

about how they are thinking about fractions. I'd also tell the students that even as an adult, I need to "see" what I'm doing and rely heavily on sketches to help with math problems.

▲ ***Why did you have students choose the number of cookies they would share for the problems?***

I'm always on the lookout for ways to blend instruction and assessment in lessons so that when children are involved in learning activities, I have the opportunity to gain insights into how each of them is thinking. Giving students the chance to set parameters for problems gives me information about their comfort levels and the challenges they're willing to take on.

▲ ***Don't you think that if the students all did the same problems, you could more easily have a class discussion later?***

Yes, I guess that's true. As a matter of fact, when I circulated around the room, I looked for common problems that we could discuss. So, upon reflection, I could have assigned some problems in common, maybe giving them three specific ones to try, and then let them do two of their own choosing. This is one of those professional judgment calls for which there's no right answer and probably no wrong choice either.

▲ ***You asked students to solve problems of dividing cookies among three, four, and six people. How come you skipped five people?***

I find that it's too hard for the students to divide circles into fifths and then be able to discern the fifths from sixths. With circles, the shapes of halves and fourths are easily recognizable. Thirds are, also, with a little practice. Sixths are related to thirds, so students have a way to cut them. Fifths, however, are more difficult. I don't think that every material is suitable for all possible fraction situations. We'll get to fifths in another way. The context of money is more natural and suitable, I think, since a nickel is one-fifth of a quarter and twenty cents is one-fifth of a dollar.

▲ ***What do you talk about with students as you observe them working on this activity?***

When circulating around the room, I offer help when asked, always focusing my help on getting the students to reason for themselves. A good deal of the help I give is helping students get down in writing what they've done. Most important is that students can explain what they're doing and why it makes sense. Hearing students explain gives me insights into their understanding, and having the opportunity to talk about their ideas helps students confirm and often extend their thinking. With this activity, I first look at students' worksheets to check for correctness. If an answer is wrong, I talk with the students about it. Also, I look to see if there are ways I can challenge their thinking further, starting with what they've done.