

Handout #1

Question Type & Sample Questions

Managing

Intended to get students working, organized

Who's doing what?

How did you start?

Clarifying

Intended to find out if student understands the task or when the student says something and the teacher is not what the student meant.

What is *area*?

How did you get your answer?

Orienting

Intended to get students started and to be sure they are focusing on the problem they are to solve

What's are you supposed to find? What will your answer look like?

Have you thought about drawing a diagram?

How did you get your answer?

How can you check your answer?

Prompting Mathematical Reflection

Intended to have students explain their own or a peer's thinking and reflect on whether they are making sense of the math and to push their thinking about the mathematics

How do you explain that?

How did you make your table?

How does your answer compare to XXX's answer? Who do you think is right and why?

How big an answer would make sense? How come?

Does anyone have a different way?

Eliciting Algebraic Thinking

Intended to have students "undo" or go backwards to see if they understand a concept; to build formulas for describing relationships; to generalize from computations they have made; to find patterns and look for what changes; to justify conclusions

What does the variable represent?

Is there a formula? What is the formula for?

How will the result change if you changed xxxx (i.e., the starting year, the rate of change)

How could you change the problem to get XXX as an answer?

Can you explain any patterns you see? How does the rule work?

What does it mean when $n=2$?

Is there an easier way?

What pattern can you observe if you do not do the arithmetic right away?