**Ocean Acidification Demonstration**

To be done in conjunction with “What is Ocean Acidification?” article. Students can visualize the effects on sea shells exposed to acid while explaining the process.

**Background information:**

Chalk is primarily calcium carbonate which is from the skeletons of very small ancient marine organisms.

CaCO3  = fossilized sea shells

When chalk comes in contact with an acid, whether acetic, carbonic or hydrochloric, it breaks down to form carbon dioxide, water and a salt. An example with hydrochloric acid is below:

**CaCO3 + Acid (HCl) → CaCl2  + CO2 + H2O**

**Demonstration:**

In this demonstration acid will be added to chalk. This demonstration is most effective if the chalk is not waxed on the outside and is slightly crushed. Upon immediate contact the acid will break down the chalk and produce an abundance of carbon dioxide bubbles.

Include this knowledge in the article critique.