

The Effects of Magnetism on the Regeneration of Tricladida

Bawek, Jodyn (School: Doland High School)

The purpose of this experiment is to determine if Neodymium Magnets will affect the regeneration of planaria. It is hypothesized that the Neodymium magnets with 42N and pull strength of 7.32lbs will enhance Planarian's regrowth period, followed by Neodymium magnets with 42N and pull strength of 3.58lbs, and then Neodymium magnets with 42N and pull strength of 1.31lbs. To conduct this experiment the planaria are bisected and sorted into their assigned groups, then put into cabinets to grow. Planaria are checked weekly, and all changes are observed and recorded. Over the observation of that month, it was shown that the stronger level magnets influenced the planaria regrowth and they grew eyes quicker than the other magnets. The non-bisected planaria also showed that the neodymium magnets kept them alive longer than the non-magnetized planaria. This experiment showed how magnetization can help regrow planaria and keep them alive. The planaria without neodymium magnets consumed other planaria whereas, the magnetized planaria did not consume each other. In conclusion it was found that the strongest strength neodymium magnets speed up the regrowth process of the bisected planaria, which, then proves the hypothesis correct.