Part 1 – Problem-Solving Process

Step 5 – Testing and Refinement

Scenario	Expected Outcome	Observed Outcome	Comments
Pet eats as expected	Food dispensed, bowl weight reduced, success logged	As expected	Works fine
Pet does not eat	Alert sent after 10 mins	As expected	Good response
Food bin empty	Alert sent immediately, no dispense attempt	As expected	Works fine

Figure 1: Testing Table

Refinements Suggested:

- Add SMS or app notifications for remote monitoring.
- Include backup feeding schedule if system time is lost.
- Consider a moisture sensor to detect stale food.