Activity 6 Assessment
Mental Math with Powers of 10

Mental Math with Powers of 10			
Expresses and uses powers of 10 in a variety of forms	Uses mental math to multiply or divide by powers of 10	Relates multiplication by a negative power and division by a positive power and vice versa	Solves problems involving multiplying or dividing by powers of 10
"1000 is the same as 10 × 10 × 10 and can also be written as 103. $\frac{1}{1000}$ is the same as $\frac{1}{10 \times 10 \times 10}$ and can also be written as 10^{-3}."	"$3.56 \times 10^3 = 3.56 \times 1000$ $= 3560$ $3.56 \div 10^3 = 3.56 \div 1000$ $= 0.003\,56$"	"10^{-3} is $\frac{1}{1000}$. So, I think that multiplying by 10^{-3} will be the same as dividing by 10^3. This means that $3.56 \times 10^{-3} = 0.003\,56$. I checked with my calculator, and I am correct."	"$8.4 \;\square\; 10^2 = 0.084$ This is the same as $8.4 \;\square\; 100 = 0.084$. The answer is smaller than 8.4. If I multiplied 8.4 by 100, the answer would be greater. So, I will use division. I'll check: $8.4 \div 100 = 0.084$, which is the answer I want."

Observations/Documentation			