### Standards that connect to this project:

#### **HS-PS1-2 Matter and its Interactions**

Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.

### **HS-PS1-5 Matter and its Interactions**

Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.

## HS-LS2-3 Ecosystems: Interactions, Energy, and Dynamics

Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions.

# HS-LS2-7 Ecosystems: Interactions, Energy, and Dynamics

Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.\*

### **HS-ESS3-4 Earth and Human Activity**

Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.\*

### **HS-ETS1-1 Engineering Design**

Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.

### **HS-ETS1-3 Engineering Design**

Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.

### Fargo Public Schools Science & Engineering Practices - SEPS -

**SEP 2: Developing & Using Models** 

**SEP 4: Analyzing & Interpreting Data** 

**SEP 7: Engaging in Argument from Evidence**