

3. Free energy change is a central concept in thermodynamics, and many thermodynamic questions involve calculating free energy change for a reaction from one set of information then using that free energy change to calculate a different piece of information.

List as many formulas as you can which can be used to calculate free energy change for a reaction. Name all the terms in each equation.

The answer key will include some formulas introduced later in the course. Just make sure you list all the ones you've covered in class at the time you're answering this question. You can add to your answer set later.

Equations to Calculate Standard Free Energy Change ($\Delta_r G^\circ$)

Equations to Calculate Free Energy Change ($\Delta_r G$)