

Counting Atoms Worksheet

Name:

Date:

Calculate the total number of atoms in:

1) 5 molecules of H_2O

2) 3 molecules of $\text{C}_6\text{H}_{12}\text{O}_6$

Apply atom counting to more complex formulas. Count the atoms in each of the following

1) $\text{C}_6\text{H}_{12}\text{O}_6$ (Glucose)

2) CaCO_3 (Calcium Carbonate)

True or False

Question

✓

X

A molecule of water (H_2O) contains two hydrogen atoms and one oxygen atom.

Carbon dioxide (CO_2) consists of two carbon atoms and two oxygen atoms

Ammonia has one nitrogen atom and three hydrogen atoms.

Methane includes one carbon atom and four hydrogen atoms.

In sodium chloride, there is one sodium atom for every one chlorine atom.

Glucose is made up of 6 carbon atoms, 12 hydrogen atoms, and 6 oxygen atoms.

Calcium carbonate includes three oxygen atoms.

A molecule of sulfuric acid contains 2 hydrogen atoms, 1 sulfur atom, and 4 oxygen atoms.

Carbon dioxide plays a critical role in the process of photosynthesis.

Ammonia is primarily used as a building material in construction projects.