

Balancing Chemical Equations WS #2

Name _____

For #'s 1-21, you do not have to balance all of the following chemical equations, but the ones that you get correct, must total up to 30 points.

Worth 2 points each:

- 1) ____ NaCl + ____ F₂ □ ____ NaF + ____ Cl₂
- 2) ____ H₂ + ____ O₂ □ ____ H₂O
- 3) ____ CH₄ + ____ O₂ □ ____ CO₂ + ____ H₂O
- 4) ____ FeCl₃ + ____ NaOH □ ____ Fe(OH)₃ + ____ NaCl
- 5) ____ K + ____ MgBr₂ □ ____ KBr + ____ Mg
- 6) ____ HCl + ____ CaCO₃ □ ____ CaCl₂ + ____ H₂O + ____ CO₂
- 7) ____ H₂O + ____ O₂ □ ____ H₂O₂
- 8) ____ NaBr + ____ CaF₂ □ ____ NaF + ____ CaBr₂
- 9) ____ H₂SO₄ + ____ NaNO₂ □ ____ HNO₂ + ____ Na₂SO₄

Worth 3 points each:

- 10) ____ N₂ + ____ H₂ □ ____ NH₃
- 11) ____ KClO₃ □ ____ KCl + ____ O₂
- 12) ____ P + ____ O₂ □ ____ P₂O₅
- 13) ____ Na + ____ H₂O □ ____ NaOH + ____ H₂
- 14) ____ Ag₂O □ ____ Ag + ____ O₂
- 15) ____ S₈ + ____ O₂ □ ____ SO₃
- 16) ____ HNO₃ + ____ NaHCO₃ □ ____ NaNO₃ + ____ H₂O + ____ CO₂

Worth 4 points each:

- 17) ____ Pb(OH)₂ + ____ HCl □ ____ H₂O + ____ PbCl₂
- 18) ____ AlBr₃ + ____ K₂SO₄ □ ____ KBr + ____ Al₂(SO₄)₃
- 19) ____ C₃H₈ + ____ O₂ □ ____ CO₂ + ____ H₂O
- 20) ____ C₈H₁₈ + ____ O₂ □ ____ CO₂ + ____ H₂O
- 21) ____ CO₂ + ____ H₂O □ ____ C₆H₁₂O₆ + ____ O₂

Word Equations: **You DO have to do all of these.** Write a balanced chemical equation complete with states of matter for each of the following descriptions.

22) Zinc and lead (II) nitrate react to form zinc nitrate and lead.

23) Aluminum bromide and chlorine gas react to form aluminum chloride and bromine gas.

24) Solutions of sodium phosphate and calcium chloride react to form a calcium phosphate precipitate and sodium chloride.

25) Potassium metal and chlorine gas combine to form ... (Predict the Products)

26) Solid nitrogen triiodide spontaneously decomposes into... (Predict the Products)

27) Liquid hexacarbon hexahydride reacts with the oxygen in the air explosively to create...

(Predict the Products)