Helping Your Child Master Math

Study Strategies and IXL Skills

Liz Golden & Rachel Rabin

Tonight's Outcomes

01

Navigating Math at Home

02

Accessing Resources

03

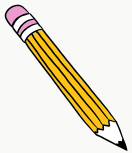
Online Tools/IXL

Just a note

Many strategies will be discussed this evening. You don’t need to use every strategy. Try each strategy until you decide what works best for YOU!

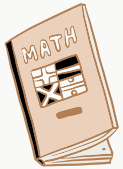
Math is...

Fill in the blank



Math is...

Math is...



Math is...

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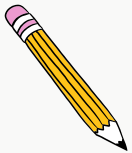
Fill in the blank

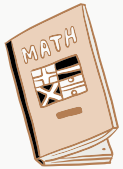


Math is...

challenging

Math is...

for life



Math is...

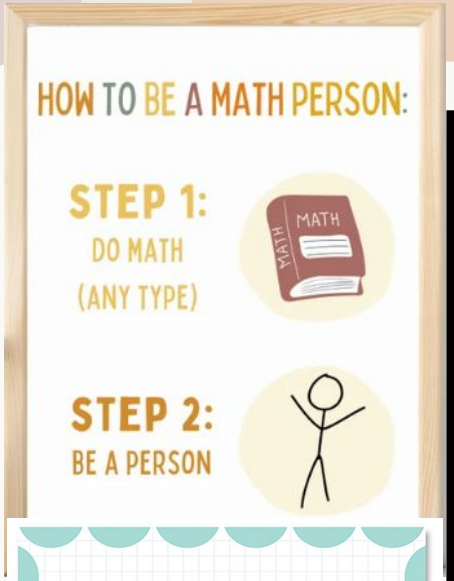
the study of patterns and relationships

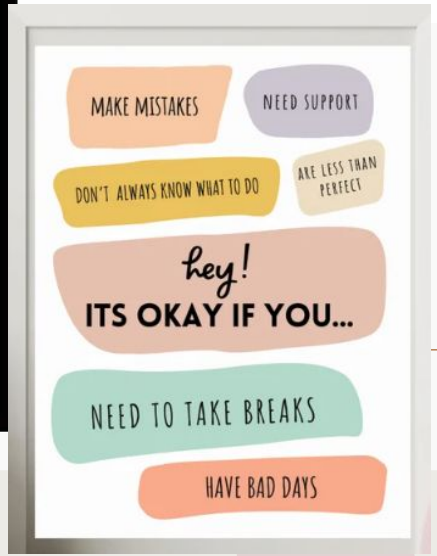
01

Navigating Math at Home

Be positive about math

- Have a supportive attitude
- Celebrate your child's achievements





Ask Questions About Topics

- Read homework problems with your child.
- Ask them questions about math class

How do I help my child...

... be a productive mathematical thinker?

Remind your child that working hard to understand a tough problem helps build their learning muscles! Ask questions to learn what your child understanding and help them find a way to get started on a task. Encourage them to use mathematical language and pay attention to details.

...be a productive mathematical thinker?

Ask

- What do you think that problem is asking?
- What's the word for _____?
  (ex. A shape with three sides)
- Does your answer seem reasonable?
- What might you do to get started?

How do I help my child...

... reason and explain in mathematics?

Encourage your child to explain their thinking about a problem and tell you why they did something, not just what they did. Expect them to refer to objects or drawings as well as talk about numbers and equations as they share their thinking.

...be a productive mathematical thinker?

Ask

- How did you figure that out?
- What were you thinking when you placed your game marker there?
- Can you find a way to prove that?
- How could you make this easier for someone else to understand your thinking?
- Can you convince me?

How do I help my child...

... model and use tools in mathematics?

Encourage your child to represent a problem in more than one way, including building a model, drawing a sketch, or writing an equation. Ask your child what tools or models they have used that might be helpful.

...model and use tools in mathematics?

Ask

- Can you draw a picture to show your thinking?
- What equation might represent this problem?
- What tools might you use to help you solve this problem?
- What can you use besides words to show how you solved the problem?
- What labels can you add to your picture?

How do I help my child...

... see structure and generalize in mathematics?

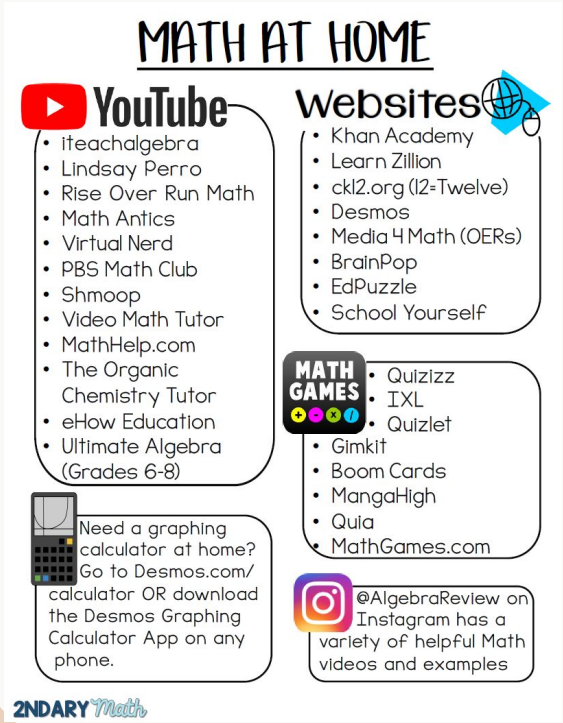
Make a habit of asking your child if they notice any patterns, both in their mathematics work and in the world around them. Encourage them to think about how a specific problem is like others they have solved and how seeing those relationships can be helpful.

...see structure and generalize in mathematics?

Ask

- What other problems does this remind you of?
- What do you notice?
- Does that always work? Why or why not?
- Do you see any patterns?
- What do you predict will happen next? Why?

Watch Videos for Support



- Search for help on online

Practice Math Skills

- Set a timer for 30 minutes or less to complete an assignment
- Make it fun!

Play Games

- Have a family game night
  - Battleship, Monopoly, Sequence, Uno are some examples
  - Games teach number sense!

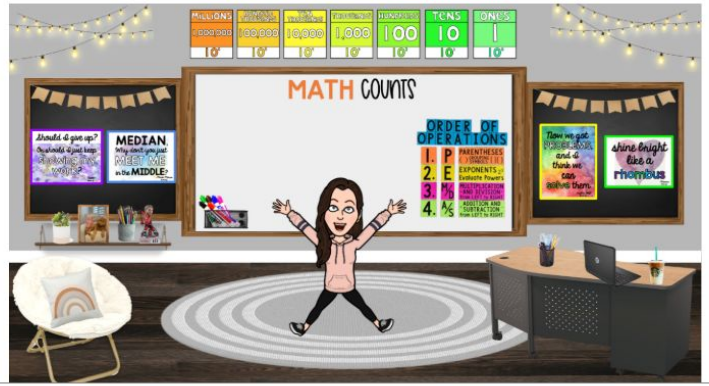
Find a balance

- Kids need to be outside, hang with friends, and just relax!
- Try to make math homework time positive and manageable.

02

Accessing Resources

Mrs. Rabin's ACC 6+ Class



Email Mrs. Rabin

[Helpful Resources] [Modules] [Syllabus]

ACC 6+ Calendar

November-ACC 6+ Calendar *work is due the following class period * 6th grade

Monday	Tuesday	Wednesday	Thursday	Friday
3 No School-END OF MP1	4 Unit 2 Lesson 21 HW: Pgs. 233-234 #1-6	5 SEE ODE SLIDES HW: All ODE work due by 11/10	6 SEE ODE SLIDES HW: All ODE work due by 11/10	7 SEE ODE SLIDES HW: All ODE work due by 11/10
10 Unit 2 Lesson 22 HW: Pgs. 238-239 #1-5	11 Unit 2 Lesson 23 HW: Pgs. 244-245 #1-6	12 Quiz Lessons 20-22 Unit 2 Lesson 24 HW: Pgs. 250-251 #1-4	13 End of Unit 2 Review HW: Finish study guide	14 End of Unit 2 Assessment HW: IXL due 11/21
17 Unit 3 Lesson 1 HW: Pgs. 9-11 #1-7	18 Unit 3 Lesson 2 HW: Pgs. 17-18 #1-6	19 Cool Down 1 & 2 Unit 3 Lesson 3 HW: Pgs. 25-26 #1-6	20 Unit 3 Lesson 4 HW: Pgs. 32-33 #1-6	21 Unit 3 Lesson 5 HW: None :)
24 Panther Day/ Early Release HW: None :)	25 Early Release HW: None :)	26 No School	27 No School	28 No School

1 Google Slides

MP 2 Week 2 : 11/10-11/14

Monday 11/10

Unit 2 Lesson 22

Tuesday 11/11

Unit 2 Lesson 23

Wednesday 11/12

Unit 4 Lesson 24

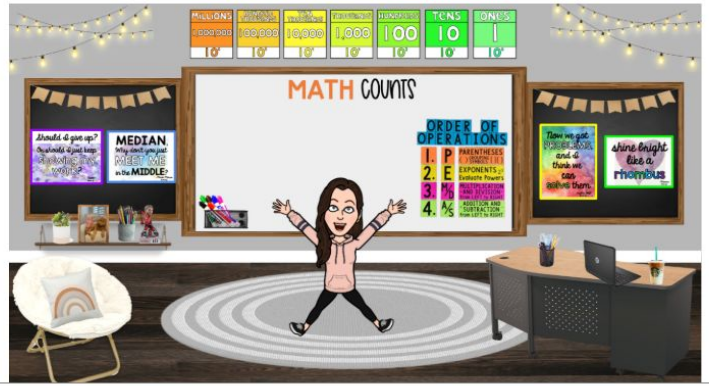
Thursday 11/13

Unit 2 Review Day

Friday 11/14

Unit 2 Test Day

Mrs. Rabin's ACC 6+ Class



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1 Google Slides

Math 6 Unit 2: Ratios, Rates, and Percentages

Teacher Notes	*Homework Answer Keys*	*Other Resources*
Lesson 1: Representing Ratios with Diagrams	U2L1 Practice Problems	
Lesson 2: Mixtures	U2L2 Practice Problems	*Blank PDF of Unit 2 Workbook*
Lesson 3: Defining Equivalent Ratios	U2L3 Practice Problems/	
Lesson 4: Introducing Double Number Line Diagrams	U2L4 Practice Problems	
Lesson 5: Creating Double Number Line Diagrams	U2L5 Practice Problems	*Learnzillion Family Materials*
Lesson 6: Per Each	U2L6 Practice Problems	
Lesson 7: Comparing Situations by Examining Ratios	U2L7 Practice Problems	
Lesson 8: Representing Ratios with Tables	U2L8 Practice Problems	
Lesson 9: Navigating a Table of Equivalent Ratios	U2L9 Practice Problems	
Lesson 10: Solving Equivalent Ratio Problems	U2L10 Practice Problems	
Lesson 11: Part-Part-Whole Ratios	U2L11 Practice Problems	
Lesson 12: Solving More Ratio Problems	U2L12 Practice Problems	
Mid Unit Study Guide	Mid Unit Answer Key	
Lesson 13: The Burj Khalifa	U2L13 Practice Problems	
Lesson 14: Measuring Different-Sized Units	U2L14 Practice Problems	
Lesson 15: Converting Units	U2L15 Practice Problems	
Lesson 16: Comparing Speeds and Prices	U2L16 Practice Problems	
Lesson 17: Interpreting Rates	U2L17 Practice Problems	
Lesson 18: Equivalent Ratios Have the Same Unit Rates	U2L18 Practice Problems	
Lesson 19: Solving Rate Problems	U2L19 Practice Problems	
Lesson 20: Percentages and Double Number Lines	U2L20 Practice Problems	
Lesson 21: Percentages and Tape Diagrams	U2L21 Practice Problems	
Lesson 22: Benchmark Percentages	U2L22 Practice Problems	
Lesson 23: Solving Percentage Problems	U2L23 Practice Problem	
Lesson 24: Finding the Percentage	U2L24 Practice Problems	
Unit 2 Review	Unit 2 Review Answer Key	

2025/2026 S1

- Home
- Modules
- People
- Announcements
- Assignments
- Discussions
- Quizzes
- Grades
- Pages
- Files
- Outcomes
- Syllabus
- BigBlueButton
- Collaborations
- Rubrics
- Settings

Mrs. Golden's Algebra 1

Mrs. Golden's Algebra Class

Email Mrs. Golden

Modules | Course Overview | + Helpful Hints

Other Info!

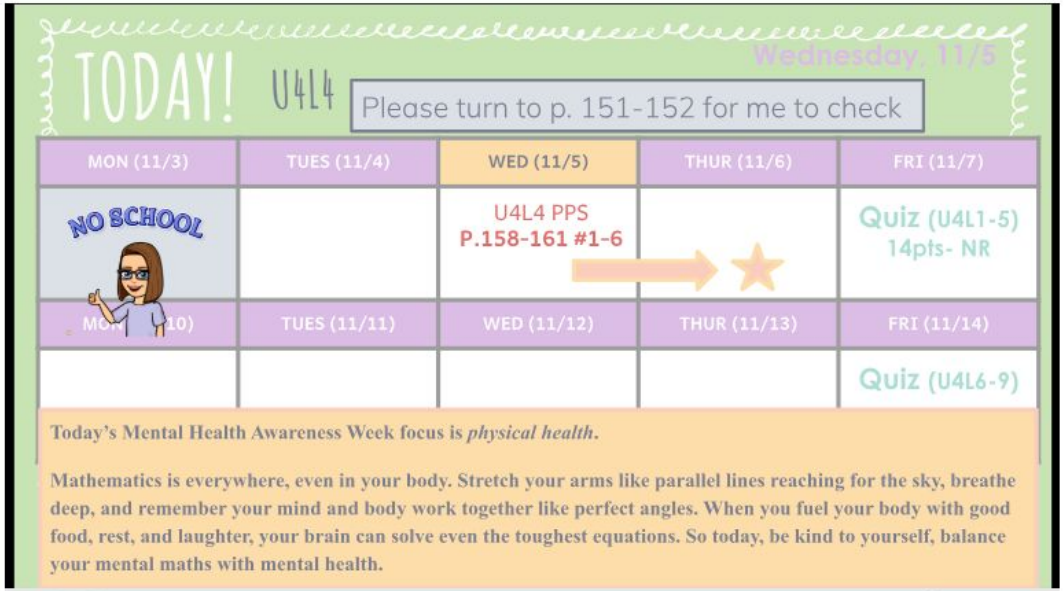
Electronic Copies of Student Workbooks (Some page numbers might not match)

Units 1-2

Units 3-5

- Unit 4: Functions (Click in each day to see the slides, homework, and any extra resources!)
  - U4 Day 0: Functions Preview (10/29)
  - U4L1-2: Describing and Graphing Functions (10/30)
  - U4L2: Function Notation (10/31)
  - U4L3: Interpreting and Using Function Notation (11/4)
  - U4L4: Using Function Notation to Describe Rules (11/5)
  - U4L1-5 Review (11/6)
  - U4L1-5 Quiz (11/7)

U4L4: Using Function Notation to Describe Rules (11/5)



U4L4 PPS Key

2025/2026 S1

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Units 1-2

Units 3-5

Helpful Hints

03

Online Tools

Family Math Support Center

Specific examples and guidance for mathematics curriculum by grade and subject.

FAMILY MATH SUPPORT CENTER

Middle School

- Math 6
- Math 7
- Math 8
- IM
- Algebra

FAMILY MATERIALS

Math 8

These short summary videos and resources will give you a brief overview of the lessons that students participate in during class and help you to understand how the concepts are taught. The video lesson summaries highlight key points and vocabulary that students learn across several lessons. This supports students for checking their understanding and reviewing important concepts and vocabulary. Videos can also be viewed with children as a review of concepts covered in class.

Unit 1

Rigid Transformations and Congruence

- Rigid Transformations
- Properties of Rigid Transformations
- Congruence

Unit 2

Dilations, Similarity, and Introducing Slope

- Dilations
- Similarity
- Slope

Unit 3

Linear Relationships

- Proportional Relationships
- Representing Linear Relationships
- Finding Slopes

Unit 4

Linear Equations and Linear Systems

- Puzzle Problems
- Systems of Linear Equations

Unit 5

Functions and Volume

- Inputs and Outputs
- Linear Functions and Rates of Change
- Cylinders and Cones
- Dimensions and Spheres

Unit 6

Associations in Data

- Does This Predict That?
- Associations in Categorical Data

Unit 7

Exponents and Scientific Notation

- Exponent Review
- Scientific Notation

Unit 8

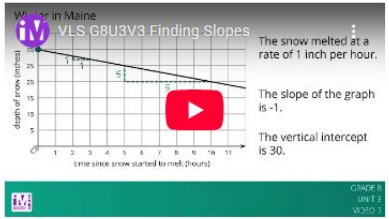
Pythagorean Theorem and Irrational Numbers

- The Size of Shapes
- The Pythagorean Theorem
- Side Lengths and Volumes of Cubes

Unit 9

Putting it All Together

Finding Slopes



This week your student will investigate linear relationships with slopes that are not positive. Here is an example of a line with negative slope that represents the amount of money on a public transit fare card based on the number of rides you take:

The slope of the line graphed here is since This corresponds to the cost of 1 ride. The vertical intercept is 40, which means the card started out with $40 on it.

One possible equation for this line is It is important for students to understand that every pair of numbers that is a solution to the equation representing the situation is also a point on the graph representing the situation. (We can also say that every point on the graph of the situation is a solution to the equation representing the situation.)

Here is a task to try with your student:

A length of ribbon is cut into two pieces. The graph shows the length of the second piece, , for each length of the first piece, .

Learn with IXL at home

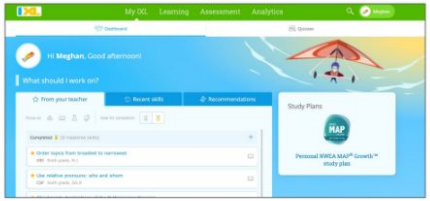
Montgomery County Public Schools use IXL as a supplemental math instructional resource for students and your child has access to this online program at home. With thousands of skills that match what students are learning, IXL is a great resource to help your child excel.

To get started, your child can access IXL by logging in through Clever or use the custom domain: https://www.ixl.com/signin/montgomerycps

STUDENT VIEW

The dashboard is the homepage for learners on IXL. From here, students can see suggestions from their teacher of skills to work on as well as recommendations based on their practice history and learning needs.

IXL has uploaded your child's MAP Growth results and students can find their personal MAP Growth Study Plan on their dashboard.



Learn more about IXL's NWEA Personalized MAP Study Plans

CHECKING PROGRESS

When your child signs into their account, have them select the "Analytics" tab. You'll be taken to your child's Student Summary report. Review the list of accomplishments and skills to work on and encourage your child to keep learning.

Parent Guide to Tracking Progress

What is IXL's SmartScore

The SmartScore is the best possible measure of how well your child understands a skill? It factors in question difficulty, answer accuracy, and consistency.

The SmartScore is not a percentage score, even if a student gets a question wrong, it's always possible to reach a 100.

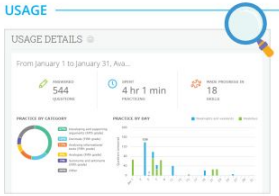
Aim for 80 to 90, which shows a strong understanding of a skill. You can tell your child, 8-0 and go and encourage them to reach a SmartScore of 80 and then they can always return to the skill for an extra challenge and try for mastery (a score of 100).

Track your child's progress with IXL Analytics

IXL offers useful reports that give you insight into your child's work in IXL. Below are some easy ways to use IXL Analytics to monitor their progress and see where they might need help!

To access these reports, simply sign in to your child's IXL account and click on the Analytics tab.

USAGE



What has my child been doing on IXL?

Get a bird's eye view of your child's work in IXL with the Usage report! You can see how much time they've spent on IXL, how many questions they've answered, the topics they've worked on, and the number of skills they've made progress in.

This is a great report to scan every 1-2 weeks to stay on top of what your child has been learning. If you want to dive deeper, you can scroll down to see a breakdown of what your child did in each of their practice sessions.

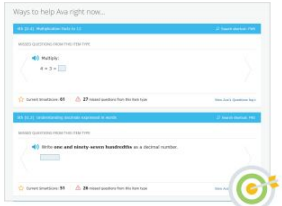
SCORE CHART

Did my child complete their assignments?

If your child's teacher has assigned specific skills as homework and/or set certain SmartScore goals to reach, the Score Chart report can help you quickly see if your child has hit those targets.

The Score Chart shows you at a glance the SmartScore your child achieved on each skill, as well as the number of questions they answered and how much time they spent on those skills.

TROUBLE SPOTS



How can I help my child with areas they're struggling with?

When you're looking for ways to provide extra support to your child at home, head over to the Trouble Spots report. It pinpoints the concepts your child is struggling with, and you can even see the exact questions your child received and missed!

If you notice a trouble spot, pick a few of the missed questions and work through them with your child to help them understand their mistakes. Or, go to that skill and answer a question incorrectly on purpose so that you can review the explanation together—it provides a useful review of the concept and a step-by-step guide for how to solve it. When your child is ready, have them work on the skill until they reach proficiency (a SmartScore of 80).

What is the IXL LevelUp™ Diagnostic and why is my child taking it?

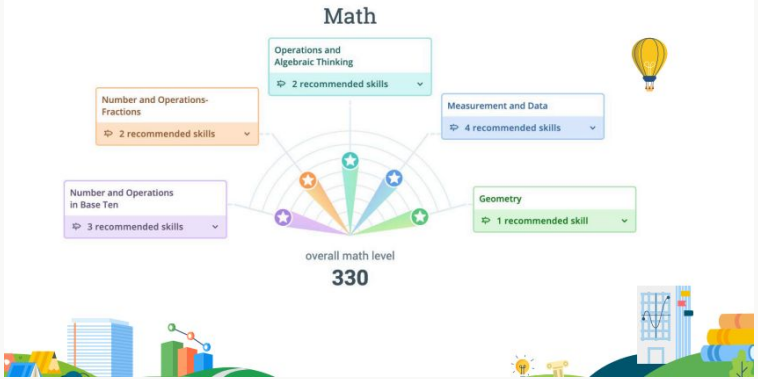
The IXL LevelUp Diagnostic is an assessment that provides an accurate picture of your child's current skill level in math and language arts, identifying both strengths and areas for growth. With this information, teachers can make aligned instructional decisions, tailor support for individual students, and ensure all learners are empowered to grow.

Many schools use the LevelUp Diagnostic at multiple points throughout the school year to get a clear picture of what students have learned and keep track of their progress.

How do I see my child's Diagnostic score?

On your child's IXL account, you can view their Diagnostic results on their personalized Action Plan. The Diagnostic Action Plan is located on your child's Assessment tab and highlights:

- Your child's overall score and scores in specific learning areas, which correspond to grade levels. For example, an overall score of 550 means your child understands about half of 5th-grade material.
- Recommended skills for your child to practice. These skills are personalized based on your child's scores, and provide the perfect skills to help them grow from where they are.
- Scroll down and select "Print your action plan" to view and print the full list of skills your child should focus on next.



What do my child's scores mean?

Diagnostic scores correspond to grade levels, which makes it easy to see if your child is working at, above, or below their current grade levels! For example, a score of 370 means your child is working on 3rd-grade material and understands about 70% of it; while a score of 400 indicates your child is ready to start 4th-grade material. An increase of 10 points in your child's score indicates about a month of growth.

In addition to overall scores for math and language arts, the Diagnostic gives scores in specific learning areas or strands (e.g., Vocabulary, Writing Strategies, and Grammar & Mechanics within language arts). These scores follow the same design as the overall score, so you can tell exactly how your child is performing for each strand.

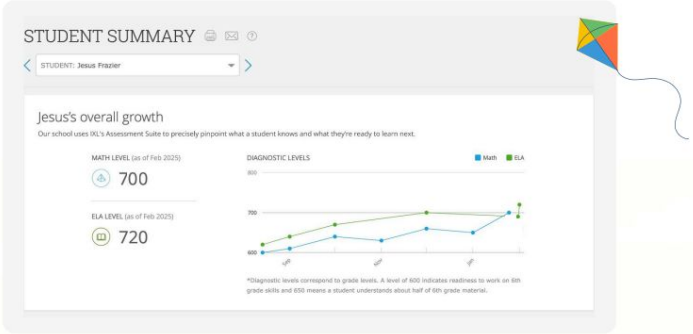
Teachers will use this data to personalize instruction, assign targeted IXL skills for your child to practice, and monitor progress over time.

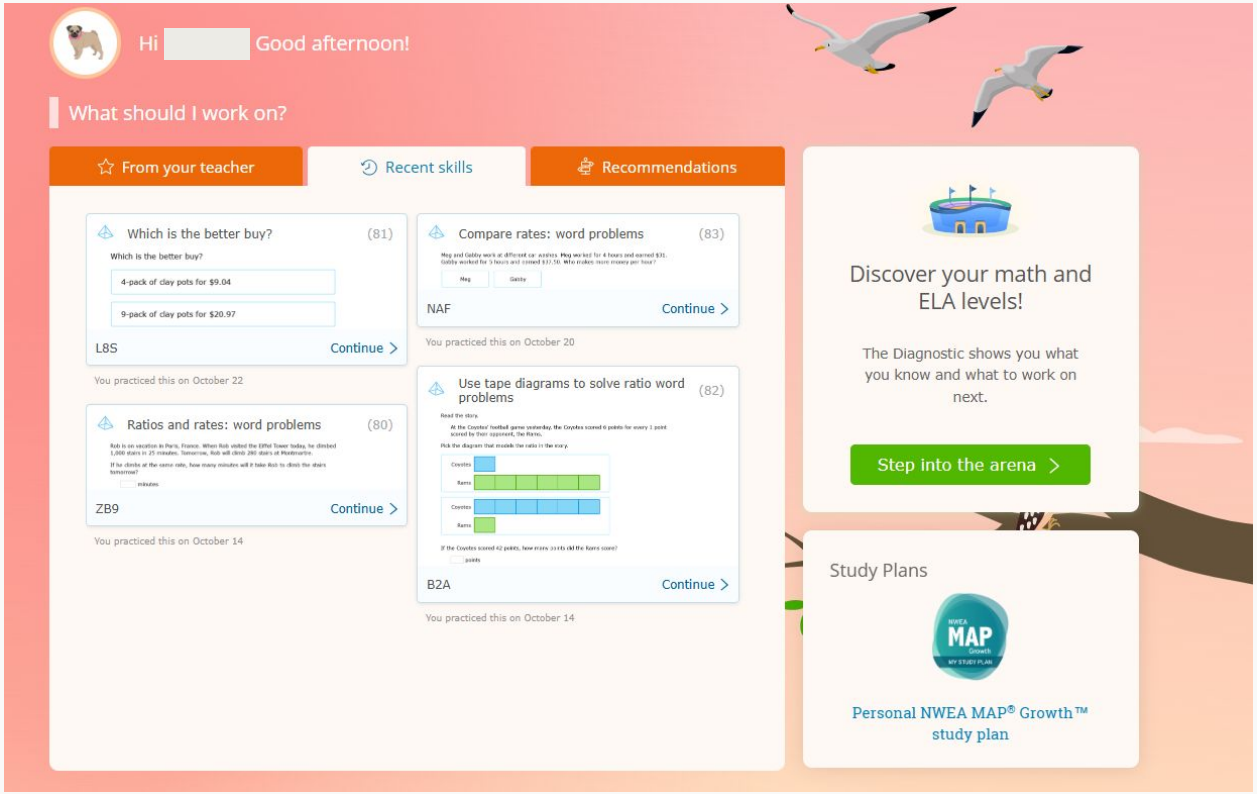
Why have my child's Action Plan and scores changed between Benchmarks?

The LevelUp Diagnostic can also provide ongoing, real-time updates on your child's progress between Benchmarks. If their teacher chooses to utilize the Diagnostic between Benchmarks, your child's Action Plan will automatically update with the levels and recommended skills that reflect their current knowledge.

You can also use the Student Summary report, located on your child's Analytics tab, to see:

- Your child's current and previous Diagnostic scores, so you can see how they've grown!
- An overview of IXL skills they have practiced, the areas they should focus on, and the biggest opportunity for growth.

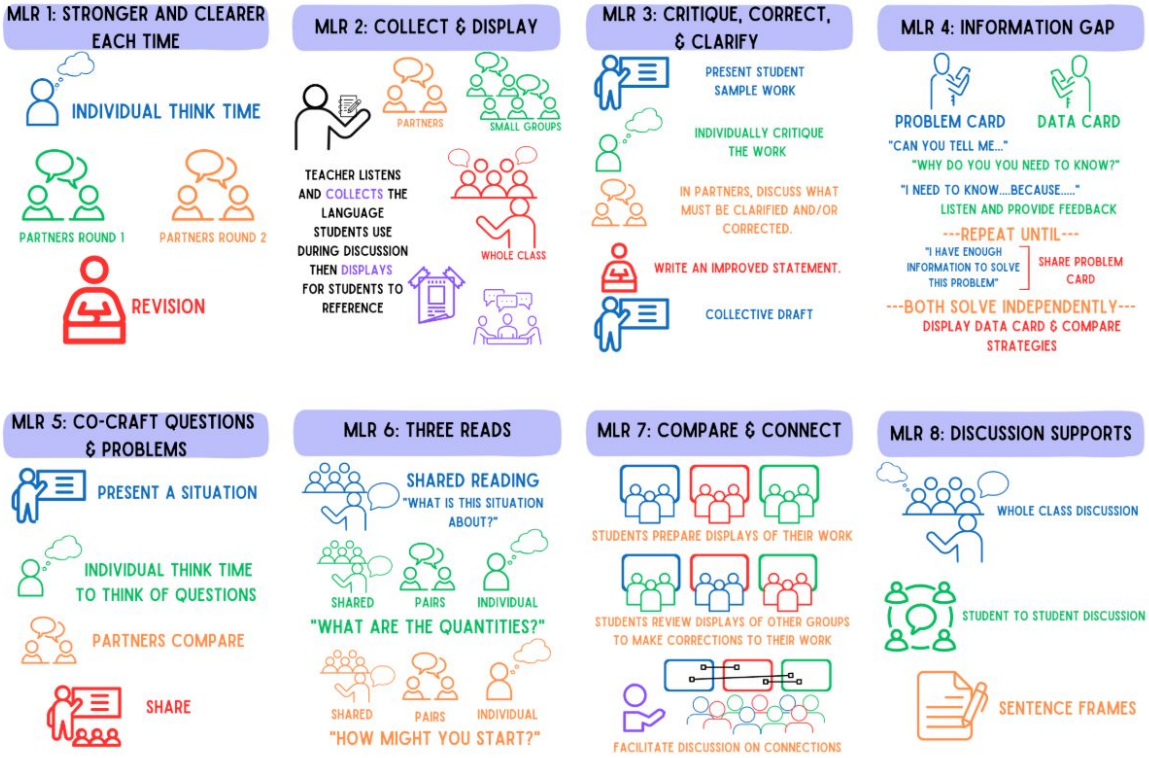




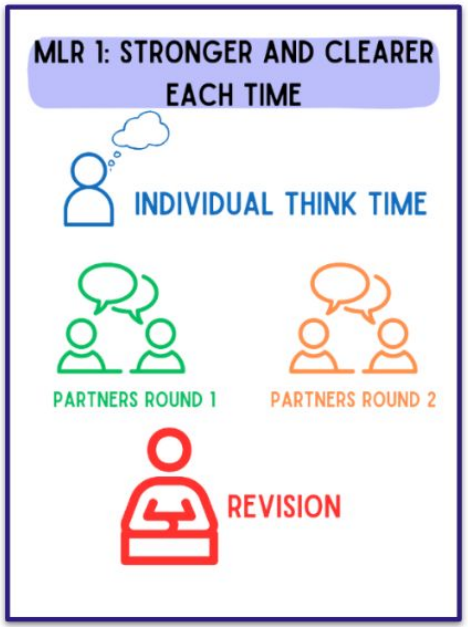
Questions

Rachel_B_Rabin@mcpsmd.org (math content specialist)

Elizabeth_A_Golden@mcpsmd.org (8th grade team leader)



MLR1: Stronger and Clearer Each Time



What it is: This routine helps students improve how they explain things.

Example: Imagine your child describes how to tie their shoes to a friend. At first, the explanation is rough, but as they talk to more friends, their instructions get clearer.

In math, they do the same with their explanations, working with a partner making them better each time.

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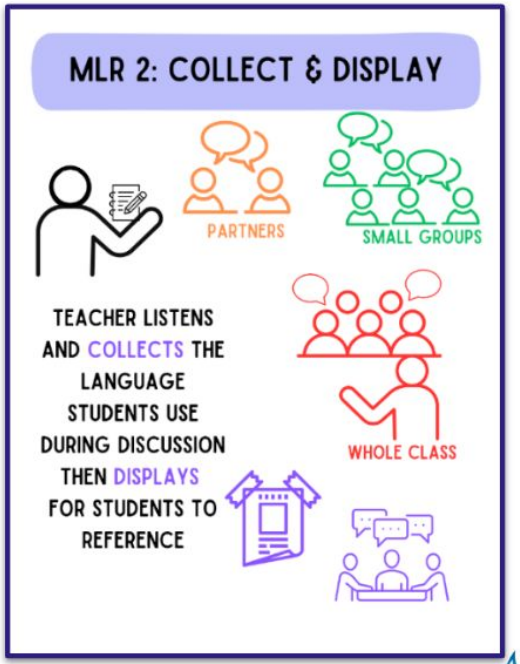
UNLEASHING POTENTIAL

MLR2: Collect and Display



What it is: This routine helps students gather ideas and put them together.

Example: If your child is trying to make a family shopping list, they might ask each family member for ideas and then write everything on a big list for everyone to see.

In math, students collect ideas and display them so everyone can learn from each other.

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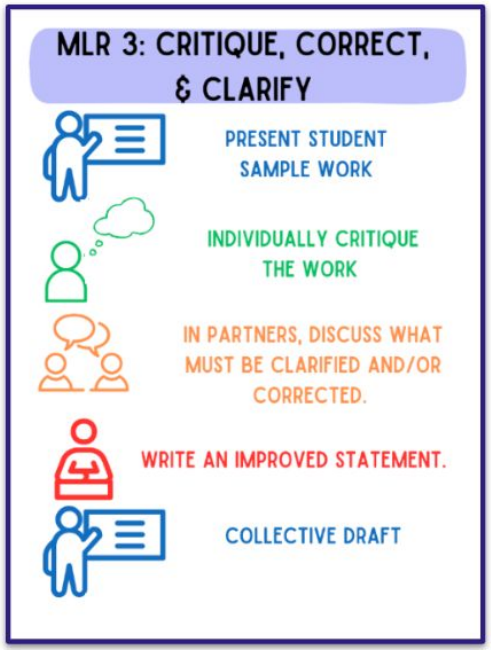
MLR3: Clarify, Critique & Correct



What it is: Students look at different solutions to a problem and improve them.

Example: Think of it like reviewing a movie with a friend. They might point out something you missed, and together, you refine your understanding.

In math, students look at their own and others' work, helping each other to find and fix mistakes.

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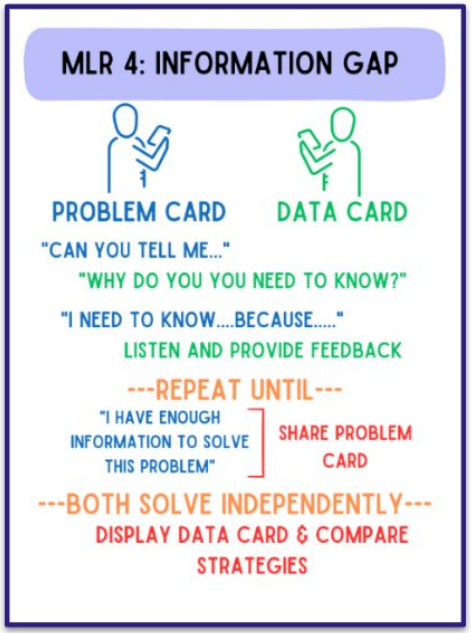
MLR4: Info Gap



What it is: Students work together to figure something out when each person has different pieces of information.

Example: Picture two kids trying to solve a puzzle where each has half the pieces. They need to talk and share information to finish the puzzle. This routine encourages teamwork and communication to solve problems.

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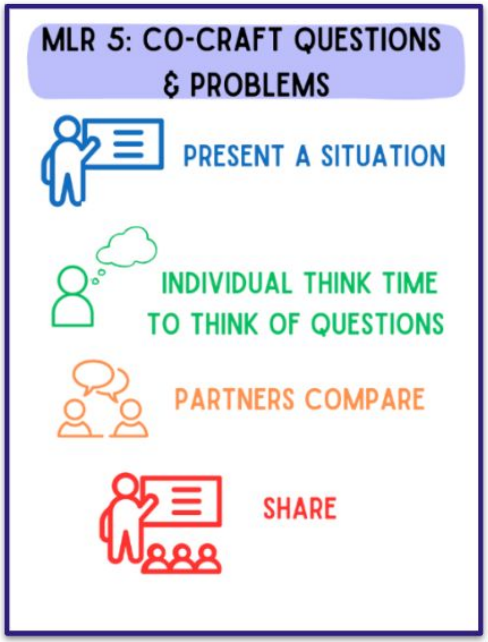
MLR5: Co-Crafted Questions



What it is: Students create math problems or questions together.

Example: Think of a family planning a trip. You might ask your child, "How long will it take to get there?" and your child can come up with different travel questions, like how much gas you'll need or how far it is.

In math, they help design questions, which makes them think more deeply.

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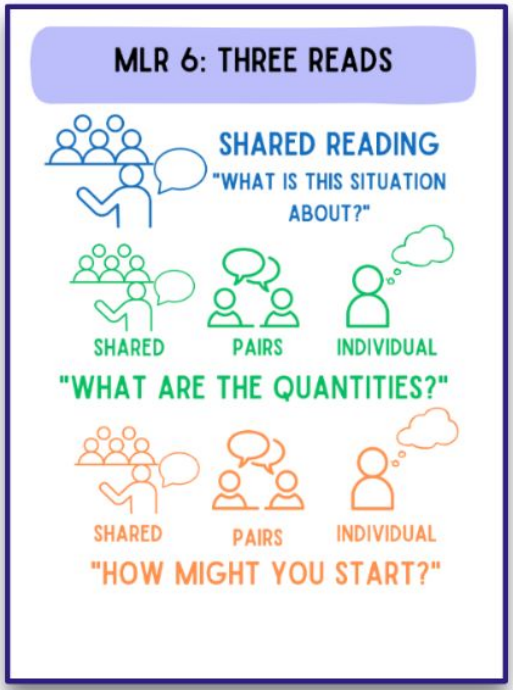
MLR6: Three Reads



What it is: This routine helps students understand problems better by reading them in different ways.

Example: If your child reads a recipe, they might first check the ingredients, then how to prepare them, and finally, the cooking time.

In math, they read a problem multiple times to understand all parts clearly before solving it.

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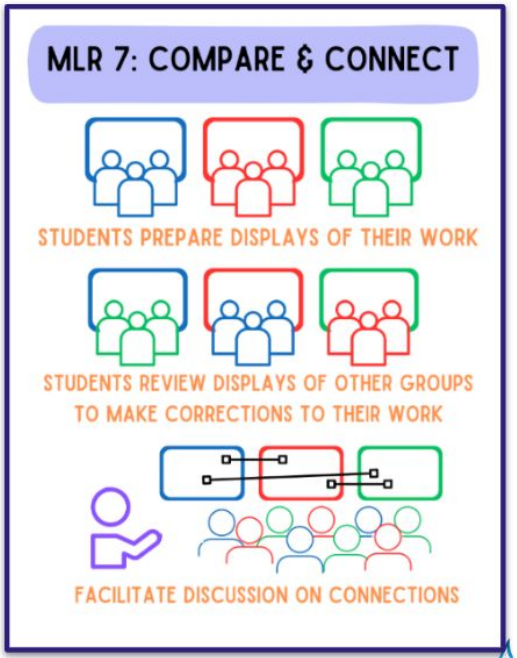
MLR7: Compare & Connect



What it is: Students look at different ways of solving the same problem.

Example: If your child is learning how to fold clothes, you might show them two methods, and they can compare which one works best.

In math, they look at different strategies and see how they are connected or which one is more effective.

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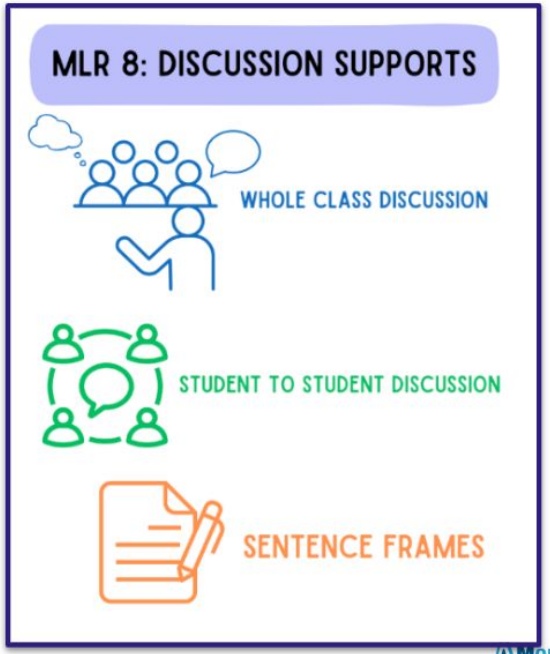
MLR8: Discussion Supports



What it is: This routine supports meaningful math conversations in the classroom.

Example: Imagine a family discussing where to go on vacation. Everyone shares their ideas, listens to each other, and builds on what others say.

In math class, this happens when students discuss problems and share solutions in a collaborative way.

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