



ASPIRE MATH ACTION PLAN



St. Therese Chinese Catholic School
聖德力華人天主教學校

A National Blue Ribbon
School of Excellence



Let's Look Deeper

Specific *Math Strands* by Grade Level

Grade	3	4	5	6	7	8
Numbers and Operations - Base 10	✓	✓	✓	na	na	na
Numbers and Operations – Fractions	✓	✗	✗	na	na	na
Measurement and Data	✓	✓	✗	na	na	na
Operations and Algebraic Thinking	✓	✓	✗	na	na	na
Foundation	✓	✓	✗	✓	✓	✓
Grade Level Progress	✓	✓	✓	✓	✓	✓
Geometry	✓	✗	✗	✗	✓	✓
Modeling	✓	✓	✓	✓	✓	✓
Justification/Explanation	✓	✓	✓	✓	✗	✓
Ratios & Proportional Reasoning	na	na	na	✓	✓	na
Expressions and Equations	na	na	na	✓	✓	✓
The Number System	na	na	na	✓	✓	✗
Statistics and Probability	na	na	na	✓	✗	✓
Functions	na	na	na	na	na	✗

✓ Area identified as a strength

✗ Area targeted for improvement

Identified Strands & Benchmarks

GRADE 3	GRADE 4	GRADE 5
Represent & solve problems involving multiplication/division (3.SMC.OA.1)	<i>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. (4.SMC.MD.1)</i>	<i>Write and interpret numerical expressions (5.SMC.OA.1)</i>
Solve problems involving measurement & estimation (3.SMC.MD.1)	<i>Use the four operations with whole numbers to solve problems. (4.SMC.OA.1)</i>	<i>Analyze patterns and relationships. (5.SMC.OA.2)</i>
Reason with shapes and their attributes (3.SMC.G.1)	<i>Draw and identify lines and angels, and classify shapes by properties of their lines and angles. (4.SMC.G.1)</i>	<i>Convert like measurement units within a given measurement system. (5.SMC.MD.1)</i>
Investigate and articulate mathematical thinking	Investigate and articulate mathematical thinking	<i>Represent and interpret data. (5.SMC.MD.2)</i>
		Investigate and articulate mathematical thinking

Identified Strands & Benchmarks

GRADE 6	GRADE 7	GRADE 8
<i>Solve real-world and mathematical problems involving area, surface area, and volume. (6.SMC.G.1)</i>	Investigate chance processes and develop, use, and evaluate probability models. (7.SMC.SP.3)	Investigate and articulate mathematical thinking
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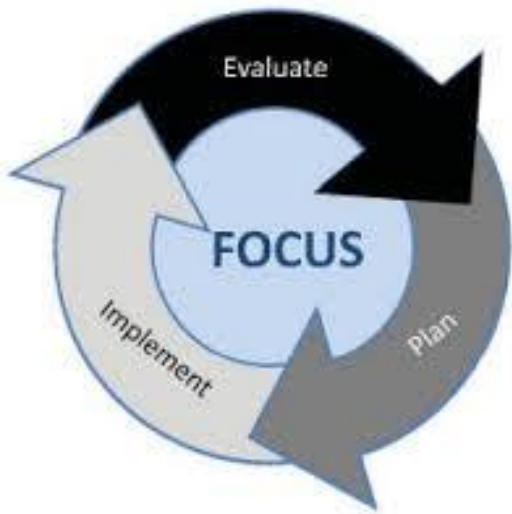
Instructional Practices/Strategies

GRADE 3	GRADE 4	GRADE 5
Everyday math lessons, use exemplars for tasks, math games	Everyday math lessons, use exemplars for tasks, math games	Everyday math lessons, use exemplars for tasks, math games
Engage in mathematical dialogue in classroom.	Engage in mathematical dialogue in classroom.	Engage in mathematical dialogue in classroom.
Implement fluencies for computations. Have parent meetings where needed to enlist additional help.	Implement fluencies for computations. Have parent meetings where needed to enlist additional help.	Implement fluencies for computations. Have parent meetings where needed to enlist additional help.
Work with Title and LBS1 teacher with identified students. Set learning goals and monitor progress weekly.	Work with Title and LBS1 teacher with identified students. Set learning goals and monitor progress weekly.	Work with Title and LBS1 teacher with identified students. Set learning goals and monitor progress weekly.
Identify targeted Quizlets after Interim analysis	Identify targeted Quizlets after Interim analysis	Identify targeted Quizlets after Interim analysis

Instructional Practices/Strategies

GRADE 6	GRADE 7	GRADE 8
text, use exemplars for tasks, math games, IXL	text, use exemplars for tasks, math games, IXL	text, use exemplars for tasks, math games, IXL
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Work with Title and LBS1 teacher with identified students. Set learning goals and monitor progress weekly.	Work with Title and LBS1 teacher with identified students. Set learning goals and monitor progress weekly.	Work with Title and LBS1 teacher with identified students. Set learning goals and monitor progress weekly.
Identify targeted Quizlets after Interim analysis	Use Cambridge/Aspire material as a supplementary resource.	Use Cambridge/Aspire material as a supplementary resource.

Some School Plans to Improve Student Achievement of All



- Deeper data dive in Interim data to identify key curriculum strands for all content areas in depart. meetings.
- Hold monthly meetings, called ***Parent Talks***, to discuss student support methods and strategies.
- Hold one-on-one meetings with parents as necessary to help on-going targeted support where needed.
- Offer afterschool & Saturday tutoring w/targeted support.
- Develop a full PS-8 action plans for key strands, especially in areas for improvement (developed with teachers/admin)
- Develop more cross-disciplinary instruction – science/math
- Require justification responses **daily** in math – HW/CW
- Provide and structure student opportunities for “productive struggle” to build learning strategies, perseverance, and confidence.

Review the Standards for Mathematical Practice with teachers & parents

Processes and Proficiencies

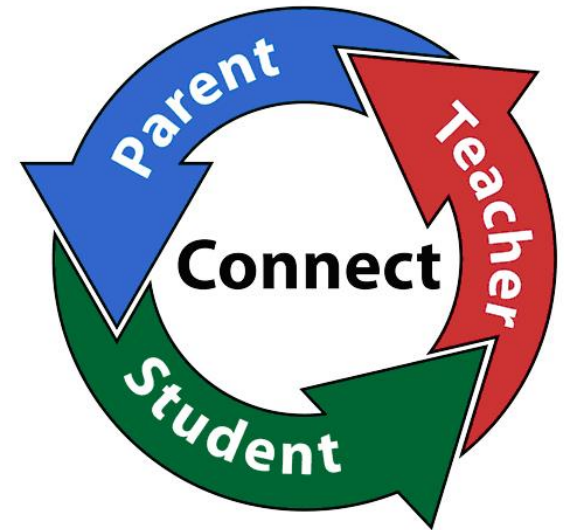
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Student Engagement

- Students will engage in mathematical dialogue in pairs, groups of 3 and 4 on specific Quizlets or targeted problems from the text. Students will share out. Rubrics will be used where necessary & shared. (MP #1, #3, & #4)
- Students will engage in mathematical tasks (such as Mars, Illustrative Math, Exemplars, etc) at least once a week. (MP #1, #3, #7, #8)
- Students will use **padlet** to share out thinking, especially on warm-ups. To help manage the responses, students will be given a number, 1 to 30. Odd numbers will report out on Monday. Even on Tuesday. Multiples of 4 on Wednesday, etc. (MP #1 & #3)
- Students will engage with math games independently and in small groups. Games: Everyday math games, Mindware, ixl software, teacher made, etc. (MP #2, #5 & #6)
- Students will work independently when using the ixl software for math. Identified objectives will be given. (MP #6)
- *Grade 3 & 6 will have additional support - using the LBS1 & Title 1 teachers.*

Recommendations for Parents to support their children

- Support **reading and writing** at home (Yes! Strong readers tend to do better in math.)
- Encourage parents to engage in deep discussions with their child.
- Encourage parents to engage the child and ask his/her opinion on a variety of topics. Encourage specificity.
- Talk about money, finances, etc. Create or look for opportunities to give your child a sense of number; for example, estimate how much a tax/tip would there be on a particular bill? Cook with your child, if a recipe requires 3 cups, give them 1/3 cup and ask them to problem solve!



Interims – Data Tracking Sheet

MATH GRADE – INTERIMS	ELL COUNT	PERCENT	IEP/ICEP Count	PERCENT	REGULAR STUDENT ENROLLMENT (NO CLASSIFICATION)	PERCENT
INTERIM I						
BELOW TARGET						
MEETING/ EXCEEDING						
GOALS FOR INTERIM II						
BELOW						
MEETING/ EXCEEDING						

Interims- Data Tracking Sheets

MATH GRADE – INTERIMS	ELL COUNT	PERCENT	IEP/ICEP Count	PERCENT	REGULAR STUDENT ENROLLMENT (NO CLASSIFICATION)	PERCENT
ACTUAL INTERIM II RESULTS						
BELOW TARGET						
MEETING/ EXCEEDING						

Ways a Parent Can Help with **MATH**

1

Look for shapes and patterns in real life

2

Have your child measure ingredients for a recipe you are making

3

Ask your child to explain the math skills he or she is working on in school

4

When helping your child with homework or school assignments, ask him or her to explain how he or she got an answer

5

Help your child find some appropriate number and problem-solving games to play online

6

Play card or board games that involve counting or patterns

7

Ask your child to count change at the grocery store, or to estimate the total cost while you are shopping

8

Compare:

Which is the tallest?
...the heaviest?
...the longest?
...the smallest?
...the fastest?
...the hottest?
...the most expensive?

9

Have tools such as a ruler, a scale, a calculator, and a measuring tape available to use in your house

10

Encourage your child to track or graph scores or stats for a favorite sports team

11

Use dice to make a game out of practicing math facts



Point out ways math is part of “real” life: money, computers, music, art, construction, cooking...

All around us, every day.

10 What Questions

to Develop a Growth Mindset in Children

1. What did you do today that made you think hard?
2. What happened today that made you keep on going?
3. What can you learn from this?
4. What mistake did you make that taught you something?
5. What did you try hard at today?
6. What strategy are you going to try now?
7. What will you do to challenge yourself today?
8. What will you do to improve your work?
9. What will you do to improve your talent?
10. What will you do to solve this problem?