

# Resources

## **AQUATIC TRUCK**

The Aquatic Box was developed to provide teachers and students with opportunities to discover and learn about wildlife in the aquatic environment.

It's suggested that teachers and students spend as much time as possible in the outdoor classroom. Such activities as observing, collecting, discovery, and identifying as many organisms as possible should enhance the learning process. It's not always important to know the scientific name of everything you find. Just discovering them can lead to new interests by students.

## **GROUND WATER FLOW MODEL**

The Ground Water Flow Model is a popular and easy-to-use teaching trunk that visually demonstrates important ground water concepts. The model is constructed of clear plexiglass allowing observers to watch water and contaminants as they move through underground rock and soil formations and interact with wells. The model can also be adapted to demonstrate how surface sources like rivers or wetlands can be connected to ground water. The model enables students to learn about recharge, porosity, permeability, water tables, confined and unconfined aquifers, contamination, and other important ground water concepts.

## **HUMAN ANATOMY FLEXIBLE SKELETON (MR. BONES)**

The skeleton is articulated to show normal posture. It is a unique preparation that can be flexed to achieve a variety of postures. Skull movements and rotation of the first two vertebrae are also possible. The thorax can be manipulated to simulate the mechanics of breathing. Extremities are removable. Detachable skull has calvarium cut and contains 32 teeth; the lower jaw is spring held. The skeleton includes a plastic dust cover and a Human Anatomy Manual. The skeleton is mounted by means of a metal rod extending from the sacrum to a quadropod base.

## **INFLATABLE WHALE**

This life sized model measures 68 feet from tail to nose, which replicates a small adult whale. The whale measures about 13 feet high at the spout and 25 feet across at the front fins. It fits in the trunk of a small car! Without air, it's just a bunch of big pieces of black plastic held together with grey duct tape. A 20 inch fan is all that's needed to bring the whale to life size. The life size whale is enough to fill half of a high school gymnasium – with the bleachers pulled back. It's almost as big as a basketball court.

Project Wild is a learning tool that can be used in many ways. You can use it to study ecosystems, mammals or extinction. The list goes on and on.

Everyone from the smallest kindergartener to the tallest senior can get "swallowed" by the whale! A look inside of a plastic whale is a special treat for students, but seeing a life-sized model of this massive creature makes studying them more meaningful.

## **PROJECT WILD**

Project WILD is an activity that helps students evaluate their choices and make responsible decisions. The mission of Project WILD is to help students learn *how* to think, not *what* to think about wildlife and the environment.

Project WILD's main goal is connecting people and wildlife. Simple and accessible, the activity invites students to explore the environment around them in search of wildlife; bringing wildlife "closer to home." Not only does the activity help students become aware of the wildlife we share our environment with, but it invites them to think about which animals are suited for which environments and what we can do to protect them.

### **SOYBEAN SCIENCE KIT**

The Soybean Science Kit is an engaging, interesting hands-on approach that teaches 4th to 9th graders the physical properties of polymers and oil, while instilling an appreciation for the use of biological, renewable resources in industrial manufacturing. Biotechnology is also covered, as students learn about the structure of DNA and gain a better understanding of this building block for all forms of life. Students will increase their awareness about using renewable natural resources, such as soybeans, for making industrial products, learn the fundamental principles of science (chemistry, biology and engineering) and that agriculture is the business of generating raw materials for industry.

### **STARLAB PLANTARIUM**

STARLAB is a portable planetarium. It is an inflatable dome capable of accommodating about 25 students. Inside the dome, a cylinder projector is not only able to show the night sky devoid of any light pollution; it can take students on a journey from the South Pole to the Equator and on to the North Pole. You can see the sky as it looks right now in New Jersey as well as at the far end of the Australian outback. You can observe our whole galaxy and study the Solar System. You can look deep beneath the Earth's crust to see the tectonic plates and study causes and effects of earthquakes and volcanic eruptions. STARLAB can also serve as a great vehicle for exploring different cultures. You can see the sky through the eyes of ancient Egyptians and Greeks, learn the legends of ancient China and Africa, and study the tales of Native Americans.

All this and more can be done within the confines of the 16' x 11' dome. Set-up time for the STARLAB is a mere ten minutes, and the entire system fits into three small cases and a duffle bag. It is easily operated by a single classroom teacher and can be used by classes of every level, from primary school art to Advanced Placement science.



### **TI-84 PLUS GRAPHING CALCULATOR**

A graphing calculator (also known as a graphic calculator or graphical calculator) typically refers to a class of handheld calculators that are capable of plotting graphs, solving simultaneous equations, and performing numerous other tasks with variables. Most popular graphing calculators are also programmable, allowing the user to create customized programs, typically for scientific/engineering and education applications. Due to their large displays intended for graphing, they can also accommodate several lines of text and calculations at a time. Some graphing calculators also have color displays, and others may even include 3D graphing.

### **THE WEATHER CENTER**

The Weather Center contains a series of six videos about meteorology; climate and seasons; wind; rain and snow; hurricanes and tornadoes and clouds. This series takes kids on a whirlwind tour through everything from the formation of a rain droplet to the development of a tornado's vortex. Students can go beyond the daily weather forecast and into the realm of exploration through dramatic live-action footage, vivid animation graphics, detailed weather maps and hands-on experiments suitable for Science Fair projects and learn how to observe and think about the weather.

### **VERNIER LABPRO**

The Vernier LabPro is a versatile data collection interface that can be used to collect data in a variety of ways in the classroom or in the field. It can be used with a computer, TI graphing calculator, Palm and Visor handheld, or as a stand-alone data logger. Some of the components included are: pH Sensors; Gas Pressure Sensors; Light Sensors; Magnetic Field Sensors; Colorimeters; Heart Rate Monitors; Motion Detectors and Biology, Chemistry and Physics Computer Books.

<b>Videos</b>	
<b>GUIDANCE</b>	
Title	Year
Good Touch/Bad Touch	
Set Straight on Bullies x 2	
<b>HIV/AIDS</b>	
Title	Year
Abstinence: Deciding to Wait	1992
AIDS: A Different Kind of Germ	1995
AIDS: Allie's Story x 2	1991
AIDS and Kids: The Whitney Project	
Bloodborne Pathogens for Bus Drivers: The Route to Safety	1998
Bloodborne Pathogens in Schools: A Refresher Course	1999
Bloodborne Pathogens in Schools: The Human Side	1995
Bloodborne Pathogens for School Employees: The Straight Facts	
Call Upon Your Spirit of Courage	
Come Sit By Me x 2	1993
Handwashing for Schools: A Clean Defense	1996
HIV and AIDS: Staying Safe	2001
"I Have AIDS" A Teenager's Story (Ryan White)	1989
In Our Own Words: Teens and AIDS	1995
Johnsons (The)	1994
North Dakota Youth At Risk	
Porch Light	1995
Real People: Teens Who Choose Abstinence	1994
Takini: A Week to Remember	1997
Time to Wait for Sex	
Universal Precautions for School Staff	
Waiting	1995

## ***Miscellaneous***

- Americans All Resource Files and Video (3)
- Assorted Manipulative (1)
- Dice
- Fishes of the Dakotas –Booklets (48)
- Geo Safari (3)
- Geoboard Activities
- Geometry Activities
  - Grade 9/10 Volume 1 (1), Grade 9/10 Volume 2 (2)
- Facilitator's Kit Grade 11/12 (1)
  - Hands-On Equations
  - Health Connections Binder
  - Heart Treasure Chest (2)
  - Know Your Body – Health Kit Grade 1-5

- Know Your Heart
- Large Lunar Globes (2)
- Manipulatives (4)
- Marco Polo Internet Content – Binders (4)
- NASA – Binders (5), Book (1)
- North Dakota Wildlife - Binder
- On Assignment with National Geographic – Travel Game
- Polyhedron Dice
- Project Alert Binder and Box
- Project Charley Binder
- Science Games
- Study Skills – Binders and Pamphlets
- The Great Body Shop Kit
- The Jug (Understanding Groundwater)
- The Real Game – Elementary (1), Grade 3-4 (1), Junior High/Middle School (2),
- The Real Game – Folders (10)
- Unifix Cubes
- Visual Thinking
- Wildflowers Across the Prairies Books (3)
- Wooden GEO Blocks, Beads, Clothes, Pins, Cubes