

**Stop Guess,
Start Progressing**
Harnessing the Power of
Learning Progressions
for Numeracy Success

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Where's the Math?




Learning Intentions:



By the end of today's session, you will:

- know what learning progressions are and why they matter
- explore the benefits of using learning progressions in math instruction
- learn how to develop learning progressions that will develop numeracy skills





Good students
aim for good grades.
Great students
aim for understanding.
Maxime Lagacé



4.PAFR.1.1



Use a strategy to accurately compute sums and differences of whole numbers up to 100,000 and justify the sum or difference.

Source: 2025 SCCCR Standards for Mathematics



4.PAFR.1.1



Use a strategy to accurately compute sums and differences of whole numbers up to 100,000 and justify the sum or difference.


$$298 - 4 = 62$$

What are your
notices?

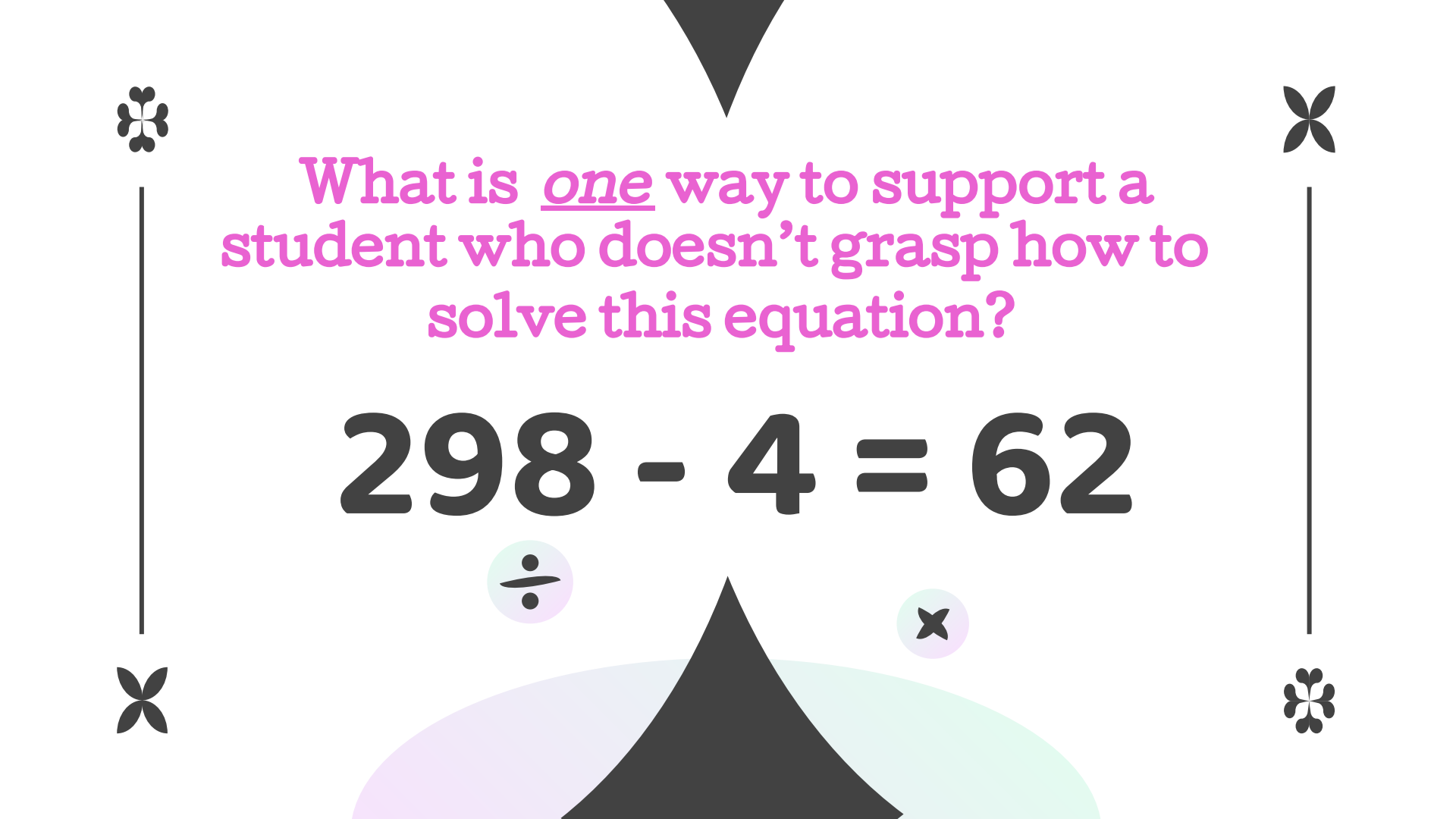




4.PAFR.1.1



Use a strategy to accurately compute sums and differences of whole numbers up to 100,000 and justify the sum or difference.



What is one way to support a student who doesn't grasp how to solve this equation?

$$298 - 4 = 62$$

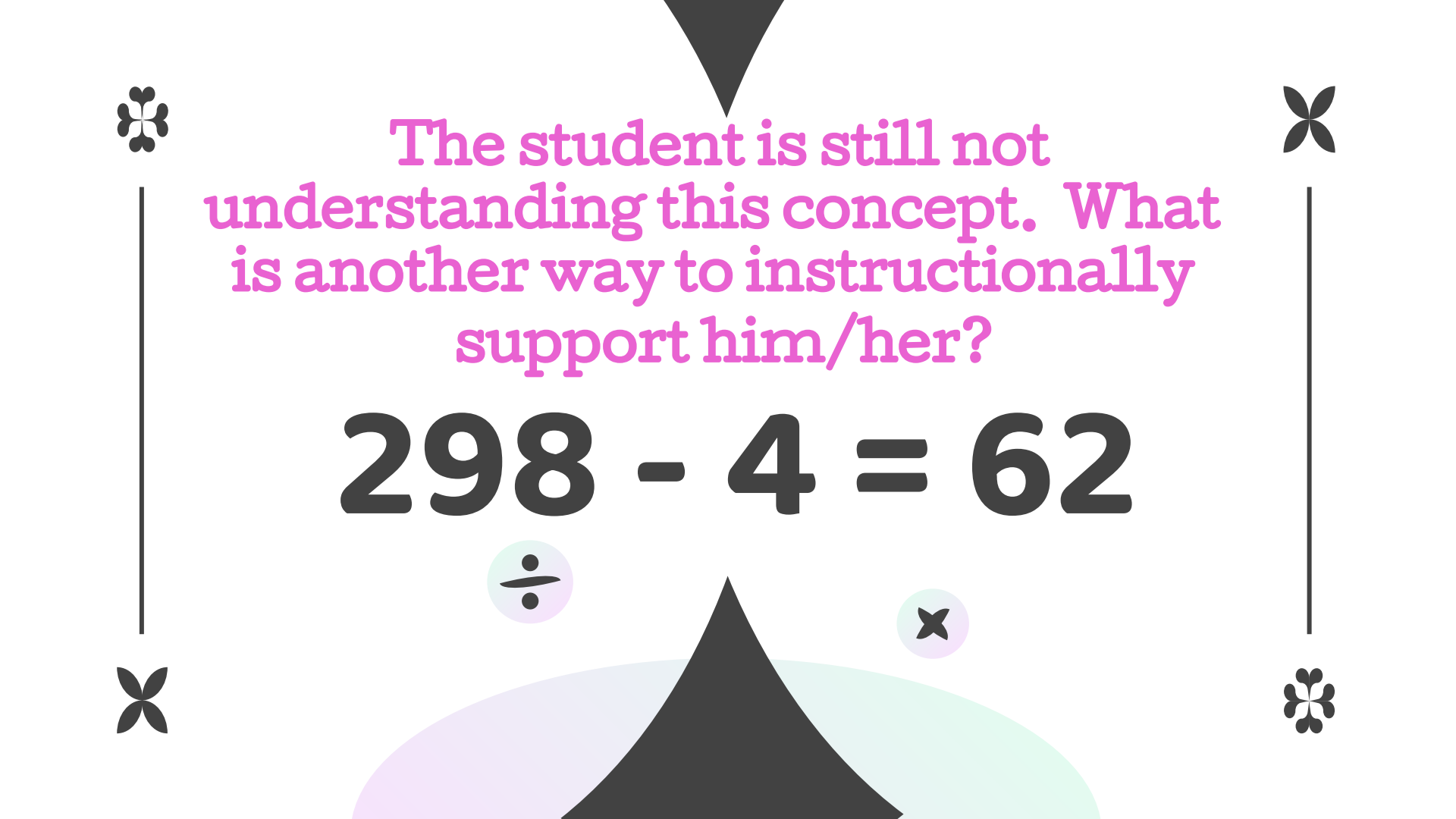




4.PAFR.1.1



Use a strategy to accurately compute sums and differences of whole numbers up to 100,000 and justify the sum or difference.



The student is still not understanding this concept. What is another way to instructionally support him/her?

$$298 - 4 = 62$$

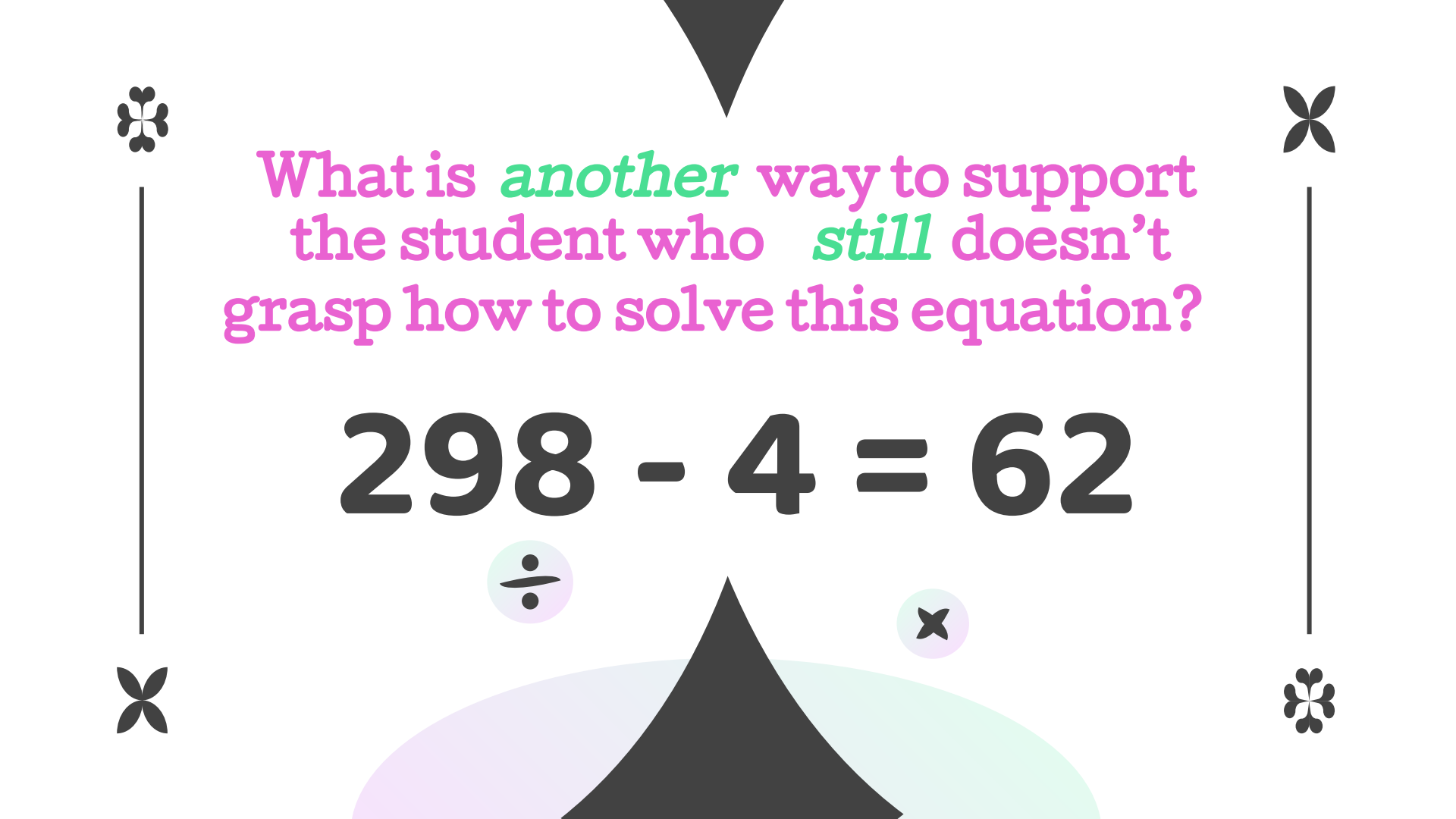




4.PAFR.1.1



Use a strategy to accurately compute sums and differences of whole numbers up to 100,000 and justify the sum or difference.



What is *another* way to support
the student who *still* doesn't
grasp how to solve this equation?

$$298 - 4 = 62$$



Let's Organize Our Thinking

With Your Group...

- Identify the sticky note(s) that identifies with EACH of the headings below:
 - Developing Foundational Skills
 - Approaching Grade Level Expectations
 - Meeting Grade Level Expectations
 - Exceeding Grade Level Expectations
- Now, place each of your sticky notes under the headings that you think are most appropriate.



What is a *Learning Progression* ?



So... What is a *Learning Progression* ?

A learning progression is a road or pathway that students travel as they progress toward mastery of the skills needed for career and college readiness.

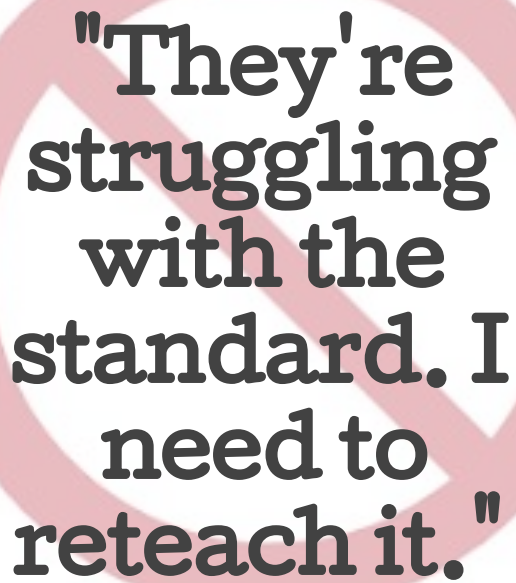
~Standards Aligned System: Pennsylvania
Department of Education



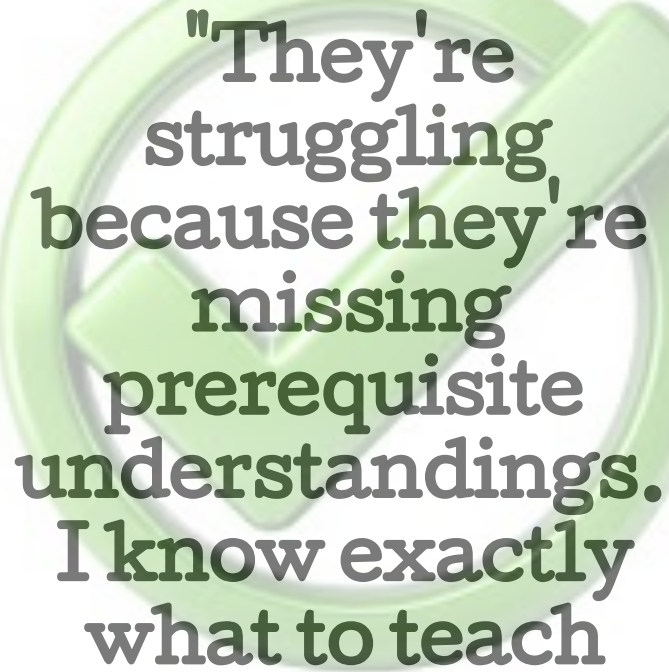
Learning progressions describe a path of increasing sophistication in student understanding in a subject matter domain.

~Michigan Assessment Consortium





**"They're
struggling
with the
standard. I
need to
reteach it."**



**"They're
struggling
because they're
missing
prerequisite
understandings.
I know exactly
what to teach
next."**



Let's Dive In



3. NR.1.1

Read, write, and represent whole numbers through the thousands period (0 to 999,999) on a number line and in standard, base ten language, word, and equations in expanded form.

What should students know and be able to do in order to show master of this standard?



Let's Dive In



3.NR.1.1

Students should know:

- Whole numbers through 999,999
- Number line
- Standard Form
- Base ten language
- Equations
- Expanded Form

Students should be able to (do):

- Write numbers through 999,999 in standard form
- Read numbers through 999,999 in standard form
- Read numbers using base ten language
- Write numbers through 999,999 in expanded form
- Represent numbers on a numberline
- Represent numbers through 999,999 using base ten language

Jot down what students should be able to do on sticky notes, and place them on posters underneath "Meets Grade Level Expectations".





Let's Dive In



3.NR.1.1

Read, write, and represent whole numbers through the thousands period (0 to 999,999) on a number line and in standard, base ten language, word, and equations in expanded form.

Developing Foundational Skills	Approaching Grade Level Expectations	Meeting Grade Level Expectations	Exceeding Grade Level Expectations
		<ul style="list-style-type: none">• Write numbers through 999,999 in standard form• Read numbers through 999,999 in standard form• Read numbers using base ten language• Write numbers through 999,999 in expanded form• Represent numbers on a numberline• Represent numbers through 999,999 using base ten language	





Let's Dive In

3.NR.1.1



Read, write, and represent whole numbers through the thousands period (0 to 999,999) on a number line and in standard, base ten language, word, and equations in expanded form.

Developing Foundational Skills	Approaching Grade Level Expectations
	

Access your 1st/2nd grade state math standards or the South Carolina math standards in the QR Code below to guide your work.





Let's Dive In

3.NR.1.1



Read, write, and represent whole numbers through the thousands period (0 to 999,999) on a number line and in standard, base ten language, word, and equations in expanded form.

Rather than going to the next grade level standards, let's increase the rigor for students who are exceeding expectations.



Meeting Grade Level Expectations	Exceeding Grade Level Expectations
<ul style="list-style-type: none">• Write numbers through 999,999 in standard form• Read numbers through 999, 999 in standard form• Read numbers using base ten language• Write numbers through 999,999 in expanded form• Represent numbers on a numberline• Represent numbers through 999,999 using base ten language	

What are the benefits of creating *Learning Progressions* ?



How can you put this
work *into action* ?





1.07

With an effect size of 1.07, learning progressions help educators pinpoint learning needs, provide targeted support, and significantly improve student achievement.

Source: Hattie, J. (n.d.). *Visible Learning MetaX: Hattie's List of Effect Sizes 2023*. Visible Learning. <https://visible-learning.org/hattie-ranking-backup-195-effects/>

Learning Progression

Standard: _____

Grade level: _____

Developing
Foundational Skills for
Grade Level Standard

Learning Target(s):
I can...

Approaches Expectations
of Grade Level Standard

Learning Target(s):
I can...

Meets Expectations
of Grade Level Standard

Learning Target(s):
I can...

Exceeds Expectations
of Grade Level Standard

Learning Target(s):
I can...

Learning Experiences:

Learning Experiences:

Learning Experiences:

Learning Experiences:

Small Group:

Small Group:

Small Group:

Small Group:

Success Criteria:

Success Criteria:

Success Criteria:

Success Criteria:



Put Your Learning Progression to Work!



Let's Sum Up Today's Work!

Unpack the standard!

List skills that align to each competency level.

Determine/identify activities that can be used to support students at each level.

Use formative/summative assessment data to determine small groups.

Thank You!!!

**Questions?
Want to Chat More?**

Let's Connect!



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