

Elementary Maths

Conversations

Common Classroom Activities

Eureka Math as supplemental material

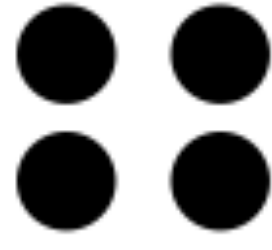
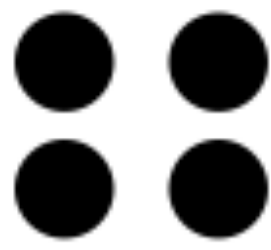
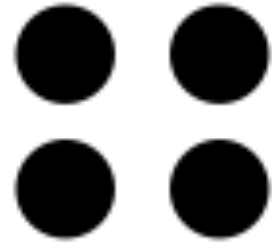
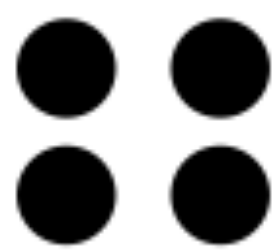
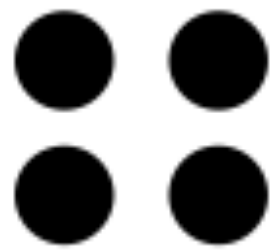
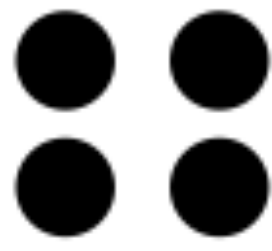
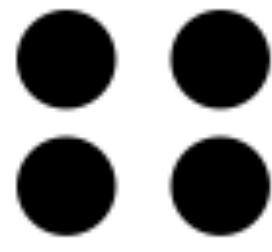
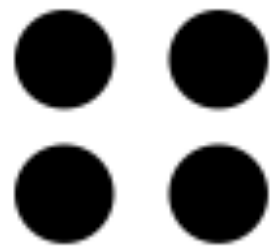
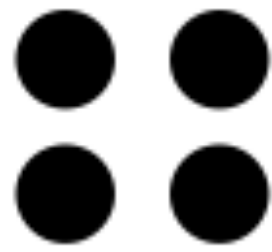
Common Core and Math Practices as standards for teaching and learning

Number Talks

What is a number talk?

- Short discussions among a teacher and students about how to solve a particular **mental math problem**.
- The focus is not on the correct answer, but on **all the possible methods** of finding the answer.
- Each student has a chance to explain their method, and everyone else will learn from other people's methods!
- This is one of the best ways to increase fluency and flexible thinking.

Let's look at an example together.



What is fluency?

Being able to do “math facts” flexibly, accurately, and efficiently. We want students to have a strong number sense: “an intuitive understanding of numbers, their magnitude, relationships, and how they are affected by operations”

This does not mean fast! Some of the best mathematicians in history have been considered “slow” and were even labeled as such in school.

Multiplication:

How Close to 100?

Pepperoni Pizza

Tic-Tac-Toe Products

Addition/ Subtraction:

Snap It!

How Many Are Hiding?

Shut the Box

Common core and the Mathematical Practices

One of the biggest changes from “old math” to “new math” is that correct answers alone are not enough.

Students are expected to develop the 8 Mathematical Practices in order to prepare them for “21st Century Jobs”

Let's look at the handout together.

How Can I Help?

Encourage children to play maths puzzles and games

Always be encouraging and never tell kids they are wrong when they are working on maths problems. Instead find the logic in their thinking –

Never associate maths with speed. Forcing kids to work quickly on maths is the best way to start maths anxiety for children, especially girls.

Never share with your children the idea that you were bad at maths at school or you dislike it – especially if you are a mother.

Encourage number sense. What separates high and low achievers is number sense-

Perhaps most important of all – encourage a “growth mindset” let students know that they have unlimited maths potential and that being good at maths is all about working hard.

Questions?

Homework questions: What to do during frustration?

How to help child who is resistant to having help for homework?

Resources:

<http://hechingerreport.org/memorizers-are-the-lowest-achievers-and-other-common-core-math-surprises/>

<https://bhi61nm2cr3mkdgk1dtaov18-wpengine.netdna-ssl.com/wp-content/uploads/2017/03/Parent-Night-Handout-vF-1-2.pdf>

<https://bhi61nm2cr3mkdgk1dtaov18-wpengine.netdna-ssl.com/wp-content/uploads/2017/03/FluencyWithoutFear-2015-1.pdf>

<http://blog.mindresearch.org/blog/math-anxiety>

http://www.wismath.org/Resources/Documents/Annual%20Conference/124MButturini-Parent_MathNight%20Handout.pdf

<https://nrich.maths.org/10624>