MATH TALK

CONVERSATION STARTERS

Created By:
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LET'S TALK MATH!

TO EXPLAIN:
- The strategy I used was...
- I noticed that...

TO CLARIFY:
- Can you explain how/why...
- I have a question about...

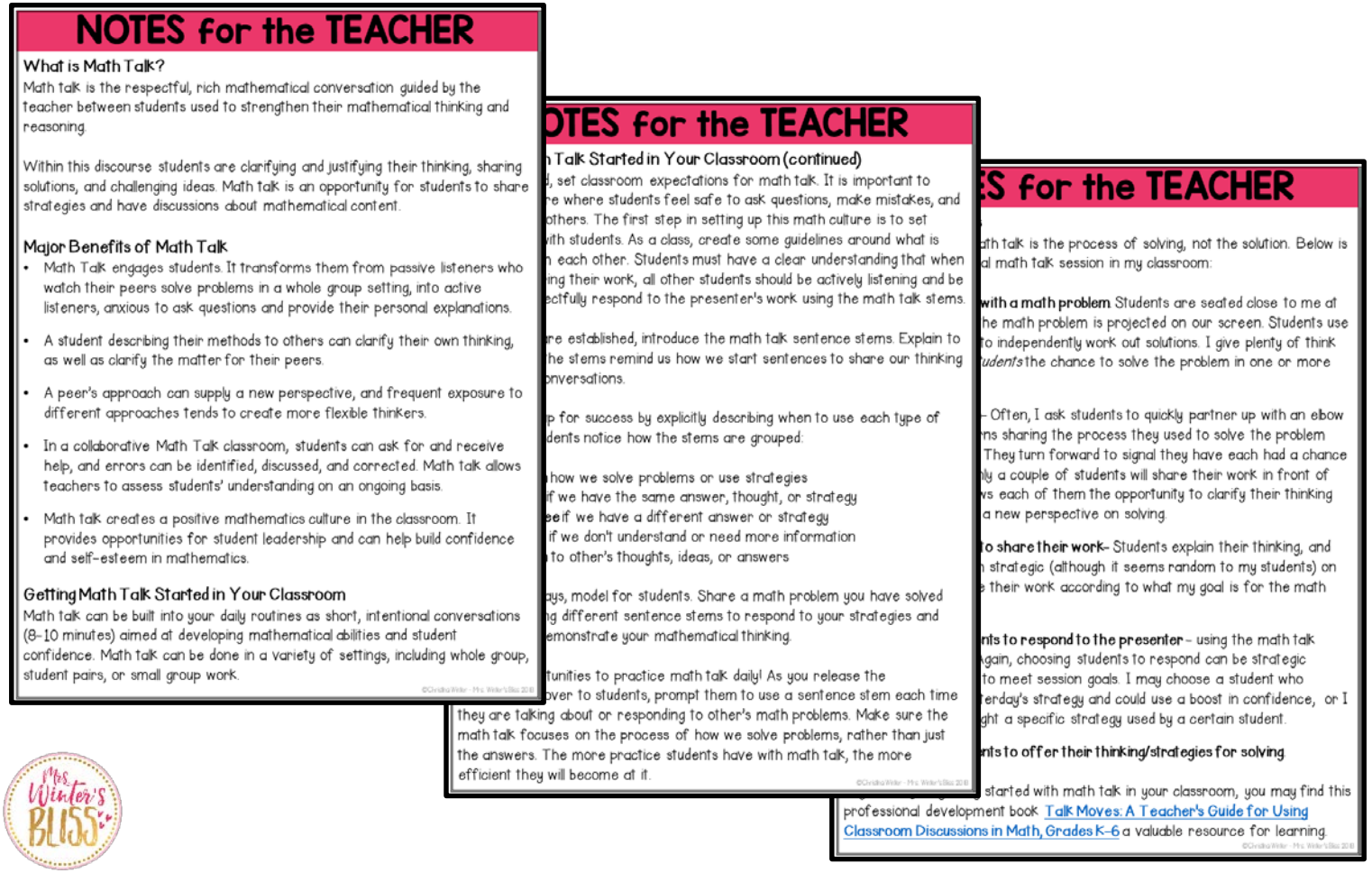
TO AGREE:
- I agree with _____ because...
- My strategy is like yours because...
- That solution makes sense because...

TO DISAGREE:
- I disagree with _____ because...
- The solution doesn't make sense because...

TO EXTEND:
- I would like to add onto...
- Another strategy we could use is...

Notes for the Teacher

- What is Math Talk?
- Benefits of Math Talk
- Getting Math Talk started
- Math Talk routines



NOTES for the TEACHER

What is Math Talk?

Math talk is the respectful, rich mathematical conversation guided by the teacher between students used to strengthen their mathematical thinking and reasoning.

Within this discourse students are clarifying and justifying their thinking, sharing solutions, and challenging ideas. Math talk is an opportunity for students to share strategies and have discussions about mathematical content.

Major Benefits of Math Talk

- Math Talk engages students. It transforms them from passive listeners who watch their peers solve problems in a whole group setting, into active listeners, anxious to ask questions and provide their personal explanations.
- A student describing their methods to others can clarify their own thinking, as well as clarify the matter for their peers.
- A peer's approach can supply a new perspective, and frequent exposure to different approaches tends to create more flexible thinkers.
- In a collaborative Math Talk classroom, students can ask for and receive help, and errors can be identified, discussed, and corrected. Math talk allows teachers to assess students' understanding on an ongoing basis.
- Math talk creates a positive mathematics culture in the classroom. It provides opportunities for student leadership and can help build confidence and self-esteem in mathematics.

Getting Math Talk Started in Your Classroom

Math talk can be built into your daily routines as short, intentional conversations (8-10 minutes) aimed at developing mathematical abilities and student confidence. Math talk can be done in a variety of settings, including whole group, student pairs, or small group work.

OTES for the TEACHER

Talk Started in Your Classroom (continued)

, set classroom expectations for math talk. It is important to
e where students feel safe to ask questions, make mistakes, and
others. The first step in setting up this math culture is to set
ith students. As a class, create some guidelines around what is
each other. Students must have a clear understanding that when
ing their work, all other students should be actively listening and be
ectfully respond to the presenter's work using the math talk stems.

re established, introduce the math talk sentence stems. Explain to
he stems remind us how we start sentences to share our thinking
nversations.

p for success by explicitly describing when to use each type of
dents notice how the stems are grouped:

how we solve problems or use strategies
if we have the same answer, thought, or strategy
eif we have a different answer or strategy
if we don't understand or need more information
to other's thoughts, ideas, or answers

ays, model for students. Share a math problem you have solved
g different sentence stems to respond to your strategies and
emonstrate your mathematical thinking.

tunities to practice math talk daily! As you release the
over to students, prompt them to use a sentence stem each time they are talking about or responding to other's math problems. Make sure the math talk focuses on the process of how we solve problems, rather than just the answers. The more practice students have with math talk, the more efficient they will become at it.

S for the TEACHER

th talk is the process of solving, not the solution. Below is
l math talk session in my classroom:

with a math problem. Students are seated close to me at
he math problem is projected on our screen. Students use
o independently work out solutions. I give plenty of think
udents the chance to solve the problem in one or more

– Often, I ask students to quickly partner up with an elbow
ns sharing the process they used to solve the problem
They turn forward to signal they have each had a chance
y a couple of students will share their work in front of
s each of them the opportunity to clarify their thinking
a new perspective on solving.

o share their work– Students explain their thinking, and
strategic (although it seems random to my students) on
their work according to what my goal is for the math

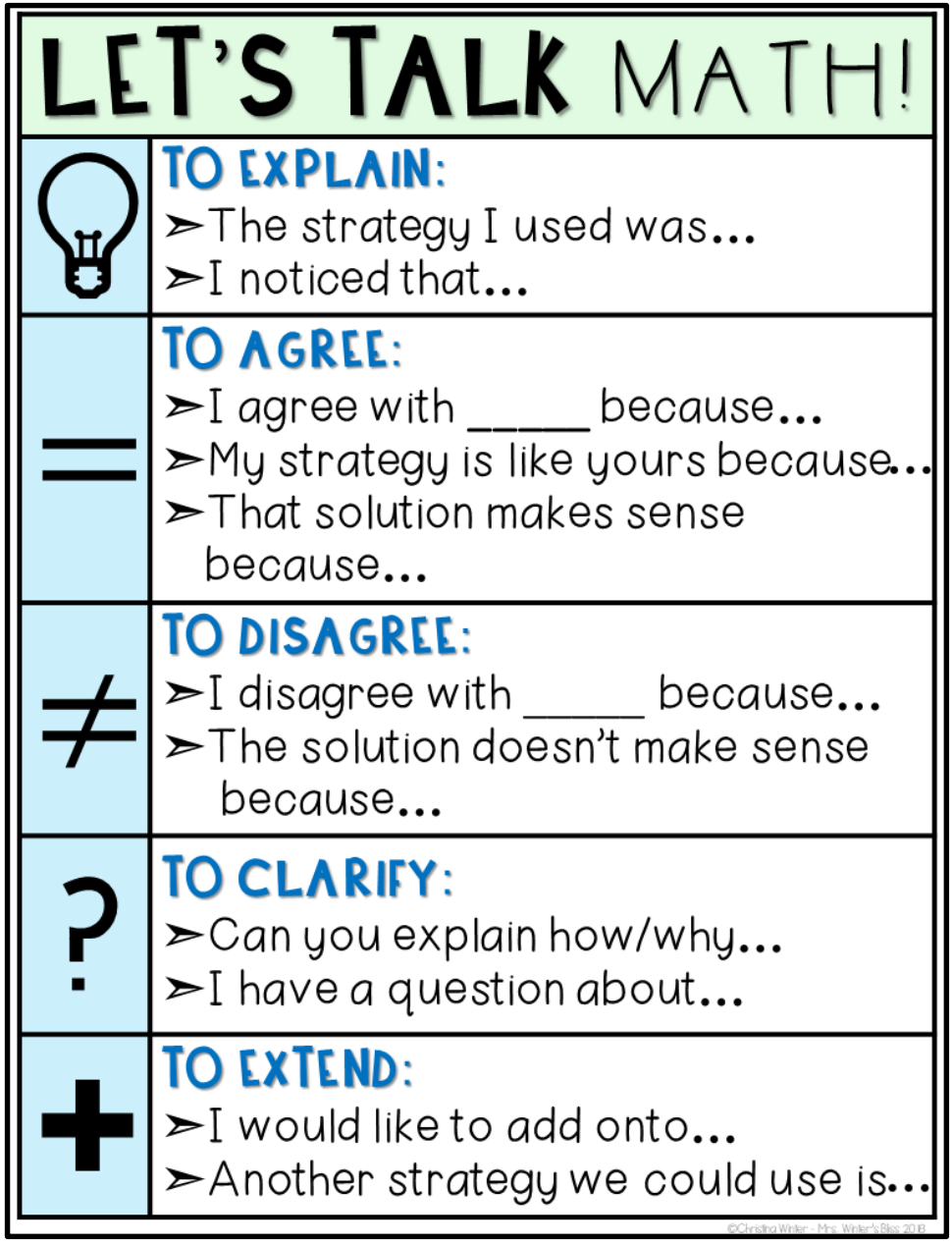
nts to respond to the presenter – using the math talk
gain, choosing students to respond can be strategic
to meet session goals. I may choose a student who
erday's strategy and could use a boost in confidence, or I
ght a specific strategy used by a certain student.

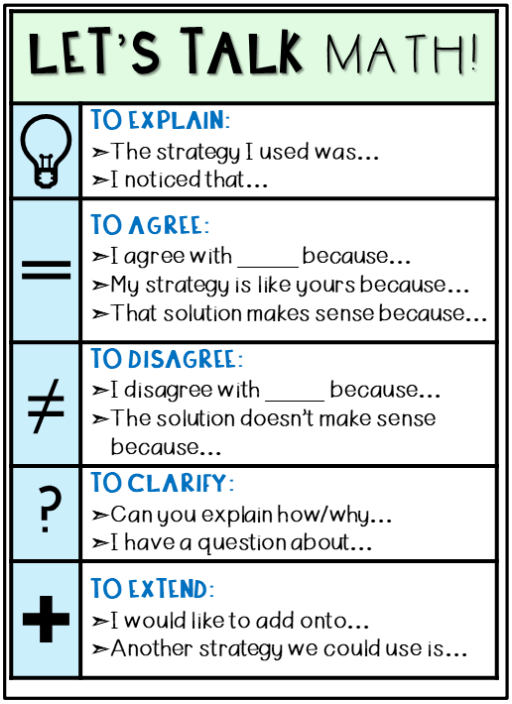
nts to offer their thinking/strategies for solving

started with math talk in your classroom, you may find this professional development book Talk Moves: A Teacher's Guide for Using Classroom Discussions in Math, Grades K-6 a valuable resource for learning.

Bulletin Board/Anchor Chart

full size • student personal copy





Large sentence stems to create a Bulletin Board/Anchor chart