WhyPower Pak

The WhyPower area in Whyville is a great place to learn about energy, power grids, math and careers. Students explore the dynamics of Whyville's power needs. Math content includes ratios and proportions, fractions, data and graph interpretation, calculating ROI, and linear equations. The WhyPower Pak provides you with lesson guides, student worksheets, and training videos for each of the activities within WhyPower.

Activities include:

- ***Electric Farm*** – Construct power plants around Whyville, generate electricity, and earn a profit! Players can choose between coal, natural gas, solar, wind, hydroelectric, and nuclear power sources.
- ***Green Build*** – Construct an energy efficient home using a simulator. Learn about R-values, BTUs, and monthly energy bills. Players can choose from a variety of construction materials and appliances to optimize their designs.
- ***Peak Power*** – Try to meet the city's power demands by regulating which power plants produce power. If power needs are not met, the city will encounter a brown out! Players must take in to account factors such as emissions, land usage, and cost of operations in their decisions.
- ***Powerline*** – An advanced activity which demonstrates how power travels from the power plant to the consumers. Players will learn about voltage, current, and resistance on power lines. They will also learn the role of substations in power grids.
- ***Power Planner*** – Players make planning decisions for Whyville about its power grid. They will learn how much energy each power plant produces, become aware of historical power usage, and decide which power sources they will use to meet the city's demands in the future.

What's included in the WhyPower Pak?

You'll get access to:

- A lesson guide for each activity – to provide a roadmap for a class lesson.
- Associated student worksheets – to be printed out for a daily participation grade.
- Walkthrough videos – short videos that takes you on a tour of the each activity, so you can quickly familiarize yourself with the content.