correctly gets the cards.



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

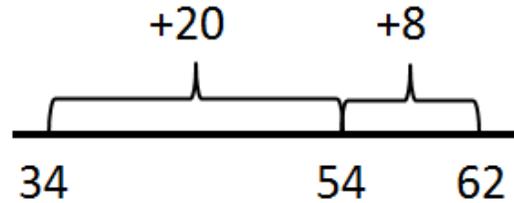
Math Books for Summer Reading

TOPIC	TITLE	AUTHOR
Number Patterns	Each Orange Had Eight Slices: A Counting Book Sea Square Anno's Magic Seeds Less Than Zero How Much is a Million?	Paul Giganti Joy Hulme Anno Mitsumasa Stuart Murphy David Schwartz
Number Stories and Operations	The King's Chessboard Anno's Mysterious Multiplying Jar Pizza Counting The Doorbell Rang What Comes in 2s, 3s, 4s? If You Hopped Like a Frog Math-terpieces The Grapes of Math The Best of Times Persephone and the Pomegranate Diary of a Worm	David Birch Anno Mitsumasa Christina Dobson Pat Hutchins Suzanne Aker David Schwartz Greg Tang Greg Tang Greg Tang Ann Tompert Doreen Cronin
Estimation	Keepin' Count Counting on Frank Popcorn	Shel Silverstein Rod Clement Frank Asch
Fractions	The Doorbell Rang Each Orange Had 8 Slices Give Me Half! Eating Fractions Fraction Fun Gator Pie	Audrey Wood Paul Giganti Stuart Murphy Bruce McMillian David Adler Louise Matthews
Geometry	If You Look Around You Sir Cumference and the Sword in the Cone The Greedy Triangle Grandfather Tang's Story Loo Loo of Dragon Mountain	Fulvio Testa Cindy Neuschwander Marilyn Burns Ann Tompert Margaret Bateson-Hill
Measurement and Data	The I Hate Mathematics Book Do You Wanna Bet? Measuring Penny How Big is a Foot? Probably Pistachio Millions to Measure	Marilyn Burns Jean Cushman Loreen Leedy Rolf Myller Stuart Murphy David Schwartz

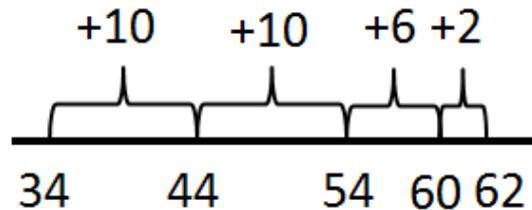
Open Number Line

Two ways to add $34 + 28$ using an open number line

Example 1



Example 2



Expanded Form

A way to write a number that shows the value of each digit

Example...for the number 2,365

This is what it looks like in expanded form

$$2000 + 300 + 60 + 5$$

Use these to help you compare fractions

Name _____

Date _____



FRACTION STRIPS UP TO TWELTHS

1 WHOLE

$\frac{1}{2}$

$\frac{1}{2}$

$\frac{1}{3}$

$\frac{1}{3}$

$\frac{1}{3}$

$\frac{1}{4}$

$\frac{1}{4}$

$\frac{1}{4}$

$\frac{1}{4}$

$\frac{1}{5}$

$\frac{1}{5}$

$\frac{1}{5}$

$\frac{1}{5}$

$\frac{1}{5}$

$\frac{1}{6}$

$\frac{1}{6}$

$\frac{1}{6}$

$\frac{1}{6}$

$\frac{1}{6}$

$\frac{1}{6}$

$\frac{1}{8}$

$\frac{1}{8}$

$\frac{1}{8}$

$\frac{1}{8}$

$\frac{1}{8}$

$\frac{1}{8}$

$\frac{1}{8}$

$\frac{1}{8}$

$\frac{1}{9}$

$\frac{1}{9}$

$\frac{1}{9}$

$\frac{1}{9}$

$\frac{1}{9}$

$\frac{1}{9}$

$\frac{1}{9}$

$\frac{1}{9}$

$\frac{1}{9}$

$\frac{1}{10}$

$\frac{1}{12}$



©2010 Math Salamanders Ltd.

MATH-SALAMANDERS.COM