

Classifying Reactions and Balancing Chemical Equations

For each of the chemical reactions are listed below, complete the following:

Balance the skeletal equation

The type of chemical reaction (synthesis, decomposition, single displacement, or double displacement)

1.

Balance the skeletal equation: _____ Cu + _____ O₂ → _____ CuO

Reaction type: _____

2.

Balance the skeletal equation: _____ H₂O → _____ O₂ + _____ H₂

Reaction type: _____

3.

Balance the skeletal equation: _____ Fe + _____ H₂O → _____ Fe₂O₃ + _____ H₂

Reaction type: _____

4.

Balance the skeletal equation: _____ H₂S + _____ AsCl₃ → _____ As₂S₃ + _____ HCl

Reaction type: _____

5.

Balance the skeletal equation: _____ CaCO₃ → _____ CO₂ + _____ CaO

Reaction type: _____

6.

Balance the skeletal equation: _____ H₂S + _____ KOH → _____ K₂S + _____ HOH

Reaction type: _____

7.

Balance the skeletal equation: _____ S₈ + _____ Fe → _____ FeS

Reaction type: _____

8.

Balance the skeletal equation: _____ H₂SO₄ + _____ Al → _____ Al₂(SO₄)₃ + _____ H₂

Reaction type: _____

9.

Balance the skeletal equation: _____ H₃PO₄ + _____ NH₄OH → _____ (NH₄)₃PO₄ + _____ HOH

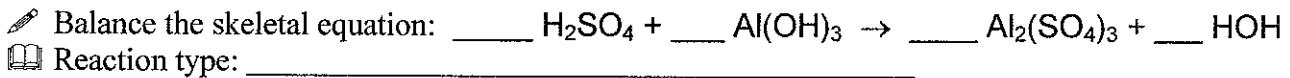
Reaction type: _____

10.

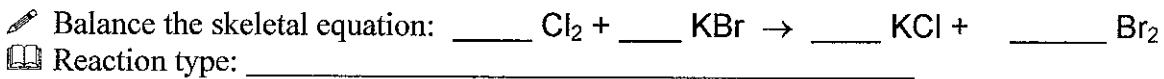
Balance the skeletal equation: _____ O₂ + _____ Al → _____ Al₂O₃

Reaction type: _____

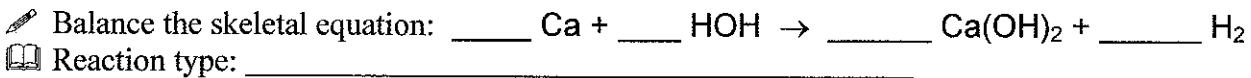
11.



12.



13.



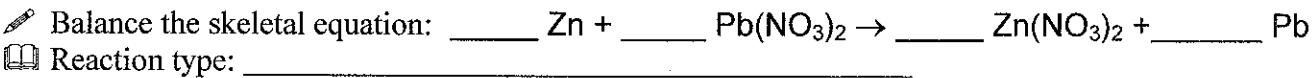
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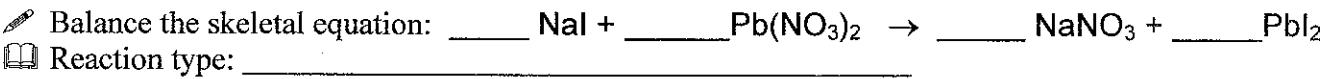
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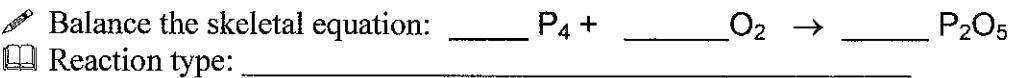
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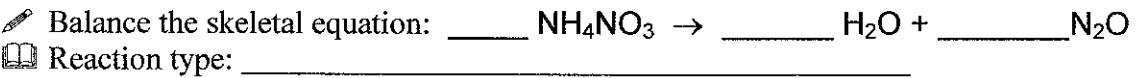
17.



18.



19.



20.

