

Synthesis/Decomp Balancing Handout name

Write a skeleton reaction, and then balance each of these chemical reactions. In the right column, state if each one is a synthesis reaction or a decomposition reaction by writing a nice big “S” or “D” 15 points total.

| # | Word and balanced equation | S or D |
|---|---|--------|
| 1 | Sodium and bromine form into sodium bromide | |
| 2 | Indium and chlorine form into indium chloride | |
| 3 | Cobalt (II) phosphide decomposes. | |
| 4 | Iron and oxygen form into Iron (III) oxide | |
| 5 | Water decomposes | |
| 6 | Gold and sulfur form into gold (III) sulfide | |
| 7 | Potassium and arsenic form potassium arsenide | |

| | Synthesis/Decomp Balancing Practice page 2 | S or D |
|----|--|--------|
| 8 | Nitrogen and hydrogen form ammonia | |
| 9 | Aluminum oxide forms into aluminum and oxygen | |
| 10 | Nitrogen dioxide forms nitrogen and oxygen | |
| 11 | Titanium and chlorine form titanium (III) chloride | |
| 12 | Palladium (IV) nitride decomposes | |
| 14 | Silver and iodine form silver iodide | |
| 15 | Bismuth and bromine form bismuth (V) bromide | |
| 16 | Strontium and fluorine form strontium fluoride | |