

My Journal

Throughout the Mindsets About Math module, you will have opportunities to pause and reflect on prompts. Use this journal to complete the reflection activities.

Section 1: Get Started with Math Mindsets

Early Math Memories

Take a moment to think about your earliest math memory.

What feelings and thoughts come to mind?

Math Is All Around You!

What are some ways you use math in your daily life?

Observe: What Are Math Mindsets?

Observe this <u>video of dad, Chet Kingston</u>, discussing his feelings and thoughts about math. Notice how his math mindset changes.

What experiences might have helped change Chet's math mindset?





Math Mindsets Develop Early in Life

Think about a time when you felt like an "insider" or "outsider" in mathematics.

What made you feel this way?

Math Mindset Myths and Facts

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Math ability is something we are either born with or not. Some groups of people are likely to be better or worse at math.	Everyone can develop their math skills and positive math mindsets. All children are born with the capacity to learn math.
Boys are better at math than girls are.	Young boys and girls are equally capable in developing their math skills. A 2018 study examined gender differences on math tasks with children ages six months to eight years. They found no differences in how girls and boys performed on the math tasks at any age.

Did these or other myths impact you in your childhood or professional practice?





Developing Positive Math Mindsets

Here are some strategies for developing positive math mindsets:

- Notice how you already use math in your everyday life.
- Pause, notice, and name your feelings about math.
- Take time to reflect on and journal about math-related strengths or worries.

Identify one strategy you can use to develop more positive feelings and thoughts about math.

Section 2: Grow Your Positive Math Mindset

How We Talk About Math Matters

Think about a time when you heard an adult make one or more of the following statements about math:

- "I'm not a math person."
- "Math is boring."
- "I was never good at math, so I don't know how to help children with math."

How might these statements reinforce a fixed math mindset?



Observe: Becoming a Math Person

In the first video, a <u>preschool educator reflects</u> on attending a week-long Count Play Explore (formerly the California Statewide Early Math Initiative, or CAEMI) professional learning institute. She describes how the institute changed her perspective about being a "math person" and what it means to "do" math.

In the second video, <u>two educators reflect</u> on their early math memories. Notice how their early experiences with math impact their current math mindsets.

Do you relate to any of these educators' math mindsets? Why or why not?

Growth Mindset Language in Practice

Let's practice using growth mindset language to talk about math!

- Review the fixed mindset statements about math.
- Reflect on how you might reframe these statements using growth mindset language.

INSTEAD OF SAYING THIS	TRY THIS
I never felt like I was good at math. I feel overwhelmed to coach educators in math.	
I don't like math. It's hard for me to create enjoyable early math activities for children and families.	
Math makes me feel anxious. I don't like to do math with my child.	



Section 3: Make Math Playful

How Do You Play?

Let's explore a memory of a playful experience. Find a photo of yourself doing something you enjoy. If you cannot find a photo, think of an activity you enjoy doing.

- What emotions did you experience in this photo or activity?
- What made this experience playful and enjoyable for you?

Playing with Math in Everyday Life

How might engaging in playful math experiences affect the way you feel and think about math?

Let's Play with Math!

Let's use the example of patterns to explore how to engage playfully in math and build a positive math mindset.

What comes to mind when you think about the word "pattern?"





Playing with Patterns

Find a pattern in your environment or create one. Describe the pattern you found or created. Then represent it using two different sets of symbols.

Think about your experience finding a pattern and using different symbols to represent the pattern.

- In what ways was this experience playful?
- Did this feel like a math activity? Why or why not?

Five Key Considerations for Creating Playful Math Professional Learning Experiences

Consider how to create playful math professional learning experiences for adults in five key ways:

- Personal Connections
- Active Learning
- Collaboration and Sharing
- Trial and Error
- Reflection

Which of these considerations do you feel most comfortable implementing in your upcoming professional learning or coaching?

Which of these considerations do you want to learn more about and strengthen?



Section 4: Set Your Math Mindset Goals

Reflect: Dear Math

As a final reflection, draft a letter to math about your math-related feelings and thoughts. The letter will include childhood math memories, current experiences with math, and ideas on how to develop a positive math mindset. Consider using a few of the prompts below or create your own.

Dear Math,

As a child...

When I thought of you, I felt...

A powerful memory I have of you is...

I remember my family telling me...

I remember my teacher telling me...

Now...

When I think of you, I feel...

A fun moment I had with you today was...

Now, when I am challenged by you, I think about...

Going forward...

I want to feel...

By thinking positively about you, I can...

I can overcome my challenges with you by...

Here are the math mindset goals I am working toward...

Sincerely,

Draft your "Dear Math" letter in the space provided below.

