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Which Temperature Do Glow Sticks Work Best?

The purpose of the project was to figure out how long glow sticks will last in different temperatures and which temperature makes glow sticks work best. Our hypothesis is: If the glow sticks were placed in cold dark areas, the chemicals would last longer. If glow sticks are put into hot water then the chemicals will not last as long as the ones in cold water. The glow sticks were tested at the same time and were watched periodically seeing how many hours they would last. The results showed that when the glow stick was in cold water it has a longer life span. The reason for that is it causes the chemical reaction inside the glow stick to proceed at a slower rate. When you heat up the glow stick it causes the chemical reaction to speed up, making it brighter but having a shorter life span. So our hypothesis was correct, we said that the glow stick would last longer in a colder temperature.