**Symbol equations for the complete and incomplete combustion of methane**

**Grade A**\*:

Write a symbol equation for the following reactions:

1. When methane (CH4) burns in a plentiful supply of oxygen to produce carbon dioxide and water vapour
2. When methane (CH4) burns in a limited supply of oxygen to produce carbon monoxide and water vapour
3. **Extension:** when propane (C3H8) burns in a plentiful supply of oxygen to produce carbon dioxide and water vapour

**Grade A:**

 Write a symbol equation for the following reactions:

1. When methane (CH4) burns in a plentiful supply of oxygen (O2) to produce carbon dioxide(CO2) and water vapour (H2O)
2. When methane (CH4) burns in a limited supply of oxygen (O2) to produce carbon monoxide (CO) and water vapour (H2O)
3. **Extension:** when propane (C3H8) burns in a plentiful supply of oxygen to produce carbon dioxide and water vapour

**Grade B:**

Balance the following equations:

1. When methane (CH4) burns in a plentiful supply of oxygen to produce carbon dioxide and water vapour

**CH4  + O2 CO2 + H2O**

1. When methane (CH4) burns in a limited supply of oxygen to produce carbon monoxide and water vapour

**CH4 + O2 CO + H2O**

1. **Extension:** when propane (C3H8) burns in a plentiful supply of oxygen to produce carbon dioxide and water vapour

**C3H8 + O2 CO2 + H2O**