# The Creation of a Dog Treat Dispenser That Activates With Water

Gomez , Camila (School: Brigida Alvarez Rodriguez Mathematics and Science High School)

The objective of this investigation is to create a functional prototype that activates when it rains and dispense dog treats. This will eventually help the dog owners protect their dogs while it's raining, this to lower the dogs stress level and therefore elongate the dog's life spawn. The investigation problem consists on how to create a functional prototype of a treat dispenser that activates with water? The hypothesis of the investigation states that if it was created a machine that collects water then it will be possible for a mechanism that dispenses treats to activate. The steps for achieving the engineering goals set for the project stared with the elaboration, it was made on a designing app. The next step was to make the initial prototype. After this it started the process of the construction of the functional prototype, this time with resistant materials. When the construction process was finished, the result was put to test. The first test made was to see how many milliliters the machine needs to activate; this test was verified six times in a row to make sure it was consistent. It needs 30ml. The next test was made to examine the relationship between the two variables of the investigation. For this one it was measured the angle of inclination in relation to the milliliters of water that fall into the bucket of the machine, the result stated that the maximum angle of inclination was 80°. In conclusion the hypothesis was accepted.