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 + $O_2 \rightarrow 2CO$
- 2. $CH_4 + O_2 \rightarrow CO_2 + H_2O$
- 3. $N_2 + O_2 \rightarrow _{---}NO$
- 4. ___NO + ___O₂ \rightarrow 2NO₂
- 5. $CH_4 + O_2 \rightarrow C + ____H_2O$

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

6. The combustion of methane (CH_4) 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.

.....