Name:_____

Class Period:_____

Simplest (Empirical) Formula

Directions:
Find the empirical formula for each of the compounds whose percentage composition is given below.

1. 88.8% copper; 11.2% oxygen Answer: _____

2. 40.0% carbon; 6.67% hydrogen; 53.33% oxygen Answer: _____

3. 70.0% iron; 30.0% oxygen Answer: _____

4. 10.1% carbon; 0.9% hydrogen; 89.1% chlorine Answer: _____

5. 12.6% hydrogen; 37.5% carbon; 50.1% oxygen Answer: _____

6. 60.2% terbium; 39.9% chlorine Answer: _____

7. 52.8% aluminum; 47.1% oxygen Answer: _____

8. 72.41% iron; 27.60% oxygen Answer: _____

9. 72.2% magnesium; 27.8% nitrogen Answer: _____

10 74.1% carbon; 8.6% hydrogen; 17.3% nitrogen Answer: _____

Name:_____

Class Period:_____

Simplest (Empirical) Formula - KEY

Directions:
Find the empirical formula for each of the compounds whose percentage composition is given below.

1. 88.8% copper; 11.2% oxygen — Answer: _____***Cu_2O***_____
2. 40.0% carbon; 6.67% hydrogen; 53.33% oxygen — Answer: _____***CH_2O***_____
3. 70.0% iron; 30.0% oxygen — Answer: _____***Fe_2O_3*** or (***FeO_2***)_
4. 10.1% carbon; 0.9% hydrogen; 89.1% chlorine — Answer: _____***$CHCl_3$***_____
5. 12.6% hydrogen; 37.5% carbon; 50.1% oxygen — Answer: _____***CH_3O*** or (***H_4CO***)_
6. 60.2% terbium; 39.9% chlorine — Answer: _____***$TbCl_3$***_____
7. 52.8% aluminum; 47.1% oxygen — Answer: _____***Al_2O_3*** or (***AlO_2***)__
8. 72.41% iron; 27.60% oxygen — Answer: _____***Fe_3O_4*** or (***FeO***)__
9. 72.2% magnesium; 27.8% nitrogen — Answer: ___**Mg_3N_2**_____
10. 74.1% carbon; 8.6% hydrogen; 17.3% nitrogen — Answer: __**C_5H_7N**_____