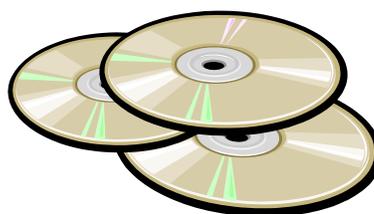
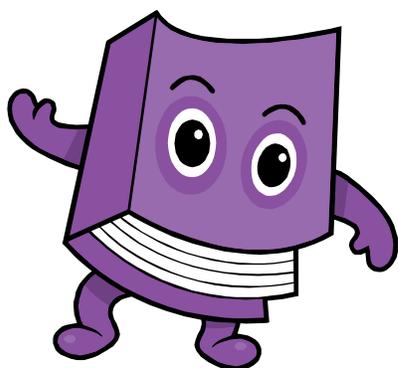


GRU'S TEACHER RESOURCES

FOR GRADES K-5



INDEX

Items for Loan:

Books	Pg 3
DVD's	Pg 6
CD ROM	Pg 15
Kits	Pg 15

Free Items:

Activity Books	Pg 20
Solar Car Kits	Pg 20

Loan items may be checked out for a two-week period. All items can be ordered using our on-line request form and will be sent to you through truck mail.

Free items are available on a first come, first served basis.

BOOKS

Small Wonders – Nature Education for Young Children

(Pre-K – K/1st)

(Linda Garrett and Hannah Thomas – 2005)

Children today are spending less time outdoors. Increasingly, they are watching TV and playing video games and their outdoor activities are highly structured and scheduled. This leaves little to no time for them to explore the natural world on their own and prevents their developing a curiosity about and a love of nature. They may be less likely to take care of the environment if they are never engaged with it and never understand how we are all connected to the earth. This book is chock full of outdoor and indoor activities that will evoke curiosity and wonder about nature, and hopefully instill a life-long dedication to the care of the environment.

WHY SHOULD I[®] SERIES: THE ENVIRONMENT

(Grades K-2)

(Jen Green – 2001)

These books will help young readers to think about simple environmental issues, and other social and moral dilemmas they may come across in everyday life. The books will help children to understand environmental change and how to recognize it in their own surroundings. Through these books, children will discover how their environment may be improved and sustained. Thinking about these issues will also teach children to consider others and to act unselfishly. Suggested follow-up activities are in the back of each book.

Titles in the series include:

Why Should I Recycle?

Why Should I Save Energy?

Why Should I Save Water?

A TRUE BOOK[®] SERIES: THE ENVIRONMENT

(Grades 3-5)

This series covers a wide range of environmental topics that are highly relevant in today's world. Energy and human impact on the environment are in the forefront of the world's consciousness and we need to help our students prepare to solve the associated problems.

These titles may be borrowed separately or as a set:

Air Pollution (Rhonda Lucas Donald – 2001)	Ozone Layer (Rhonda Lucas Donald – 2001)
Alternative Energy (Christine Petersen – 2004)	Recycling (Rhonda Lucas Donald – 2001)
Conservation (Christine Petersen – 2004)	Solar Power (Christine Petersen – 2004)
Endangered Animals (R. L. Donald – 2001)	Water Power (Christine Petersen – 2004)
Land Preservation (Christine Petersen – 2004)	Wind Power (Christine Petersen – 2004)

ROOKIE READ-ABOUT[®] SCIENCE SERIES: THE ENVIRONMENT

(Grades K-2)

These colorful, fact-filled books describe for very young readers a range of environmental topics from recycling to habitats to pesticides.

These titles may be borrowed separately or as a set:

Lands of Grass (Allan Fowler – 2000)	Rachel Carson (Justine & Ron Fontes – 2005)
Life in a Pond (Allan Fowler – 1996)	Recycle That! (Fay Robinson – 1995)
Life in a Wetland (Allan Fowler – 1998)	Save the Rain Forests (Allan Fowler – 1996)
Our Living Forests (Allan Fowler – 1999)	

RECYCLE EVERY DAY

(Nancy Elizabeth Wallace – 2003)

(Grades K-4)

This story featuring an engaging bunny family teaches children about ways to become involved with recycling. Some classroom activities are included at the back of the book.

BE A FRIEND TO TREES

(Grades K-4)

(Patricia Lauber – 1994)

The author details the importance of trees and the many roles they play in the Earth's environment.

BIG BOOKS

(Grades K-2)

These are guided reading leveled books. Each title comes with:

- 1 Big Book
- 6 Student Books
- Audio CD
- 1 Smart Word Card
- 8 Photo Cards
- 1 Teachers Guide
- List of Correlating Sunshine State Standards

Kids for the Earth (Guided Reading Level F)

Children are introduced to ways to conserve our natural resources—water, trees, and earth—including through recycling.

How We Use Electricity (Guided Reading Level H)

Electricity is observed creating light, heat, sound, and motion. Children also examine batteries, power plants, power lines, plugs, and more.

Energy (Guided Reading Level L)

It takes energy for a car to run. It also takes energy to walk, run, skip, or jump. Discover all the different ways energy makes the world work.

DVD's

ENERGY FOR CHILDREN DVD SERIES

(Grades K-5)

(Schlessinger Media – 2000)

This series teaches kids the basics about five forms of energy: heat, mechanical, chemical, electromagnetic and nuclear. Dynamic graphics and visuals help explain scientific concepts like potential and kinetic energy, renewable and nonrenewable resources, work, conduction, convection and radiation. Inquiry-based learning is encouraged by the inclusion of fun, hands-on demonstrations and a stimulating investigation that kids can do in each program.

Each title comes with:

1 DVD (23 min.)

Teacher's Guide

Investigation Data Sheet

List of Correlating Sunshine State Standards

ALL ABOUT HEAT

Concepts taught:

What heat energy is and how we use it

How heat moves through conduction, convection & radiation

Melting point and boiling point

ALL ABOUT THE USES OF ENERGY

Concepts taught:

How electricity transformed the world

How generators create electricity

ALL ABOUT THE CONSERVATION OF ENERGY

Concepts taught:

Fossil fuel supplies are limited, and energy should be conserved

Actions kids & adults can take to reduce energy consumption

Pros and Cons of renewable energy sources

ALL ABOUT THE TRANSFER OF ENERGY

Concepts taught:

Potential and kinetic energy

How energy transfers between potential and kinetic

WHAT IS ENERGY?

Concepts taught:

What energy is and how we use it

How heat energy affects atoms

The sun is the ultimate source of Earth's chemical energy

Electromagnetic and nuclear energy

PHYSICAL SCIENCE FOR CHILDREN DVD Series

(Grades K-5)

(Schlessinger Media – 2000) (Other titles in this series will be available in the future.)

This series explores the world of physical science and how it can be seen, touch and understood in everyday life. Simple demonstrations will help children comprehend basic concepts, including the properties of matter, forces and gravity, light, sound, flight, simple machines and more.

ALL ABOUT ELECTRICITY

Concepts taught:

Positive & negative charges

How electrical charges flow

Opposites attract

Like charges repel

Comes with:

1 DVD (23 min.)

Teacher's Guide

Investigation Data Sheet

List of Correlating Sunshine State Standards

EARTH SCIENCE FOR CHILDREN DVD SERIES

(Grades K-5)

(Schlessinger Media – 2000)

Children will be fascinated by this hands-on approach to learning about the earth. This series takes young viewers on an introductory tour of the third planet from the sun, exploring its many processes, such as the water cycle and the creation of natural resources.

Each title comes with:

1 DVD (23 min.)

Teacher's Guide

Investigation Data Sheet

List of Correlating Sunshine State Standards

ALL ABOUT NATURAL RESOURCES

Concepts taught:

Renewable vs. non-renewable resources

Alternative forms of energy

ALL ABOUT THE WATER CYCLE

Concepts taught:

Evaporation

Condensation

Precipitation

KITS

ENERGY CURRICULUM KIT

(Grades 3-8)

This curriculum, which GRU created for the Alachua County School system, covers subjects including the importance of renewable resources, where energy comes from, how to save energy at school and home, and how to protect the environment. Games and other interactive activities, such as Energy Bingo and the Pay Me Game, are used to educate students about energy efficiency.

By offering this curriculum to area schools, GRU expects to make learning and practicing energy efficiency fun. All elements necessary to carry out the lessons can be found in the individual game boxes. The games may be played directly from the box without the help of the Teacher's Resource Guide, and the guide provides back-up material and information to enhance each lesson.

Contents:

Box 1: The Pay Me Game

One clear pencil case; Home Energy Tip card (30); 60 envelopes: 30 labeled "Utility" and 30 labeled "Me"; GRU Money: \$150 per student, 25 (\$1), 13 (\$5), 6 (\$10)

Box 2: Bingo Save

Bingo Save reusable game cards (30); Dry erase markers; Caller cards

Box 3: Conservation & Plugging Leaks

Tape; Pencils (30); Tissue Paper (30 sheets); Draft-o-meter instructions; Home Draft Checklist; The Blackout Story; Caulking and Weather stripping poster; Historical Perspective on Energy poster; Note pads (30)

Box 4: GRU for Kids

GRU for Kids Magazine; GRU for Kids Teacher's guide; Rubber bands; Two small thermometers; Two clear plastic containers; Table fan; One package of cotton balls
Two small cardboard boxes

Box 5: Conserving Energy at School

Student worksheets: Questions for Maintenance Personnel/Custodian; "Is Energy Conserved or Wasted in School?" "What's Wrong with this Picture?" "The School Heat Leak Detective Game" Draft-o-meter; Note pads (30); Tissue Paper (30 sheets); DVD "Simple Things You Can Do to Save Energy in Your School"
Teachers Guide

ENERGY & SOCIETY KIT

(Grades PreK-8)

The Energy & Society program provides tools and activities to help students learn about their relationship with energy and investigate the environmental issues related to energy's role in society. Energy & Society helps students develop critical thinking skills to make decisions about their personal energy use. In addition to hands-on activities, Energy & Society integrates music and dance to enhance the study of energy issues.

Most activities are written for grades 3-8, with suggested adaptations for lower grades.

Contents:

Energy & Society Activity Guide

Energy & Me Music CD

Energy & Me Music and Dance Video/DVD

"Where is the Energy" and "What Powers the Move Posters"

The items on this page are available on a first come, first served basis.

FREE STUFF!

Energy for Today and Tomorrow

(Grades PK-3)

This colorful book uses activities such as matching, connect the dots and story sequencing to teach young children the following concepts:

What energy is; Types of energy; How energy is produced; How we use energy;
How to conserve energy

A teacher's guide is included. Limited to 30 copies per class.

Learning to Save Energy

(Grades 3-5)

This book is jam-packed with activities designed to teach older children the following concepts:

What energy is; Types of energy; How energy is produced; How we use energy;
How to conserve energy

A teacher's guide is included. Limited to 30 copies per class.

SOLAR CAR KITS

These kits include all parts needed to create a solar racer. Limited to 15 per teacher per year.

Contents:

Solar panel 3v @ 3 watts; Solar motor w/lead wires; Motor mounting bracket w/screws;
Gears for motor shaft (3 sizes); Axle shafts (2) Wheels/tires (4)