Name	_
Synthesis and Decomposition Reactions	

Chemistry

Directions: Fill in the correct missing chemical formulas

Addition

- 1. K + Cl₂ →
- 2. Mg + \rightarrow MgBr₂
- 3. + → NaCl
- 4. + → CuO
- 5. Ag + C →

Directions: Write and balance equations for the following synthesis reactions.

- hydrogen and bromine react forming hydrogen bromide
- 2. fluorine and argon react forming argon trifluoride
- sulfur and oxygen react forming sulfur dioxide
- ____
- 4. calcium and chlorine react forming calcium chloride

Decomposition

- 1. $MnO_2 \rightarrow$
- 2. $H_2O \rightarrow$
- 3. \rightarrow K + Cl_2
- 4. $KClO_3 \rightarrow KCl +$
- 5. \rightarrow Ba + S₈

Directions: Write and balance equations for the following decomposition reactions

- 6. decomposition of liquid water into hydrogen and oxygen gases
- 7. decomposition of solid aluminum oxide into solid aluminum and oxygen gas
- 8. decomposition of aqueous sodium chloride into solid sodium and chlorine gas
- 9. decomposition of aqueous ammonia into hydrogen gas and nitrogen gas