

Sample Questions for the Chemistry Placement Exam

Note: These questions are intended to represent the general level of difficulty and areas of coverage of the Chemistry Placement Exam.

They are NOT intended to be a complete representation of the specific types of questions to be found on the exam.

1.	Aluminum reacts with element X to form a compound with the formula Al_2X_3 . Element X exists as diatomic molecules, X_2 , in the gaseous state at normal temperature and pressure. Element X must be
a)	Nitrogen
b)	Oxygen
c)	Sulfur
d)	Chlorine
2.	What is the coefficient of O_2 when the following equation is balanced? $C_2H_4O + O_2 \rightarrow CO_2 + H_2O$
a)	2
b)	3
c)	4
d)	5
3.	How many moles of GeH_4 are needed to form 8.00 moles of GeF_3H according to the following reaction? $GeH_4 + 3GeF_4 \rightarrow 4 GeF_3H$
a)	2.00
b)	4.00
c)	8.00
d)	16.00

4.	According to its location in the periodic table, the element bromine (element # 35) is best described as
a)	A metal
b)	A nonmetal
c)	A transition metal
d)	A metalloid
5.	Which of the following species is neither acidic nor basic when dissolved in water?
a)	HCl
b)	NH ₃
c)	NaCl
d)	NaHCO ₃
6.	To the correct number of significant figures, the result of the following calculation $\frac{[(11.13 - 2.6) \times 10^4]}{[103.15 \times 10^{-6}]}$ should be reported as
a)	8.27×10^8
b)	8.3×10^{-4}
c)	8.3×10^8
d)	8.27×10^{-8}