

Review for Chapter 4 Chemistry Test 11 Grade

Vocabulary Words

1. proton
2. atom
3. mass number
4. atomic mass unit
5. electron
6. isotope
7. atomic number
8. atomic mass
9. nucleus
10. neutron

Dalton's atomic theory

1. all elements are composed of submicroscopic indivisible particles called atoms
2. atoms of the same element are identical
3. the atoms of any one element are different from those of any other element
4. atoms of different elements can physically mix together or chemically combine with one another in simple whole ratios to form compounds
5. chemical reactions occur when atoms are separated, joined or rearranged. however, atoms of one element are never changed into atoms of another element as a result of a chemical reaction.

Facts to know

1. the nucleus is positively charged with a high density
2. to find the number of neutrons, subtract the atomic number from the mass number
3. the mass number is the number of protons and neutrons in the nucleus of an atom
4. all atoms of the same element must have the same number of protons and electrons
5. hydrogen has three isotopes which all differ from each other by the number of neutrons
6. the atomic mass is measured in amu's. an amu is equal to 1/12th the mass of a carbon atom

7. how to identify an isotope

${}^{24}_{12}\text{E}$	${}^{24}_{13}\text{E}$	${}^{25}_{11}\text{E}$	${}^{25}_{12}\text{E}$
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8. do you know how to calculate the average atomic mass of an element?

practice quiz

1. dalton's atomic theory included the idea that atoms of different elements can chemically combine in - _____ ratios
2. an atom is the smallest particle of an element that retains the _____ of that element
3. _____ are subatomic particles with a negative charge
4. the nucleus of an atom is composed of _____ and protons
5. a neutron has no charge, but its mass is almost the same as that of a _____
6. the number of protons in an atom is called its _____ number
7. there are 10 neutrons and _____ electrons in an atom of oxygen 18
8. isotopes of an element have different numbers of neutrons. They also have different _____ numbers
9. the total number of protons, neutrons and electrons in an atom of silver 109 (atomic number 47) is _____
10. the mass number of an element with 14 electrons and 16 neutrons is _____