

Math Facts Activities

Required (Monday-Thursday):

You are required to practice math facts regularly at home to increase your fluency. As part of your math homework, **fluency timings** will be sent home each week. With the fluency timing in the plastic sheet protector, use a dry-erase marker to practice repeatedly. Record your best time and score each day on your homework form. *[The target goal is to finish all 25 problems in 1 minute and 15 seconds, with 90% accuracy (23 out of 25 problems correct).]*

Suggestions For Extra Practice:

1) FRONT ROW ED: go to <https://student.frontrowed.com/#login> and login with your first name, last name, and class code: **423neg**. Choose “Practice”, then “Math Fluency” (this is a good alternative to XtraMath for students who do not like to be timed during fact practice). For extra practice in other math skills, choose “Foundational Math”. Use the following calendar for a domain guide:

- September-November: Counting and Operations
- December-Mid February: Base 10
- Mid February-March: Measurement and Data
- April-May: Geometry and Fractions

2) REFLEX MATH: Practice your fact families with online games. <https://www.reflexmath.com/>

3) XTRA MATH: Practice math facts during one session of Xtra Math. <https://xtramath.org/>

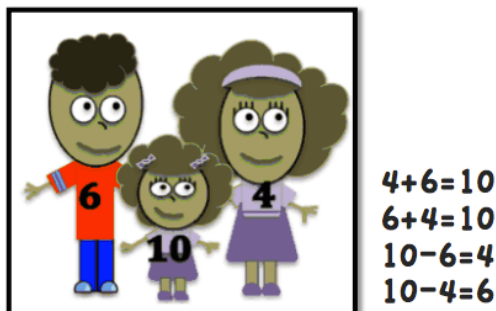
Abigail	6504	Logan	2144
Benjamin	5718	London	4049
Braxton	1090	Luke	8304
Charli	8326	Mason	8467
Ella	7909	Parker	5480
Ezri	1546	Porter	3529
Hazel	2076	Quinn	8988
Jackie	3289	Raquel	5520
Jackson W.	8166	Rockwell	3342
Jaxon H.	4520	Sam D.	5673
Jaylyn	9563	Samuel M.	1645
Kasen	5316	Sophie	4558
Laker	1771	Zachary	7000

**A parent flyer (included in the blue homework folder) has easy login instructions for Reflex Math and enrollment information to quickly set up an account for XtraMath on your home computer or mobile device (app is free for Reflex Math).

4) FLASH MATH: Use a set of flash cards with ADDITION or SUBTRACTION facts. 1st graders need to **demonstrate fluency for addition and subtraction within 10**. You can often find flash cards at dollar stores, create them on index cards, or even create them at this site: <http://www.kitzkikz.com/flashcards/>

5) MATH MAGICIAN: Practice ADDITION or SUBTRACTION. <http://www.oswego.org/ocsd-web/games/mathmagician/cathymath.html>

6) FAMILY MATH: Write each of the number families for the number 10. Include addition and subtraction facts for each family. For instance, for the 4-6-10 family, you should write: $4+6=10$, $6+4=10$, $10-6=4$, and $10-4=6$. The math families for 10 are: 1-9-10, 2-8-10, 3-7-10, 4-6-10, and 5-5-10. Below is a pictorial example of the 4-6-10 family, with 10 being the sum, and 4 & 6 being the addends.



7) MATH ATTACK: Write your ADDITION facts (ALL facts up to 12). You do not need to repeat facts as you move up the number list, for example you do not need to write $3+1=4$ if you already wrote $1+3=4$. You may use manipulatives (such as small candies, beans, pennies, etc.) to help you calculate the correct answers.

8) MATH REVIEW: Choose any 2-digit number less than 100 and write the numbers that are **one more, one less, 10 more, and 10 less** than that number. Do this for 6 different numbers and write them. Here's an example for the number 47:

47

one more: 48

one less: 46

10 more: 57

10 less: 37

9) Tug of War: You will need 2 Players, 2 Dice (or Number Cards like UNO), a piece of paper, and a small object for a game piece.

Draw a simple game board on a piece of paper (see below). Place the game piece on "start". One player is trying to reach the 4 on the right side of "start" and the other player's objective is to reach the 4 on the left side of "start". Before playing, decide if you want to add or subtract, and decide if the winning roll is the highest or lowest sum (or difference). Players take turns rolling the die and adding (or subtracting) the numbers rolled. Whoever gets the highest (or lowest) sum (or difference), moves the marker in their designated direction. The marker will go back and forth until one of the players reach their 4 and is announced WINNER!



4 3 2 1 Start 1 2 3 4

Dear families,

What is **fact fluency** and why is it important? Math fact fluency, or the ability for students to recall basic math facts quickly, accurately, and effortlessly, is an essential component of students' math knowledge. It would take you ages to write a paper if you had to look up the spelling of each individual word: In the same way, lack of fact fluency can slow down students' processing of more complex math problems and situations. Research shows the importance of fact fluency as a foundation for more difficult math, and even as a predictor of future math success. For these reasons, fact fluency is one important component of our math curriculum in first grade.

How do we build fact fluency? It is important to realize that Fact fluency is not just memorizing the basic facts. During class, we will focus on building students' conceptual understanding of the basic math facts, rather than focusing solely on memorization. We will encourage children to focus on looking for patterns and relationships between the facts, building on, and connecting to what facts they already know (for example, if students know $4+4=8$, then $4+5=$ one more than eight; or 9). In 1st grade at Quest, we particularly focus on "Addition Strategies". This conceptual framework anchors students' recall in meaning. In other words, students are making meaningful connections that make remembering the facts easier.

Students will also be *required* to practice math facts regularly at home, helping the brain transition facts from short-term memory into long-term storage. As part of their math homework, timing pages will be sent home for students to practice repeatedly to increase their fluency.

For *variety* and *extra practice* at home, other math facts activities and programs will be offered that complement our in-class learning. Front Row Ed, Reflex Math, XtraMath, and other suggested options are listed in the "Math Facts Activities" sheet [included in the blue homework folder and also on our blog (hover over "Homework" and "Math Homework" then click on "Math Facts Activities").]

Front Row Ed Fact Practice is like **computerized flash cards**. As students work through the facts, they will uncover a hidden picture and earn "coins" for correct answers. They receive immediate feedback after answering each math fact and are shown correct solutions if they answered incorrectly. This is a great option for kids who do not like to be timed during fact practice.

Reflex Math is a **game based** adaptive online system that helps students become fluent with their math facts. It uses a **fact family approach** when teaching new facts. A fact family is a group of related facts that use the same numbers, so instead of learning all the addition facts and then all the subtraction facts, children learn both operations at the same time. This method has several advantages. It helps students understand the nature of inverse operations and learning related facts at the same time is ultimately easier and more efficient than other approaches.

XtraMath provides sessions (lasting approximately 10 minutes) of **targeted practice** needed to ensure mastery of basic math facts. It achieves this through timed practice. Students receive a smiley face if they solve the problem under 3 seconds and a check mark for solving it under 10 seconds. After 10 seconds or if they answer incorrectly, the correct answer is shown and students must type it in before moving on to the next question. It tracks and shows their individual progress to help motivate them. (Note: the problems go beyond our core standard which states that 1st graders need to demonstrate fluency for addition and subtraction within 10, but can be a great option to challenge students who are ready for it! You can decide if this program is a good option for your child).

*On the back, you will find quick & easy instructions to login to Reflex Math and enrollment information for XtraMath. For Front Row Ed, go to <https://student.frontroned.com/#login> and login with your first name, last name, and class code: **423neg**. Choose "Practice", then "Math Fluency".

Thank you for your support in helping your child succeed in learning their math facts this year!