**Activity – Factors Affecting the Rate of Dissolution of a Solute in a Solvent** [](http://mommydish.net/wp-content/uploads/2011/09/Hershey-kiss.jpg)

**Directions:**

**THIS IS A NO TALKING EXERCISE SINCE TALKING CAN IMPEDE THE DISSOLUTION OF THE SOLUTE!!!!!!!**

1. Place a chocolate kiss in your mouth chew it. Time how long it takes for the kiss to completely dissolve and go away.
2. Place a 2nd kiss in your mouth, BUT instead of chewing it, let it dissolve on your tongue. Time how long it takes for the kiss to completely dissolve and go away.
3. Place a 3rd frozen kiss in your mouth and let it dissolve on your tongue. Time how long it takes for the kiss to completely dissolve and go away.

**Data:**

Room Temperature Chewed Kiss:

Room Temperature Kiss (not chewed):

Frozen Kiss (not chewed):

**Analysis:**

1. Which kiss took the longest to dissolve? Why do you think it took so long compared to the others?
2. Which kiss took the least amount of time? Why do you think it was the shortest compared to the others?
3. What factor affected the rate the frozen kiss dissolved?
4. What factor affected the rate the chewed kiss dissolved?