

The Boltzmann Distribution

Pre-lesson assignment- textbook page 150-151

Make notes on the Boltzmann Distribution

Use the following questions as guidance

1. Sketch the Boltzmann Distribution:
 - a. What does it show about the distribution of energy amongst a collection of molecules?
 - b. How do we know that the line intersects the origin?
 - c. What is represented by the area under the curve?
 - d. Why does the curve not reach the x axis?
 - e. Explain, using your diagram, why it is that catalysts increase reaction rate.
2. Sketch the Boltzmann Distribution at two different temperatures. Explain, using the diagram, why raising the temperature increases the reaction rate.