



**3<sup>rd</sup> Grade  
Summer  
Work  
Packet &  
Activities**

Dear Parents,

Each student is expected to engage in fun and consistent math practice throughout the summer to avoid the summer slide. Brains need rest too, however, so don't forget to have fun!

**Summer Work Expectations and Guidelines:**

**Print out this packet.** If you don't have access to a printer, you may pick up a hard copy at school. The student work portion is due the first day of school to next year's teacher!

- The packet includes problems from different areas of the 2<sup>nd</sup> grade curriculum. It is expected that the students are entering into 3<sup>rd</sup> grade having mastered these areas. Particular areas of strength and growth are noted in your child's report card.
- If your child completes the packet in June and doesn't solve any math problems for the rest of the summer, she will lose some very important concepts. This packet should be spread out, repeated or tweaked along the way to provide consistent practice.
- The pencil and paper portion includes some questions that are from the next grade level. Do not worry if your child has difficulty, or hasn't mastered these extensions.

**Suggested Schedule:**

Weekly: Addition and subtraction facts to 20 should be practiced weekly!

Bi-Monthly/Monthly:

Comprehensive review of the concepts included in the packet. Feel free to copy, modify or use the resources below to provide additional ways of practice.

**Parents: You have homework too!**

Recommended Books and Resources:

Jo Boaler's Parent Resources: [Jo Boaler's Youcubed.org](http://JoBoaler'sYoucubed.org) from Stanford University

[The Opposite of Spoiled](#) by Ron Leiber

**Family Activities:**

- Involve your child in your shopping experiences. While we love to use our debit and credit cards, find time to allow your child to pay with cash. Other activities include estimating the total cost of the purchase, deciding between items based on price or wants and calculating the change.
- Board games are a wonderful way for your child to learn turn-taking, game strategies, money, counting and perseverance. These are widely overlooked but critical to developing a strong mathematician.
  - Good games: Blokus, Monopoly, Parcheesi, Sorry, Mancala, Chess
- Measure, cook and bake with your child!
- Involve your child in calculating distance traveled, time spent traveling and make the "Are we there yet?" into a math problem!

**Resources for word problems and math facts:**

Create and Print Worksheets: <http://www.mathfactcafe.com/>

Word Problem Generator: [gregtangmath.com](http://gregtangmath.com)

## Recommended Websites and Apps

Websites that require a subscription:

| Name     | Website  | Description  |
|----------|--|--|
| Dreambox | <a href="http://www.dreambox.com">www.dreambox.com</a> | An adaptive, constructive website that provides students with practice with math concepts & skills practice (check privacy policy) |
| ixl      | <a href="http://www.ixl.com">www.ixl.com</a>           | A website that provides practice with topics organized by grade level or by standard (check privacy policy)                        |

Free websites:

| Name                                 | Website  |
|--------------------------------------|--|
| Greg Tang Math                       | <a href="http://gregtangmath.com">gregtangmath.com</a>   |
| Calculation Nation                   | <a href="http://calculationnation.nctm.org/">http://calculationnation.nctm.org/</a>  |
| Illustrations                        | <a href="http://illustrations.nctm.org/">http://illustrations.nctm.org/</a>  |
| Mathbreakers                         | <a href="https://mathbreakers.com">https://mathbreakers.com</a>  |
| Addition & Subtraction Math Magician | <a href="http://www.oswego.org/ocsd-web/games/Mathmagician/mathssadd.html">http://www.oswego.org/ocsd-web/games/Mathmagician/mathssadd.html</a><br><a href="http://www.oswego.org/ocsd-web/games/Mathmagician/mathssub.html">http://www.oswego.org/ocsd-web/games/Mathmagician/mathssub.html</a> |
| Fact Monster (flashcards)            | <a href="http://www.factmonster.com/math/flashcards.html">http://www.factmonster.com/math/flashcards.html</a>  |

Apps:

- Match 10 - Combinations of 10 (1<sup>st</sup> grade and up)
- Name that Number - Also known as Target, using addition & subtraction to reach a target number (Challenging 1<sup>st</sup> grade and up)
- Kakooma - addition challenges in puzzle format (2<sup>nd</sup> grade and up)
- King of Math - Various types of math problems (2<sup>nd</sup> grade and up)
- Baseball Multiplication - single digit multiplication (3<sup>rd</sup> grade and up)
- Beat the Computer - single digit multiplication (3<sup>rd</sup> grade and up)

## Place Value and Base 10

**Decompose a number into hundreds, tens and ones:**

Complete the equations below.

$$75 = \underline{\quad} \text{ tens} + \underline{\quad} \text{ ones}$$

$$\underline{\quad} \text{ hundreds} + \underline{\quad} \text{ tens} + \underline{\quad} \text{ ones} = 209$$

$$\underline{\quad} \text{ ones} + \underline{\quad} \text{ tens} + \underline{\quad} \text{ hundreds} = 542$$

To make **126**, I could use:

$$\underline{\quad} \text{ hundreds} + \underline{\quad} \text{ tens} + \underline{\quad} \text{ ones}$$

**or**  $\underline{\quad} \text{ tens} + \underline{\quad} \text{ ones}$

**or**  $\underline{\quad} \text{ ones}$

**Write the numbers below in expanded form.**

$$\underline{\hspace{10em}} = 158$$

$$\underline{\hspace{10em}} = 509$$

$$\underline{\hspace{10em}} = 1,294$$

**Write the numbers below in standard form (number form).**

$$300 + 80 + 4 = \underline{\hspace{2em}}$$

$$600 + 10 + 9 = \underline{\hspace{2em}}$$

$$1,000 + 400 + 30 + 6 = \underline{\hspace{2em}}$$

Draw base 10 blocks below to show the number 251.

In the number 461:

The 1 digit represents: \_\_\_\_\_

The 8 digit represents: \_\_\_\_\_

The 3 digit represents: \_\_\_\_\_

Which number is in the hundreds place in 462: \_\_\_\_\_

Which number is in the thousands place in 3,109: \_\_\_\_\_

**Compare the numbers below by using  $>$ ,  $<$ , or  $=$**

a.  $918$  \_\_\_\_\_  $981$

b.  $802$  \_\_\_\_\_  $798$

c.  $1,201$  \_\_\_\_\_  $1,198$

**Adding and subtracting with tens and hundreds:**

a.  $284 + 10 =$  \_\_\_\_\_

b.  $392 + 10 =$  \_\_\_\_\_

c.  $275 - 10 =$  \_\_\_\_\_

d.  $671 + 100 =$  \_\_\_\_\_

e.  $508 - 10 =$  \_\_\_\_\_

f.  $432 - 100 =$  \_\_\_\_\_

g.  $916 + 100 =$  \_\_\_\_\_

h.  $1,003 - 10 =$  \_\_\_\_\_

**Addition and Subtraction**  
(using any efficient strategy)

$52 + 41 =$

$148 + 291 =$

$542 + 489 =$

$86 - 14 =$

$685 - 232 =$

$419 - 255 =$

$2,145 + 1,532 =$

$724 - 469 =$

$1,342 - 1,138 =$

## Developing Flexibility and Efficiency with Addition & Subtraction

Look at the numbers before solving to choose the most efficient strategy. Hint: It may not be the algorithm or using expanded form...think about friendly numbers!

$426 + 199 =$

$362 + 198 =$

$503 + 177 =$

$95 + 95 =$

$99 - 67 =$

$101 - 75 =$

$267 - 98 =$

$1,002 - 998 =$

## Solving Story Problems

Patti had \$225 in her wallet. She went shopping and had \$87 left. How much money did she spend shopping?

During field day the 1<sup>st</sup> place winner threw the baseball 116 feet, which was 37 more feet than the 2<sup>nd</sup> place winner. How far did the 2<sup>nd</sup> place winner throw the baseball?

J'vonae's basketball team won the first four games of the season. The first game they scored 35 points. Every game thereafter, they scored 10 more points than the game before. How many total points did they score in the first 4 games?

Alice's class had an estimation jar. There were 265 candies in the jar. She gave some candy to her classmates and then there were 187 candies left. How much candy did she give to her classmates?



## Open Response Problems

(Solve on a separate sheet)

|  |   |
|--|---|
| <p>The difference between two numbers is 17. What might the two numbers be? Show as many different solutions as you can.</p>   | <p>Ben now has 112 marbles. How many marbles did he once have and what happened to them? Show as many different solutions as you can.</p>   |
| <p>Tom had a large candy bar. He cut it into pieces so that he could share it equally with his best friend. Show different ways Tom might have cut the candy bar. Label each part as a fraction. What about if he shared it with 2 friends? Three friends?</p> | <p>Choose one of these numbers: 2, 3, 5, or 6. Double the number you chose and record the number sentence. Keep doubling the total until you reach a sum that is greater than 100. How far away is 100 from your final number? Try it with another number. What patterns do you notice?</p> |
| <p>Work with a partner. Turn over 3 numeral cards each and make a 3-digit number. Record and find the sum and difference of your numbers. Repeat.</p>  | <p>Tom put 12 (or 18, 24, 36...) counters into equal piles. How many counters were in each pile? Show as many different solutions as you can.</p>   |
| <p>Turn over three numeral cards to make a 3-digit number. Round the number you make to the nearest 10. Repeat 10 times. Explain your strategy for rounding numbers to the nearest 10.</p>   | <p>Find 3 objects at home that are shorter than your ruler. Order your objects from shortest to longest. Measure each object using your ruler. Record your findings.</p>  |
| <p>Sam has 30 cents in his pocket. What coins might he have? Show as many different solutions as you can. Repeat with different amounts of money.</p>  | <p>I bought three items at the toy store and spent exactly \$1.00. What might I have bought and how much did each item cost?</p>  |
| <p>Put a bunch of different objects in a cup. Sort the objects in your cup. Create a representation to show your data. Your representation must have a title and a key. Write 3 facts about the data in your bar graph or line plot.</p>                       | <p>Draw a clock to show one time that is quarter past the hour, one that is half past the hour and one that is quarter to the hour. For each clock write the time it would be one hour earlier and one hour later. Repeat with one <math>\frac{1}{2}</math> hour earlier and later.</p>     |
| <p>Write a story problem to match the equation <math>\text{_____} + 250 = 815</math>.</p>  | <p>Using all of the digits 4, 5, 6, 7, 8, 9, what numbers can you make using addition and/or subtraction?</p>   |

Number Cards (Print and Cut to Play Card Games)

0

1

2

3

4

5

6

7

8

9

10