**Let it Flow! Exit Ticket Answer Key**

Complete this sentence: As the temperature of a fluid \_\_increases\_\_\_\_, its viscosity \_decreases\_\_\_\_\_\_\_\_\_\_\_.

\*Students may also choose to describe the opposing relationship: As the temperature of a fluid \_\_decreases\_\_\_\_, its viscosity \_increases\_\_\_\_.

In the diagram below, draw a simple sketch of the molecular structure of a given liquid as it receives an increase in thermal energy.

Be sure to include the following labels for your diagram: “liquid at low viscosity” and “liquid at high viscosity.” Also label the following parts in your drawings: “molecular bond” and “molecule.”



molecules

 

liquid at lower viscosity

Molecular bond

liquid at higher viscosity

Please explain your diagram.

\*Students should show and explain in their drawing their understanding that as the liquid absorbs thermal (heat) energy, molecules break free of their molecular bonds, causing the viscosity to decrease.