

NOTES ON CALCIUM CARBONATE.....

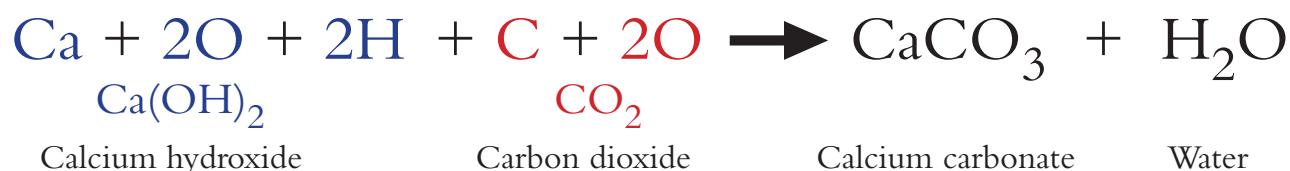
Water is H_2O —2 hydrogen atoms bonded to 1 oxygen atom.

Calcium hydroxide is $\text{Ca}(\text{OH})_2$ —1 calcium atom bonded to 2 oxygen atoms and 2 hydrogen atoms.

Carbon dioxide is CO_2 —1 carbon atom bonded to 2 oxygen atoms.

Calcium carbonate is CaCO_3 —1 calcium atom bonded to 1 carbon atom and 3 oxygen atoms.

In our investigation we mixed calcium hydroxide, $\text{Ca}(\text{OH})_2$, with carbon dioxide, CO_2 . When this happens, the atoms reorganize, a process called a reaction. New products form.



The calcium atom bonds with the carbon dioxide plus one of the oxygen atoms from the hydroxide part of the calcium hydroxide to make a molecule of calcium carbonate. The remaining oxygen atom bonds with the two hydrogen atoms to make a molecule of water.

The calcium carbonate molecule does not dissolve in water, so it forms a solid white material.