>> Write an equilibrium constant expression for this equation. Okay, your equation says, two moles of hydrogen gas reacts with one mole of oxygen gas to form two moles of water as a vapor, as a gas. You'll notice there's a double headed arrow here. It could be written that way, it could also be written in this way, where you have one arrow going one direction, and the other arrow going in the other direction. So, both of s are ways to indicate a reversible reaction. Now, with this reversible reaction, we want to write the equilibrium constant expression. To write that, we need to, first off, figure out what are we going to put in the numerator of our expression? And the numerator will always be the species on the right-hand side of the equation. In other words, the products become the numerator in our expression here. The reactants, the left-hand side, these become the species in our denominator. And so, you can see the case of C is set up with water in the numerator. Down in the denominator, we have our hydrogen gas times our oxygen gas. Now, one other point I want to make is, look what happens to the coefficients. We have coefficient of two. This is actually a coefficient of one. And here's another coefficient of two. When we're writing the equilibrium constant expression, those coefficients become powers. So, in this case here, we have water to the second power. Down below, we have hydrogen to the second power. And we have oxygen. We don't put a power on that because that's what we would be writing and it really doesn't matter because all we're saying is we have the concentration of oxygen to the first power. We don't have to write the first power. Okay. One other thing I want to mention about this, anything we put in this equation, in this equilibrium constant expression has to be in gas form. So, if any of these were not a gas. If, say, one of these said solid or liquid, it would not show up in this expression here.