

A TEACHER REFLECTS



While field testing this unit, I had the distinct advantage of doing so with two classes. When I was doing Lesson 9 with the first group, I didn't feel that the students grasped the meaning of various percents in relation to each other. With the second group, I started out with the number 20,000 because it would require students having to really understand the process and not just work from memory. I put a number line on the overhead projector showing zero percent on the left and 100% on the right. Then I asked the students, "If right here was half, what percent is that and how much of the 20,000 does it represent?" I put another mark on the line for 25% and asked them for the equivalent fraction and how much of 20,000 it represents.

The kids started to correct each other about some of the misconceptions. The question about $\frac{1}{2}$ of 20,000 threw a couple of students even though they could tell me in theory that $\frac{1}{2}$ was the same as 50%. They knew that half of 20,000 was 10,000 but really weren't sure if that was the question I was asking. Looking at a number line with percents on it was an unfamiliar experience. I went to 10% next, and showed them the easy way to find 10%, placing the decimal point over or erasing the last zero (i.e. 10% of 20,000 is 2,000). Five percent was half of 10%. I think it is so important to get into the 1%. Once we got there the estimation for the numbers really came out to "exact" numbers because students started subtracting 1% from the 10% twice to get 8%. To find the 23%

they used the 25% and subtracted 1% twice. Some of my students were excited to find a way they could do percents that weren't even numbers in their heads. Completing the table no longer involved estimating. My first class estimated while my second class got the exact numbers.

I then had the students fill out a table with equivalent fractions, decimals, and percents. When students did the first problem, $\frac{1}{2}$, I asked them to come up with two decimal equivalents. About half of the class did this correctly right off the bat. The others were split rather evenly between being unable to come up with a second decimal (they had 0.5) and writing 0.05 since they knew it had something to do with zero. I went over place value in decimals briefly, trying to get them to see why 0.5 and 0.50 are the same, while 0.05 is not. Also, in going over the chart, I pointed out to students how you could find 75% of a number by adding 50% and 25%, another "trick" to add to their repertoire.