

## Packet for Test 4

### Worksheet Balancing Equations Chapter 10

The number at the end of the equation is the sum of the coefficients used to balance the equation. Understood ones are not included in the sum of the coefficients.

- \_\_\_\_\_1.  $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$  (2)
- \_\_\_\_\_2.  $\text{NH}_3 + \text{HCl} \rightarrow \text{NH}_4\text{Cl}$  (0)
- \_\_\_\_\_3.  $\text{Al} + \text{HCl} \rightarrow \text{AlCl}_3 + \text{H}_2$  (13)
- \_\_\_\_\_4.  $\text{Mg} + \text{H}_3\text{PO}_4 \rightarrow \text{Mg}_3(\text{PO}_4)_2 + \text{H}_2$  (8)
- \_\_\_\_\_5.  $\text{Cu} + \text{AgNO}_3 \rightarrow \text{Cu}(\text{NO}_3)_2 + \text{Ag}$  (4)
- \_\_\_\_\_6.  $\text{Ca} + \text{Pb}(\text{NO}_3)_2 \rightarrow \text{Pb} + \text{Ca}(\text{NO}_3)_2$  (0)
- \_\_\_\_\_7.  $\text{Al} + \text{Pb}(\text{NO}_3)_2 \rightarrow \text{Pb} + \text{Al}(\text{NO}_3)_3$  (10)
- \_\_\_\_\_8.  $\text{Zn} + \text{Sn}(\text{NO}_3)_4 \rightarrow \text{Zn}(\text{NO}_3)_2 + \text{Sn}$  (4)
- \_\_\_\_\_9.  $\text{Cl}_2 + \text{AlI}_3 \rightarrow \text{AlCl}_3 + \text{I}_2$  (10)
- \_\_\_\_\_10.  $\text{Br}_2 + \text{CuI} \rightarrow \text{CuBr} + \text{I}_2$  (4)
- \_\_\_\_\_11.  $\text{NH}_4\text{OH} + \text{FeCl}_3 \rightarrow \text{NH}_4\text{Cl} + \text{Fe}(\text{OH})_3$  (6)
- \_\_\_\_\_12.  $\text{KBr} + \text{Pb}(\text{NO}_3)_2 \rightarrow \text{KNO}_3 + \text{PbBr}_2$  (4)
- \_\_\_\_\_13.  $\text{AlCl}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{HCl}$  (11)
- \_\_\_\_\_14.  $\text{Al}_2(\text{SO}_4)_3 + \text{BaCl}_2 \rightarrow \text{BaSO}_4 + \text{AlCl}_3$  (8)
- \_\_\_\_\_15.  $\text{Na}_2\text{CO}_3 + \text{CaCl}_2 \rightarrow \text{CaCO}_3 + \text{NaCl}$  (2)
- \_\_\_\_\_16.  $\text{H}_2\text{SO}_4 + \text{AlBr}_3 \rightarrow \text{HBr} + \text{Al}_2(\text{SO}_4)_3$  (11)
- \_\_\_\_\_17.  $\text{Na}_3\text{PO}_4 + \text{BaCl}_2 \rightarrow \text{Ba}_3(\text{PO}_4)_2 + \text{NaCl}$  (11)
- \_\_\_\_\_18.  $\text{K}_3\text{PO}_4 + \text{MgSO}_4 \rightarrow \text{Mg}_3(\text{PO}_4)_2 + \text{K}_2\text{SO}_4$  (8)
- \_\_\_\_\_19.  $\text{NaOH} + \text{CuSO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{Cu}(\text{OH})_2$  (2)
- \_\_\_\_\_20.  $\text{Mg}(\text{OH})_2 + \text{H}_2\text{SO}_4 \rightarrow \text{MgSO}_4 + \text{H}_2\text{O}$  (2)