

# Counting Atoms Worksheet

## Section 1: Exploring More Complex Molecules

1. Glucose ( $C_6H_{12}O_6$ )
  - a. Count the number of carbon (C), hydrogen (H), and oxygen (O) atoms.
  - b. Question: How is glucose used by our bodies?
2. Ammonium Nitrate ( $NH_4NO_3$ )
  - a. Count the number of nitrogen (N), hydrogen (H), and oxygen (O) atoms.
  - b. Question: What are some uses of ammonium nitrate in agriculture?

## Section 2: Involving Biochemical Molecules

1. Hemoglobin ( $C_{2952}H_{4664}N_{812}O_{832}S_8Fe_4$ )
  - a. Count the number of carbon (C), hydrogen (H), nitrogen (N), oxygen (O), sulfur (S), and iron (Fe) atoms. (Note: Simplified counting for key elements may be performed.)
  - b. Question: Explain the role of hemoglobin in the human body.
2. DNA Segment ( $C_{10}H_{14}N_2O_5$ )
  - a. Count the number of carbon (C), hydrogen (H), nitrogen (N), and oxygen (O) atoms.
  - b. Question: How does DNA store genetic information?