Imagine a sweet potato is like a big rock that feels heavy when you hold it in your hand. The density of the sweet potato tells us how tightly packed the material inside the sweet potato is. It's like comparing how tightly packed toys are in a toy box.

When we say the density of the sweet potato is 0.44 grams per cubic centimeter, it means that for every cubic centimeter of space the sweet potato takes up, there are 0.44 grams of stuff inside it. It's like saying there are 44 marbles in a box that is 100 cm^3 in size.

To find out how much the sweet potato weighs (its mass), we need to know its volume, which is how much space it takes up. If the sweet potato's volume is 750 cubic centimeters, that's like saying it takes up 750 of those same toy boxes we talked about earlier.

To calculate the sweet potato's mass, you can multiply its volume by its density. In this case, you would multiply 0.44 grams/cm^3 by 750 cm^3. The unit 'cm^3' cancels out, leaving us with 0.44 x 750 grams, which equals 330. This means that the sweet potato's mass (its weight) is 330 grams.

So, to sum it up, the mass of the sweet potato is 330 grams. You can think of it as weighing the same as about 3 small apples or 11 medium-sized strawberries. I hope this explanation helps you understand how we can calculate the mass of a sweet potato using its density and volume!