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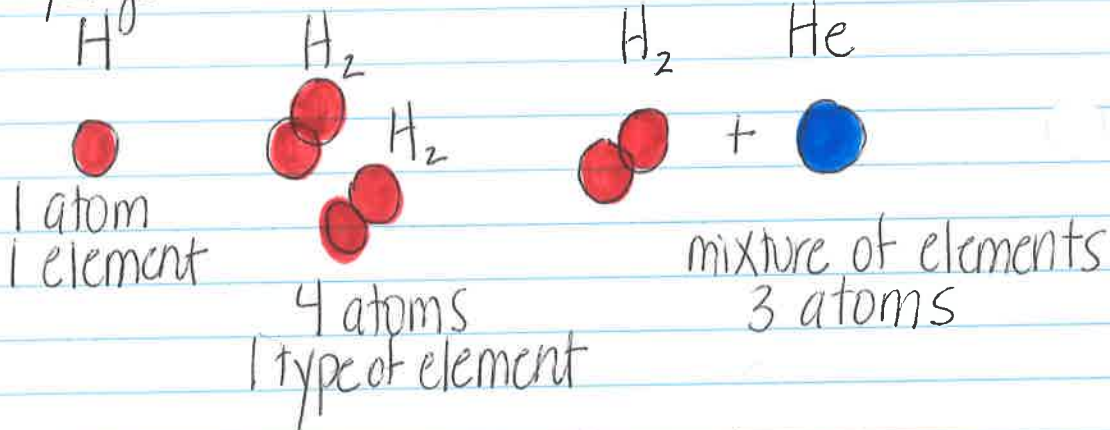
# The Nature of Matter

Matter is anything that has mass and takes up space.

Element - pure substance that cannot be broken down into other substances by chemical or physical means.

An element consists of only one type of atom with the same number of protons.

Hydrogen



On average a single human body cell has  $10^{14}$  atoms = 100 trillion  
100,000,000,000,000

Compounds - two or more different types of atoms (elements) chemically bonded.

A compound is a pure substance that cannot be separated by physical means.

