

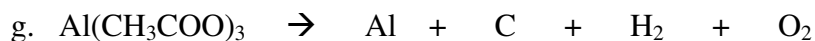
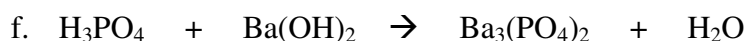
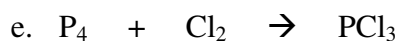
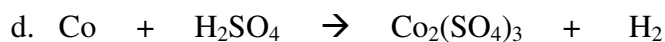
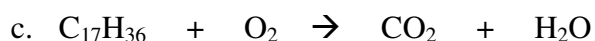
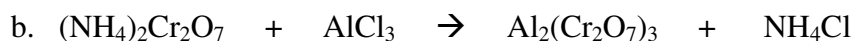
Name _____

Date _____

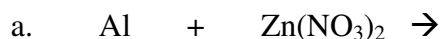
Chemistry 11

Review of Unit 6

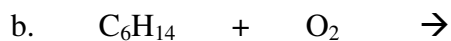
1. Balance the following equations:



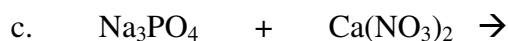
2. **Complete, balance** and **classify** the following equations as *synthesis, decomposition, single replacement, double replacement, neutralization* or *combustion*.



Reaction Type _____



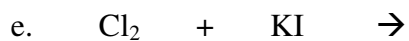
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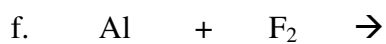
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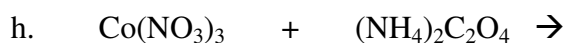
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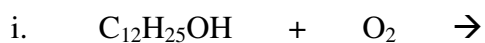
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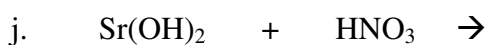
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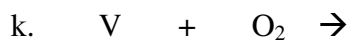
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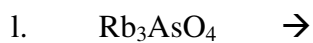


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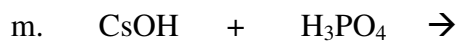


(Assume combining capacity of V is 5+)

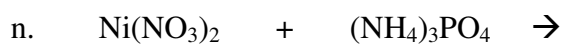
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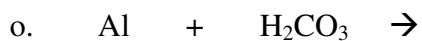
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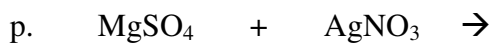
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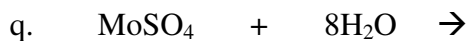
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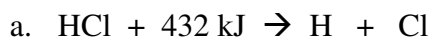


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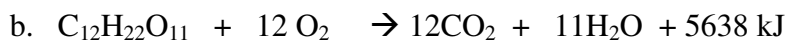


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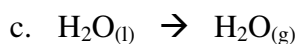
3. State whether each of the following are *exothermic* or *endothermic*.



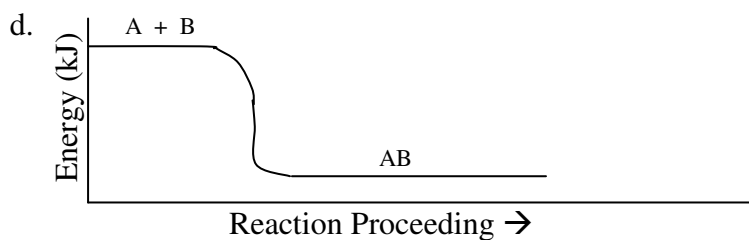
Answer _____



Answer _____



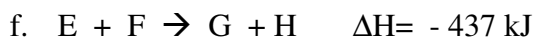
Answer _____



Answer _____



Answer _____



Answer _____

4. In an *exothermic* reaction, the surroundings get (*warmer/cooler*) _____.

5. Define *enthalpy*

6. Given the equation: $C_{12}H_{22}O_{11} + 12O_2 \rightarrow 12CO_2 + 11H_2O + 5638 \text{ kJ}$

- a. How much heat is released during the formation of 9.6 moles of CO_2 ?

Answer _____

- b. How much heat is released during the formation of 0.036 moles of H_2O ?

Answer _____

- c. If 1026 grams of $C_{12}H_{22}O_{11}$ are consumed, how much heat is released?

Answer _____

- d. If 23.76 grams of CO_2 are produced, how much heat is released?

Answer _____

7. Calculate the amount of heat (in Joules) required to warm 350.0 g of water from 30°C to 35°C . (Heat Capacity (C) for H_2O is $4180 \text{ J/kg} \cdot ^\circ\text{C}$)

Answer _____

8. 35.112 kJ of heat are added to a 500.0 gram sample of water initially at 7°C . Calculate the final temperature of the water sample. Be careful with units!

Answer _____