Supporting Your Student with Math

Welcome!

Kimberly Grunder

Presenter

CJ Stewarts

Chat Moderator

Together, we will...

- Discuss the importance of **modeling a growth mindset about math skills**

- Review how to access information about **your student's math strengths** and **areas for growth**

- Practice **math strategies** that you can **use at home** with your student to **grow their math skills and confidence**

Agenda

1) How do our **beliefs** about math **influence** students?

2) What are my student's **strengths** and **areas for growth** in math?

3) How can I **support** my student to **grow** their math skills?

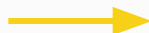# Our Beliefs Matter

Our Beliefs Matter

Mindsets are the **beliefs** that people hold about their **own intellectual abilities** and the **abilities of others**.

"I was never good at math." → **"Let's try to learn this together."**

"You'll never use this math in real life." → "This math is teaching you good problem-solving skills."

"This math is really hard." → "This is more challenging. How can we work through it in small steps?"

"I hate math." → **"This isn't my favorite topic, but I enjoy a good challenge."**

"You should be getting this." → "Let's take a break and try again later."

FIXED

GROWTH

**FIXED MINDSET** *VS.* **GROWTH MINDSET**

Your Learner

i-Ready

- i-Ready is a program that we use to **monitor** your student's **math and reading levels** AND **support them to grow** their **math and reading levels**

- Diagnostic assessments occur **3 times a year**

- Diagnostic results show us a **student's overall math level**, their **math strengths**, and their **math areas for growth**

Analyzing the Results

On Grade Level (495 - 564)

560

440

Test

(08/18/21)

Approaching
Grade 6

Placement
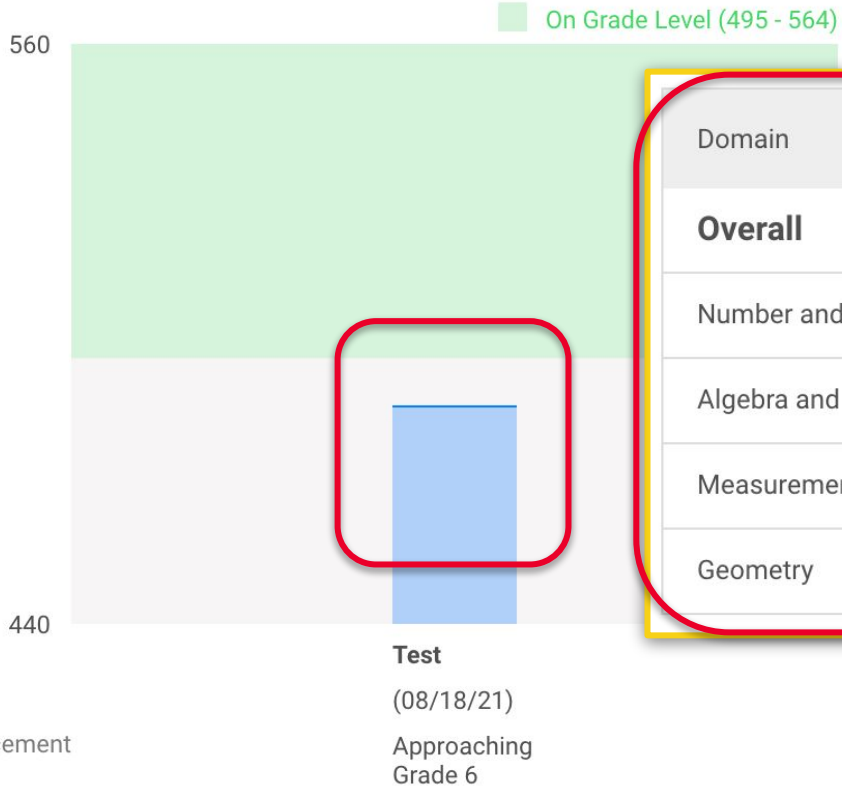
| Domain	Test (08/18/21)
Overall	**Approaching Grade 6**
Number and Operations	At Grade 6
Algebra and Algebraic Thinking	Approaching Grade 6
Measurement and Data	At Grade 6
Geometry	Needs Improvement

Use i-Ready weekly

- Complete 3 lessons per week to practice below-grade level skills AND to get ahead!
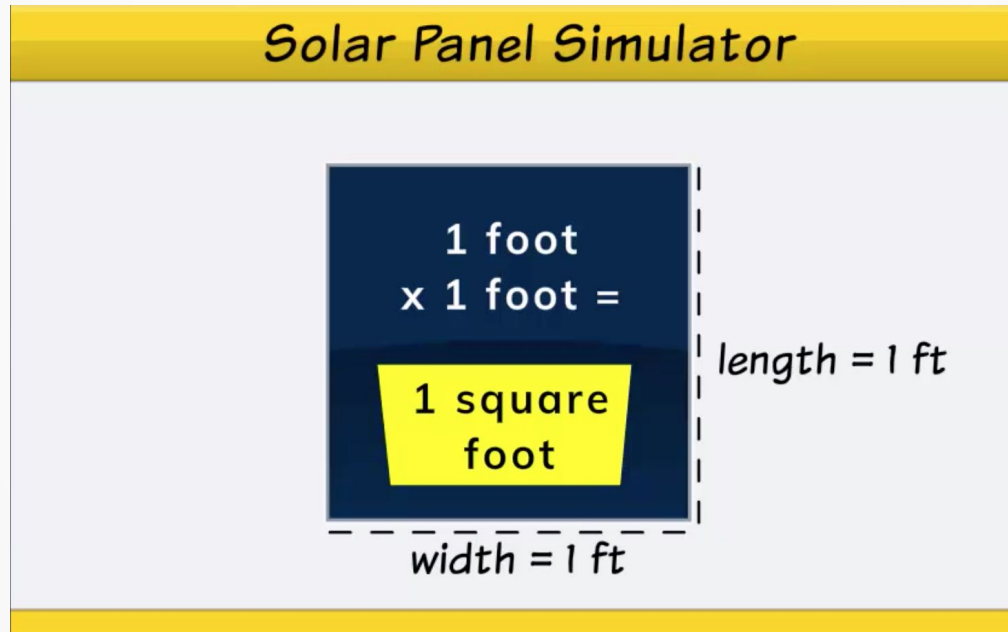
Resource

SmartStart i-Ready Frequently Asked Questions

mySchool.org/i-Ready
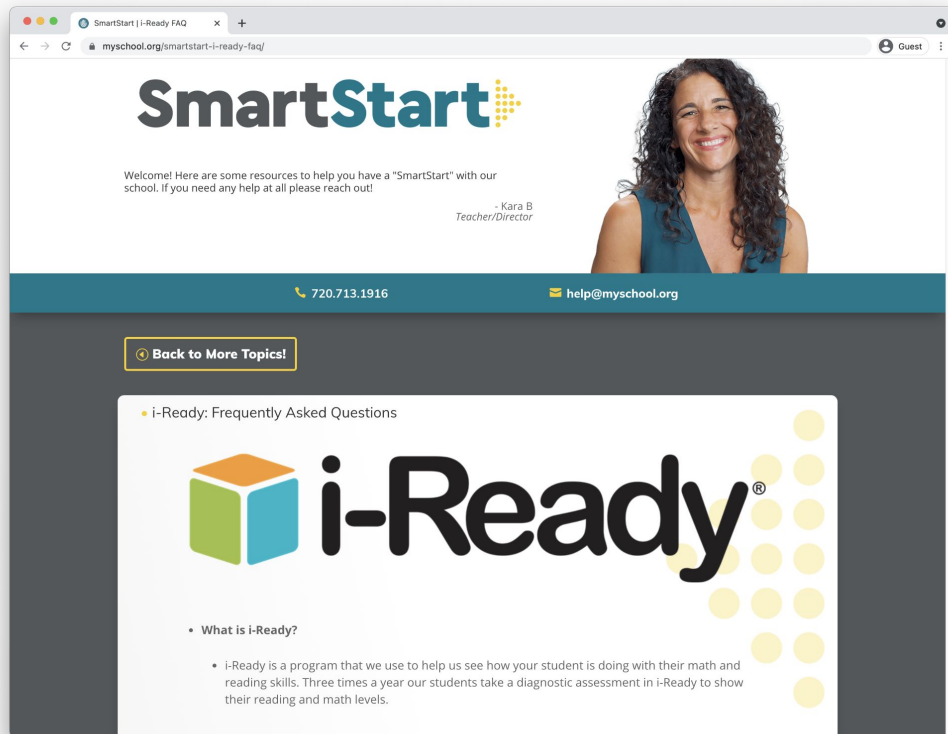
Strategies

Math Strategies

1. Analyzing Word Problems

2. Using Visuals

3. Use Your Resources

1. Analyzing Word Problems- Overview
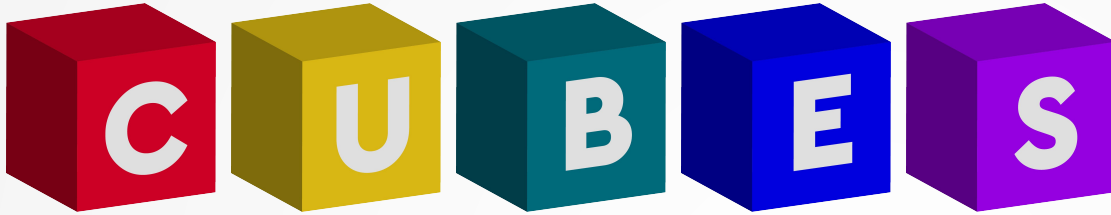
- **C**ircle the numbers

- **U**nderline the question

- **B**ox any operation words

- **E**liminate extra information and **E**xamine the question

- **S**olve and check

  - Ask yourself, "Does my answer make sense?"

Dr. Jo Boaler, *Mathematical Mindsets*

1. **Analyzing Word Problems** - *Application*

Lily ~~loved to collect butterflies and~~ caught 15 butterflies. She can put 3 butterflies ~~and 4 ants in each jar.~~ How many jars does Lily need to separate the 15 butterflies that she caught?

Solve and check:
3+3+3+3+3 = 15   **OR**   3x5 =15

1. **Analyzing Word Problems** - *Resource*

Analyzing Word Problems

Circle the numbers

Underline the question

Box any operation words

Eliminate extra info & **Examine** the question

Solve and Check ✔

Addition +	Subtraction –	Multiplication ×	Division ÷
• Add	• Compare 2 amounts	• Double	• Break up
• All together	• Decreased	• Each	• Divided by
• Combined	• Difference	• Factors	• Each
• Gain	• Fewer	• Multiples	• Equally separate
• In all	• How many more	• Of	• Goes into
• Increased	• Less	• Product	• Half
• More than	• Less than	• Times	• Out of
• Plus	• Loss	• Triple	• Percent
• Sum	• Minus	• Twice	• Quotient
• Together	• Subtracted from		• Shared
• Total	• Take away		• Split

Equals =	Variable x y
• Answer	• A number
• Equivalent	• Any number
• Is	• Letters/symbols
• Is the same as	• Some number
• Makes	• Unknown

Analyzing Word Problems
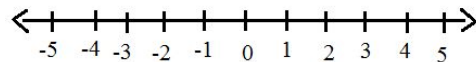
2. **Using Visuals** - *Overview*

- Visual representations (or **drawings!**) are a **powerful way** for students to **picture** abstract mathematical ideas.

- **Drawing** a situation, **graphing** lists of data, or **placing numbers** on a number line all help make abstract concepts **more concrete and organize information**

- Many math problems are presented in words, and creating a visual representation can help **break down the problem** into something the student can **see** and **understand**

- Visual representations can include **pictures, tables, charts**, and **graphs.**

2. **Using Visuals** - *Application*

- Example using a picture:

Lily loved to collect butterflies and caught 15 butterflies. She can put 3 butterflies and 4 ants in each jar. <u>How many jars does Lily need to separate the 15 butterflies that she caught?</u>
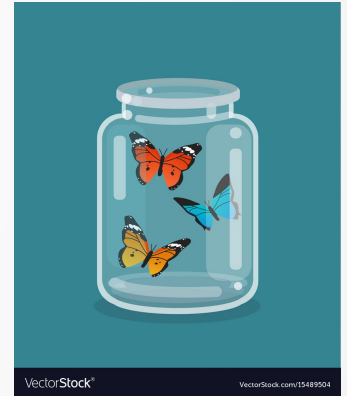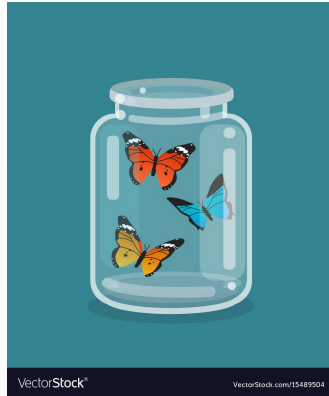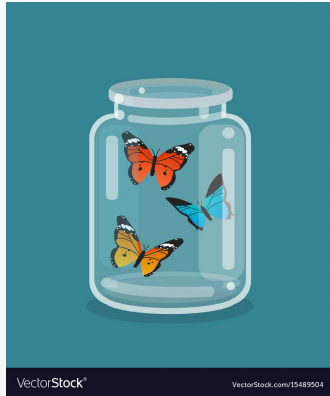
2. **Using Visuals** - *Resource*

List of math visual examples?

- Draw a picture

- Make a table or chart

- Number lines

- Use of manipulatives (coins, blocks, marbles)

Study Time vs. Grades

Student	Study Time (hours)	Grade
Bob	2	84
Carlos	4	91
Cindy	5	92
Florence	3	89
Kim	4	88
Lori	4	93
Marisa	1	78
Pat	2	89
Thomas	5	94
Wendy	2.5	87

3. **Use Your Resources** - *Overview*

- Using your resources means to utilize all the **materials and tools** provided.

- In the real world, we all use resources to find steps, visuals, and example problems.

- The key is being able to **follow the steps and use them properly**.

- Examples of using resources:

  - Finding an example problem in one of the lessons & following the same steps

  - Using a study guide or review assignment

  - Watching recordings of live sessions

  - Looking up a definition, formula, or conversion rate

  - Messaging or emailing the teacher a question

  - Signing up for tutoring sessions with the teacher

3. Use Your Resources - *Application*

Your student is taking a geometry exam and is stuck on this question.
They aren't sure what the differences are between a ray, line, and line segment.

3. Use Your Resources - *Application*

They could:

- Search in the Geometry module folder for:
  - a relevant lesson with definitions
  - a study guide or review assignment

3. Use Your Resources - *Application*

They could:

- Search in the Teacher Information and Links folder for:
  - a relevant live lesson recording
  - the teacher's contact info to ask them a question
  - directions to sign up for tutoring

1. Name the following geometric image?

○ ray AB

○ ray BA

○ line AB

○ line segment AB

⌄ 📂 Teacher Information and Links

    📄 Contact Information

    📄 Office Hours

    📄 Live Lessons

    📄 Additional Links
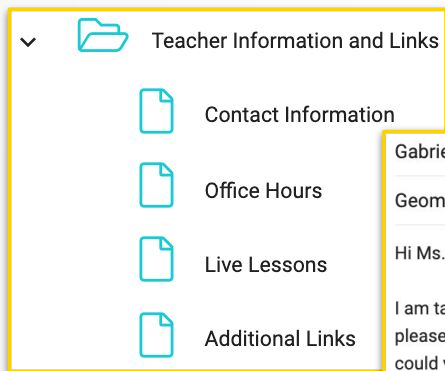
Gabriela Hadad (gabriela.hadad@astravo.org)

Geometry exam question

Hi Ms. Hadad,

I am taking the Geometry exam and my first problem is about rays and line segments, can you please help me to understand the difference? I tried looking for it in the lessons and I can't find it, could you direct me to where I can find it? I can also sign up for a tutoring session if this is not a quick question to answer.

-Student Name

3. Use Your Resources - *Application*

They could:

- Search online for definitions or helpful pictures

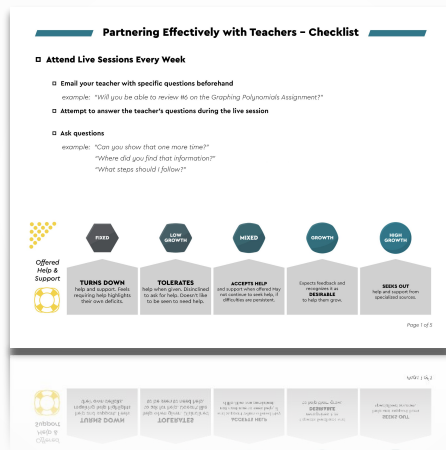1. Name the following geometric image?

○ ray AB

○ ray BA

○ line AB

○ line segment AB

3. **Use Your Resources** - *Resource*

Partnering Effectively With Teachers

Going Forward

We're here for you!

Email:

help@myschool.org

Call:

Arizona	Colorado
602-641-8220	720-713-1916

mySchool.org/SmartStart

Coming Up...

Date	Topic
December 1, 2021	Mental Health Resources
January 26, 2022	Executive Functioning Skills 101
February 9, 2022	Helping your Student Plan and Follow Through
March 9, 2022	Managing Conflict with Your Student
April 13, 2022	How Can I Support My Perfectionist Student?

Thank You!