

Chemistry 20 - Science 10 Review - Formation, Decomposition, and Complete Combustion

Name: _____

KEY

Ensure that your chemical equations are balanced. Ensure that your symbolic equations are properly *balanced* using coefficients.

1. Complete each of the following word equations. You may need to look up some chemical formulas using your textbook.

a. sodium plus fluorine gas produces

sodium fluoride

b. barium plus selenium produces

barium selenide

c. calcium plus iodine produces

calcium iodide

d. strontium plus nitrogen produces

strontium nitride

e. hydrogen fluoride decomposes to

hydrogen and fluorine

f. magnesium phosphate decomposes to

magnesium, phosphorus, oxygen

g. iron (III) hydroxide decomposes to

iron, hydrogen and oxygen

h. vanadium (V) sulfide decomposes to

vanadium and sulfur

i. methane burned in oxygen produces

carbon dioxide + water vapor

j. glucose burned in oxygen produces

carbon dioxide + water vapor

k. propane burned in oxygen produces

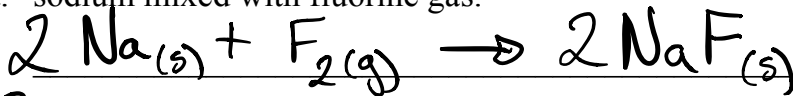
carbon dioxide + water vapor

l. nitrogen monoxide burned in oxygen produces

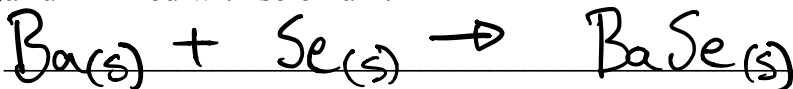
nitrogen dioxide

2. Write balanced symbolic chemical equations for each of the following reactions. Use the most common charge for ambiguous multivalent ions.

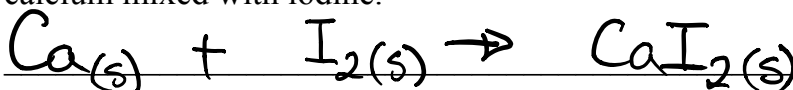
a. sodium mixed with fluorine gas.



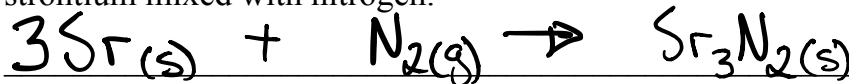
b. Barium mixed with selenium.



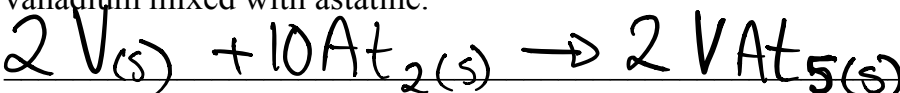
c. calcium mixed with iodine.



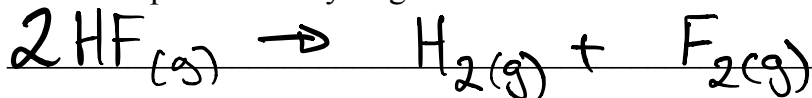
d. strontium mixed with nitrogen.



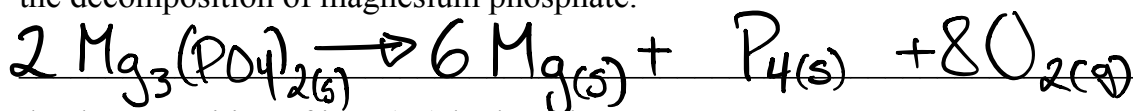
e. vanadium mixed with astatine.



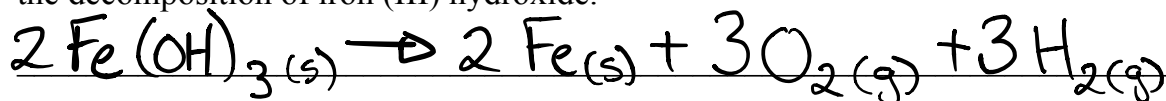
f. the decomposition of hydrogen fluoride.



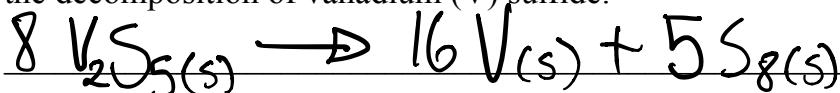
g. the decomposition of magnesium phosphate.



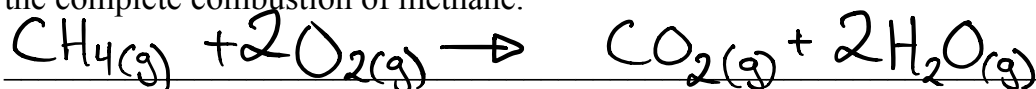
h. the decomposition of iron (III) hydroxide.



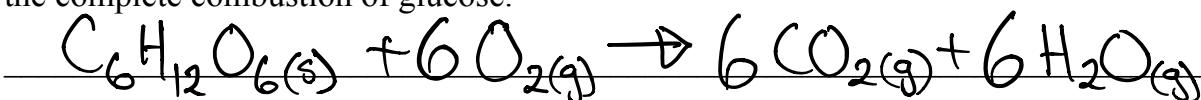
i. the decomposition of vanadium (V) sulfide.



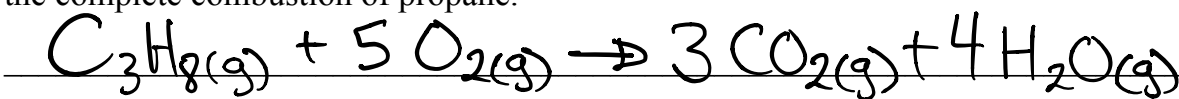
j. the complete combustion of methane.



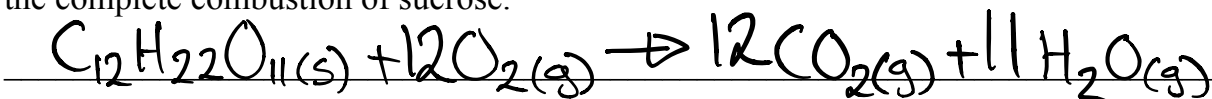
k. the complete combustion of glucose.



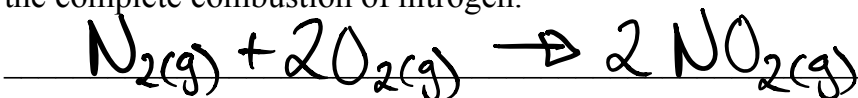
l. the complete combustion of propane.



m. the complete combustion of sucrose.



n. the complete combustion of nitrogen.



o. the complete combustion of carbon disulfide.

