Combustion equations

Education in Chemistry
May 2018
rsc.li/EiC318-airpollution

This activity accompanies the above article ‘Taking care of the air’.

Task A: Add balancing numbers to the following equations associated with combustion and pollution.

1. ____C + O₂ → 2CO
2. CH₄ + ____O₂ → CO₂ + ____H₂O
3. N₂ + O₂ → ____NO
4. ____NO + ____O₂ → 2NO₂
5. CH₄ + O₂ → C + ____H₂O

Task B: Write balanced symbol equations for the following descriptions.

6. The combustion of methane (CH₄) to give a poisonous gas and water.

7. The combustion of sulfur (S) impurities to give an acidic gas.

8. The complete combustion of propane (C₃H₈).

9. The incomplete combustion of propane (C₃H₈) to give a solid pollutant and water.

10. The incomplete combustion of solid carbon (C) to give a poisonous gas.