Project Timeline

This project is designed to be completed over a three to four week period of time. Extension lessons and projects can be used to create a longer, more in depth unit if time allows. Pre-test data should have been collected at the beginning of the school year. Post test data should be collected after the project activities are completed.

Just before start:	Make sure you have already created a *Whyville* teacher account.
Day 1:	Introduce Project – Define standby power and discuss electricity safety; send home consent forms (this can be done in 10-15 minutes). Complete Safety Quiz; Can also be completed in Whyville if you have students create accounts first.
Day 2:	Electricity Basics – What it is and how it's measured
Day 3:	Electricity Basics – how it's produced and transmitted
Day 4:	Begin Lesson 2: The Greenhouse Effect demonstration (Global Climate Change ppt Part 1
Day 5:	What is Global Climate Change – part 2 ppt (defining carbon Footprint and climate change; Begin EPA activity
Day 6:	Looking at Global climate change data – Getting to the Core activity
Day 7:	Future of Global Climate Change – energy production sources
Day 8:	Begin Lesson 3: Electrical Energy ppt; Send home plug in appliance worksheet
Day 9:	Energy Production – renewable and non-renewable resources
Day 10:	Student Energy Production presentations
Day 11:	Energy Quiz; Begin Lesson 4: Introduce *Whyville* to class including STEM career activities.
Day 12:	Have students create their Whyville account UNDER under teacher login; Students will log into *Whyville* accounts and explore careers in *WhyPower.*
Day 13:	Have students explore Vampire Manor and WhyPower; Students should be able to going into different rooms in Vampire Manor and check for standby power for appliances.
Day 14:	Define and discuss standby power and how to determine appliances that use it. Should have inventory complete for discussion.
Day 15:	Using the Belkin device – students learn how to use the device at school. Send devices home.
Day 16:	**You may wish to give them an extra day to get their devices measured. You might choose to have students work on their career component in preparation for the Career Fair.
Day 17:	Begin Lesson 7 **-** Analyzing data. Students should have completed measurement worksheets to begin analyzing data.
Day 18:	Reflection on data analysis

Day 19: Lesson 8: Examine ways to conserve power, specifically related to collected standby power data from homes.

Day 20: Lesson 9: Educating Others and Career Fair

*** Teachers may choose to continue the project's extension activities until data is completed. **In the Final Phase of the project, the Educating Others segment can be removed if time is not available, but is an excellent culminating assessment tool for the project.**

Final Phase: Days 1-4 days

Educating others – students individually, or in groups, will produce a video (skit, song, etc), blog, or poster to educate others about standby power conservation

After Project Ends Collect Post-Test Data – this will take 1-2 class periods in a computer lab or, if necessary, can be assigned as homework over a few days.