## What's a Variable?



In algebra, we use letters, like x and y, as **variables** to represent numbers that we don't know the value of yet. They are just like numbers, we just don't know what they mean until we solve for them! This is what algebra is all about!



In this case, since we don't know how many pizzas you can get, we can use the variable n = number of pizzas to represent this number we don't know yet.

Number of Pizzas	Cost (in dollars)
1	1x10=10
2	2x10=20
n	nx10 = 10n

How much does my pizza order cost?



Variables can take on many values. Like I can replace n with 1, 2, or 3 to represent different sized pizza orders.

We use variables in bar modeling in the same way, to represent a number. Then we can use bar modeling to figure out the value of the variable!

Since a variable is just standing in for a number we don't know, we use bars to show variables the same way we use bars to show numbers, like this:

