**Catalysts and Enzymes**

**Catalyst**

* provides a lower energy pathway for a reaction to occur
* not used up in the reaction
* speeds up the reaction

Potential Energy profile Energy Distribution

**Types of catalysts:**

Homogeneous catalyst – catalyst is the same phase as the reactants

Example: chlorine catalyzes the decomposition of ozone

Heterogeneous catalysts – catalyst is a different phase from the reactants

Example: catalytic converter in a car exhaust system

Enzyme – biological catalyst – a protein that facilitates a chemical reaction

Example: sucrase

