CLAIM 🡪 Baking soda is one of the most important ingredients in baking.

EVIDENCE 🡪 Neutralization with baking soda usually produces carbon dioxide gas, which you can observe bubbling forth if you mix vinegar (an acid) and baking soda. Such reactions are used in cooking to take advantage of the gas, as in getting a cake to rise. Cakes, muffins, and so on will not rise without the addition of baking soda.

SOURCE 🡪

“Baking Soda.” *American Heritage Student Science Dictionary*. N.p.: n.p., 2009. 32-32. *Marshall Cavendish Science Reference Center*. Web. 03 Sept. 2012.

CLAIM 🡪 If dough is going to rise in baking, there has to be an acid and a base; therefore, baking powder can be an easier ingredient to use than baking soda.

EVIDENCE 🡪 Baking powder is a mix of an acid, baking soda, and a base, cream of tartar. When water is added these two react leading to the bubbles that will make dough rise. Without both the acid and base, there is no neutralization which leads to those biscuit rising bubbles!

SOURCE 🡪

McNulty, Karen. “Biscuit Blues.” *Science World* 50.11 (1994): 18. *Science Reference Center*. Web. 3 Sept. 2012.

CLAIM 🡪 Yeast must be living in order to help bread rise.

EVIDENCE 🡪 Yeast are microscopic, single-celled organisms that cells multiply rapidly by the process of budding. In the presence of an abundant food source, huge populations of yeast cells accumulate. Yeast are among the few living organisms that do not need oxygen in order to produce energy. This oxygen-independent state is called anaerobic. During such anaerobic conditions, yeast convert carbohydrates--starches and sugars--to alcohol and carbon dioxide gas. This process is known as fermentation.

SOURCE 🡪

“Yeast.” *U\*X\*L Encyclopedia of Science*. U\*X\*L, 2007. *Gale Student Resources*

*In Context*. Web. 3 Sep. 2012.