

Educator Resources



Lesson Plan Name: The Responsible Business Owner

Subject & Grade: Science: Grade 5

Topic: Students explore how businesses use and conserve utilities: Water, Wastewater, & Energy.

Driving Question: How can students and businesses reduce our energy, wastewater, and energy use?

Power Standard:

5-ESS3-1 Earth and Human Activity- *Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.*

Supplementary Content Standards:

5-ESS3.C Human Impacts on the Earth- *Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments.*

CCSS.ELA. W.5.8 Literacy - *Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.*

References & Tools:

- HBPW 2016 Annual Report Website
- Supplement with school tour of a Holland Board of Public Works Water Treatment Plant

Summary of Tasks & Actions:

Day 1:

- Class discussion of how students use utilities (water, wastewater, and energy) at home.
- Have each student read the business features on the HBPW Annual Report.
- Separate class into small groups and assign a business.
(Examples: *Pet Groomer, Car Wash, Ice Cream Shop, Movie Theater, Restaurant, Grocery Store*)
- Have student groups list ways utilities are used in their business.
- Have each group create a venn-diagram of utility use at home vs at their assigned business.
- Have students present their findings to the class and add applicable ideas from other groups.

Day 2:

- Define natural resource and discuss how conserving is good for our environment.
- Show that natural resources create power using "How it Works" graphics in the HBPW annual report.
- Pass out previous day's venn-diagram and separate students back into groups.
- Have each group analyze ways their business could reduce their use of water, power and wastewater.

Assignment:

- Assign students a journal entry to evaluate their best tactic and explain why it would help reduce utility consumption.