

Reading Guide

Name: Key

Phys Sci
Chapter/pages: 18.2

Survey: Read the title, headings, and subheadings. Read the first and last paragraph, or chapter summary. Look at the illustrations and graphics; read the **boldfaced** and *italicized* words and the captions under the pictures.

What topics will I be reading about?

subatomic particles mass of atom
- mass
- charge
- location isotopes

how to id. an element

Vocabulary: Place each vocabulary word in the KTU below. These are the bold words found in the reading.

Words I K now	Words I T hink I know	Words I am U nsure of
atomic # mass # isotope	avg atomic mass	

Question: Write 5 questions about the following: the title, headings and subheadings, illustrations and graphs, and unknown vocabulary words.

1. How do you find the atomic mass of an atom?
2. Compare & contrast p, n, e.
3. How is an element identified?
4. Write the symbol, atomic #, p, n, e, and mass for Chlorine.
5. What is the difference between C-12 & C-14?

Read: Read to search for information you can use to formulate answers to your questions. After reading each section, write in note form answers to the questions you asked. *Put the information into your own words!*

	mass	charge	Location
Proton	1 amu	1+	nucleus
neutron	1 amu	0	nucleus
electron	0 amu	1-	cloud around nucleus

$$\text{atomic mass} = \#p^+ + \#n^0$$

$\#p^+$ identifies the element

Chlorine - Cl, 17, $p=17$, $n=18$, $e=17$, mass = 35

C-12 & C-14 are isotopes = same element w/ diff masses, diff $\#n^0$
 \downarrow \downarrow
 6 n^0 8 n^0

What words do I need to look up?

Recite: Cover your answer-notes and recite the answers from memory. Slow down and re-read the text for unanswered questions.

Review: Go back to the KTU chart and make changes. (Circle ideas and draw an area to the new column.) Review all of your questions/notes, and summarize them to create cohesive ideas about the whole section or chapter.

Summary of section or chapter:
 Atoms are made of 3 subatomic particles: protons, neutrons, and electrons. Protons have a mass of 1 amu, a charge of 1+, and are found in the nucleus. The number of protons determines the element. Neutrons have a mass of 1 amu, a charge of 0, and are also found in the nucleus. Electrons are much smaller and have a mass of 0 amu, a charge of 1-, and are found in a cloud around the nucleus. Isotopes are atoms of the