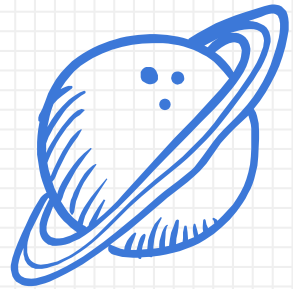
Welcome to Our Principal and Parent Workshop

Growing independent math learners
(A focus on Mathematical Practice 1)

Today's Focus

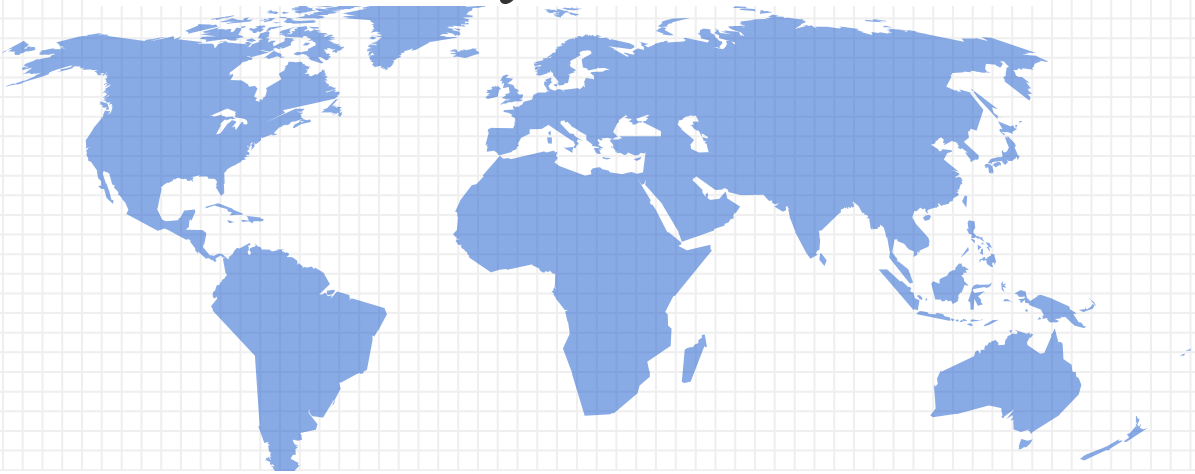
Introduce "Mathematical Practices"

Make connections to brain research



Explore ways for parents to support children's math at home

Comparisons of teaching in Japan and the US have shown that students in Japan spend 44% of their time "inventing, thinking and struggling with underlying concepts" but students in the U.S. engage in this behavior only 1% of the time.

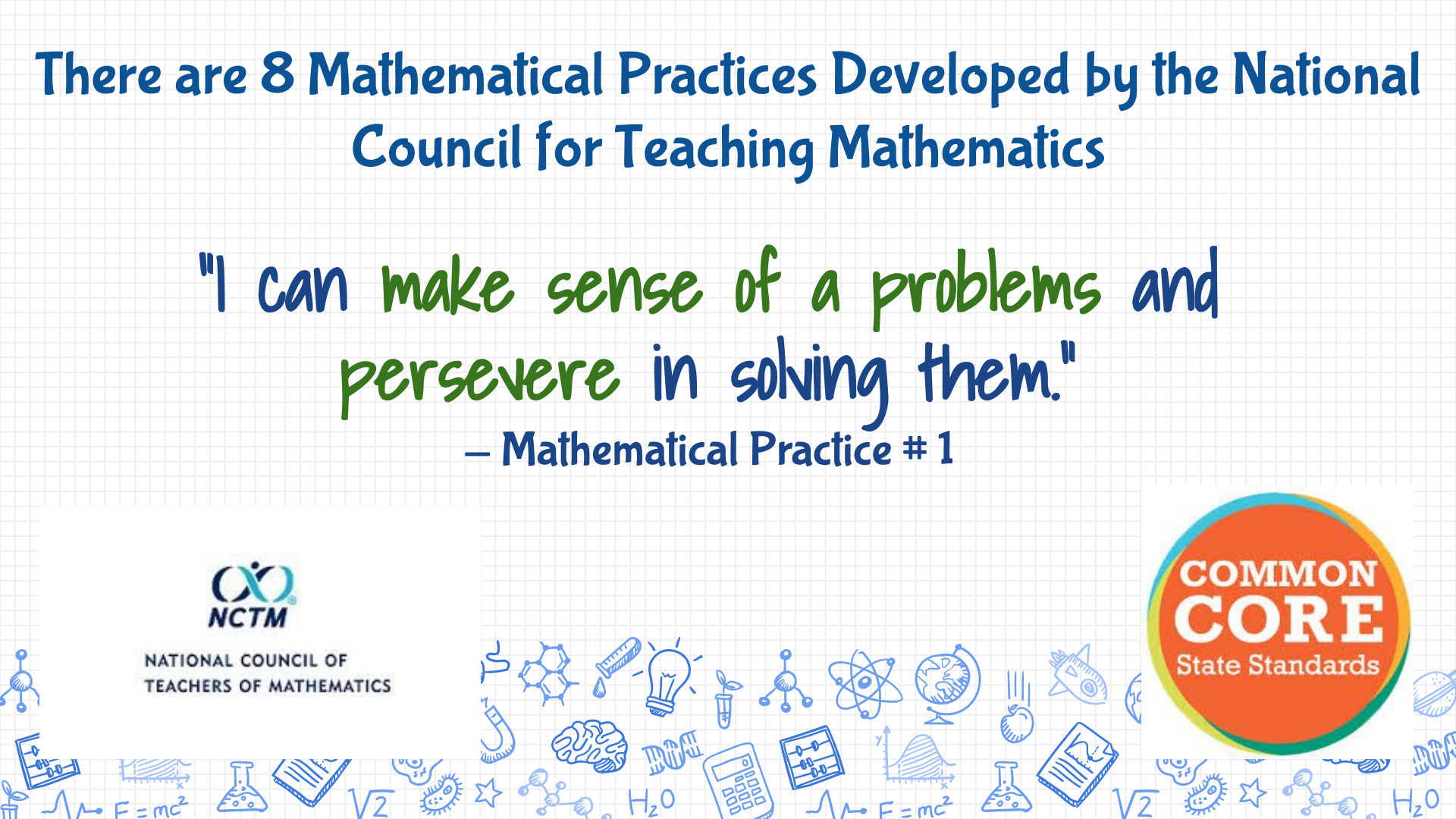


Stigler, J., & Hiebert, J. (1999). *The teaching gap: Best ideas from the world's teachers for improving education in the classroom*. New York: Free Press.

There are 8 Mathematical Practices Developed by the National Council for Teaching Mathematics

"I can make sense of a problems and persevere in solving them."

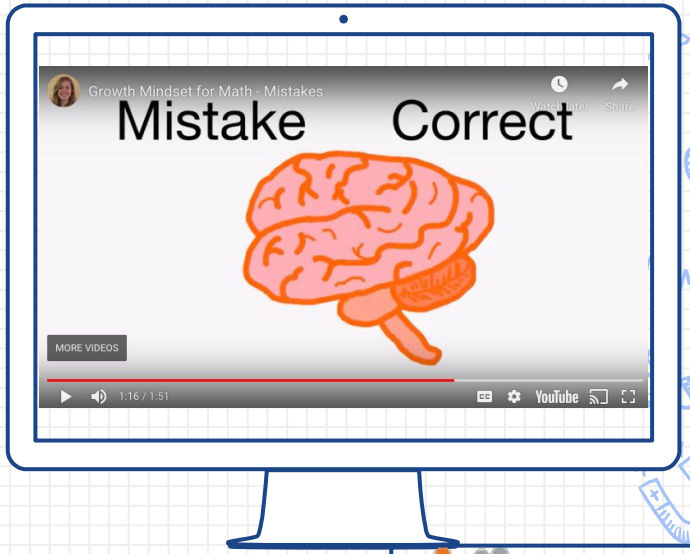
– Mathematical Practice # 1



Why Does Developing Independent–Thinkers Matter?

Our brains have the ability

promotes increased brain growth and spatial reasoning.

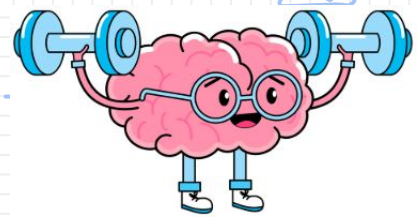


AMS American Mathematical Society
Advancing research. Creating connections.

"Scientists now know that the best times for brain growth and change are when people are working on challenging content, making mistakes, correcting them, moving on, making more mistakes, always working in areas of high challenge."

– Jo Boaler, Professor of Mathematics Education, Stanford University

So How Can Parents Support Independent Learners at Home?



Strategic Questions to Guide Student Thinking

Uncover: "What is the question?"

"Can you restate or re–tell me the question in your own words?"

Determine: "What information will you need to solve it?"

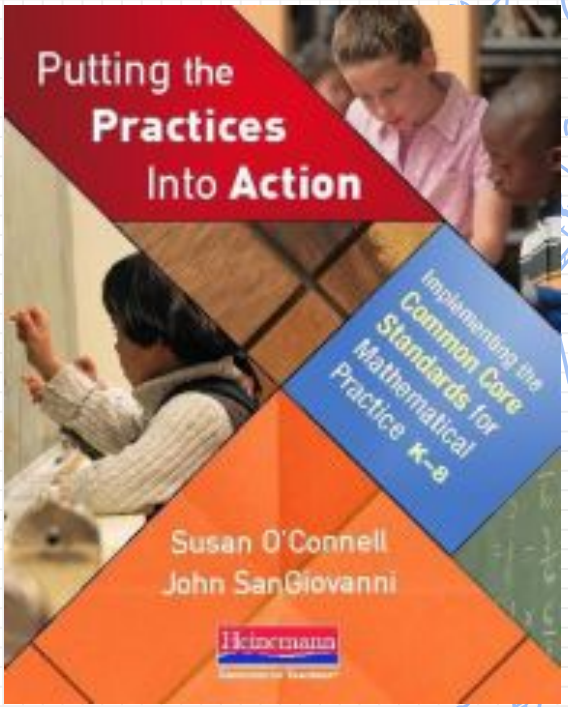
"Where will you find the information?"

Decide: "What should you do with the information?"

"What in the problem tells you to add, subtract, multiply, or divide?"

Evaluate: "Is there another way to solve it?"

"Could you have used a different method? Explain which one and why."



Thank you for helping us continue to grow the next generation of independent, mathematicians! Each family should receive an Independent Mathematician Kit which includes:

Examples of strategic questions to promote independent problem solving

Your mathematician's grade level goals

Teacher recommended math tools aligned with your child's current grade

How Else Can You Promote Math Learning at Home?

DreamBox aligns with your child 's current learning

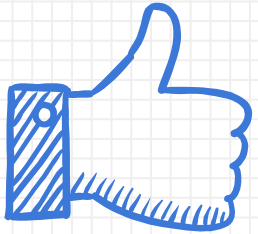
Runs on an adaptive engine

Individual licenses cost $20/month per child!

Principal & Parent Workshop Evaluation

We appreciate the time you've spent with us this morning!
Please complete this evaluation before you leave.
Thank you for your support!

Questions: *Preguntas:*	Circle One
Did you learn the importance between Mathematical Practice 1 and helping your child grow more independent with math? *¿Aprendiste la importancia entre la práctica matemática 1 y ayudar a tu hijo a ser más independiente con las matemáticas?*	*yes/si* *no*
Did you learn about why brain researchers believe challenging children's thinking promotes brain growth? ¿Aprendiste por qué los investigadores del cerebro creen que desafiar el pensamiento de los niños promueve el crecimiento cerebral?	*yes/si* *no*
Did you receive information on how to support your child becoming more independent using the Mathematician Kit and strategic questioning? *¿Recibió información sobre cómo ayudar a su hijo a ser más independiente utilizando el Kit de matemáticas y las*	*yes/si* *no*



THANKS!

Any questions?

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