

Dear Rising Fourth Grade Mathematicians,

This summer, some hard work will help you to prepare for fourth grade math. The most important thing you can do to get ready for fourth grade is to **memorize your multiplication facts!** When your math facts are automatically in your head it is like having all of the ingredients for a recipe ready for you, and you can jump right to the next step. **Therefore, we expect you to spend 20 minutes a week on math for 10 of the 12 weeks of summer.** In those 20 minutes, we expect you to practice your math facts for 10 minutes, and use the rest of the time to work on one of these two options:

1. Complete the **math packet (See PDF)**
 - a. If you choose this option, you'll hand it in on the first day of school.
 - b. Please show your work and complete all work in pencil!
2. Practice math skills on **IXL.com**.
 - a. If you choose this options, you must master with **at least 80% accuracy five** of the following 3rd grade math skills.
 - b. Although you can choose which topics are best for you, you must master at least **one skill from each category** (Place Values, Addition, Subtraction, Understand Multiplication, Estimation and Rounding)
 - c. You can always try to master more than five, but start by choosing skills in which you feel you need a little extra practice.
 - d. For this option, your teachers can view what you practice online, so you won't have to hand anything in on the first day of school.

Place values

- **B.1** Place value models up to thousands
- **B.2** Place value names up to thousands
- **B.3** Place value names up to hundred thousands
- **B.4** Value of a digit
- **B.5** Convert to/from a number
- **B.7** Convert from expanded form
- **B.8** Convert between standard and expanded form

Addition

- **C.1** Add two numbers up to three digits
- **C.2** Addition input/output tables - up to three digits
- **C.3** Add two numbers up to three digits - word problems
- **C.6** Add three numbers up to three digits each
- **C.7** Add three numbers up to three digits each: word problems
- **C.8** Addition patterns over increasing place values

Subtraction

- **D.1** Subtract numbers up to three digits
- **D.2** Subtraction input/output tables - up to three digits
- **D.3** Subtract numbers up to three digits - word problems
- **D.6** Subtraction patterns over increasing place values

Understand multiplication

- **E.1** Count equal groups
- **E.2** Identify multiplication expressions for equal groups
- **E.3** Write multiplication sentences for equal groups
- **E.4** Relate addition and multiplication for equal groups
- **E.5** Identify multiplication expressions for arrays
- **E.6** Write multiplication sentences for arrays
- **E.7** Make arrays to model multiplication
- **E.8** Write multiplication sentences for number lines

Estimation and rounding

- **P.1** Rounding - nearest ten or hundred only
- **P.2** Rounding
- **P.4** Rounding puzzles

Whether you choose the paper and pencil practice, the online practice, or both, solidifying math skills over the summer is a great way to be ready for the start of school in September. We can't wait to start getting to know you as middle school mathematicians!

Sincerely,

Avery and Jane, the 4th Grade Teaching Team

afinch@greenestreetfriends.org

jkang@greenestreetfriends.org