List of Lessons

1. What is waste? Categorize waste into groups of recycle/trash/decomposed materials
2. Where does waste go? Look at how waste is disposed of at school and at home
3. Tracked and weighed waste- weighed lunch time waste to show student impact on school waste for 5th grade only and had students categorize waste by moving recycled and composting items into separate groups to build background information
4. Problem solving- what are strategies students can do starting today to reduce waste in the classroom, at lunch time, and at home. Brainstorm all ideas in Steam notebook
5. Composting 101- students researched items that we could compost from lunch to put in hate school compost. Start 5th grade compost
6. Wiggly worm presentation from Joan Crandell to illustrate the characteristics of a happy worm composting environment- order red wigglers if students cannot collect enough worms to populate compost
7. Garden application- students explore the school garden, plant I.D., weeding, planning using tablets and measurements of area, and animal ID
8. Waste data comparison spiral back- students had been tracking the four categories of waste for a week to compare data. Using the tablet (creates graph.com) students created bar graph to compare 5/6th school lunch waste to 7/8th school waste. Answered questions to compare and contrast.
9. Analyzing our waste*Waste data interpretation for 5th grade over two weeks*- students track data for week one(no teacher influence on waste) and week 2(education on waste/composting/recycling) students make predictions before given the data and then graph the data using creates graph.com students look at trends and make observations based on the graphs they created. They make predictions about if the information would also apply to 7/8th grade (would educating the older students also decrease their waste?)
10. Solutions specific to school waste-students make a specific plan on reducing waste in the lunchroom that will be implemented immediately. This includes recycling can position, more categories for waste, composting bin implementation, etc…
11. School wide waste outreach- posters, pictures, tablet campaign

Content Standards-

Math
(5-MD-1)
Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real-world problems.

Science

(5-PS1-1) Planning and Carrying Out Investigations to answer questions or test solutions to problems.

(5-PS1-3) Using Mathematics and Computational Thinking in 3–5 builds on K–2 experiences and progresses to extending quantitative measurements to a variety of physical properties and using computation and mathematics to analyze data and compare alternative design solutions. Measure and graph quantities such as weight to address scientific and engineering questions and problems.

ELA

http://www.corestandards.org/ELA-Literacy/W/5/2/e/

http://www.corestandards.org/ELA-Literacy/W/5/3/d/

http://www.corestandards.org/ELA-Literacy/W/5/3/e/

http://www.corestandards.org/ELA-Literacy/W/5/6/