Family Night – Math Strategies

Hal Hutchens Elementary

February 9, 2020

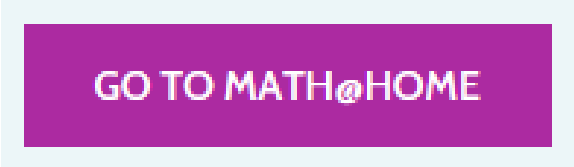
Math Inventory

- The Math Inventory is a computerized test that results in a score, or Quantile® , that indicates how well a student understands mathematical skills and concepts along a developmental continuum. A student who scores at the Proficient level by the end of the school year is considered to be performing on grade level and is on track to meet the demands of college and career by the end of high school.

- Test Administration – 3 times a year (August, December/January, May)

Math Inventory™

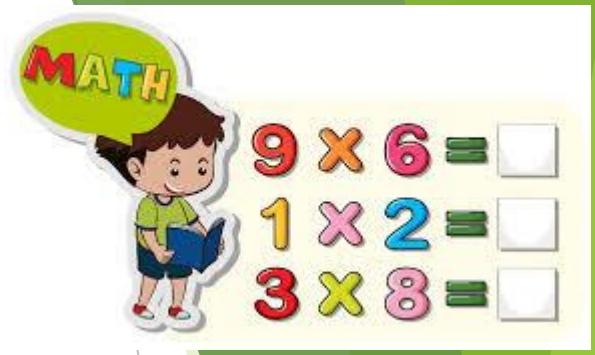
Quantile Resource

- https://www.quantiles.com/parents-students/find-math-resources-to-support-classroom-learning/mathhome/ or http://tinyurl.com/hutmath
- Click on 

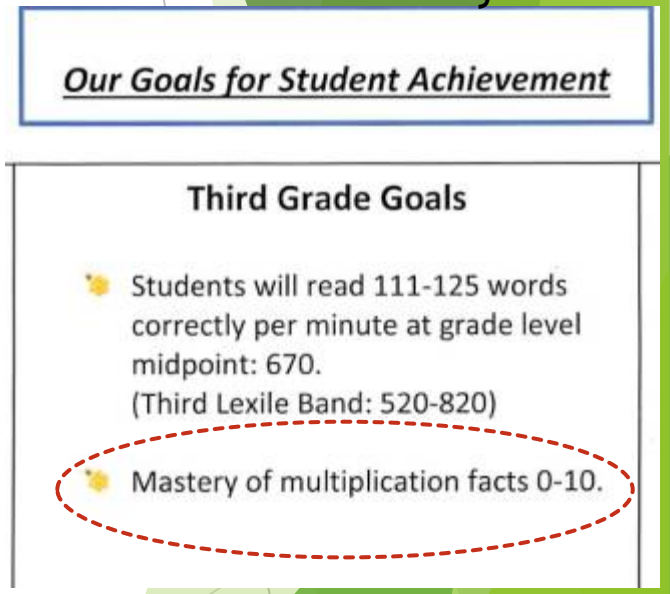
- Enter Student's Information from their Math Inventory Score Report
  - Use the Instructional Recommendations section to pick out keywords (i.e. Numbers and Operations, Algebraic Thinking, Patterns, etc.)

Fact Fluency

- **What is math fact fluency?**
- Math fact fluency, is the ability to quickly and accurately recall the answer to basic math facts. This is typically the result of repeated practice that results in the fact being committed to long-term memory, allowing it to be instantaneously recalled.
- To be considered fluent, students should no longer need to rely on strategies such as counting on their fingers or drawing models to compute.
- **Strategies to Increase Math Fluency**
- ***1. Good old-fashioned practice(Flashcards, worksheets)***
- ***2. Ask facts out loud for mental practice.***
- ***3. Offer variety(flashcards, popsicle games, worksheets, online game)***
- ***4. Make it fun!***
- ***5. Work a little at a time!(start with facts that are not known and work up to mixed practice)***



Third Grade Multiplication Fact Fluency



EVERY WEEK, ALL THIRD GRADE STUDENTS ARE TIME TESTED FOR FACT FLUENCY. THE GOAL IS 100 FACTS IN 7 MINUTES.

Fact Fluency Games

- Remember our goal by the end of third grade: Mastery of Multiplication facts 0-10.
- Multiplication War – Use two decks of cards and multiply to get the product. Whoever has the highest product wins.
- Education Galaxy – My Skill Practice- **www.educationgalaxy.com/login**
- **Fact Monster Game:**
  - **https://www.factmonster.com/math/flashcards**
- Quick Flash II – Multiplication: Online Game
  - **https://www.multiplication.com/games/play/quick-flash-ii**
- Place facts on popsicle sticks and draw one randomly.

Number Talks

is a ten-minute classroom routine teaching mental math.

The goal of **Number Talks** is for students to compute mentally accurately, efficiently, and flexibly. This includes fluency with single-digit combinations in addition, subtraction, multiplication and division as well as procedural fluency with two or multi digit **numbers**.

Additionally, Number Talks encourages students to make sense of mathematics, be able to communicate mathematically, and reason and prove solutions.

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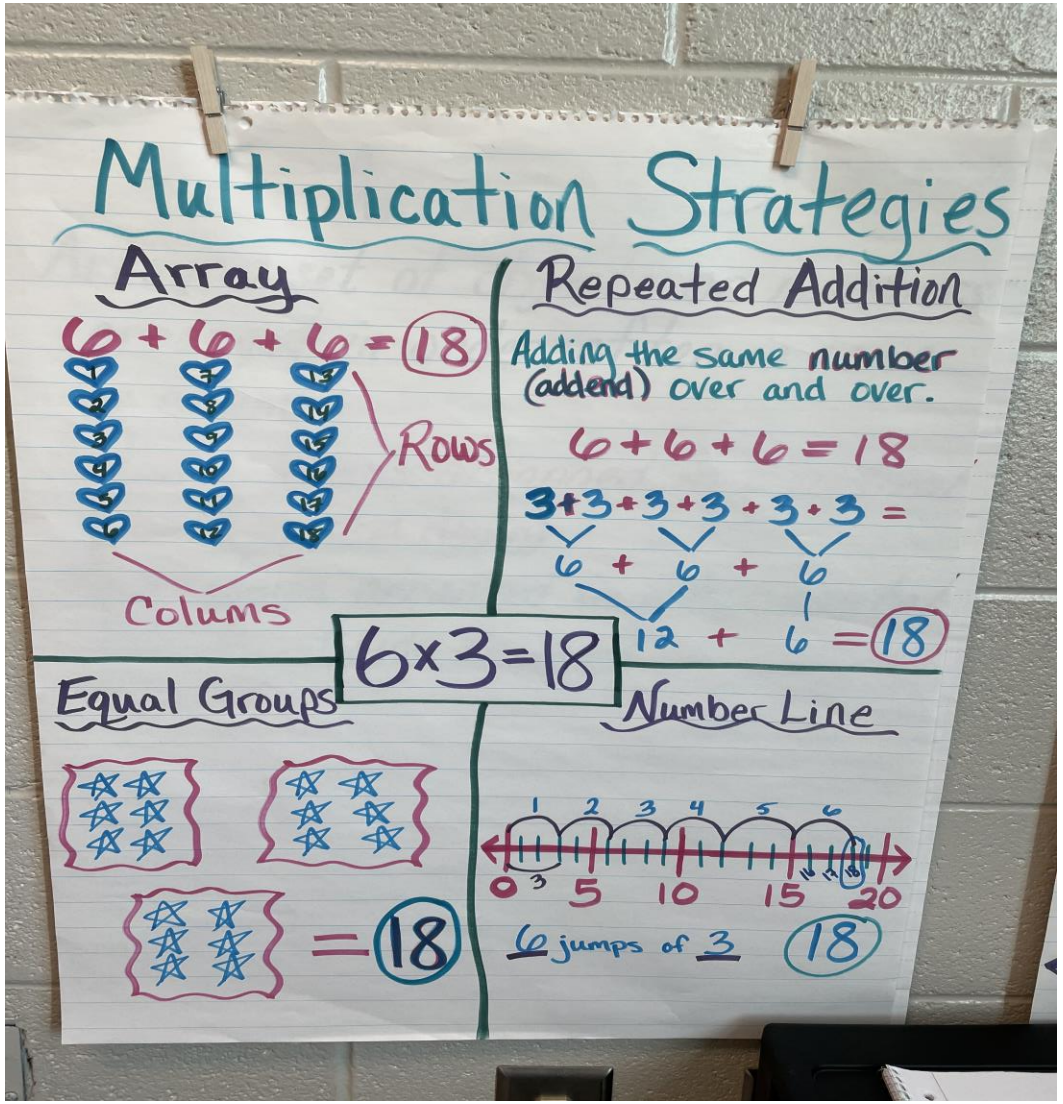
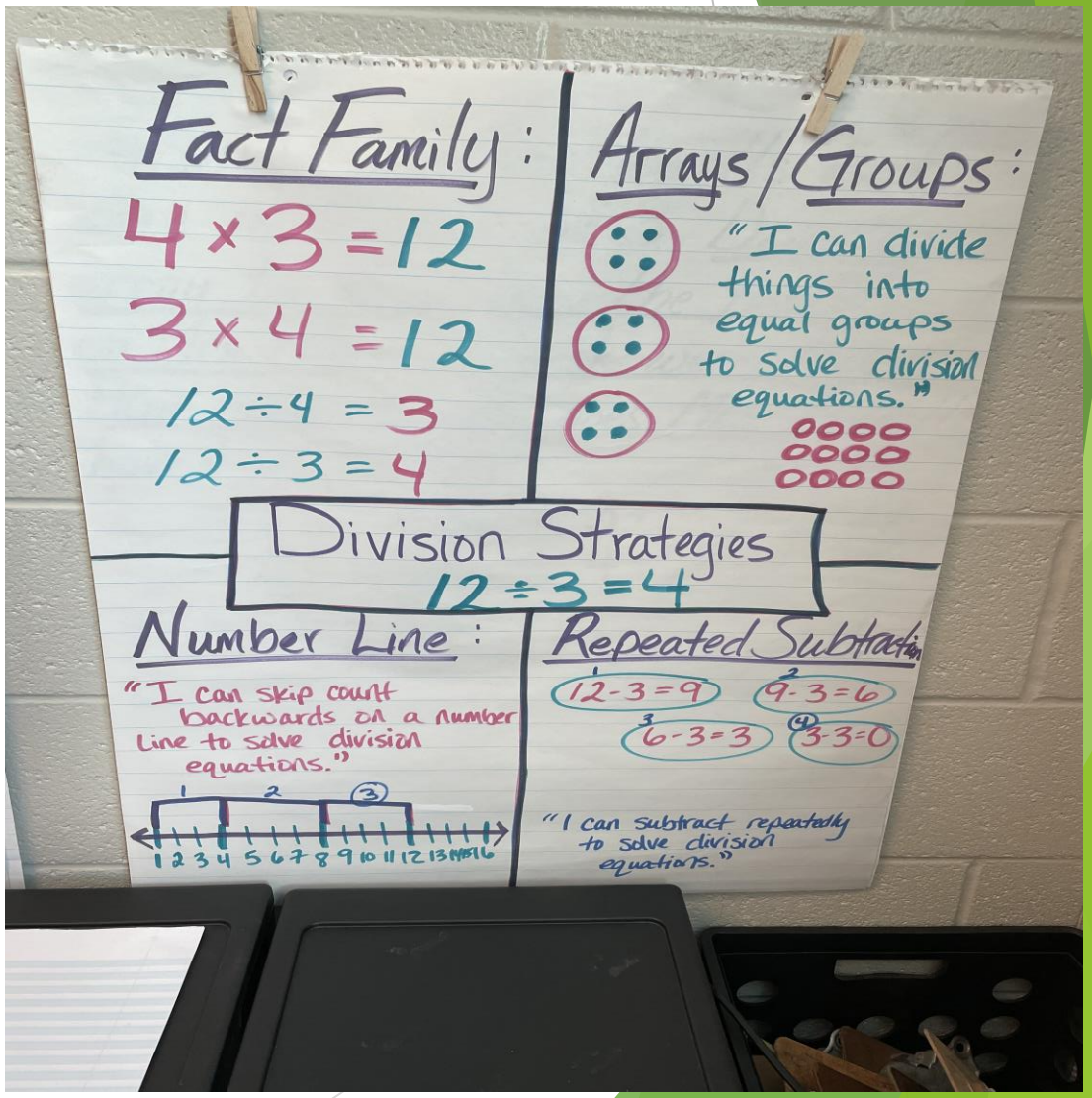
1. Teacher provides the problem.
2. Teacher provides students opportunity to solve problem mentally.
3. Students show a visual cue when they are ready with a solution. Students signal if they have solved it in more than one way too. *(This quiet form of acknowledgement allows time for students to think, while the process continues to challenge those who already have an answer)*
4. Teacher calls for answers. She collects all answers- correct and incorrect- and records answers.
5. Students share strategies and justifications with peers.

Math Strategy Anchor Charts





Modeling How to Solve a Two-Step Word Problem #1

John has 27 toy racecars. He gave 6 to his friend. Then, he placed the rest on 3 shelves. He put the same number of toy racecars on each shelf. How many toy racecars did John put on each shelf?

- 27 – 6 = 21

  Use number talks strategies to subtract 6 from 27.

- 21 divided by 3 = 7

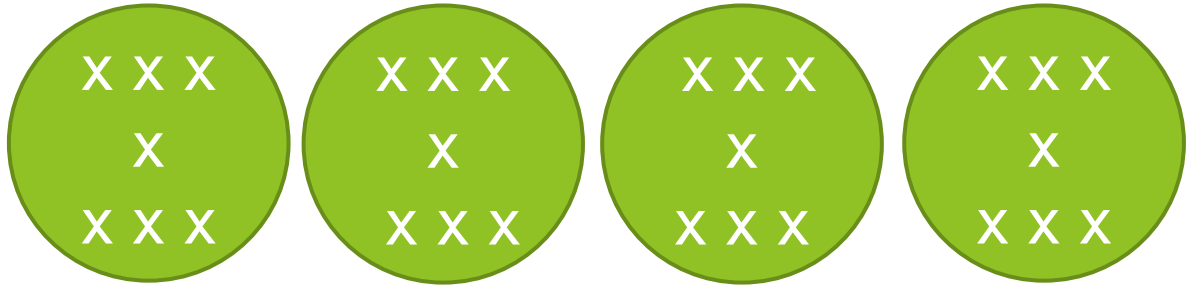
  I drew 3 circles. Then I divided 21 up evenly into the 3 groups.

John put _7_ racecars on each shelf.

Modeling How to Solve a Two-Step Word Problem #2

Kim bought 4 mugs for $7 each. She gave the clerk $30. How much change should Kim get back?

- 4 x 7 = 28



Using equal groups, I drew 4 circles to represent the 4 mugs. Then I put 7 x's inside to represent the cost of each mug. To determine the answer, count all the x's in the circles.

- 30 – 28 = 2

Use number talks strategies to subtract 28 from 30.

- Kim should get <u>$2</u> change.

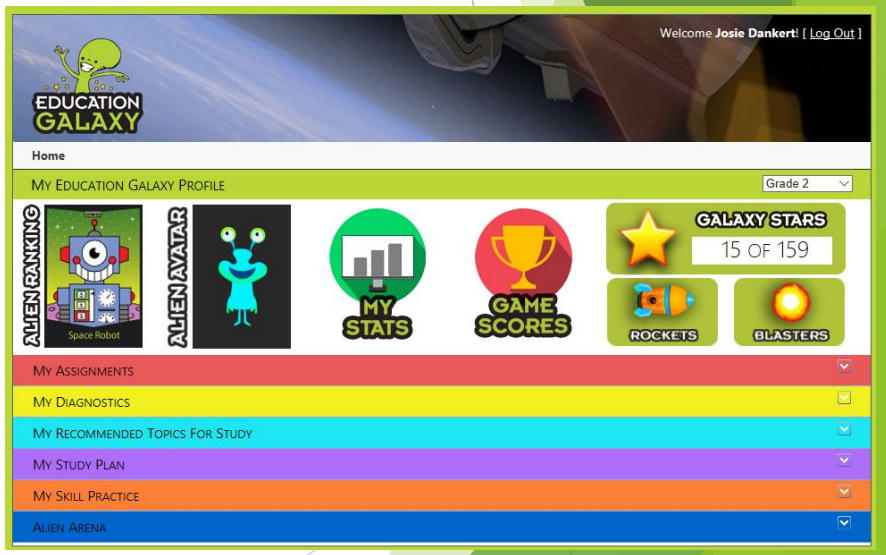
Education Galaxy

- www.educationgalaxy.com

Username – Student ID # + hes (lunch #)

Password – Student ID # (lunch #)

Resource for student skill practice at home in Reading, ELA, and Math



Typing Club

- https://www.typingclub.com/
- Click on 

in top right hand corner of webpage
- Creating a login will allow students to continue their progress the next time they login back in.
- Georgia Milestones Assessment for 3rd – 5th is administered on the computer. Students must type their constructed responses and the writing component.