

#38 The element at which of the following locations has the largest atomic radius?

- (A) Period 3, Group 14 (B) Period 3, Group 17
(C) Period 4, Group 14 (D) Period 4, Group 17

#40 An element with atomic number X is a very reactive metal. What property would an element with atomic number $X + 1$ have?

- (A) very reactive nonmetal (B) unreactive element
(C) less reactive metal (D) metalloid with nonmetallic properties

#42 Which element is so chemically reactive that it occurs naturally only in compounds?

- (A) potassium (B) silver (C) copper (D) sulfur

#44 The bond between sulfur and chlorine in an SCl_2 molecule is

- (A) ionic, because electrons are transferred
(B) covalent, because electrons are transferred
(C) ionic, because electrons are shared
(D) covalent, because electrons are shared

#46 Which combination of atoms can form a polar covalent bond?

- (A) H and H (B) N and N
(C) H and Br (D) Na and Br

#48

Which compound contains ionic bonds?

- (A) N_2O (B) CO (C) Na_2O (D) CO_2