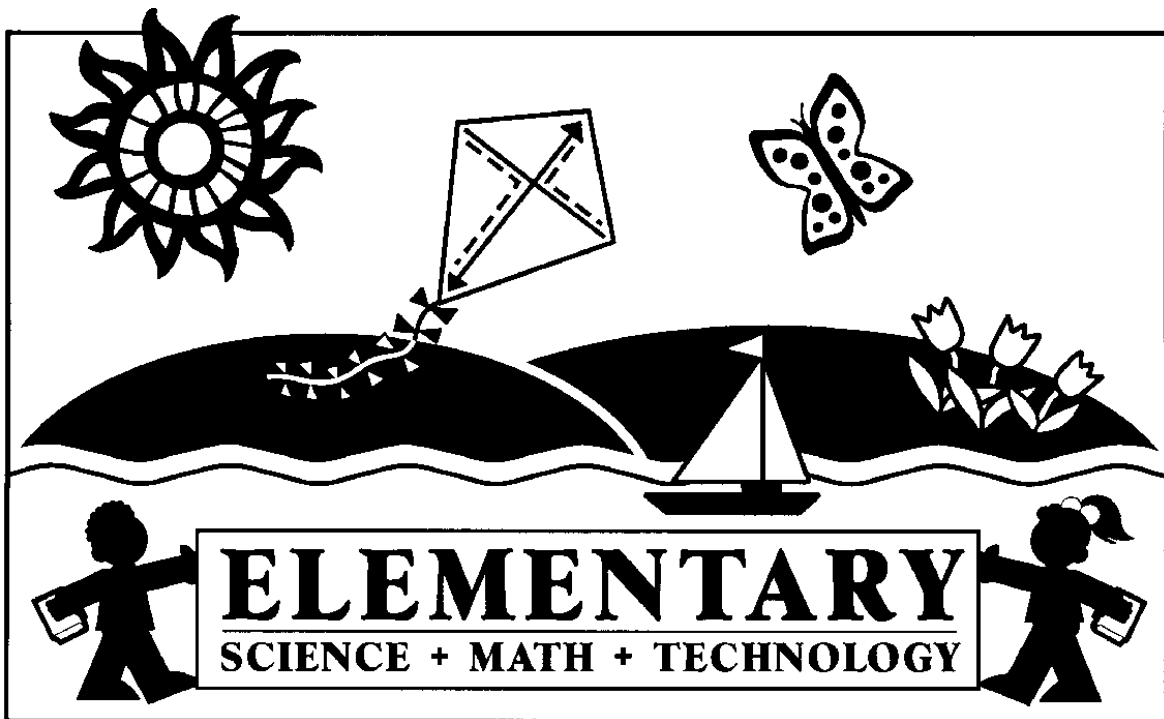


Sate

Standards

Science + **M**ath + **T**echnology

Program



SAFETY INFORMATION

Oneida County BOCES

**Program and Professional Development
Division**

MEMORANDUM

TO: Elementary and Middle School Principals

FROM: Patricia Zuck

DATE: December 16, 2003

SUBJECT: Chemical Safety Information

This packet contains revised safety information about chemicals contained in the kits used by your school. Included is a Chemical Data Chart, an alphabetical list of chemicals for each kit, and Material Safety Data Sheets (MSDSs) for each chemical deemed hazardous according to state and federal laws. **Our local poison control information center's phone number is 798-6200.**

The MSDSs are written for the worker in the workplace with a forty-hour exposure to the chemicals, in concentrated form. ***The MSDSs frequently do not apply to the dilute chemicals provided in the kit.***

Every effort is made to ensure that materials provided in the kits are safe for use in elementary classrooms. Of course, all chemicals need to be treated properly. Students should notify teachers immediately of corrosive batteries or broken thermometers. Corrosive batteries can cause burns. Teachers and students should demonstrate safe practices for use, storage, and disposal of chemicals at all times. *Teachers and students should never mix chemicals as a quick way to clean up after a lesson.* Refer to your yellow publication, *Safety Guidelines*, for additional information on poisonous plants, electrical safety, etc.

I hope you find this packet helpful. Feel free to photocopy these documents within your building. For any further assistance, please do not hesitate to contact me or the Elementary Science Center at 793-8590. **This chemical safety information is listed on the BOCES website as a pdf file under the Program and Professional Development Division section – Science Center, and will be updated regularly as the kit contents change. The address is www.oneida-boces.org.**

PZ/jd
Enclosure

CHEMICALS LISTED ALPHABETICALLY BY KIT

Animal Characteristics	food pellets for guinea pigs		
Buoyancy	baking powder	detergent	glycerine
Brine Shrimp	food coloring	cooking oil	
Chemical Relationships	baking soda cooking oil sugar *iodine vinegar water saline solution (eye wash) salt *Plaster of Paris (calcium sulfate)		glycerine powdered sugar starch (powdered) bromothymol blue citric acid hydrogen peroxide Alka Seltzer yeast Epsom salts
Classifying Plants and Animals	*iodine Vermiculite	alcohol vinegar	fertilizer (Miracle Gro) food coloring
Common Objects	Alka Seltzer cooking oil drink mix, powdered food coloring helium		starch (liquid) vinegar salt sugar crystal demonstration tree
Data Data Plus Astronomy	*calcium chloride		tulip bulbs
Electromagnetism	none		
Energy	glycerine		
Energy In Our World	cooking oil vinegar	salt	sugar
Environmental Factors	fertilizer (Miracle Gro)		Vermiculite
Experimenting	*iodine BTB Herbal tea bags		sodium chloride (salt) baking soda
Exploring Changes in our World	none		
Gather, Graph and the Weather	none		
Goldfish	anti-chlorine drops		
Hermit Crabs Plus Plants	food coloring		

Introduction to Controlled Studies	food coloring		sugar
Landforms and Boulders	*Plaster of Paris (calcium sulfate) Petroleum jelly	galena salt	sugar
Life Cycles In Nature	food coloring		
Life Stages	none		
Looking at Liquids	alcohol Detergent Cooking oil		baby powder food coloring glycerol
M.S.T. Links	*wood glue		
Matching	wood pellets		
Outer Space	none		
Physical Interactions	honey	salt	glue
Plant Characteristics	food coloring (red)		liquid detergent
Plants, Prey and Predators	food coloring		owl pellets
Rocks and Minerals	galena Food coloring	Epsom salts Sharpie markers	vinegar
Seeing Is Believing	detergent salt		food coloring sugar
Senses	food coloring	salt	sugar
Simple Machines	none		
Sorting	food coloring (red)		
Sound	wood pellets		
Weather	food coloring		

***THESE SUBSTANCES ARE CONSIDERED HAZARDOUS BY STATE AND FEDERAL LAWS. CONSULT THE CHEMICAL DATA CHART AND MATERIALS SAFETY DATA SHEET (MSDS) FOR FURTHER INFORMATION.**

MATERIAL SAFETY DATA SHEETS (MSDSs)

MSDS NAME

KIT

Alcohol (Isopropyl Alcohol)

Looking At Liquids
Classifying Plants and Animals

Calcium Chloride

Data Data Plus Astronomy

Calcium Sulfate (Plaster of Paris)

Chemical Relationships
Landforms and Boulders

Iodine

Chemical Relationships
Experimenting
Classifying Plants and Animals

Wood Glue

MST Links

DEFINITIONS

HEALTH HAZARD – Any chemical which has a low lethal dose or medium lethal dose to any test animal of 500 milligrams or less per kilogram of body weight when present in concentrations of 1% or more. The hazardous concentration for suspected or probable carcinogens is 0.1% or more. The chemical hazard may be through ingestion, inhalation or absorption.

REACTIVE – A chemical which has a pH of below 2.0 or above 12.5, or which can react violently with air, water or other substances.

FLAMMABLE – Any liquid having a flash point below 100° F. or a solid which has the potential of forming an explosive mixture in the air.

HAZARD RATING – Whenever possible, substances are rated on a scale of 0 (non-hazardous) to 4 (extremely hazardous), based on the J.T. Baker, Inc. catalog.