**Equilibrium constant expression**

**Write the equilibrium constant expression for each reaction**

|  |  |  |
| --- | --- | --- |
| Year | Equation | Equilibrium constant expression |
| 2020 | 2COF2(*g*) ⇌ CF4(*g*) + CO2(*g*) |  |
| 2018  2015 | 2SO2 *(g)* + O2 *(g)* ⇌ 2SO3 *(g)* |  |
| 2014 | CH4 (*g*) + H2O(*g*) ⇌ CO(*g*) + 3H2(*g*) |  |
| 2012 | PCl5(*g*) ⇌ PCl3(*g*) + Cl2(*g*) |  |
| 2011 | CO(*g*) + 2H2(*g*) ⇌ CH3OH(*g*) |  |
| 2022  2010 | H2(*g*) + I2(*g*) ⇌ 2HI(*g*) |  |
| 2009 | 2NO(*g*) + O2(*g*) ⇄ 2NO2(*g*) |  |
| 2008 | N2(g) + O2(g) ⇄ 2NO(g) |  |
| 2008 | 2O3(g) ⇄ 3O2(g) |  |
| 2007 | 2NH3(*g*) ⇄ N2(*g*) + 3H2(*g*) |  |
| 2019  2017  2013  2006 | 3H2(*g*) + N2(*g*) ⇄ 2NH3(*g*) |  |

The equilibrium constant expression is provided in the table below, write the equation for each reaction

|  |  |  |
| --- | --- | --- |
| Year | Equilibrium expression | Equation |
| 2021 |  |  |
| 2016 |  |  |
| 2015 |  |  |
| 2013 |  |  |

<http://www.chemical-minds.com>

NCEA questions and answers reproduced with permission from NZQA