## Water Molecules on the Move

<table>
<thead>
<tr>
<th>Scientific IDEA/question</th>
<th>Name of Experiment and brief explanation</th>
<th>Materials needed for ONE experiment</th>
<th>Instructions: how to perform the experiment</th>
<th>What are you observing? Explain Results. Are there any variations to this experiment?</th>
</tr>
</thead>
</table>
| Do molecules move faster in hot water or cold water? | This experiment is great for testing if hot water molecules really move faster than cold ones. Pour some water, drop in some food coloring and compare results. | A clear glass filled with hot water  
A clear glass filled with cold water  
Food coloring  
An eye dropper  
2 clear glasses | Fill the glasses with the same amount of water, one cold and one hot.  
Put one drop of food coloring into both glasses as quickly as possible.  
Watch what happens to the food coloring. | If you watch closely you will notice that the food coloring spreads faster throughout the hot water than in the cold. The molecules in the hot water move at a faster rate, spreading the food coloring faster than the cold water molecules which move slower. |