## Astronomy Ranking Task: Chemical Reactions

## Exercise #3

<b>Description:</b> The following are all unbalanced chemical reaction equations.
A. $CH_4 + O_2 \rightarrow CO_2 + H_2O$
B. $C_4H_{10} + O_2 \rightarrow CO_2 + H_2O$
C. $C_3H_8 + O_2 \rightarrow CO_2 + H_2O$
D. $C_8H_{18} + O_2 \rightarrow CO_2 + H_2O$
<b>A. Ranking instructions:</b> When the equations are properly balanced, rank the total number of oxygen atoms in each balanced reaction.
Ranking Order: Most 1 2 3 4 Least
Or, all of the balanced reactions involve the same total number of oxygen atoms (indicate with a check mark)
Carefully explain your reasoning for ranking this way:
D. Doubing instructions. When the counties are prepared, helegand would be a tatal acceptant
<b>B. Ranking instructions:</b> When the equations are properly balanced, rank the total number of hydrogen atoms in each balanced reaction.

Or, all of the balanced reactions involve the same total number of hydrogen atoms. \_\_\_\_\_

Ranking Order: Most 1 \_\_\_\_ 2 \_\_\_ 3 \_\_\_ 4 \_\_\_ Least

(indicate with a check mark)

Carefully explain your reasoning for ranking this way:
<b>C. Ranking instructions:</b> When the equations are properly balanced, rank the total number of carbon atoms in each balanced reaction.
Ranking Order: Most 1 2 3 4 Least
Or, all of the balanced reactions involve the same total number of carbon atoms (indicate with a check mark)
Carefully explain your reasoning for ranking this way: