

## 17.5 Using the Reaction Quotient (Q) (Video)

This project was preformed to supply **Libretext authors** with videos on General Chemistry topics which can be used to enhance their projects. Also, these videos are meant to act as a learning resource for **all General Chemistry students**.

### Video Topics

The reaction quotient  $Q$  determines the direction a reaction must go to get to equilibrium.  $N_{2(g)} + O_{2(g)} \rightleftharpoons 2 NO_{(g)}$  For the above reaction if we start with only  $N_2$  and  $O_2$  the reaction must go the right of make  $NO$ . If we start with only  $NO$  the reaction must go to the left to make  $N_2$  and  $O_2$ . To find the direction of change first find the reaction quotient  $Q$ . Find  $Q$  by plugging the initial reaction concentrations into the equilibrium expression. If  $Q$  less than  $K$  the reaction goes to the right If  $Q$  more than  $K$  the reaction goes to the left If  $Q = K$  the system is at equilibrium

### Link to Video

Using the Reaction Quotient (Q): [https://youtu.be/\\_J04fgRs7QU](https://youtu.be/_J04fgRs7QU)



### Attribution

- Prof. Steven Farmer (Sonoma State University)

17.5 Using the Reaction Quotient (Q) (Video) is shared under a [not declared](#) license and was authored, remixed, and/or curated by LibreTexts.