

# Bread Math

"Baker's Percentages" are a recipe shorthand for baked goods recipes; since flour is the key ingredient, it's basically "one part flour to \_\_\_ parts ..." of everything else in the recipe, and they're *a/ways* by weight. This makes recipes accurate and repeatable and lets us scale them to however much we want to make with a little arithmetic.

This worksheet is meant to help keep track of some of the extra details when calculating a sourdough bread recipe; it looks more complicated than it really is, and once you find some recipes and final dough weights that work for you, just keep using those numbers.

Quantities in bold are what you actually add to make the dough.

$$\frac{\text{Final Dough}}{\text{g}} \div (1.00 + 0.\text{ } \text{Flour} + 0.\text{ } \text{Water} + \dots + \text{Salt}) = \text{Total Flour g}$$

(I definitely use a calculator for this)

$$\text{g Starter} \div 2 = \text{g Flour and Water from starter}$$

$$\text{Additional Flour} = \text{g Total Flour} - \text{g from starter}$$

$$\begin{array}{rcl} & \times 0.\text{ } & = \text{g of flour} \\ \text{Additional Flour g} & \times 0.\text{ } & = \text{g of flour} \\ & \times 0.\text{ } & = \text{g of flour} \\ & + & \\ & 1.00 & \end{array}$$

$$\text{Water: g Total Flour} \times 0.\text{ } - \text{g from starter} = \text{g}$$

$$\text{Salt: g Total Flour} \times 0.\text{ } = \text{g}$$

A good basic loaf recipe is:

50% Whole wheat	70% Water	← (Sometimes a whole recipe like this one is summarized as "70% hydration")
25% Bread flour	2% Salt	
25% All-purpose		

Experiment with flour and water percentages, substituting milk or broth or egg for some of the water, adding a small percentage of oil or fat, ...on and on

