The California Math Standards

What?

When?

Where?

Why?

How?

What and *Why* Questions

Why does my child need to learn math the way it's being taught? It's not how *I* learned!

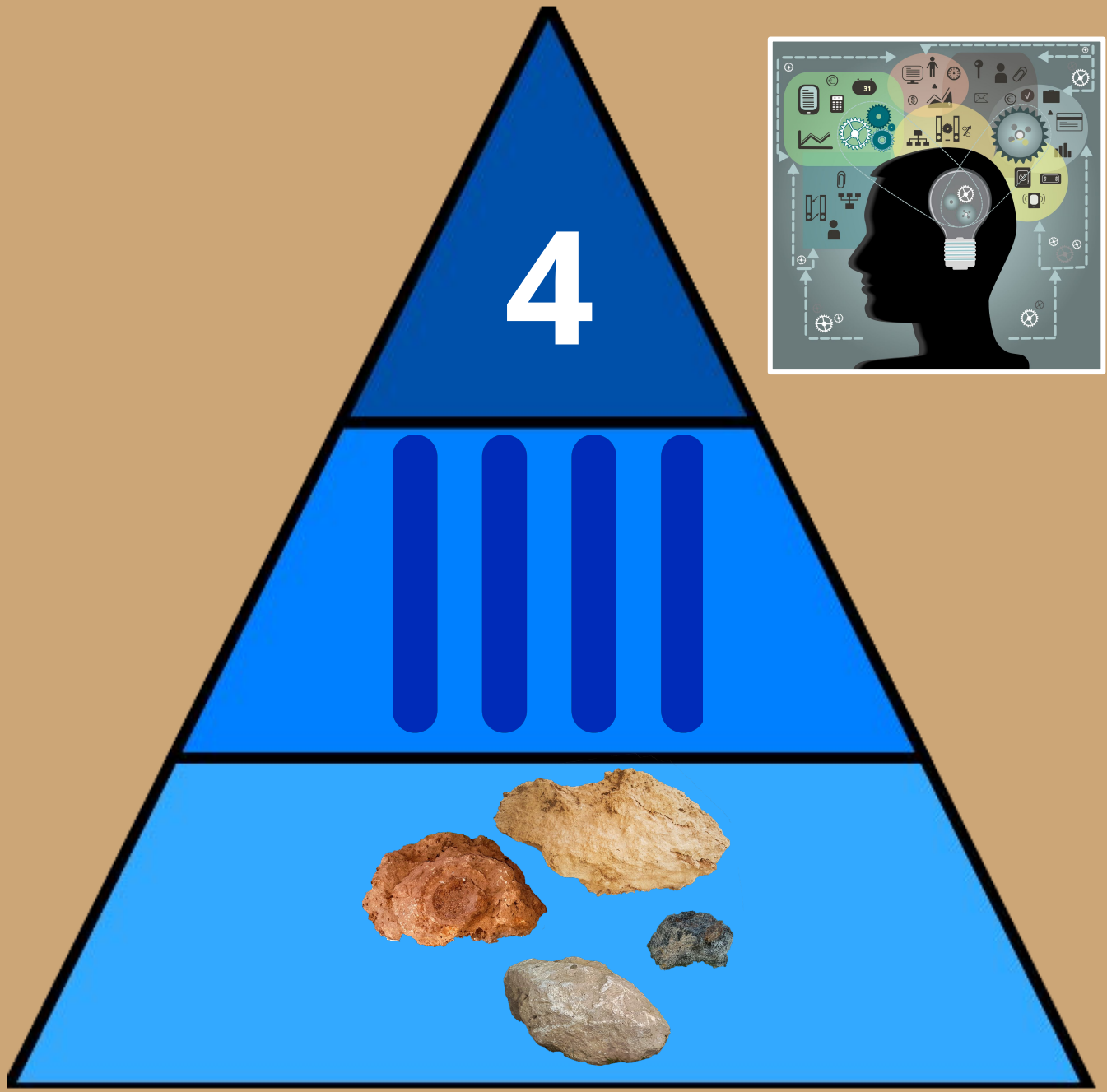
Compared internationally,
US students
demonstrated a
lack in
strategic problem solving.

Why the lack of strategic problem solving?

Symbolic Representations

Visual Representations

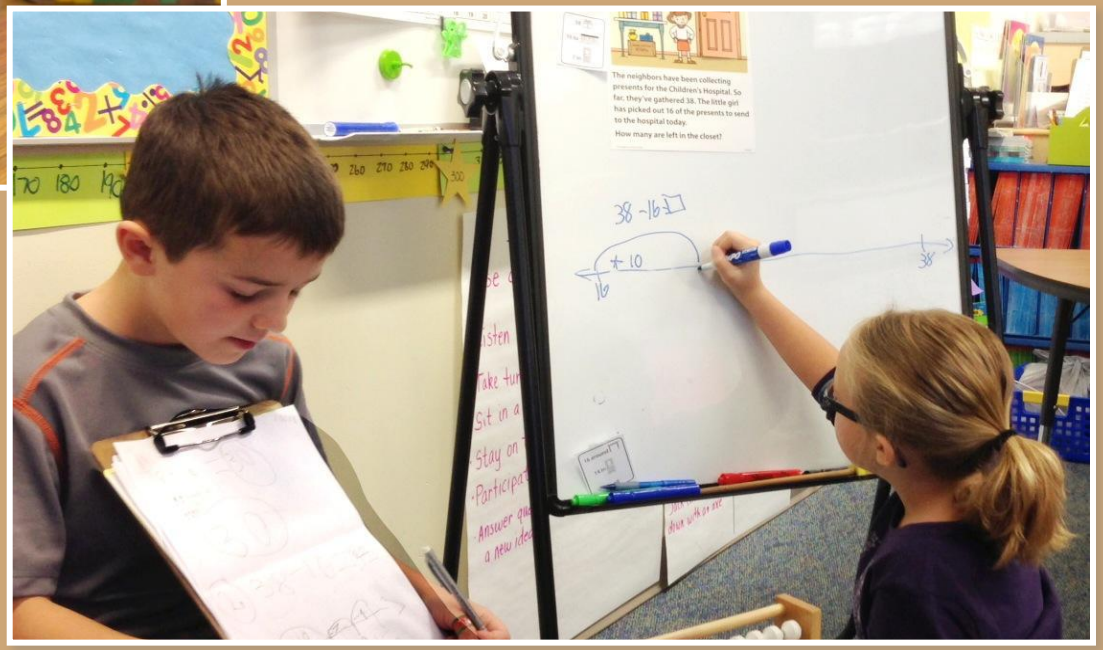
Concrete Representations



What *is* this math being taught (*and how does it support strategic problem solving*)?

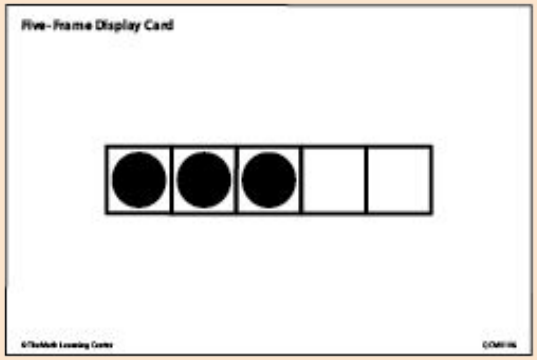
- Mathematical **concepts & skills AND "Habits of Mind"** (*i.e. teaching students to think like mathematicians)*
- Emphasizes deeper learning by moving from **concrete through abstract representations,** as well as **multiple strategies** to achieve the same solution
- Encourages **creative and critical thinking, collaboration, and communication**
- Designed to prepare students for today's and tomorrow's world using **strategic problem solving**

What will you see in a math classroom?

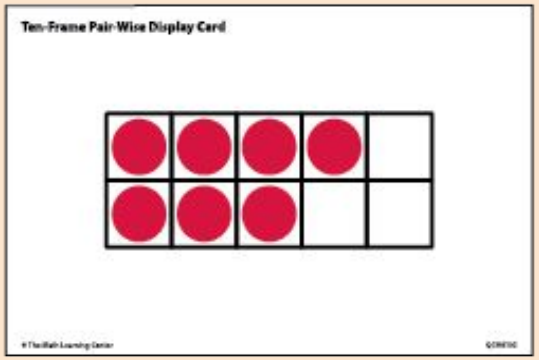


Math Models

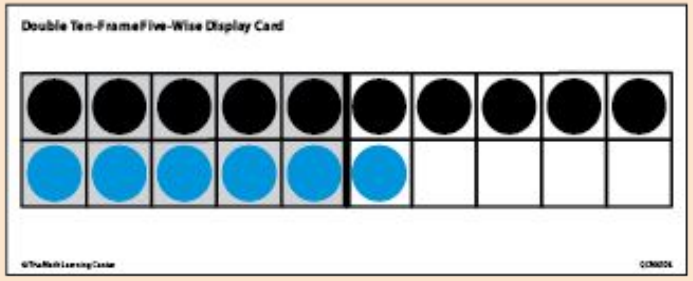
Number Frames Bundles & Sticks



Five-frame

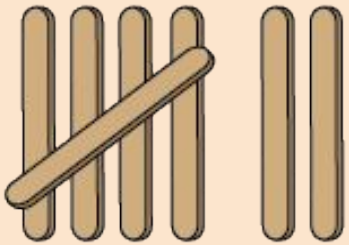


Ten-frame

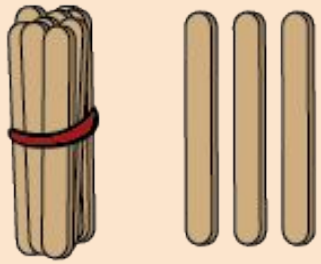


Double ten-frame

Tally marks
showing 8

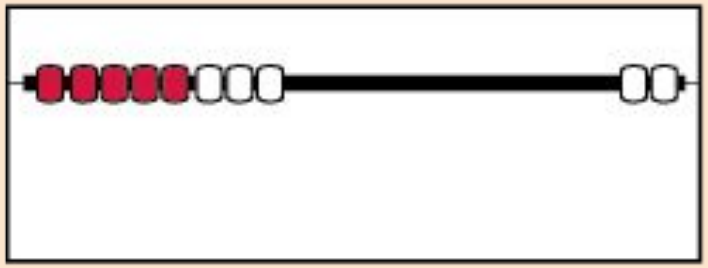


Craft sticks
showing
7 as tallies

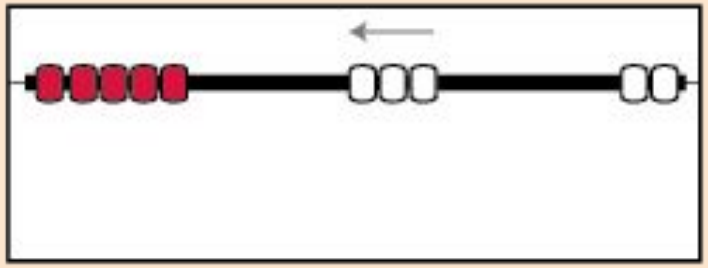


A bundle of 10 and
3 more makes 13

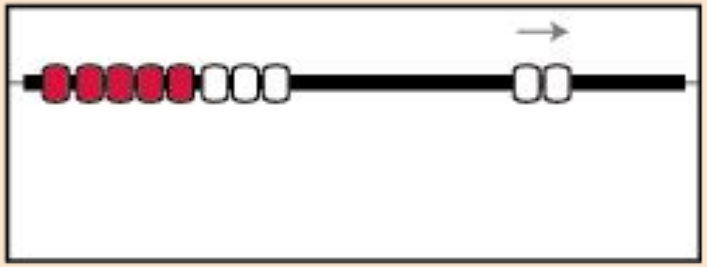
Number Racks



"1, 2, 3, 4, 5, 6, 7, 8. That's 8."

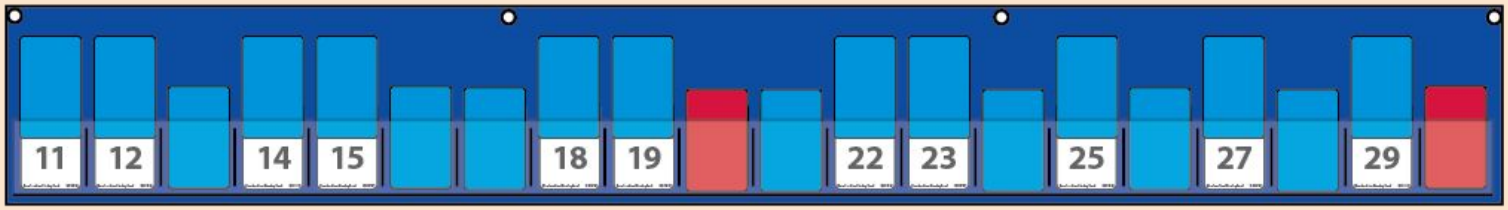


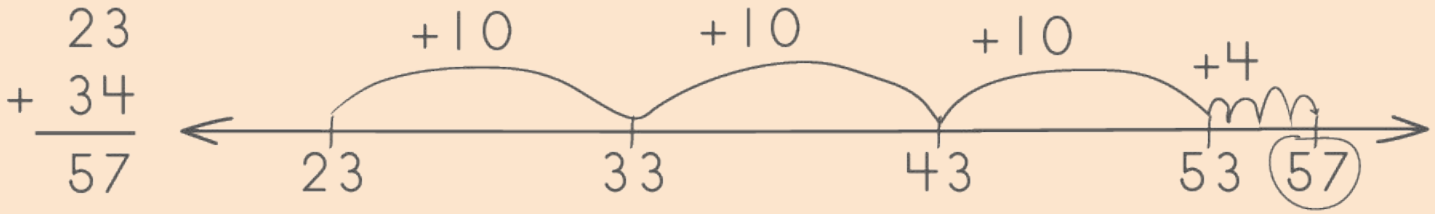
"First slide 5, and then 3 more makes 8."



"I know it's 8 because it's 2 less than 10."

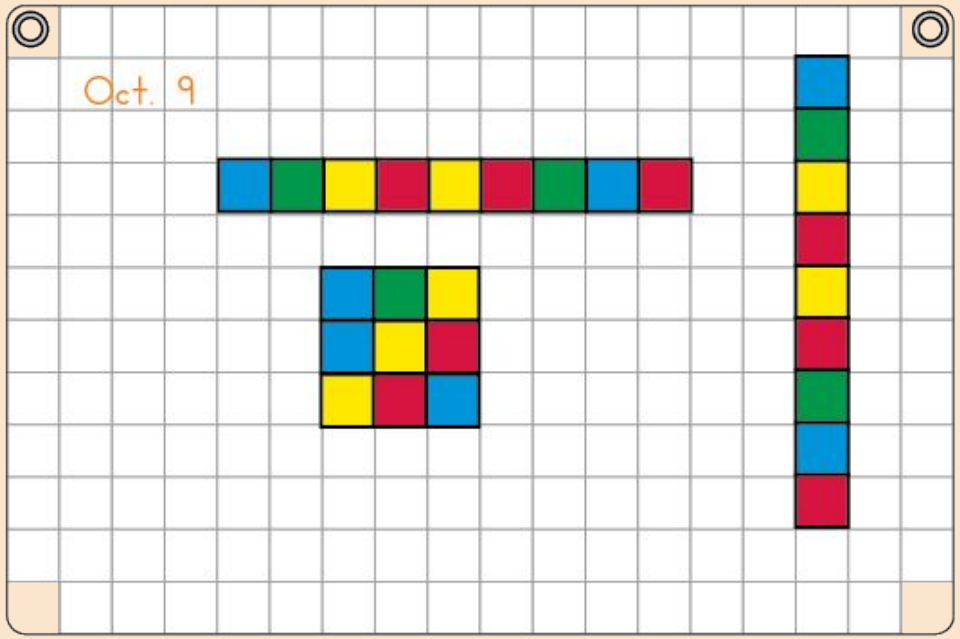
Number Line

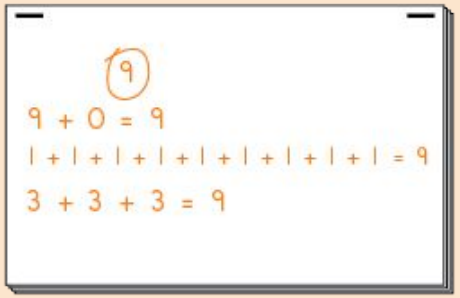




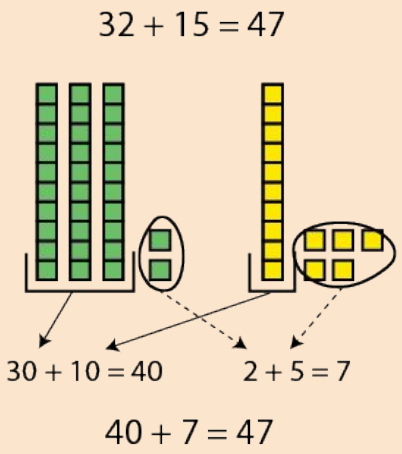
Jumping Strategy

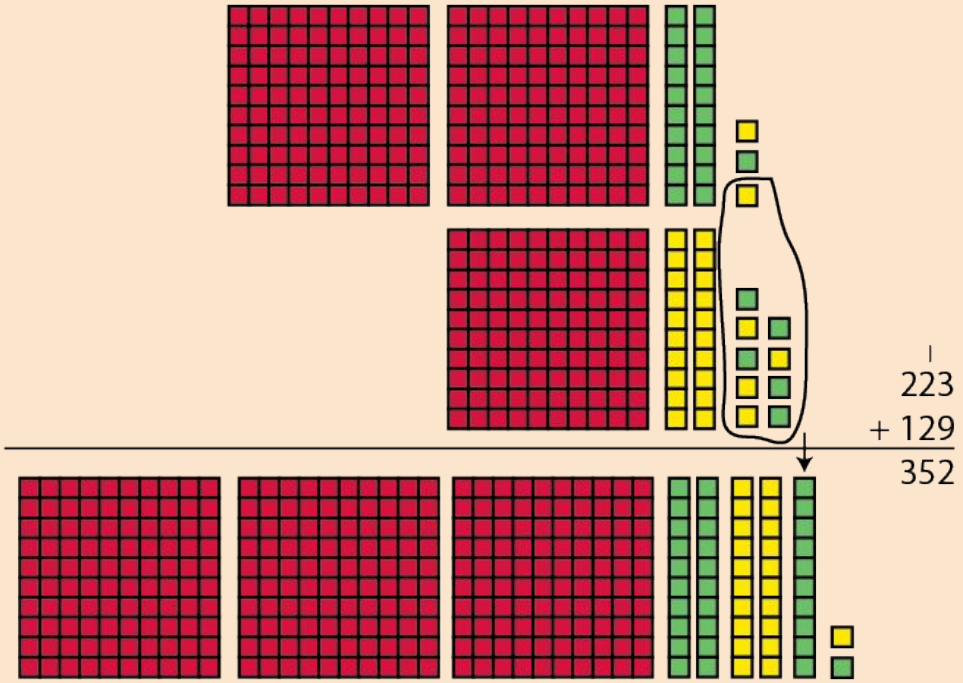
Tile Arrays



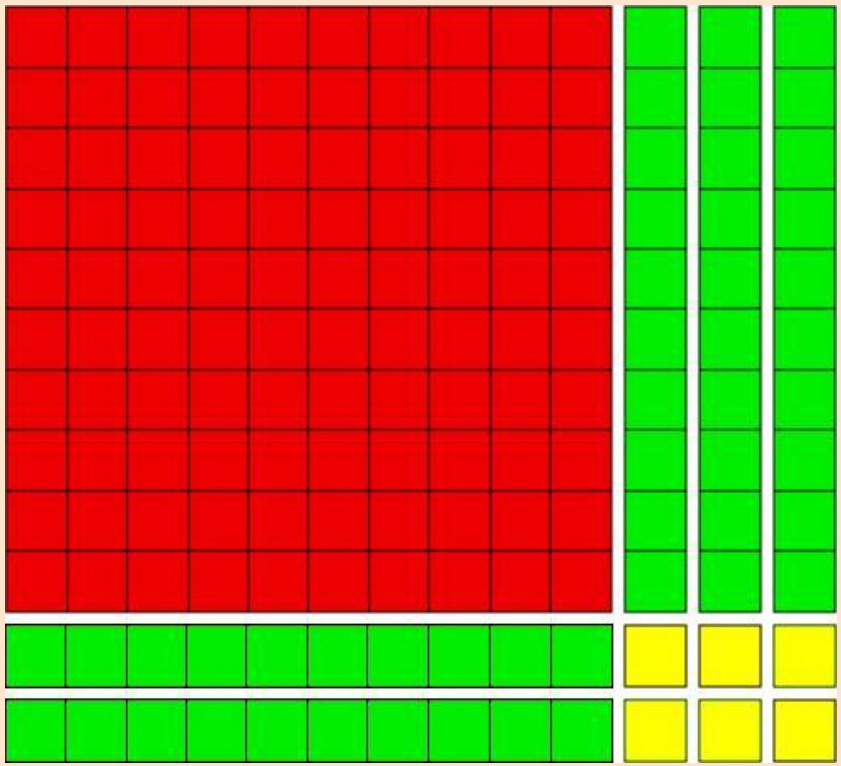


Number Pieces



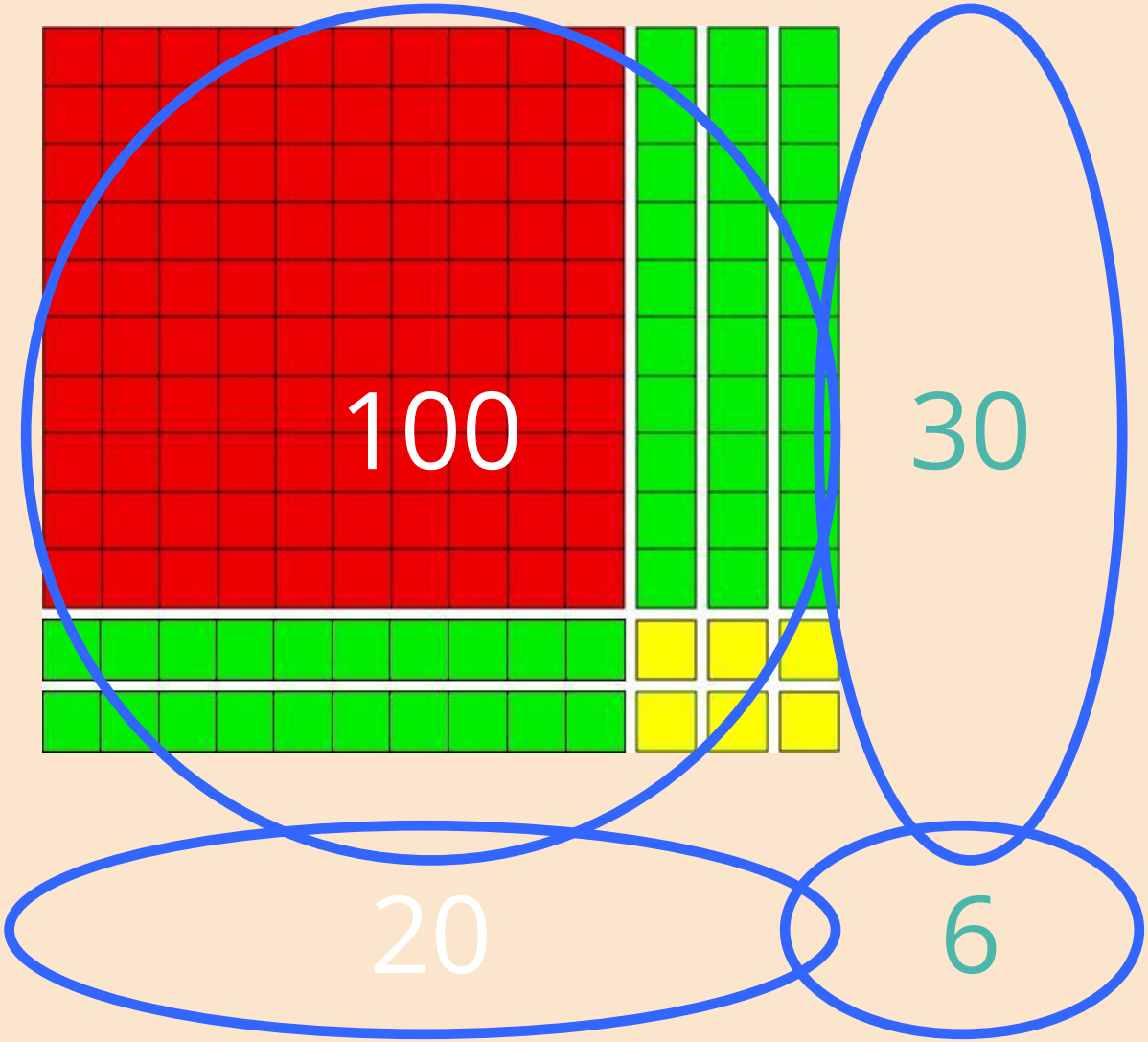


Number Pieces



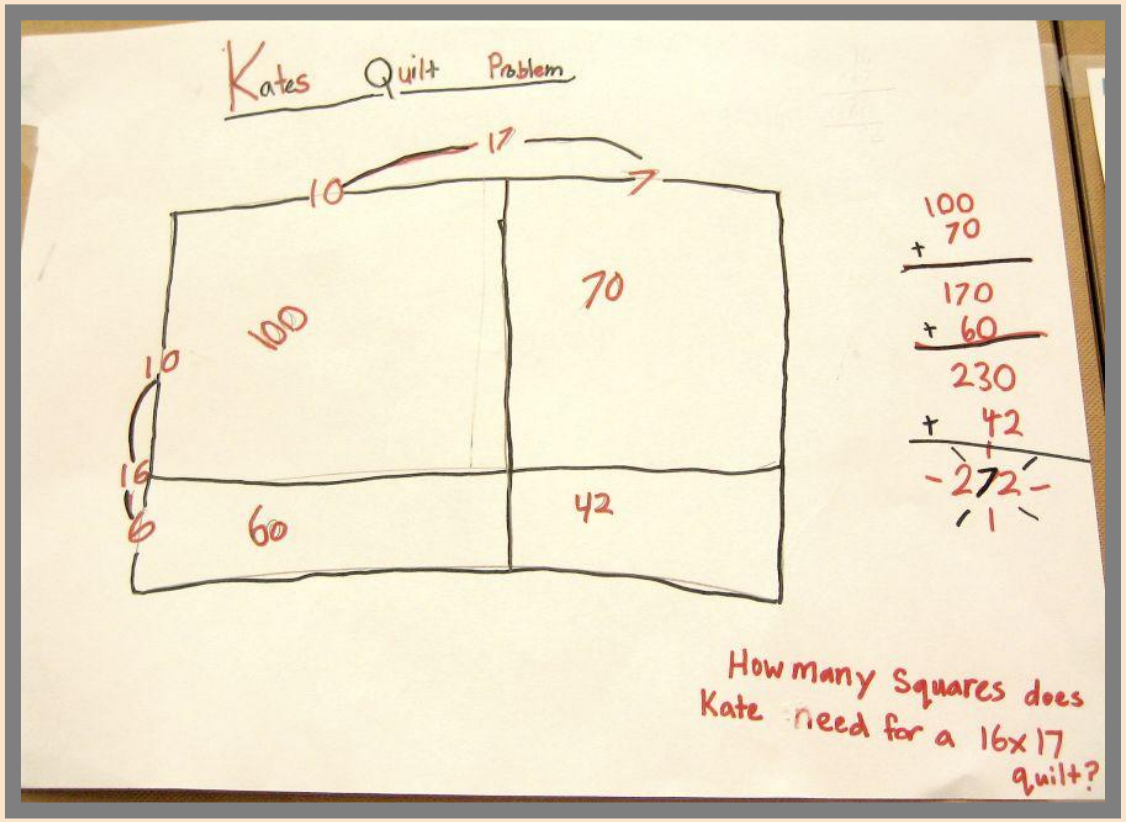
13 x 12 = ___

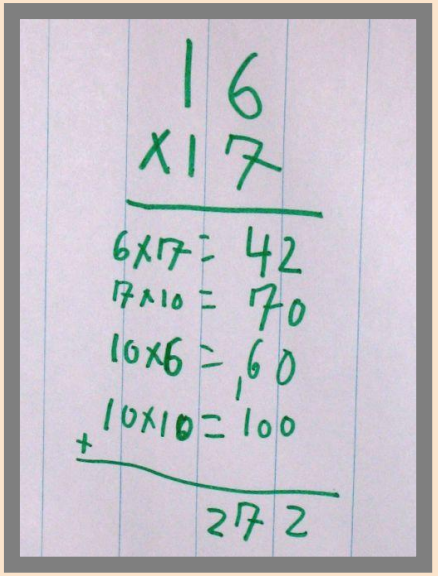
Number Pieces



100
30
20
+ 6
156

Number Pieces





How Questions

How do I help my child learn the math standards?

Ask questions
(*and get comfortable with productive struggle*)

Get excited about mistakes
(*and comfortable with productive struggle*)

Let your child know you believe they will achieve!

Question 1: What do you notice?

Question 2: How did you figure that out?

Question 3: How can you show your thinking? (e.g., picture, model, equation)

Question 4: Do you see any patterns?

How do I help my child when

I'm not a *math* person?

Rewind.

Neuroscience says you ARE!

When Questions

When do I ‘step in’ to help my child with math?

When your child asks for help.

When do I know it’s time to reach out to my child’s teacher for help?

The *Where* Question

Where do I find

resources

to help *me* help *my child*?

Helping Students With Math at Home

Math at Home Activities

Math Apps

Math Apps are engaging digital manipulatives students can use to solve math problems at home.

Bridges Family Support

Bridges Second Edition Family Support

Asking Questions
English
Spanish

Learning from Mistakes
English
Spanish

Promoting a Growth Mindset
English
Spanish

Mathematical Practice Cards
English
Spanish

Using Language Intentionally
English
Spanish

YouCubed
Parent Resources
Activities

Thank You!

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