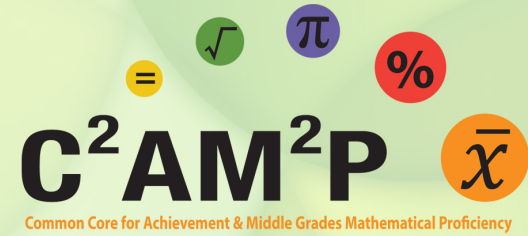


What's golden?

Year 3: Summer Day 8

C²AM²P Middle Grades is a grant program through Bowling Green State University and funded by the Ohio Department of Education through the Ohio Mathematics and Science Partnership (MSP) Program.

Introductions



- Jonathan Bostic
- Jessica Belcher

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Agenda

- Introductions and Norms
- Morning Jumpstart: Showers or baths
- Activity: Going with the flow
- Lesson Reflection: Reflecting on SMCs and SMPs
- Lunch
- Launch after Lunch: How do you explain windchill?
- Activity: Windchill
- Lesson Reflection: Reflecting on SMCs and SMPs
- Lesson Planning
- Daily Evaluation

Evolving Norms for this PD

- We will be ready for class and use our class time effectively.
- We will keep our focus on learning and use technology for personal reasons during breaks.
- We will be respectful of each other's time and space and work efficiently.
- We will actively participate by (a) listening to each other, (b) giving others our attention, (c) not speaking when someone else is talking, and (d) regularly sharing our ideas in class.
- If we disagree with someone or are unclear, we will ask a question about his or her idea and describe why we disagree or are confused.
- We will ask questions when we do not understand something. We will comment on others' ideas rather than the person.

Evolving Norms for this PD

- We will take advantage of opportunities to share ideas and gather feedback through presentations.
- We will encourage one another to share ideas.
- We will show our appreciation to one another for their ideas.
- If we disagree with someone or are unclear about their ideas related to mathematics content and pedagogy, we will ask a question about his or her idea and describe why we disagree or are confused.
- We will ask questions when we do not understand something about mathematics content and pedagogy.
- We will comment on others' ideas about mathematics content and pedagogy rather than the person.

Evolving Norms for this PD

- We will always look for another approach to solve problems.
- We will use pictures, graphs, tables, symbols, numbers, manipulatives, and/or words to assist us while doing mathematics.
- We will persist with every problem and examine it from multiple perspectives.
- We will be mathematically precise whenever possible.
- We will explain and justify our ideas in a way that everyone can understand.
- We will engage in rough-draft talk and encourage others to do so as well.

Morning Jumpstart:

When given a choice, do you take a shower or bath? Why do you choose that one?

Activity – Modeling with mathematics

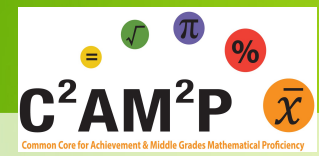
- In the next task, you will need to:
 - Make sense of a situation
 - Determine the given and needed information. Make assumptions. Translate these ideas into mathematical ideas as a problem to solve.
 - Work towards an intermediate result.
 - Interpret the intermediate result within the original context of the problem (i.e., problem situation).
 - Judge whether the intermediate result is reasonable and helpful. If not, return to the problem situation.
 - Report the intermediate result as the solution.

Activity – Going with the Flow

- Some water conservationists say that showering uses less water than bathing. Others say this is not true! Keep in mind that older showerheads have a flow rate of up to 3.4 gallons per minute whereas energy-saving showerheads have a flow rate as low as 1.9 gallons per minute. Bathtubs also vary in size. Provide a method (model) to determine if a shower or a bath uses more water. Explain and justify your approach.

Reflecting on SMCs and SMPs

- Share across your table with different SMPs and SMCs addressed by today's activities.
 - Be purposeful indicating what specific behaviors or habits led you to conclude that you engaged in a specific SMP.
 - Similarly, what did the instructor(s) do to encourage/foster/facilitate that SMP?



Lesson Reflection

Lesson Reflections

Date:

Lesson:

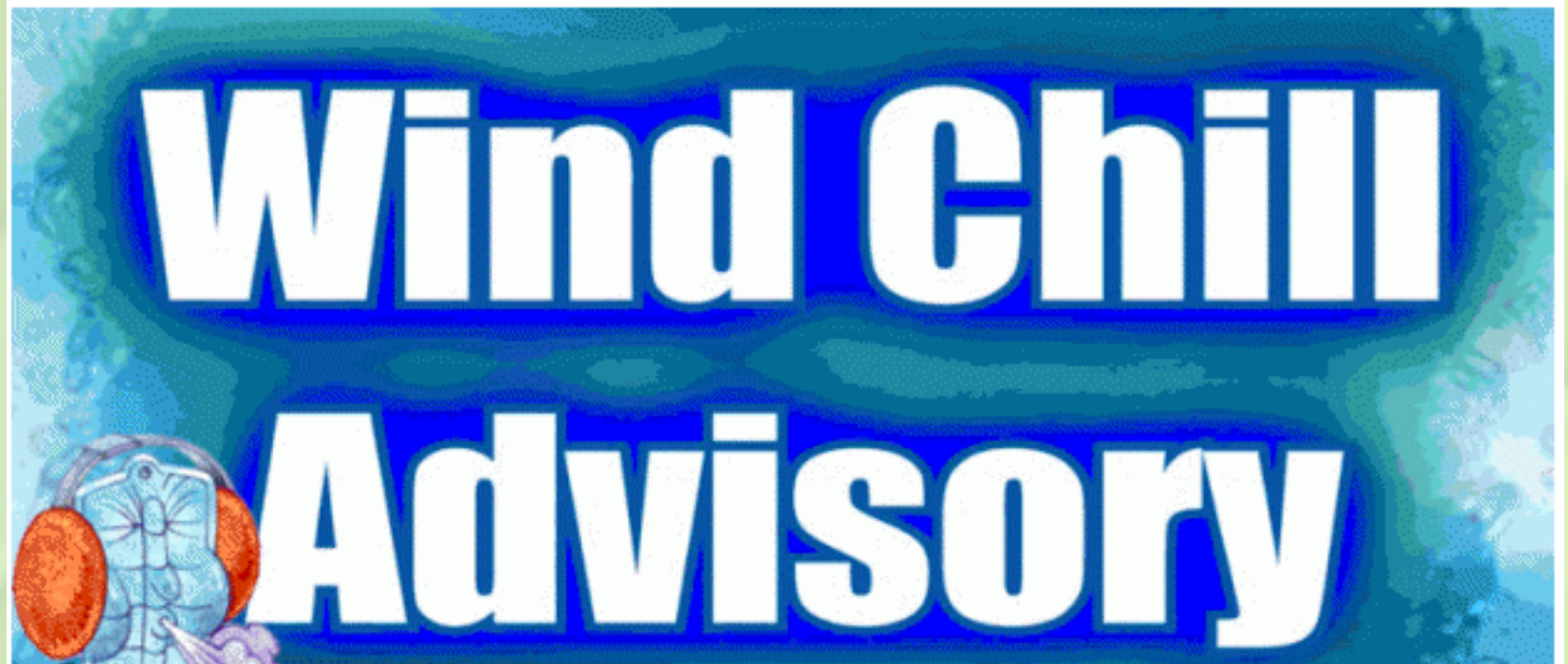
Personal Notes		Group Discussion		Notes
Content	Practice	Content	Practice	

LUNCH

Launch after Lunch

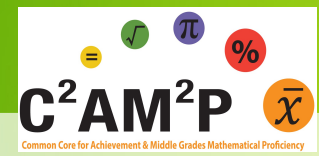
Imagine you meet someone from Central America (e.g., Costa Rica or Belize) who has never experienced temperatures below freezing (0C or 32F). How might you describe windchill to this individual?

Activity – Wind chill



Reflecting on SMCs and SMPs

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Lesson Reflection

Lesson Reflections

Date:

Lesson:

Personal Notes		Group Discussion		Notes
Content	Practice	Content	Practice	

Lessons

- You will design one Expression and Equations (EE) lesson to implement next academic year. Work on this lesson will be done in grade-level teams.
 - Special education teachers are encouraged to work with those they tend to collaborate with most often, students they tend to see more frequently, or content that seems most unclear. You are still expected to author one EE lesson.
 - Each teacher is responsible for one lesson; however, the team's lessons should be organized as part of a series of lessons that the grade-level teams could pick up and use in its entirety.

Lessons

- Lessons may use tasks from online/NCTM/books but they must be different in some way.
- TTLP questions must be clearly addressed. Copy and paste the question from the TTLP into your lesson so the reader knows its focus.
- You must address at least one bullet from each section within Parts 1 and 2.
- You must address two bullets from Part 3.
- You may use the provided BGSU lesson plan template or another lesson plan template as a way to frame your lesson.

Lessons

- Technology and other resources are encouraged.
- SMPs and SMCs must be indicated in the lesson.
- Assessment of some kind (questions, worksheet, brief quiz, etc.) must be provided.
- As a group, you must have a grade-level academic language support document. This should include words, definitions, examples, and if possible, ways to contextualize the word in a math task other than the one in the lesson. Hyperlinks to resources are encouraged.

Take Care

- Please complete the exit ticket and place it on the parking lot.
- Please help us keep the room in order by throwing away any trash and tidying your area.
- Thank you for your commitment to yourselves, your students, and our field as a group of professionals.
- Please, feel free to contact me or others for any reason.