

APPENDIX D

SAFETY FORMS

Sample Safety Forms

- Accident Report
- Emergency Medical Information Form
- Laboratory Safety Survey
- Material Safety Data Sheet
- Parent Letter for Field Trips
- Permission Form
- Science Laboratory Safety Contract

ACCIDENT REPORT

(SAMPLE)

School_____Date_____Time_____

Student's Full Name_____

Student's Address_____

Phone_____Age_____Sex_____Grade_____

☐Abrasion

☐Burn

☐Puncture or Cut

☐Ingested Material

☐Sprain

☐Chemical Contact

☐Eye

☐Arm

☐Leg

☐Torso

☐Internal

Description of the Accident:

•Location where the accident occurred_____

•List of tools, equipment, or chemicals involved:_____

•First aid treatment administered_____

•Who administered the first aid?_____

•Time Parent Notified _____

•Student sent: Home _____ Doctor _____ Hospital _____

Name of Hospital

Principal

Teacher

Nurse

EMERGENCY MEDICAL INFORMATION FORM (SAMPLE)

Name of student _____ Date _____

Date of birth _____ Age _____

Home address _____

Name of parents or guardian _____

Home phone _____ Business phone _____

Alternate emergency contact _____

Phone number _____

Family doctor _____

Office phone _____ Office address _____

Please describe any health related problems, allergies, or other physical conditions that may limit full participation in the field trip activities.

Please list any medications that the student is required to take during the field trip.

Name: (1) _____ (2) _____ (3) _____

Dosage: (1) _____ (2) _____ (3) _____

In case of an emergency, I hereby authorize the physician selected by school personnel to provide the necessary medical treatment for my child.

Signature _____ Date _____

Print Name _____

THIS FORM MUST BE RETURNED BY _____

LABORATORY SAFETY SURVEY

This survey will provide information on accidents that have occurred in a science classroom laboratory, preparation room, or storage room. Confidentiality will be kept to protect individuals participating in the survey. The results will be used to improve safety in public schools. Please respond by placing a (✓) in the appropriate space.

1. What is the student population of your school?
☐ less than 1000 ☐ 1000–1500 ☐ 1500–2000 ☐ more than 2000
2. How many science classes do you teach?
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7
3. How many teaching preparations do you have?
☐ 1 ☐ 2 ☐ 3 ☐ 4
4. How many of the following classes do you teach?
☐ Physical Science ☐ Biology ☐ Chemistry ☐ Physics ☐ other
5. What is the average class size for your assignment?
☐ less than 20 ☐ 20–24 ☐ 25–28 ☐ 29–32 ☐ more than 32
6. In which setting do you conduct science investigations?
☐ classroom ☐ laboratory ☐ classroom / laboratory combination
7. What is the approximate square footage (length x width) of the room where you conduct science investigations?
☐ 600 square feet ☐ 600–800 square feet ☐ 800–1000 square feet
☐ 1000–1200 square feet ☐ larger than 1200 square feet
8. To which types of safety equipment do you have access in your laboratory?
☐ eye / face wash ☐ fire extinguisher ☐ safety shower ☐ safety goggles
☐ fume hood ☐ fire blanket ☐ chemical spill kit ☐ first aid kit
☐ corrosive cabinet ☐ flammables cabinet
9. Have you received any professional development on safety this school year?
☐ yes ☐ no

If you answered yes, did your safety professional development include:

- Materials Safety Data Sheets (MSDS) ☐ yes ☐ no
- chemical labels ☐ yes ☐ no
- proper storage of chemicals ☐ yes ☐ no
- proper disposal of chemicals ☐ yes ☐ no

10. Do you have Materials Safety Data Sheets (MSDS) on file in your building?
☐ yes ☐ no ☐ do not know
 If yes, do you know where the MSDS are located? ☐ yes ☐ no
11. Is there a school nurse located in your building?
☐ yes ☐ no
 If yes, is the nurse employed: ☐ full time? (or) ☐ part time?

12. Is there a communication system (telephone) available in your classroom or laboratory?
☐yes ☐no
13. Are chemicals stored in an area separate from the laboratory or classroom?
☐yes ☐no
14. Is there a chemical storage room with locking doors? ☐yes ☐no
15. Do students have access to the chemical storage room? ☐yes ☐no
16. Do you have administrative support for student misbehavior? ☐yes ☐no
17. Does your laboratory or classroom have a ventilation system? ☐yes ☐no
18. Have you evacuated your laboratory or classroom because of chemical fumes?
☐yes ☐no
19. Are written and oral safety precautions reviewed before each laboratory investigation?
☐always ☐usually ☐sometimes ☐rarely ☐never
20. Are students tested on their knowledge of laboratory safety? ☐yes ☐no
21. Are students required to wear safety goggles when working with:
☐chemicals ☐dissections ☐grinding/chipping solid materials
22. Have any minor accidents (those not requiring medical attention) occurred in any laboratories at your school during this year? ☐yes ☐no. If yes, how many? ____
23. Have accidents requiring medical attention occurred in any laboratory at your school during the past 5 years? ☐yes ☐no. If yes, how many? ____
24. If an accident has occurred (minor or needing medical attention) did it involve:
☐an explosion ☐broken glass ☐heat burns ☐material in the eye
☐chemical burns ☐faulty equipment ☐electrical shock ☐ingestion
25. Has an accident occurred in the past 5 years during a demonstration or laboratory preparation? ☐yes ☐no

Additional comments: _____

Please return the survey to:

James W. Collins
 Charles A. Dana Center
 The University of Texas at Austin
 2901 North I-35
 Austin, Texas 78722-2348

MATERIAL SAFETY DATA SHEET

(SAMPLE)

MATERIAL IDENTITY: ETHYL ALCOHOL

- CAS Number: 64-17-5
- Date Prepared: October 28, 2000
- Manufacturer: Jane & John Doe Chemical Company
- Address: Hazardland, Texas 77777
- Information on Chemical: 1-800-111-0000
- Emergency Line: 1-800-111-0001

SECTION I: MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS	PERCENTAGE	TLV
Ethyl Alcohol (ethanol)	92.4-100	1000 ppm
Water	0-7.6	N / A

SECTION II: PHYSICAL AND CHEMICAL CHARACTERISTICS

- Boiling point: 172°F (78°C)
- Vapor Pressure (mm Hg & temperature): 100 mm at 27°C
- Vapor Density (Air = 1): 1.59
- Solubility in water (Completely miscible appearance and odor): Alcohol is clear and has an alcohol odor. Appearance and odor can be modified by non-hazardous components of the mixture.
- Specific Gravity (Water = 1): 0.785 (60°F)
- Melting Point: -130°C
- Evaporation Rate (n-Butyl Acetate = 1): 2.7
- Water Reactive: None

SECTION III: FIRE AND EXPLOSION HAZARD DATA

- Flash Point and Method Used: 55°F c.c.
- Auto-Ignition Temperature: 793°F
- Flammability Limits in Air (% by Volume)
 - ◊ LEL: 3.28%
 - ◊ UEL: 19.00%
- Extinguisher Media (carbon dioxide); alcohol foam Special Fire Fighting Procedures: Use ABC chemical fire extinguisher.
- Unusual Fire & Explosion Hazards: Explosion hazard is moderate when exposed to flame.

SECTION IV: REACTIVITY HAZARD DATA

- Stability: Stable
 - ◊ Conditions to Avoid: Keep away from heat or ignition sources.
- Incompatibility (Materials to avoid): Oxidizing agents such as acetyl chloride, nitric acid & hydrogen peroxide.
- Hazardous Decomposition Products: Carbon dioxide during combustion.
- Hazardous Polymerization: Does not occur.

SECTION V: HEALTH HAZARD INFORMATION

- Primary Route of Entry:
 - ◊ Inhalation
 - ◊ Ingestion
- Carcinogen Listed: No carcinogens present
- Health Hazards
 - ◊ Acute: Irritation of eyes, nose and throat; headache
 - ◊ Chronic: Drowsiness and lassitude; loss of appetite and inability to concentrate
 - ◊ Medical Conditions Generally Aggravated by Exposure: Unknown
- Emergency First Aid Procedures: Seek medical assistance for further treatment
 - ◊ Eye Contact: Irrigate eyes with water for 15 minutes
 - ◊ Skin Contact: Wash with water
 - ◊ Inhalation: If excessive, notify authorities and seek medical assistance
 - ◊ Ingestion: Gastric lavage, followed by saline catharsis, seek medical care

SECTION VI: CONTROL AND PROTECTIVE MEASURES

- Respiratory Protection: Activated Carbon Respirator
- Protective Gloves: Not required unless in contact with skin
- Eye Protection: Chemical Splash Goggles
- Ventilation to be Used: Local exhaust sufficient
- Other Protective Clothing or Equipment: If exposure limit is exceeded, use NIOSH approved respirator

SECTION VII: HANDLING, DISPOSAL, AND SPILL PROCEDURES

- If material is spilled or released:
 - ◊ Keep away from ignition sources
 - ◊ Ventilate area
 - ◊ Large quantities may be collected and incinerated
 - ◊ Consult with local and state regulations
- Precautions when handling and storing material
 - ◊ Keep containers closed
 - ◊ Ground containers when emptying

NOTE: This sample is for educational use only. There is no guarantee of the reliability of the data on this sample, therefore, we are not liable for damages relating to the use of the information on this sample MSDS form.

PARENT LETTER FOR FIELD TRIPS

(SAMPLE)

Date

Dear Parent,

On (date of trip), (science teacher's) science classes will be taking a one day field trip to (location of site) to (major objective of trip). Students have been studying (list current topics students have been studying in class so that learning in class connects with the learning on the trip). Students will be observing (list interesting events and features that the students will be seeing and doing on the trip).

We will be leaving at (time of departure) from (where parents are to bring students) and returning at approximately (time of return). Students will be traveling to the site by (list means of transportation). They will be supervised by (list all adult supervisors). We are pleased to have (list an administrator accompanying the students and a parent whose expertise will be used as a resource on the trip) join us.

Students should arrive at (site name) at (approximate time of arrival) and be led by (name of a professional or representative of the site). We should complete the major portion of our work at 12:00 and will have lunch at the site. During lunch (parent expert) will make a presentation on (related information to the objective of the trip) to the classes. Departure will be at (approximate time of departure).

In an emergency, you can reach your child at (list the site and telephone number if possible). Identify our group as (how the classes will be identified at the site). A list of the students will be given to the office.

Students should wear (list the types of appropriate clothing students should wear). Students will need to bring a lunch (if needed) and a canned drink. Ice chests will be available to keep the food and drinks cold.

Attached to this letter is a Permission Form for students to attend the field trip and a Medical Information Form. Please fill these out, sign, and return them to (teacher) by (deadline for returning the signed form).

We are all very excited about the trip and the opportunity to see firsthand what we have been learning in class. If you have other questions about the field trip please do not hesitate to call me. I can be reached at (business number) during my planning period from (times you can be reached).

Sincerely,

(teacher's signature)

PERMISSION FORM

(SAMPLE)

(date)

I have read the information concerning (teacher's name) (classes going) field trip to (name of the site) on (date of trip).

☐ I give permission

☐ I do not give permission

for _____ to participate in the activity.
(student's name)

I understand that students and sponsors will be traveling by (kind of transportation) and leaving at (time of departure). I will be at the school at (approximate time of return) to meet the returning students at (location at school) of the school.

Parent (print name)

Parent Signature

Date

PLEASE RETURN THIS PERMISSION FORM NO LATER THAN (date) TO:
(teacher's name)
(school name)

SCIENCE LABORATORY SAFETY CONTRACT
(SAMPLE)

- I will act responsibly at all times in the laboratory.
- I will follow all instructions about laboratory procedures given by the teacher.
- I will keep my area clean in the laboratory.
- I will wear my safety goggles at all times in the laboratory and protective clothing when necessary.
- I know where the fire extinguisher is located in the laboratory and have been trained on its use.
- I will immediately notify the teacher of any emergency.
- I know who to contact for help in an emergency.
- I will tie back long hair, remove jewelry, and wear shoes with closed ends (toes and heels) while in the laboratory.
- I will never work alone in the laboratory.
- I will not take chemicals or equipment out of the laboratory without permission from the teacher.
- I will never eat or drink in the laboratory unless instructed to do so by the teacher.
- I will only handle living organisms or preserved specimens when authorized by the teacher.
- I will not enter or work in the storage room unless supervised by a teacher.

This contract is to be kept by the student.

Students should sign in the appropriate space below and return the bottom portion to the teacher.

I, _____ have read each of the statements in the Science Laboratory Safety Contract and understand these safety rules. I agree to abide by the safety regulations and any additional written or verbal instructions provided by the school district or my teacher.

Student Signature

Date

Parent Signature

Date