

**AP MULTIPLE CHOICE QUESTIONS**  
**CH. 3, SET 3**

**AP Chem Test I**

33. Balancing the oxidation-reduction reaction



gives the coefficients

- (A) 4, 12, 10, 4, 10, 8, 6                      (C) 2, 10, 8, 4, 6, 5, 8                      (E) 2, 6, 10, 4, 6, 5, 8  
(B) 2, 6, 10, 4, 8, 10, 6                      (D) 2, 10, 8, 2, 6, 8, 5
38. How many grams of Na are present in 30 grams of NaOH?  
(A) 10 g                      (D) 20 g  
(B) 15 g                      (E) 22 g  
(C) 17 g

**Test II**

- (A) sodium chlorate  
(B) sodium chloride  
(C) sodium chlorite  
(D) sodium hypochlorite  
(E) sodium perchlorate
6. NaCl  
7. NaClO  
8. NaClO<sub>2</sub>  
9. NaClO<sub>3</sub>
30. Consider the balanced equation:  
$$2\text{KClO}_3 \rightarrow 2\text{KCl} + 3\text{O}_2$$
  
If 72 grams of oxygen gas are produced, the amount of potassium chlorate required in grams is:  
(A) 112 g                      (D) 448 g  
(B) 224 g                      (E) 1020 g  
(C) 183 g
66. Substances are neither created nor destroyed, but simply changed from one form to another. This is the law of:  
(A) change of matter  
(B) conservation of energy  
(C) conservation of matter  
(D) multiple proportions  
(E) thermodynamics (second law)
56. Select the substance that is molecular and a compound:  
(A) gold                      (D) oxygen gas  
(B) hydrogen gas                      (E) sodium chloride  
(C) methane