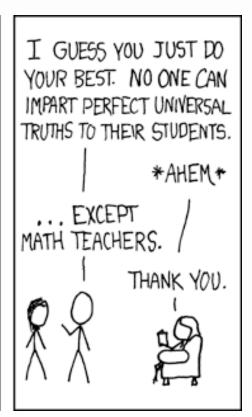


THE WORLD IS SO COMPLICATED - THE MORE I LEARN, THE LESS CLEAR ANYTHING GETS.
THERE ARE TOO MANY IDEAS AND ARGUMENTS TO PICK AND CHOOSE FROM. HOW CAN I TRUST MYSELF TO KNOW THE TRUTH ABOUT ANYTHING?

AND IF EVERYTHING I KNOW IS SO SHAKY, WHAT ON EARTH AM I DOING TEACHING?





## Mathematical Goals and Questions

Reflecting on Practice

Week #2 Day #6



## Questions are linked to goals.

#### Our goals for you:

- Better understand the meaning of each of the eight Mathematical Practices.
- Identify specific evidence of students' demonstrating the Mathematical Practices.
- Identify questions that push/probe student thinking related to the Mathematical Practices

# Agenda over the next two classes: <u>Today</u>:

- Receive an overview of all 8 Mathematical Practices.
- Your table will create a poster explaining one Mathematical Practice in detail. (Evidence students are practicing it, evidence they are not).
- Review the work of other tables, give feedback.
  - Read/digest feedback, plan for the next day .

#### **Tomorrow:**

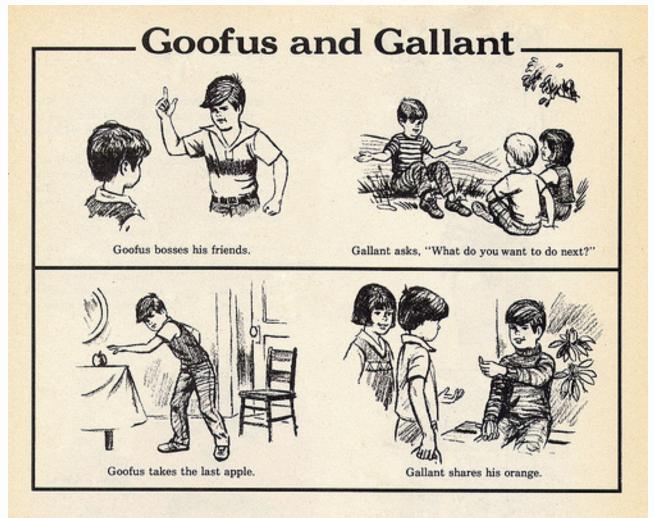
- A ONE PAGE document of "best evidence" of the Mathematical Practices.
- Write PUSH and PROBE questions specific to that Mathematical Practices.
- Submit work to a collaborative document (Evidence + Questions) that we will compile and share with you.

#### **CCSS Mathematical Practices**

Common Core State Standard Mathematical Practices
The eight core practices that students should understand and enact in doing and thinking about mathematics:

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
   Look for and express regularity in repeated reasoning

### Remember Goofus and Gallant?





# Illustrating One of the Eight Mathematical Practices in a Classroom

#### **Poster**

 How do you know when you see/hear it from students? What do they say? Do? Write? Better yet, how do you know when you don't see/hear it?

#### Questions that help:

- What will students be doing when they do(n't) illustrate the MP?
- What will they be saying when they do(n't) illustrate the MP?
  - What will they be writing when they are (not) engaged in the MP?

## Another analogy for you hipster Internet Meme Lovers







## Gallery Walk

Take Post-It Notes and respond to something specific by writing comments like:

- This example is helpful because . . .
- I disagree/am confused by this because . . .
- I wonder if saying \_\_\_would help because . . .
- Nice idea! Great poster!

## Feedback on your poster.

Look at the feedback from your poster.

- What needs more specificity?
- What examples are working?
- Which one's aren't?



## Start thinking about tomorrow's task:

## You will upload a ONE PAGE document tomorrow, with:

- The pieces of evidence that best show success with the MP.
- The pieces of evidence that best show struggle with the MP.
- Pushing questions that challenge students to demonstrate the MP.
  - Probing questions that inform you where they are with the MP.