

Chemistry Basics (Speedy Study Guide)

Speedy
Study
Guides

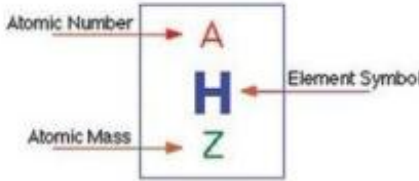
CHEMISTRY BASICS

Atomic Structure

An atom is the smallest building block of matter. Atoms are made of neutrons, protons and electrons. The nucleus of an atom is extremely small in comparison to the atom, if an atom was the size of the Houston Astrodome, then its nucleus would be the size of a pea.

Introduction to the Periodic Table

Scientists use the Periodic Table in order to find out important information about various elements. Created by Dmitri Mendeleev (1834-1907), the periodic table orders all known elements in accordance to their similarities. When Mendeleev began grouping elements, he established the Law of Chemical Periodicity. This law states, "the properties of the elements are periodic functions of atomic number." The periodic table is a chart that categorizes elements by "groups" and "periods." All elements are ordered by their atomic number. The atomic number is the number of protons per atom. In a neutral atom, the number of electrons equals the number of protons. The periodic table represents neutral atoms. The atomic number is typically located above the element symbol. Beneath the element symbol is the atomic mass. Atomic mass is measured in Atomic Mass Units where 1 amu = $\frac{1}{12}$ mass of carbon measured in grams. The atomic mass number is equal to the number of protons plus neutrons, which provides the average weight of all isotopes of any given element. This number is typically found beneath the element symbol. Atoms with the same atomic number, but different mass numbers are called isotopes. Below is a diagram of a typical cell on the periodic table.



The diagram shows a rectangular box representing an element's cell on the periodic table. Inside the box, the letter 'A' is at the top, 'H' is in the middle, and 'Z' is at the bottom. Three arrows point to these letters from the left: 'Atomic Number' points to 'A', 'Element Symbol' points to 'H', and 'Atomic Mass' points to 'Z'.

There are two main classifications in the periodic table, "groups" and "periods." Groups are the vertical columns that include elements with similar chemical and physical properties. Periods are the horizontal rows. Going from left to right on the periodic table, you will find metals, then metalloids, and finally nonmetals. The 4th, 10th, and 18th periods are called the transition metals. These elements are all metals and can be bent past to isolate. They are known for their beauty and durability. The transition metals include two periods known as the lanthanides and the actinides, which are located at the very bottom of the periodic table. The chart below gives a brief description of each group in the periodic table.

Group 1A	<ul style="list-style-type: none"> • Known as Alkali Metals. • Very reactive. • Never found free in nature. • React readily with water.
Group 2A	<ul style="list-style-type: none"> • Known as Alkaline earth elements. • All are metals. • Occur only in compounds. • React with oxygen in the general formula EO where O is oxygen and E is Group 2A element.

Filesize: 5.94 MB

Reviews

Absolutely essential study pdf. It is written in basic words and phrases rather than hard to understand. I am just happy to tell you that this is basically the finest pdf I actually have studied during my personal lifestyle and can be the very best publication for actually.
(Shyanne Senger)

CHEMISTRY BASICS (SPEEDY STUDY GUIDE)



Wahida Clark Presents, 2014. PAP. Book Condition: New. New Book. Delivered from our US warehouse in 10 to 14 business days. THIS BOOK IS PRINTED ON DEMAND. Established seller since 2000.



[Read Chemistry Basics \(Speedy Study Guide\) Online](#)



[Download PDF Chemistry Basics \(Speedy Study Guide\)](#)

Relevant Books



The Werewolf Apocalypse: A Short Story Fantasy Adaptation of Little Red Riding Hood (for 4th Grade and Up)

2015. PAP. Book Condition: New. New Book. Delivered from our US warehouse in 10 to 14 business days. THIS BOOK IS PRINTED ON DEMAND. Established seller since 2000.

[Read eBook »](#)



The Writing Prompts Workbook, Grades 3-4: Story Starters for Journals, Assignments and More

2012. PAP. Book Condition: New. New Book. Delivered from our US warehouse in 10 to 14 business days. THIS BOOK IS PRINTED ON DEMAND. Established seller since 2000.

[Read eBook »](#)



Short Stories 3 Year Old and His Cat and Christmas Holiday Short Story Dec 2015: Short Stories

2016. PAP. Book Condition: New. New Book. Delivered from our US warehouse in 10 to 14 business days. THIS BOOK IS PRINTED ON DEMAND. Established seller since 2000.

[Read eBook »](#)



Books for Kindergarteners: 2016 Children's Books (Bedtime Stories for Kids) (Free Animal Coloring Pictures for Kids)

2015. PAP. Book Condition: New. New Book. Delivered from our US warehouse in 10 to 14 business days. THIS BOOK IS PRINTED ON DEMAND. Established seller since 2000.

[Read eBook »](#)



Short Stories Collection I: Just for Kids Ages 4 to 8 Years Old

2013. PAP. Book Condition: New. New Book. Delivered from our UK warehouse in 3 to 5 business days. THIS BOOK IS PRINTED ON DEMAND. Established seller since 2000.

[Read eBook »](#)