



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

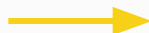
Mindsets are the **beliefs** that people hold about their **own intellectual abilities** and the **abilities of others.**



Instead of....

Try...

"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
MINDSET**

vs.

**GROWTH
MINDSET**





Your Learner

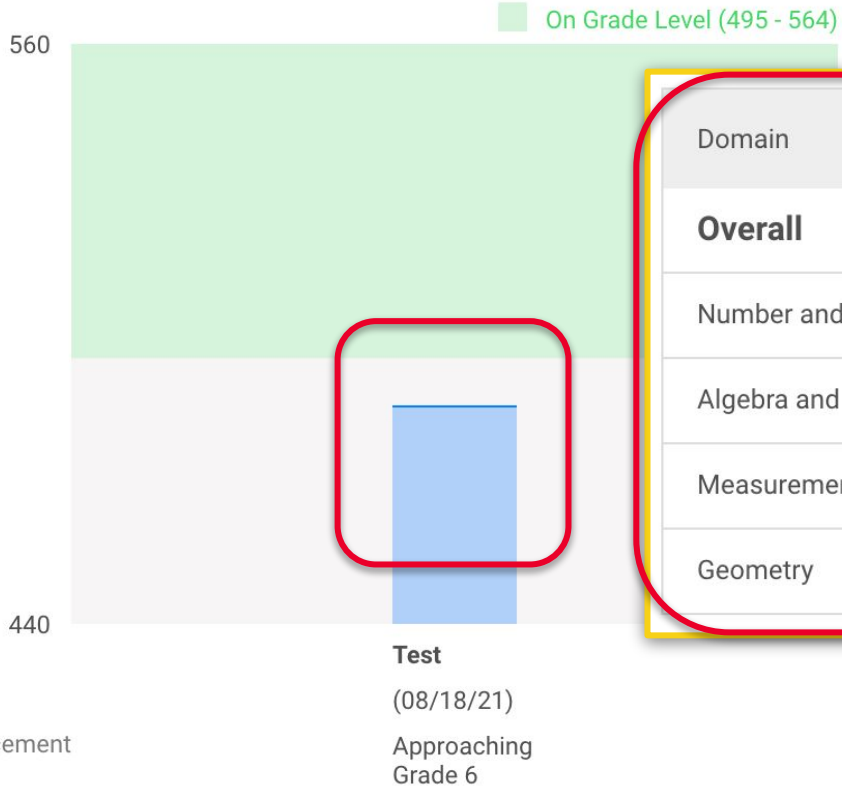


i-Ready

- 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

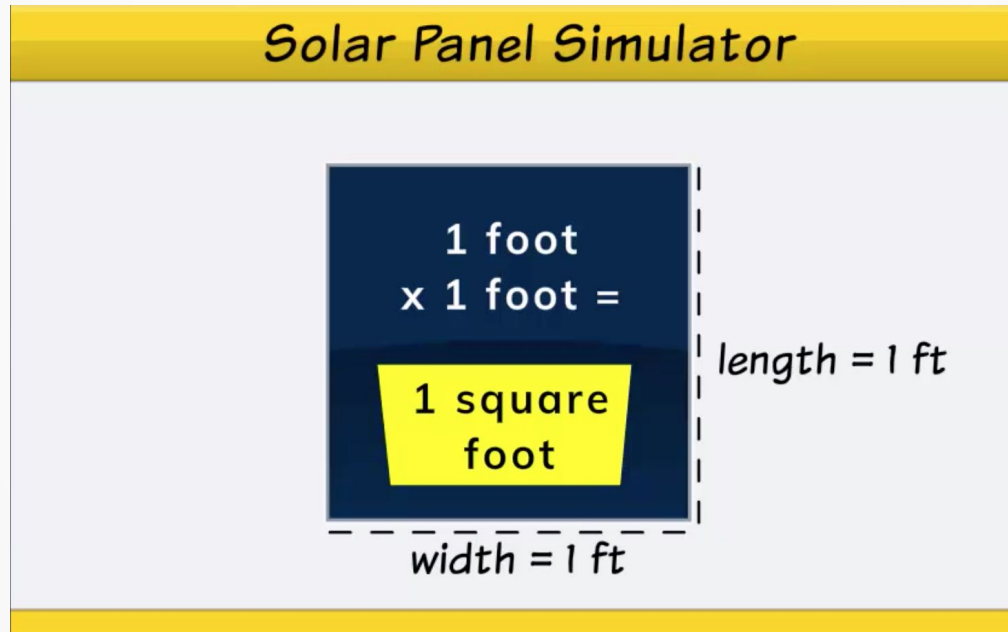


Domain		Test (08/18/21)	
Overall		Approaching Grade 6	
Number and Operations		At Grade 6	
Algebra and Algebraic Thinking		Approaching Grade 6	
Measurement and Data		At Grade 6	
Geometry		Needs Improvement	



Use i-Ready weekly

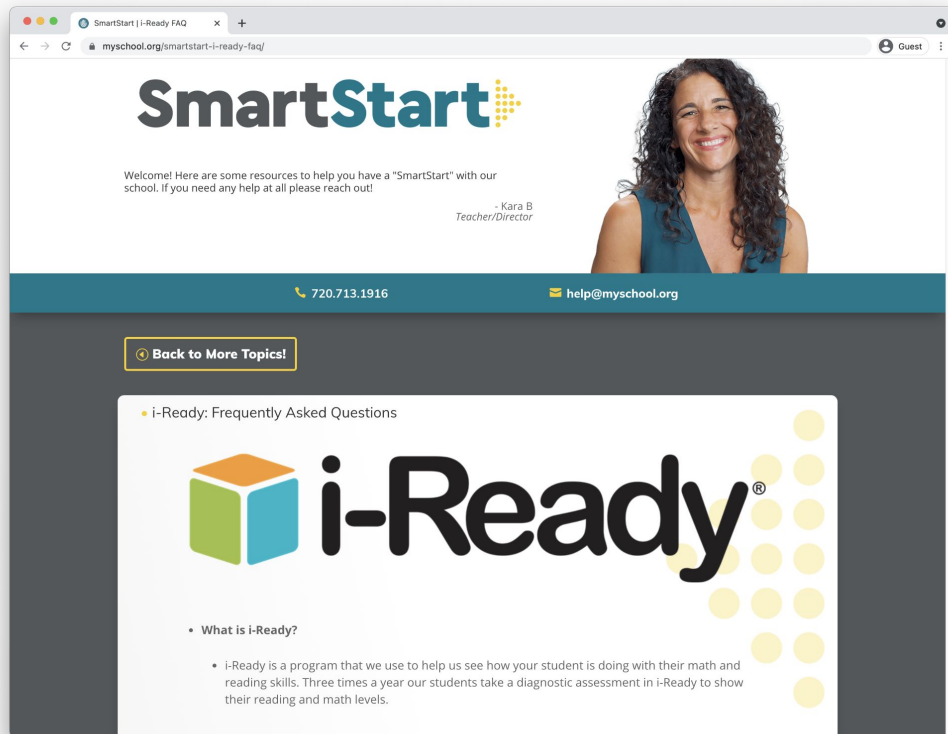
- Complete 3 lessons per week to practice below-grade level skills AND to get ahead!



Resource

SmartStart i-Ready Frequently Asked Questions

myschool.org/i-Ready





Strategies

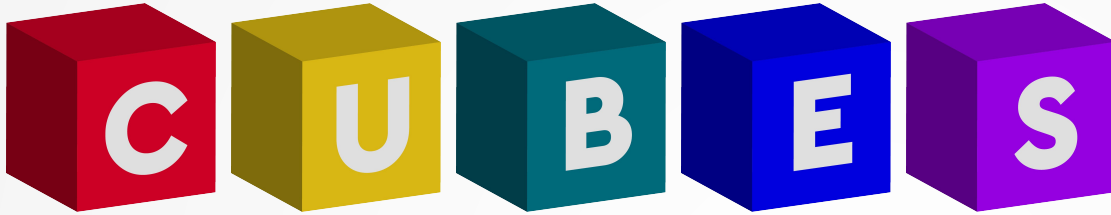


Math Strategies

1. Analyzing Word Problems
2. Using Visuals
3. Use Your Resources



1. Analyzing Word Problems- Overview



- Circle the numbers
- Underline the question
- Box any operation words
- Eliminate extra information and Examine the question
- Solve and check
 - Ask yourself, “Does my answer make sense?”



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:

$$3+3+3+3+3 = 15 \quad \text{OR} \quad 3 \times 5 = 15$$



1. Analyzing Word Problems - Resource

Analyzing Word Problems

C

U

B

E

S

Circle the numbers

Underline the question

Box any operation words

Eliminate extra info & Examine the question

Solve and Check ✓

Addition +	Subtraction -	Multiplication ×	Division ÷
<ul style="list-style-type: none">• Add• All together• Combined• Gain• In all• Increased• More than• Plus• Sum• Together• Total	<ul style="list-style-type: none">• Compare 2 amounts• Decreased• Difference• Fewer• How many more• Less• Less than• Loss• Minus• Subtracted from• Take away	<ul style="list-style-type: none">• Double• Each• Factors• Multiplies• Of• Product• Times• Triple• Twice	<ul style="list-style-type: none">• Break up• Divided by• Each• Equally separate• Goes into• Half• Out of• Percent• Quotient• Shared• Split
<div style="background-color: #f8d7da; padding: 5px;">Equals =</div> <ul style="list-style-type: none">• Answer• Equivalent• Is• Is the same as• Makes		<div style="background-color: #d1ecf1; padding: 5px;">Variable x, y</div> <ul style="list-style-type: none">• A number• Any number• Letters/symbols• Some number• Unknown	

Addition	Subtraction
<ul style="list-style-type: none">• plus• sum• total• together• all together• combined• increase• more than• gain• in all	<ul style="list-style-type: none">• minus• difference• less than• fewer• subtracted from• take away• decrease• less• how many more

Multiplication	Division
<ul style="list-style-type: none">• times• product• of• each• multiply• factors• double• triple• twice	<ul style="list-style-type: none">• quotient• percent• out of• half• goes into• equally separate• each• divided by• break up

Analyzing Word Problems



2. Using Visuals - Overview

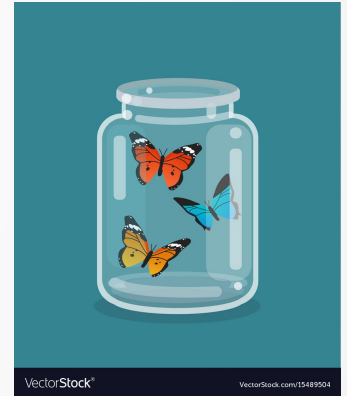
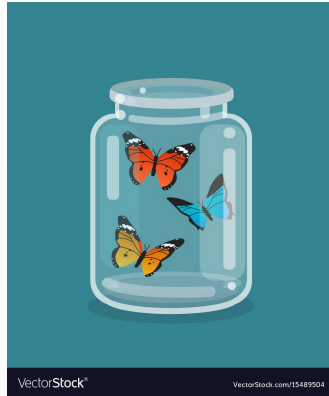
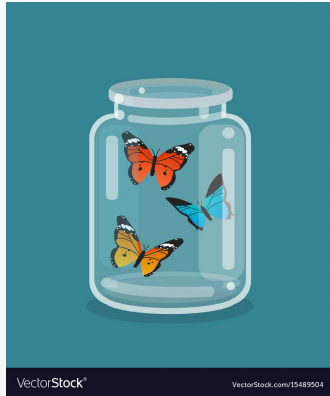
- Visual representations (or **drawings!**) are a **powerful way** for students to **picture** abstract mathematical ideas.
- **Drawing** a situation, **graphing** lists of data, or **placing numbers** on a number line all help make abstract concepts **more concrete and organize information**
- Many 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. How many jars does Lily need to separate the 15 butterflies that she caught?



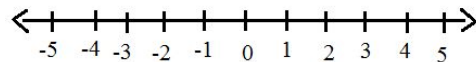
2. Using Visuals - Resource

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.

**Geometry Exam**
Math 6 B (SP21) 3 / Module 5: Geometry

1. Name the following geometric image?



☐ ray AB

☐ ray BA

☐ line AB

☐ line segment AB



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

1. Name the following geometric image?



- ☐ ray AB
- ☐ ray BA
- ☐ line AB
- ☐ line segment AB

Basic Geometric Terms
Math 6 B (SP21) 3 / Module 5: Geometry

Geometry 1

Some basic terms.

Module 5: Geometry

- Module 5 Study Guide - Geometry
- Basic Geometric Terms
- Basic Geometric Terms Quiz
- Angles and Their Relationships

A line is a straight row of points that goes on forever in both directions. A line is drawn using arrowheads to show that it never ends. The line is named using the letters of any two points on the line. The example shows Line AB.

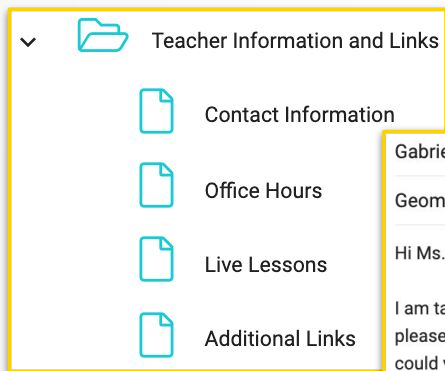
A piece of a line that has two endpoints is called a **line segment**. A line segment is named using its endpoints. The segment with endpoints A and B is shown in the example.

A **ray** is a part of a line that has only one endpoint and goes on forever in one direction. A ray is named by using the endpoint and some other point on the ray. The endpoint is always mentioned first. Ray AB is shown in the example.

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



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



1. Name the following geometric image?



- ☐ ray AB
- ☐ ray BA
- ☐ line AB
- ☐ line segment AB



3. Use Your Resources - Application

They could:

- Search online for definitions or helpful pictures

Google search results for "ray line segment".


Search results include:

- Lines, Angles, & Rays** (youtube.com): A video showing diagrams of lines, segments, and rays. It includes a diagram of a line segment AB , a ray EF , and a line AC . It also shows a diagram of a line segment AB and a ray AC meeting at point A , with the union $AB \cup AC$ forming an angle BAC .
- Lines, Rays and Line segments ...** (mathworksheets4kids.com): A table defining geometric terms.
- Lines, segments and rays work...** (k5learning.com): A worksheet with diagrams of lines, segments, and rays.
- Lines, Line** (onlinemathle...): A partial view of a definition.

Point, Line, Line segment & Ray		
Point	•	A point is an exact position on a plane surface.
Line	↔	A line is a set of points in a straight path that extends in opposite directions without ending.
Line segment	—	A line segment is a part of a line between two end points.
Ray	↗	A ray is a part of a line that has one end point and extends in one direction without ending.

Geometry Exam
Math 6 B (SP21) 3 / Module 5: Geometry

1. Name the following geometric image?



☐ ray AB

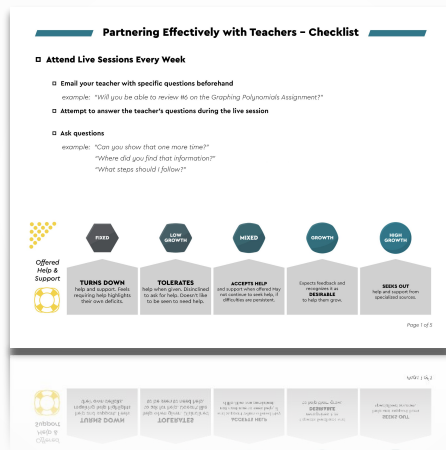
☐ ray BA

☐ 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

The screenshot shows a web browser window with the URL `myschool.org/smartstart`. The page features three distinct sections for a webinar series, each with a video player and a 'Learn More' button. The first section is titled 'WEBINAR SERIES 01' and the video is 'Building and Maintaining Positive Momentum with Your Learner'. The second section is titled 'LEARNING COACH WEBINAR SERIES: 02' and the video is 'My student is struggling. What can I do?'. The third section is titled 'LEARNING COACH WEBINAR SERIES: 03' and the video is 'How to Effectively Support Multiple Learners'. All videos are hosted by Kimberly Grunder. The page has a dark grey background with yellow polka dots on the right side. The browser window shows a 'Guest' user and standard navigation icons.

WEBINAR SERIES 01

Building and Maintaining Positive Momentum with Your Learner
hosted by Kimberly Grunder

click play 28:23

Join us as we explore strategies and techniques for building and maintaining positive momentum with your student!

[Learn More](#)

LEARNING COACH WEBINAR SERIES: 02

LEARNING COACH WEBINAR SERIES 02

My student is struggling. What can I do?
hosted by Kimberly Grunder

click play 40:34

My Learner is Struggling. What Can I Do?

We understand that having a learner who is struggling can feel overwhelming. This webinar will give you strategies and techniques on how to support your learner through academic challenges.

[Learn More](#)

LEARNING COACH WEBINAR SERIES: 03

LEARNING COACH WEBINAR SERIES 03

How to Effectively Support Multiple Learners.
hosted by Kimberly Grunder

click play

How to Effectively Support Multiple Learners

Supporting multiple learners has its advantages, and it can also be challenging to meet each student's needs – especially when it seems like multiple learners want your attention at the same time!

[Learn More](#)



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!

