Use with textbook pages 52-57.

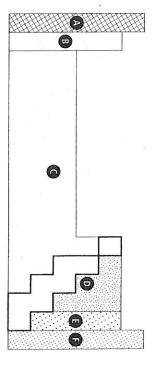
Using the periodic table

Section 2.2 Applying Knowledge

> Section 2.2 Analyzing Information

Use with textbook pages 52-57.

Families of elements



shaded region on the blank line. You can use regions more than once. region does each element or family belong? Place the letter corresponding to the Use the simplified periodic table shown above to answer questions 1 to 12. To which

than once. You will not need to use every term.

ion charge

Suoi

good families

electrons average atomic mass atomic number Vocabulary

halogens

non-metals periodic table periods

properties poor metalloids multiple ion charge

noble gases

metals

Use the terms in the vocabulary box to fill in the blanks. You can use each term more

2. The periodic table is divided into seven horizontal rows called

and 18 vertical columns called

to their physical and chemical

organizes the elements according

These elements are

appear on the left side of the periodic table.

conductors of heat and electricity.

You can use the periodic table on page 201 to help you answer these questions.

on can use the periodic table on page 201 to help you allswel these q	h acarr
1. helium	
2. lithium	e.
3. fluorine	
4. beryllium	
5. halogens	
6. noble gases	
7. alkali metals	
8. alkaline earth metals	
9. non-metallic elements that are strongly reactive	
0. metallic elements that are strongly reactive	
1. metallic elements that are reactive	
2. non-metallic elements that are very unreactive	

30 MHR • Section 2.2 The Periodic Table and Chemical Properties	 Some metals, like platinum and cobalt, form than one way. In other words, they have a(n) 	8. A(n) on an atom when it gains or loses electrons.	7. The is the atoms of an element.	6. The an atom has in the nucleus.	5. Theform a zigzag staircase on the periodic table. These elements have properties similar to both and	
roperties © 2007 McGraw-Hill Ryerson Limited	in more	is an electric charge that forms	is the weighted average of the masses of the	refers to the number of protons that	form a zigzag staircase arrangement roperties similar to both	conductors of heat and electricity

AR.

(f) number of electrons

(d) symbol of element

(d) number of protons

(a) name of element ______
(b) average atomic mass

(a) atomic number _______(b) average atomic mass

(d) number of protons

number of

number of (e) electrons

(e) electrons

Phosphane 31.0

f) newhours

0 =

(c) ion charge

(a) atomic number ______(b) average atomic mass

28

MHR • Section 2.2

The Periodic Table and Chemical Properties

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- ATOMIC STRUCTURE

Comprehension Section 2.2

Name_

charge, too few, a positive charge. imbalance between protons and electrons. Too many electrons produces a negative number of protons equals the number of electrons. The charge on an ion indicates an An atom is made up of protons and neutrons (both found in the nucleus) and electrons (in the surrounding electron cloud). The atomic number is equal to the number of protons. The mass number is equal to the number of protons plus neutrons. In a neutral atom, the

This structure can be written as part of a chemical symbol.

1. Use the vocabulary words listed to label the diagram.

Test your knowledge how information is displayed for each element in the periodic

What is in the box?

Use with textbook pages 52-57

20	Q			Example:
number	tomic	N ² 7Nts	number charge	: mass
4 ele	8 ne	7 pr	charge K	
4 electrons	8 neutrons (15 - 7)	7 protons		

Complete the following chart.

blanks below.

atomic number average atomic mass

> name symbol

@ @ @ @

1 8

<u>e</u>

Vocabulary

Examine the periodic table entry for each of the following elements and complete the

lon	Number	Atomic Wass	Number	Protons	Neutrons	Electrons
I						
İ						
ကို						
3 ⁷ Li						
35C)-						
			10			
1997						
24Mg ²⁺						
As ³ ·	0					
Ag						
A 0+1						
Ag						
S.						
c						
3						

ited