What Conditions Do Planarians Regenerate Best In?

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The purpose of my experiment is to see what conditions Planarians regenerate best under since their genes are being used to try to find ways to regenerate human organs. My hypothesis was that the Planarians will regenerate the fastest when kept at 80-85 degrees Fahrenheit. When doing part one of my project, I cut 36 of the planarians using the following procedure: Place it on ice to immobilize and anesthetize the animal. Cut it with a scalpel or single-edged razor blade or pocket knife. Make the cut 3/4 the way between the anterior and posterior. After the cuts were made, I tested the animals under the following conditions: salt water, dark, bright light, 40 degrees, room temperature, and 80-85 degrees. I then observed the regeneration of the Planarians for a period of five days. Part one of my experiment lead to very similar results in the two best conditions. These conditions were room temp and 80-85 degrees. I retested these variables with a larger sample size and found that room temperature is better. I also tested them under magnetism, and this greatly improved the rate of regeneration.

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