

ES PARENT COFFEE

SINGAPORE AMERICAN SCHOOL

JAN. 16, 2023

How to Support Your Child at Home with Mathematics



SINGAPORE AMERICAN SCHOOL
www.sas.edu.sg

SINGAPORE AMERICAN SCHOOL

David Hoss

Elementary School Principal

Welcome to our January 2023 Coffee

OUR PRINCIPAL AND DEPUTY PRINCIPALS



David Hoss
Elementary School Principal



Jo McIlroy
Deputy Principal
ELC



Lisa Wan
Deputy Principal
KG-G1



Amanda Wood
Deputy Principal
G2-G3



Susan Shaw
Deputy Principal
G4-G5



Ken Schunk
Deputy Principal

SAS COMMUNITY NORMS

COMMUNITY NORMS

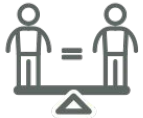
As an SAS community member I agree to hold myself to a high standard of personal conduct in my interactions and communications with students, faculty, and parents. This means I will adhere to the SAS Statement of Community by:



CONTRIBUTING PRODUCTIVELY AND POSITIVELY



ASSUMING POSITIVE INTENT



REFRAINING FROM DISCRIMINATION

(religious, ethnic, racial, sexual, or gender)



SHARING ACCURATE INFORMATION



GOING TO THE SOURCE

Questions to consider before posting:
1) Is it the truth?
2) Is it fair to all concerned?
3) Will it build better community and friendships?
4) Is it beneficial to all?

SAS
SINGAPORE AMERICAN SCHOOL

WHO WILL BE LEADING OUR SESSION



Gynelle Gaskell
ES Math Specialist

ELC-G5 MATH LEADERSHIP TEAM



Kristi McEwen
ELC



Analu Kewelar, Maiki del Rosario, Sudesh Pathmarajah
KG



Amy Wood, Donna Fernandez, Kristi Goldhammer
G1



Mary Bellone, Shelby Goerne
G2



Jena Hutchinson, Lyndall Bolton
G3



Jennifer Brinton, Lea Christiansen, Travis Macdonnell
G4



Amalia Kingsbury, Matt Kish, Hayley Anderson
G5



Julie Zhang (G3), Ying Chu (PLC Coach), Yuri Liu (G2)
Chinese Immersion



Dan Gach, Jill Carpenter
Support Services



Lisa Wan - Deputy
Gynelle Gaskell - Facilitator/
ES Math Specialist

STRATEGIC DIRECTION



2022-2023 PRIORITIZED AREAS OF GROWTH

#1 As a school, **strengthen relationships and foster an inclusive culture** based on our commitment to diversity, equity and inclusion.

#2 - Educators develop **greater expertise in using high quality, culturally responsive practices** to plan, teach, and assess.

#3 - Educators, students, and families are **prepared to transition to improved or new learning, work and community spaces**.

#4 - Educators **support students in the key social-emotional learning areas** identified by CASEL: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

PRIORITY 2: DEVELOP HIGH QUALITY, CULTURALLY RESPONSIVE PRACTICES

*In the **elementary school**, we will:*

- *Implement our new Illustrative Math program*
- *Utilize PLC coaches, the SAS Guidebook to Teaching, and DEI specialists*
- *Strengthen PLC coaches ability to lead and coach their teams*



LAST SESSION

Goals:

- Experience a problem-based lesson
- Reflect on the importance of a problem-based curriculum
- Share ways we are providing additional challenge for students

We heard from you following the session:

- How to support our children at home
- More specific grade level sessions

OUR PURPOSE TODAY

What	Why	How
• Understand how to best support your child at home with problem-based mathematics	• To build a partnership with families so that your children can understand and enjoy mathematics • To have a stress free situation at home with mathematics	• Share Tips for Helping at Home • Make connections to problem-based learning and SAS philosophy ad guiding principles

MATERIALS

Each person should have:

1. SAS ELC-12 Math Philosophy and Guiding Principles
2. Tips for Supporting Your Child at Home with Math
3. Asking Questions to Support Math Learning

CONNECTING TO NOV. 2022 SESSION



REVISITING: PROBLEM-BASED RESEARCH EVIDENCE

CHARACTERISTICS

1. Learning is student-centered.
2. Learning occurs in small student groups.
3. Teachers are facilitators or guides.
4. Problems form the original focus and stimulus for learning.
5. Problems are a vehicle for the development of problem solving skills.
6. New information is acquired through self-directed learning.

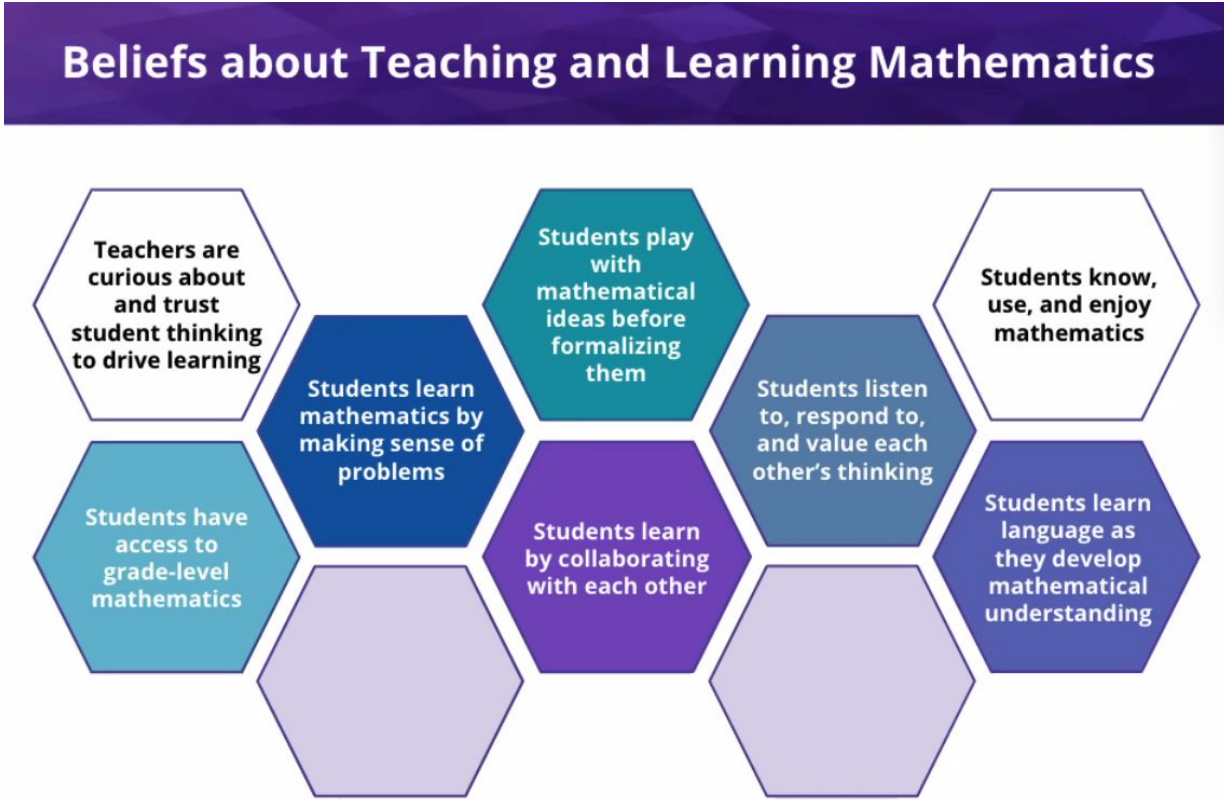
OUTCOME

- Increased **retention** of knowledge
- Enhanced **transfer** of concepts to new problems
- Enhanced intrinsic **interest** in the subject matter
- Encouraged self-directed learning skills (**metacognition**)

Barrows, H.S., & Tamblyn, R.M. (1980). *Problem-based learning*. New York: Springer.

Norman, G.R., & Schmidt, H.G. (1992, September). The psychological basis of problem-based learning: A review of the evidence. *Academic Medicine,* 67(9), pp. 557-565.

REVISITING: PROBLEM-BASED LEARNING BELIEFS



CONNECTING TO SAS ELC-12 PHILOSOPHY AND GUIDING PRINCIPLES



Singapore American School ELC-12 Math Philosophy and Guiding Principles for the 2027 Strategic Plan

Vision

A World Leader in Education,
Cultivating Exceptional Thinkers,
Prepared for the Future

Mission

Singapore American School is committed to providing each student an exemplary American educational experience with an international perspective

Learning Aspirations



Character | Collaboration | Communication | Content Knowledge | Creativity | Critical Thinking | Cultural Competence

At Singapore American School, our mathematics program empowers students to develop agency and build positive mathematical identities by engaging in equitable, rigorous, and meaningful learning experiences.The following are our guiding principles for teaching and learning mathematics, with descriptors of how they may look in the classroom.*

FIVE GUIDING PRINCIPLES

1. **Every student** has the opportunity to **develop deep mathematical understanding** and experience **wonder** in mathematics.
2. Teaching practices nurture **students' positive identities as knowers, doers, and sense-makers of mathematics.**
3. Mathematics curriculum and instruction must be **equitable, rigorous, and relevant.**
4. Learning mathematics is a **collaborative responsibility**.
5. Purposeful **assessment drives** mathematics instruction and learning.

Tuning In...

Helping with math at home is _____.

Share your name, grade level of your child(ren), and what you are hoping to get out of today.

IF WE BELIEVE THAT EACH CHILD ...

has experiences and ideas that are valuable

has brilliant mathematical ideas

...then what might I say to encourage my child at home when...

- they are stuck?
- they are not yet confident?

can make sense of and solve problems

can learn grade-level mathematics



TIPS FOR SUPPORTING YOUR CHILD AT HOME WITH MATHEMATICS

TIP #1

Let your child
do the thinking.





“Adults tend to confuse familiarity with understanding.”

- Paul Lockhart (2019)

The goal of helping your child with math is **not to do the work for them** but to **help them figure out for themselves.**

See Think Wonder







A routine for exploring works of art and other interesting things

PURPOSE: THIS ROUTINE ENCOURAGES STUDENTS TO MAKE CAREFUL OBSERVATIONS AND THOUGHTFUL INTERPRETATIONS. IT HELPS STIMULATE CURIOSITY AND SETS THE STAGE FOR INQUIRY.

MAKING THINKING VISIBLE

RITCHHART, CHURCH, AND MORRISON 2011

Padlet

http://bit.ly/3Cz4rek

Asking Questions to Support Math Learning - Before, During, and After Problem Solving



http://bit.ly/3GNh8oo

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TIP #2

Give positive messages about mathematics and show interest.



“Parents’ ***math anxiety,*** not math knowledge, impacts children’s math achievement and how they feel about math…

…Math anxiety is a real phenomenon all over the world. But it's not equal opportunity. It's tied to stereotypes — to race, and especially to gender. Research shows that mothers are prone to pass that feeling on to their kids, especially to girls” (Boaler, 2016, p. 2).



TIP #3

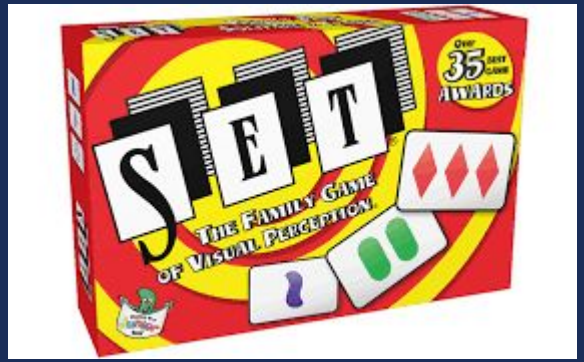
Be a good role model for mathematical thinking.

TIP #4

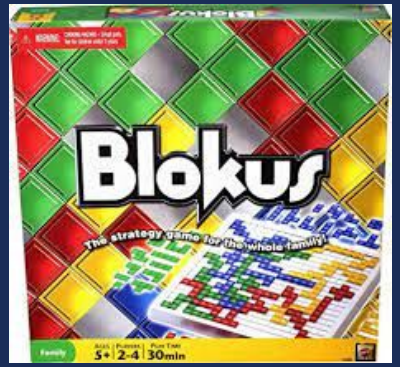
Make math fun though games.



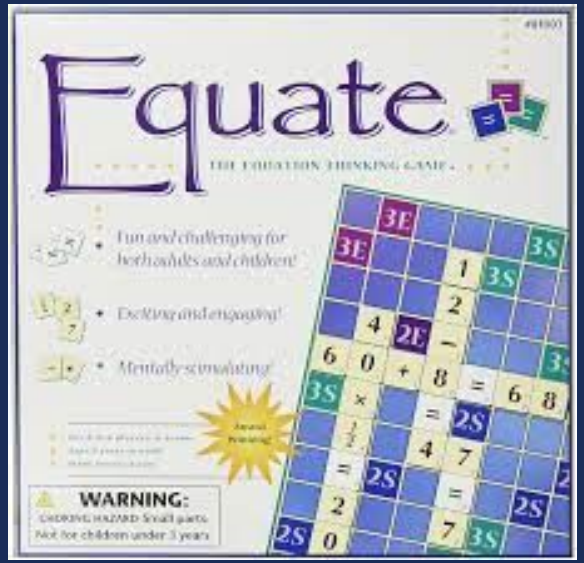

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4
4
2

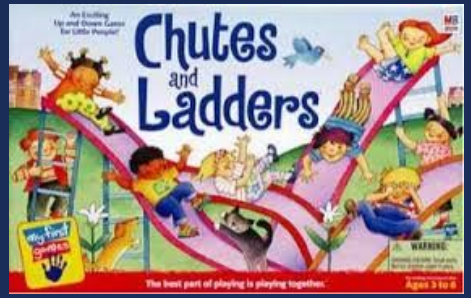

SET
Over 35 Best Game Awards
The Family Game of Visual Perception

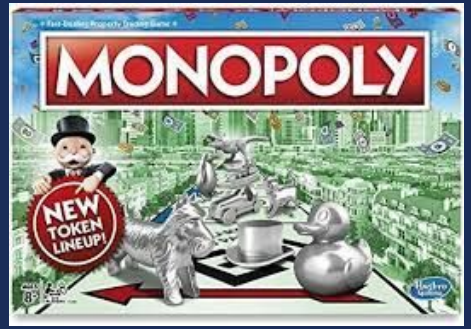

TCA
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PROOF!


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The strategy game for the whole family!
5+ | 2-4 | 30min


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mattel games
BLINK
The World's Fastest Game!
7+
2


Equate
THE EQUATION THINKING GAME
Fun and challenging for both adults and children!
Exciting and engaging!
Mentally stimulating!
WARNING:
CHOKING HAZARD-Small parts.
Not for children under 3 years.


Chutes and Ladders
The best part of playing is playing together.
Ages 3 to 6

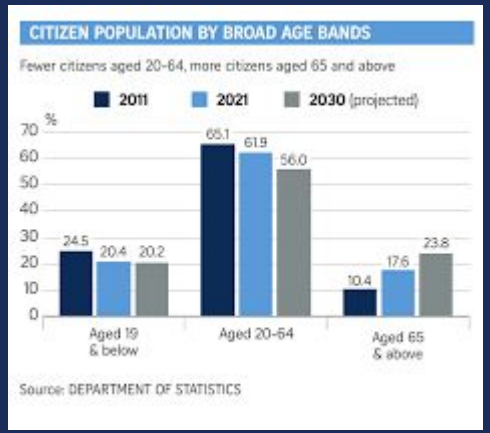

MONOPOLY
NEW TOKEN LINEUP!


3









TIP #5

Make math relevant by doing math in everyday situations.



Padlet

http://bit.ly/3Cz4rek


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or
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S
1
30/09


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clearance
was: $52.99
now: $47.99
you save:
$12
model #:
valid:

Additional Homework Help

1. Establish a routine and location for completing homework.
2. Don’t stress - if homework is a struggle, speak with the teacher. Be sure to explain the struggles as specifically as possible so the teacher can help. Encourage children in grades 3 and above to communicate with the teacher.

Tips for Supporting Your Child at Home with Math



Fun With Math

Grades 4 and 5

Wednesday 3:15-4:15

Math Games?

FAMILY WEBSITE

SAS Elementary Mathematics for Families


Q
A

EXIT TICKET - FEEDBACK

What did you **like** about the session?

What do you **wish** would have been done differently?

What **questions** do you have now?

http://bit.ly/3CAr3Lr

Thank you!