

#### ***Scenario 4***

4. Noelia read that Aloe promoted healing and burned issue. He decided to investigate the effect of varying amounts of *Aloe vera* on the regeneration of planaria. He bisected the planaria to obtain 10 parts ( 5 heads and 5 tails) for each experimental group. He applied concentrations of 0%, 10%, 20%, and 30% *Aloe vera* to the groups. Fifteen mL of *Aloe vera* solutions were applied. All planaria were maintained in a growth chamber with identical food, temperature, and humidity. On day 15, Avi observed the regeneration of the planaria parts and categorized development as full, partial, or none ( qualitative)

#### ***Scenario 5***

5. In Chemistry class , Amar and Vincent determined the effectiveness of various metals in releasing hydrogen gas from hydrochloric acid. Several weeks later, Amar and Vincent read that utilities company was burying lead next to iron pipes to prevent rusting. They hypothesized that less rusting would occur with the more active metals. He placed the following into 4 separate beakers of water; (a) 1 iron nail, (b) iron nail wrapped with aluminum strip, (c) 1 iron nail wrapped with a magnesium strip, and (d) 1 iron nail wrapped with aluminum strip. He used the same amount of water, equal amounts ( mass) of the metals, and the same type of iron nails. At the end of 5 days, he rated the amount of rusting as small, moderate, or large. They also recorded the color of the water.