Tools and Topics

Inspiring Connections Course 2, Prelude

Spotlight On: Venues for Learning

Throughout the school year, students will work in teams in various settings: at tables, at vertical non-permanent surfaces (VNPSs), and with electronic devices. Each day, they will use their Mathematician's Notebook and an electronic device to access the curriculum. The Mathematician's Notebook is where they can write down ideas, draw pictures, make graphs, work through problems, write solutions, and take notes to remember later. Students will use their electronic devices to access problems, look at images, access links, and more.

The Big Picture

CPM's methodology is based on the following principles.

- All students are capable of understanding mathematics deeply.
- Learning mathematics takes time, effort, and support.
- Students learn mathematics more deeply when they discuss the material with classmates and work in teams.
- Students make greater meaning and see more connections when they experience mathematics in different contexts and with a variety of problems.
- Students need to engage and re-engage with topics over time.

Need Help?

Methods & Meanings boxes are included in the Mathematician's Notebook as reference.

0.1.2: Multiplying Fractions
0.1.3: Evaluating Algebraic Expressions
0.1.4: Area of Polygons
0.1.5: Unit Rate
0.1.6: Box Plots

Welcome to *Inspiring Connections Course 2*!

Inspiring Connections Course 2 is a research-based course for mathematics with a student-centered, problem-based approach.

Current Topics

In the Prelude, students will learn the skills necessary for success in this course. These skills include working collaboratively, communicating mathematical ideas, giving and receiving productive feedback, practicing an academic mindset, and thinking like a mathematician.

Collaboration

An important function of the Prelude is to build a foundation for collaborative, working relationships. Students will work together to learn how their classmates show respect, communicate and participate in discussions, and view classroom working agreements.

Standards for Mathematical Practice

Students will be encouraged to use their full linguistic repertoire as they build their mathematical identities and work on the Standards for Mathematical Practice:

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.

Positive Academic Mindsets

Supports in the Prelude include reflection questions, opportunities to promote various perspectives, and reminders to focus on the iterative learning process. In addition to building a classroom environment where students will thrive, these practices help students develop positive academic mindsets.

Try This at Home!

Throughout this course, students will write both learning reflections and goal reflections in their journals. Ask your student to show you these journals and talk about the benefits of writing down one's thoughts.

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