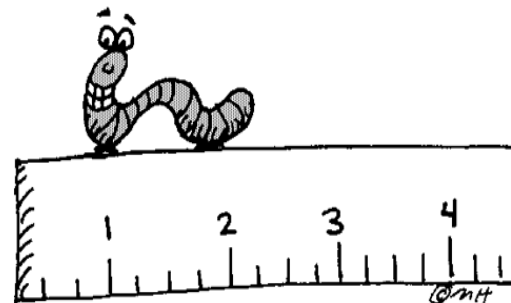


# Summer Math Calendar

## Entering 4th Grade



***Get ready to discover math all around you this summer!*** Just as teachers encourage students to continue reading throughout the summer to solidify and retain reading skills, we feel the same attention should be given to mathematics. Regular practice over the summer with problem solving, computation, and math facts will maintain and strengthen math gains made over the school year. This summer math calendar has been created to provide your child and your family with a variety of math activities to explore this summer.

Inside you'll find creative activities that include measuring and counting everyday objects, math games, riddles, and basic facts practice. The goal is for your child to have fun thinking and working collaboratively with you while communicating his/her mathematical ideas. While you are working on these activities, ask your child **how** he found that solution or **why** she chose that strategy. These activities help reinforce the concepts/skills your child learned this past year so that s/he can retain them over the summer.

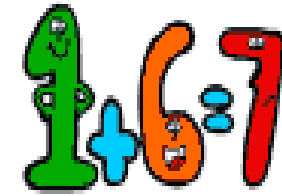
This packet consists of 2 calendar pages, one for July and one for August as well as directions for math games to be played at home. (Note: a substitute for numeral cards can be a regular deck of cards without the face cards or Uno cards.) Each month's activities are organized into 28 "math boxes." ***You can choose which activities you'd like to complete on which day.*** We encourage your child to complete 20 math boxes each month. After completing a box, color it in. In September return the calendar, with your signature, to your child's new teacher.

We recommend that you integrate an average of 15-20 minutes of math activities into your child's day, including completing the enclosed activities *and* reviewing basic facts. Number facts can be practiced and reinforced through repeated use in games, real-life problems, songs, rhymes, and cards. Help your child to identify "FACTS I KNOW" and the "FACTS I AM WORKING ON." Think of regular and convenient times to review these facts, such as waiting in line, driving in a car, riding the train, reading time, etc.

*We hope that you will enjoy the activities, extend them, create new ones and **have fun!***



# July



**Directions:** Complete **any** 20 math boxes and color in the box after you complete it. Return the Math Calendar to school in the fall.

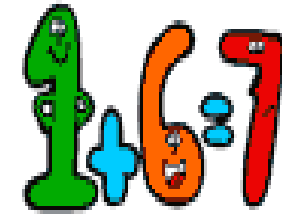
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>Play a game.</p> <p><b>Turn Over 10</b> (see directions)</p>	<p>15+2 16+2 17+2 18+2 19+2</p> <p>What's your strategy?</p>	<p>Look in your refrigerator.</p> <p>Categorize the items as dairy, fruit, vegetable, meat, grains, fats, or other.</p> <p>Make a tally chart.</p>	<p>How many more popsicles do I need to buy if I already have 6 and I want to have 11?</p> <p>What's the number sentence?</p>	<p>Create a bar graph of the drinks in your house. Categorize the drinks according to where they come from, e.g., plants, animals, man-made.</p>	<p>How many cents do I have if I have 2 dimes, 2 nickels and 3 pennies?</p> <p>Can you show that value with different coins?</p>	<p>Draw a square that has a perimeter of 16 cm.</p>
<p>Create a symmetrical picture using: triangles, squares, circles, and/or trapezoids. Draw the line of symmetry. Create another.</p>	<p>Look at the clock. What time is it? What time will it be in ten minutes?</p>	<p>How many times can you hop on your left foot in a minute? your right foot?</p> <p>Compare the number of hops using the symbols &lt;, &gt; or =.</p>	<p>Write five equivalent names for 50.</p>	<p>10-6 10-7 10-8 10-9 10-10</p> <p>What's your strategy?</p>	<p>Play a math number game like:</p> <p><b>Uno or War.</b></p>	<p>I have 7 puppies but I want 19. What do I have to do?</p> <p>I have 12 fleas but I only want 5. What do I need to do?</p>
<p>Name 5 ways to make 30 cents.</p> <p>Draw a picture to show your thinking and write the number sentences.</p>	<p>2 groups of 2 2 groups of 3 2 groups of 4 2 groups of 5 2 groups of 5</p> <p>What's your strategy?</p>	<p>Play a game.</p> <p><b>Double Compare</b> (see directions)</p>	<p>Find a place outside where you can observe creatures. Watch for 10 minutes. Record what you see. Create a pictograph to show your data.</p>	<p>Skip count by 5's backwards from 200 to 50.</p>	<p>6+6 7+7 8+8 9+9 10+10</p> <p>What's your strategy?</p>	<p>How many different ways can you cut a sandwich into four equal pieces?</p> <p>Try it with real or "paper sandwiches."</p>
<p>Make 5 number bonds for the number 100.</p>	<p>Think about your schedule for the day. What will you do? Create a schedule to record your activities between 7am-2pm.</p>	<p>Today is Tuesday. What is today's date?</p> <p>What was the day and the date 2 days ago? What will tomorrow's day and date be?</p> <p>What day and date will it be in 1 week?</p>	<p>A movie starts at 3:10 pm and ends At 5:20 pm. How long was the movie?</p>	<p>12-4 11-4 10-4 9-4 8-4</p> <p>What's your strategy?</p>	<p>Fold a piece of paper in half 2 times. Open it. How many rectangles? Now, fold it in half 3 times. How many rectangles? 4 times? Can you find a pattern?</p>	<p>How many times can you fold a piece of paper in half? Predict and try. Try it with 4 different sizes of paper. Can you make the same number of folds with all sizes?</p>

Parent's Signature: \_\_\_\_\_

Child's Name: \_\_\_\_\_



# August



**Directions:** Complete **any** 20 math boxes and color in the box after you complete it. Return the Math Calendar to school in the fall.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>Play a game.</p> <p><b>Race to the Finish Line</b> (see directions)</p>	<p>The 3 numbers in my fact family are 8, 4 and 12. What two addition and two subtraction number sentences can you make?</p>	<p>How tall are you? Measure your height with a tape measure (or paper clip chain). How tall is an adult? Measure and compare the difference.</p>	<p>2 groups of 5 3 groups of 5 4 groups of 5 5 groups of 5 6 groups of 5 7 groups of 5 What's your strategy?</p>	<p>Set the table for dinner. How many utensils will you need for 6 plates? 8 plates? Describe the pattern. Estimate 12 plates w/o counting.</p>	<p>15+5 16+5 17+5 18+5 19+5 20+5 What's your strategy?</p>	<p>Draw parallel, intersecting and perpendicular lines</p>
<p>Play a game.</p> <p><b>Double Compare</b> (see directions)</p>	<p>What are the names for a 6, 7, 8, 9, 10 sided polygons?</p>	<p>20-6 19-6 18-6 17-6 16-6 What's your strategy?</p>	<p>How many cups are in a pint? How many quarts are in a 2 gallons? How many cups are in 3 gallons?</p>	<p>Make a repeating pattern using at least 2 different objects (stickers, coins, etc.)</p>	<p>Play a game like <b>Uno</b> or <b>War</b>.</p>	<p>10+10 10+11 11+11 11+12 12+12 What's your strategy?</p>
<p>Roll 2 dice together and add to find the sum. Record the sum. Do this 25 times. Create a bar graph with the results. What did you notice? Why?</p>	<p>Estimate how long it will take you to clean your room. Make a prediction, write it down, set the timer and clean. How close were you?</p>	<p>I am thinking of an odd number. It is greater than 33 and less than 40. You say it when you skip count by 5s. What number am I?</p>	<p>A 3<sup>rd</sup> grader needs about 10 hours of sleep at night. If Kelly has been sleeping for 7 ½ hours, how many more hours of sleep does she need?</p>	<p>How many inches are in one foot? How many feet are in 3 yards? How many feet are in 2 miles?</p>	<p>In California it is 3 hours earlier than it is in Boston. What time will it be in California when you eat lunch? When you go to sleep?</p>	<p>What time is it now? Write down the time.  What time will it be in 30 minutes? What time was it 20 minutes ago?</p>
<p>Divide 35 by 7= Divide 350 by 7= Divide 3,500 by 7=  Check your answers by multiplying</p>	<p>Play 10 questions. One person thinks of a number between one and 100. The other person asks 10 yes or no questions to guess it.(ex: is it odd? Is it &gt; 50? etc.).</p>	<p>Think of a special day you are looking forward to. How many days until that special day? How many weeks?</p>	<p>Write a letter to your Fourth grade teacher sharing your thoughts about math.</p>	<p>Collect 10 leaves. Determine the leaf with the largest area by using your thumbprint (dip in paint) or pennies to measure. How many cover a leaf?</p>	<p>20+10 30+10 40+10 50+10 60+10 70 + 10 What's your strategy?</p>	<p>Can you grow and shrink in one day? Outside, make an X with chalk for your feet to stand on. Trace your shadow at 8am, noon, and 8pm. What did you notice?</p>

Parent's Signature: \_\_\_\_\_

Child's Name: \_\_\_\_\_

# Double Compare Instructions

- Materials:** Deck of Number Cards
- Players:** 2
- Object:** Decide which of two sums is greater.

## Note to families:

In this game, your child will be finding the totals of pairs of numbers. You will need a set of Number Cards to play this game.





## How to Play

1. Mix the cards and deal them evenly to each player. Place your stack of cards face down in front of you.
2. At the same time, both of you turn over the top two cards in your stack. Compare your cards to your partners to determine which sum is more. If your total is more than the other player's, say "Me!" If the two totals are the same, turn over the next two cards and compare these sums.

Sometimes you may be able to decide which pair is more without actually figuring out the total.

3. Keep turning over two cards. Say "Me!" each time your total is more.
4. The game is over when you have both turned over all the cards in your stack.

## Variations

-  Remove the 7-10 cards from the deck, and play with just the 0-6 cards.
-  Play Compare. Players turn over one card on a turn. The player with the larger number says "Me!"
-  Add the four wild cards to the deck. A wild card may be used as any number. Challenge students to use it for the lowest number that will allow them to win.
-  Play Triple Compare. Players turn over three cards on a turn. The player with the larger total says "Me!"

# Race to the Finish Line

Number of players: 2-4

You will need: 2 dice  
Recording sheet (below)

**Directions:**

1. Each player rolls one die to determine who goes first. Player 1 is the person who rolls the highest number.
2. Player 1 rolls two dice and records the addition sentence below the correct sum (e.g. write **6+5** in the 11 column)
3. Players alternate turns until one column is completely filled. The player who records the last number in a column, and reaches the finish line, is the winner.

2	3	4	5	6	7	8	9	10	11	12
<b>Finish Line</b>										

# Turn Over 10

**Materials:** Deck of Number Cards (four of each) plus four wild cards (you can use a face card)

**Players:** 2 to 3

**Object of the Game:** to collect more combinations of 10 than the other players

**How to Play:**

- 1) Arrange the cards face down in four rows of five cards. Place the rest of the deck face down in a pile.
- 2) Take turns. On a turn, turn over one card and then another. A wild card can be made into any number.
  - If the total is less than 10, turn over another card.
  - If the total is more than 10, your turn is over and the cards are turned face down in the same place.
  - If the total is 10, take the cards and replace them with cards from the deck. You get another turn.
- 3) Place each of your card combinations of 10 in separate piles so they don't get mixed up.
- 4) The game is over when no more 10's can be made.
- 5) At the end of the game, make a list of the number combinations for 10 that you made.