Choose and Defend!

GRADES 2-8

Math		
AREA OF FOCUS	III	Mathematical Rigor Through Language
GUIDELINE	7	Explicit guidance for teachers to engage students in using mathematical practices
SPECIFICATIONS	7b	Opportunities for students to evaluate and address mathematical errors, misconceptions, and clarity of communication
	7c	Opportunities for students to revise their own, peers', and/or fictitious mathematical writing

Description of resource and intended audience:

Choose and Defend! is an activity during which students are asked to choose and defend their position on a statement (true or false) provided in writing by the teacher or another student. Example of a true statement: *A square is always a rectangle.* Example of a false statement: *If a square is a rectangle, then a rectangle is a square.*

The positions to choose from are:

- *I agree* (with this statement).
- *I disagree* (with this statement).
- *I am not sure. I have questions.*

This activity can be used either at the beginning of the lesson or during a specific part of the lesson with the ultimate goal of revealing and discussing students' thinking and/or misconceptions and promoting students' participation in discourse (oral and written). This activity is also intended:

- To create an opportunity for students to reveal their mathematical thinking including potential misconceptions through both language and also numeric, symbolic, and/or visual representations.
- To support students' engagement in Common Core Standards for Mathematical Practice such as:

  3. Construct viable arguments and critique reasoning of others.

  4. Model with mathematics.

  7. Attend to precision.

- To serve as a formative assessment tool to assess students' mathematical learning and determine their language needs.
- To advance students' participation in discourse (oral and written) and share their mathematical reasoning by having students share ideas and justify their thinking.

Materials needed: "Choose and Defend!" worksheet (below) and writing materials

Approximate time needed: Varies, at least 10 minutes

Instructions:

When students are not sure or disagree about a mathematical concept or idea, the teacher gathers them in a group to address their questions and then invites them to proceed to "Agree" or "Disagree" with a position or a claim using the "Choose and Defend!" worksheet. Generally, the students are given (5- 8 min.) and are asked to work independently to choose a position, and explain their thinking by writing an explanation (see worksheet below). Students are encouraged to include visual and/or numeric representations to support their explanation. After that, the teacher engages students in sharing and defending their positions. Depending on instructional goals and time, this can be done in different ways:

- With a partner

- In groups of 3-5 students

- By forming an "Agree" group, "Disagree" group, and "Have Questions" group. Students within each group engage in sharing their ideas.

- Teacher-led whole group

Note: English learners of emerging and developing language levels might need supports such as visuals, gestures, paraphrasing, and/or sentence starters/stems to assure access to the task and equitable engagement with the task.

Choose and Defend!

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Statement: _____

_____

1. Read the statement carefully. Think about it! Does it make sense mathematically?
2. Choose your position and decide whether you agree with the statement, disagree with the statement, or have questions about the statement.
3. Show or describe your thinking in writing. Use pictures, diagrams, words, and/or numbers to support your thinking.
4. Be prepared to defend your position.

I agree/don't agree with this statement	The statement makes sense mathematically because...
I disagree with this statement.	The statement doesn't make sense mathematically because...
I am not sure. I have questions about this statement.	Here is my question: