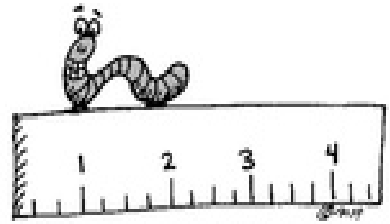
Summer Math Calendar
End of Third Grade



Get ready to discover math all around you this summer!

Teachers encourage students to continue reading throughout the summer to solidify and retain reading skills. Well math is important too! Regular practice over the summer with problem solving, computation, and math facts will maintain and strengthen the progress you made during the school year.

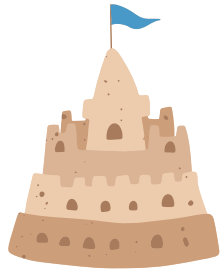
This calendar has been created to provide a variety of math activities to explore this summer. You'll find measuring and counting projects, games, and riddles, along with basic facts practice. There are two calendar pages, one for July and one for August. You'll also notice directions for math games. We encourage your child to complete **20** math boxes each month. Boxes may be completed in any order, so have fun! After completing a box, color it in. In August, return the signed calendar to your child's new teacher.

The goal is to have **fun** with math, and for you to gain further insight into your child's mathematical thinking. We recommend that you start with 15-20 minutes of math practice several times each week. Remember, informal practice is just as good as (if not better than) a worksheet!

Counting money, making change, telling time, skip counting, identifying patterns, and estimating fractions are math skills we use in our everyday lives. This makes them important--and easy--to practice! Number facts can be practiced and reinforced easily too, through games, real-life problems, songs, and rhymes. You can practice while waiting in line, riding in the car, flipping burgers on the grill, jumping off the diving board, etc.

Whichever activities you choose, have fun!

**Regular cards (without the face cards) and/or Uno cards work well for the games included here.*



July

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Play a game. Try "Turn Over 10".	15 x 2 16 x 2 17 x 2 18 x 2 19 x 2 What's your strategy?	Look in your refrigerator. Categorize the items as dairy, fruit, vegetable, meat, grains, fats, or other. Make a tally chart.	How many more popsicles do I need to buy if I have 6 and I want to have 11? What's the number sentence?	Create a bar graph of the drinks in your house. Categorize them according to their source, e.g. plants, animals, man-made.	How many cents do I have if I have 2 dimes and 3 pennies? Can you show that value with a different combination of coins?	Draw 2 different rectangles with a perimeter of 16 cm. Is it possible to draw a square with a perimeter of 14 cm? How about a rectangle?
Create a symmetrical picture using triangles, squares, circles, and/or trapezoids. Draw the line of symmetry. Create another.	Look at the clock. What time is it? What time will it be in ten minutes?	How many times can you hop on your left foot in a minute? Your right foot? Compare using the symbols <, >, or =.	Decompose 30 five different ways.	56 – 6 56 – 7 156 – 8 156 – 9 156 – 10 What's your strategy?	Play a math game like Uno or War.	I have 7 puppies but I want 19. What do I need to do? My cat has 12 toys but she only plays with 5. How many can I give away?
Show 5 ways to make $0.30.	How much? 8 groups of 2 8 groups of 3 8 groups of 4 8 groups of 5 8 groups of 6 What's your strategy?	Play a game. Try "Double Compare".	Find a place outside where you can observe creatures. Watch for 10 minutes. Record what you see. Create a pictograph to show your data.	Skip count by 5s. Start at 200 and work backwards until you reach 50.	6 x 6 6 x 7 6 x 8 6 x 9 6 x 12 What's your strategy?	How many different ways can you cut a square sandwich into 4 equal pieces? Try it with real or paper sandwiches.
Decompose 100 as many ways as you can in 1 minute. What's your strategy?	Think about your schedule for the day. What will you do? Create a table to record your activities between 7 a.m. and 2 p.m.	Today is Tuesday. – What is today's date? – What was the day and the date 2 days ago? – What will tomorrow's day and date be? – What day and date will it be in 1 week?	A movie started at 3:10 p.m. and ended at 5:20 p.m. How long was the movie?	Find two 3-digit numbers somewhere around your house. Add them together, then subtract the smaller number from the bigger number. What's your strategy?	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?	Roll a die four times. Use the numbers you roll to make a BIG, 4-digit number. Repeat, but make a small 4-digit number. Subtract the small number from the BIG number.

Parent's Signature: _____ Child's Name: _____

August

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Play a game. Try "Race to the Finish Line".	The numbers in my fact family are 8, 4 and 12. What two addition and two subtraction number sentences can you write?	How tall are you? Measure your height with a tape measure or yardstick. How tall is an adult? Measure one, then compare the difference.	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?	Set the table for dinner. How many utensils will you need for 6 plates? 8 plates? Describe the pattern. Estimate 12 plates without counting.	15 x 5 16 x 5 17 x 5 18 x 5 19 x 5 20 x 5 What's your strategy?	Draw parallel, intersecting and perpendicular lines. Teach someone the difference between them.
Play a game. Try "Double Compare".	What are the names for 6–, 7–, 8–, 9–, and 10–sided polygons? Look for them around your house or neighborhood.	200 – 60 190 – 60 180 – 60 170 – 60 160 – 60 What's your strategy?	How many cups are in a pint? How many quarts are in 2 gallons? How many cups are in 3 gallons?	Make a repeating pattern using at least 3 different objects (e.g. stickers, coins, etc.)	Play a money game like LIfe or Monopoly. Take a turn being the banker!	24 / 8 24 / 4 30 / 6 30 / 3 *48 / 12 What's your strategy?
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?	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?	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 is it?	A 3rd 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?	How many inches are in 1 foot? How many feet are in 3 yards? How many feet are in 2 miles?	In California it is 3 hours earlier than it is in Philly. What time will it be in California when you eat lunch? When you go to sleep?	What time is it now? Write down the time. What time will it be in 30 minutes? What time was it 20 minutes ago?
Divide 35 by 7. Divide 350 by 7. Divide 3,500 by 7. Check your answers by multiplying.	Play "Ten Questions". One player thinks of a number between 1 and 100. The other player may ask up to 10 yes or no questions before guessing the number.	Think of a special day you are looking forward to. How many days until that special day? How many weeks? How many hours?	Write a letter to your fourth–grade teacher sharing your thoughts about math.	Collect 10 leaves. Determine the leaf with the largest area by using your thumbprint or pennies to measure. How many does it take to cover each leaf?	20+10 30+10 40+10 50+10 60+10 70 + 10 What's your strategy?	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?

Parent's Signature: _____ Child's Name: _____

Double Compare

Materials: deck of number cards

Players: 2

Object: decide which of two sums is greater

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 players turn over the top two cards in their stacks. Find the sum. Compare your sum to your partner's sum to determine which is greater.

3. If your total is more than the other player's, say "Me!" If the two totals are the same, say "Tie!"

4. Repeat steps two and three until you have both turned over all the cards in your stack.

Tip: you might be able to determine which pair is more without actually figuring out the total.

Variations

- Remove the 7–10 cards from the deck, and play with just the 0–6 cards.
- Play Single Compare. Players turn over one card each turn. The player with the larger number says "Me!"
- Add four wild cards to the deck. A wild card may be used as any number. Challenge players 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!"
- Play Multiplication Compare. Players turn over two cards and find the product rather than the sum.

Race to the Finish Line

Materials: 2 dice, recording sheet (below)

Players: 2 or more

Object: compute sums

1. Each player rolls one die to determine who goes first. The person with the highest roll is Player 1.
2. Player 1 rolls two dice and records the addition sentence below the correct sum. For example, if you roll a 6 and a 5, write "6 + 5" in the 11 column.
3. Players take turns rolling and recording until one column is completely filled. The player who fills the last box in a column has reached the finish line and is the winner!

Tip: you can make a similar recording sheet and practice multiplying instead of adding.

2	3	4	5	6	7	8	9	10	11	12
Finish Line										

Turn Over 10

Materials: deck of number cards (four of each number plus four wild cards)

Players: 2–3

Object: collect more combinations of 10 than the other player(s)

How to Play

1. Shuffle the cards. Arrange twenty of them face down in a 4 x 5 grid. Place the rest of the deck in a pile, face down.

2. Player 1 turns over one card, then another. A wild card may be made into any number.
   - If the sum is less than 10, he/she turns over another card.
   - If the sum is more than 10, his/her turn is over and the cards are flipped back over.
   - If the sum is exactly 10, he/she takes the cards and replaces them with cards from the deck.
3. Keep your tens in a separate pile so they don't get mixed up!

4. Repeat steps two and three until no more combinations of ten can be made. The winner is the player with the most cards.

5. At the end of the game, make a list of the different combinations of ten you found.

Tip: this game can easily be played as a version of Go Fish; it can also be adapted to practice other addition/multiplication facts.