Designing Learning for Improved Student Outcomes

**Sub tasks / Activities**

- Collaboratively review the critical components of scientific inquiry
- Define problem and identify materials and investigative procedure
- Review how to ensure a “fair test” - defining variables and establishing controls
- Develop hypothesis
- Practice organizing and editing data
- Practice using various measurement tools
- LAB - Document quantitative (weight, temp) and qualitative (colour, smell, touch, size) changes daily
- Review analyzing data and writing conclusions
- Reflection

**How to**

- Provide graphic organizer summarizing key components of scientific inquiry via google docs
- Pre-establish criteria and formal group check-in with oral and written feedback for each hypothesis
- Co-creation of “Strong work in the science lab” rubric
- Daily group check-ins with oral and written feedback in google docs
- LAB - Final reflection based on rubric and a series of guided questions
- Mid-point parent feedback in google docs
- Guided analysis of observations with oral feedback

**Lab**

- Document quantitative (weight, temp) and qualitative (colour, smell, touch, size) changes daily
- Review analyzing data and writing conclusions
- Reflection

...what happens to natural waste as it breaks down over time
...how to design and carry out a scientific investigation that answers a question through experimentation and observation.