Safe Activity Foundations in Education Document (SAFEdoc)

Exploring Technologies:

TIJ10

(EXPL)

Revision May 2013



This resource was produced by the Ontario Council for Technological Education (OCTE)
In support by the Ministry of Education
It may be used in its entirety, in part, or adapted.

OCTE SAFEdoc

EXPL

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Overview	

Overview
Establishing Your Safety Binder
Starting Your Safety Net
Safety Net Lesson Plan
Materials, Physical Resources Planning Sheet

Disclaimer

This material was designed to assist teachers implement the Ontario Curriculum – Technological Education (revised Grade 10 -12), but is fully adaptable to the Ontario Curriculum Grade 1 – 8 Science and Technology curriculum. This material was created by members of the Ontario Council for Technology Education (OCTE) subject association and is intended as working guides for classroom, lab or shop activities. Permission is given to reproduce these materials for any purpose except profit. Teachers are encouraged to amend, revise, edit and adapt this material for educational purposes. Please acknowledge the source in all uses. Any references in this document to particular to commercial resources, materials or equipment reflect only the opinions of the writers of this material, and do not reflect any official endorsement by the Ontario Council for Technology Education, the Ontario Ministry of Education, or any other agency or government body.

All materials within these safety related documents are to be considered as suggestions and recommendations only. These are not legal documents and are not to be considered as legal requirements or as official policy. OCTE or the individual contributors makes no claim to the accuracy or the completeness of the enclosed documents and accepts no responsibility for any damages pertaining to their use. Users of this document should not assume all warnings and precautionary measures are contained herein, that additional information or measures are not required, or that local by-laws, regulations or Board policies are explicitly included.

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SECTION 1: GENERAL

Safe Activity Foundation in Education (SAFEdoc): Exploring Technologies

This **SAFEdoc** was designed to provide safety data sheets, posters, safety passports, and safety resources for all technology educators. While originally developed as a resource for the Course Profiles, it is available for any grade level or any technology education environment.

In 2013 another resource called the SafetyNET was created by OCTE with many subject-specific exemplars of exciting student projects that incorporate varying levels of safety risk. Please review exemplar <u>TIJ OCTElab SafetyNET</u> resource documents created 'by teachers for teachers' with experienced tips and customization options for your course projects.

The **SAFEdoc** been created for eleven separate disciplines per Ontario Ministry Courses:

Communications, (COM)	Hospitality and Tourism (HOST)
Computer Engineering Technology (CET)	Manufacturing (MANU)
Construction, Custom Woodworking (CON)	Technological Design (DESIGN)
Green Industries (GREEN)	Transportation (TRANS)
Hairstyling and Aesthetics (H&A)	Exploring Technologies (EXPL)
Health Care (HC)	

Please note that due to the cross-curricular nature of Technological Education, there may be a need to refer to other **SAFEdocs** for cross-discipline data sheets. For example, a Health Care teacher may need to utilize food production and handling equipment, therefore may need to refer to the HOST **SAFEdoc**. Teachers are encouraged to download ALL **SAFEdocs** for reference.

Teachers are encouraged to add to this **SAFEdoc** with data sheets, tests or other materials on an ongoing basis. Additions or revisions to this document will be posted on the **Ontario Council for Technology Education (OCTE)** website (http://www.octe.on.ca) periodically.

This document is a practical safety resource that compliments and elaborates on other recommended resources for technical teachers. See the appendix for linking information such as **Live Safe! Work Smart!**, the **Young Worker's Awareness Program**, and industry associations dedicated to safe working practices.

It is imperative that all students are made aware of the issues of health and safety particular to your class, and that you have assessed and evaluated their understanding before they are allowed to work in a shop environment or on specific procedures or tools. The use of Safety Passports, Safety Agreements, and Safety Tests (provided in this document) is highly recommended.

NOTE: While it is important to give students initial safety training and testing at the beginning of the semester, it is also important to practice **JIT Safety Training (Just In Time).** Reinforce specific safety

procedures and rules each day before initiating new procedures or using equipment. For example, before students use a band saw, review the setup and ask key questions of students before allowing its use.

Usage of the SAFEdocs

Teachers are encouraged to use and modify this document as they see fit. Individual pages may be directly printed, or custom formatting may be applied for printing any part of the document. **General Guidelines** may be used in Board or school policy documents. **Safety Guidelines** may be used as student handouts, as a teacher reference for tests, or printed and mounted as posters around equipment.

The **SAFEdoc** also contains sample **Safety Passports**. These can be used as verification that students have been trained and understand the safety aspects of each equipment or procedure they need to use to accomplish their tasks. There are several formats that may be used. Teachers are encouraged to keep consistent records at all times.

See Appendix A for related safety resources, such as Live Safe, Work Smart; the Young Workers Awareness Program, the Ministry of Labour and other organizations dedicated to safe practices.

It is important that teachers are knowledgeable about their own Board and school policies regarding safety, and that they are familiar with local municipal regulations.

Responsibilities for Safety

[from the Ontario Ministry of Education The Ontario Curriculum(Revised)2009, Technological Education, Grades 9 and 10 (page 28); Grade 11 and 12(page 33)]

Health and safety is of paramount importance in technological education. In every course, students must be made aware that health and safety is everyone's responsibility at home, at school, and in the workplace. Before using any piece of equipment or any tool, students must be able to demonstrate knowledge of how the equipment or tool works and of the procedures they must follow to ensure its safe use. Personal protective gear must be worn as required..

Classroom practice and all aspects of the learning environment must comply with relevant municipal, provincial, or federal health and safety legislation, including the following:

- the Ontario Workplace Safety and Insurance Act
- the Workplace Hazardous Materials Information System (WHMIS)
- the Food and Drugs Act
- the Ontario Health Protection and Promotion Act
- the Ontario Building Code
- the Occupational Health and Safety Act
- local by-laws

Teachers should make use of all available and relevant resources to make students sufficiently aware of the importance of health and safety. These resources include:

• Live Safe! Work Smart! – website (http://www.livesafeworksmart.net/) and related resources

- Passport to Safety website (http://www.passporttosafety.com/) and related resources
- Workplace Safety and Insurance Board (WSIB) website (http://www.wsib.on.ca/splash.html) and related resources
- Industrial Accident Prevention Association (IAPA) website (http://www.iapa.ca/) and related resources
- Ontario Ministry of Labour (MOL) website (http://www.labour.gov.on.ca/english/) and related resources
- Canadian Centre for Occupational Health and Safety (CCOHS) website (http://www.ccohs.ca/)
 and related resources
- Appropriate Safe Workplace Associations (SWAs) and clinics (http://www.ohscanada.com/links/associations.aspx), such as:
 - the Construction Safety Association of Ontario (CSAO) website (http://www.ihsa.ca/home.cfm)
 - the Ontario Service Safety Alliance (OSSA) website (http://www.ossa.com/)
 - the Infrastructure Health & Safety Association of Ontario (IHSAO) website (http://www.ihsa.ca/about/)
 - the Electrical & Utilities Safety Association (E&USA) website (http://www.eusa.on.ca/)
 - o the Workers Health & Safety Centre (WHSC) website (http://www.whsc.on.ca/)
 - the Occupational Health Clinics for Ontario Workers (OHCOW) website (http://www.ohcow.on.ca/)

Teachers should also be aware of the Occupational Health and Safety Act, Regulations 857, Amended to O. Reg. 352/91. The Occupational Health and Safety Act can be found at: http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900857_e.htm

Delegating the Responsibilities for Safety

As well, there are key areas of responsibility that must be clearly delegated for all technological subject areas and they must be addressed for their individual board, school and facility.

These may include administration, department heads, technology teachers, students, board facilities, custodian/maintenance and other local partners or board-defined roles.

* An original source of this delegation example has been adapted from the Toronto District School Board – Experiential Learning Department – Technological Education 'Front Matter' for the purposes of the SafeDOC revision 2013. Please note that this section is not original to the SafeDOC writers, but is a result of collaboration between the TDSB and OCTE. This in no way refers any responsibility to the TDSB for this information, and has been provided as a guideline reference only.

Administration

The responsibility rests with the Principal or his or her designate to ensure that each Technological Education Teacher has received the information and instruction on the safe use of equipment in the classroom.

In order to achieve safety goals the School Board, Superintendents and Principals should:

- establish and maintain a written Board safety policy and program
- emphasize and enforce the safety policy and procedures
- ensure that each Teacher has been satisfactorily trained on the use of equipment within the classroom
- ensure in-service education sessions are held for Teachers concerning the safety policy and procedures therein, such as machine guarding, lock-out, fire prevention, first aid, personal protective equipment
- be aware of current legal issues about liability for classroom accidents; ensure that such is part of in-service sessions for staff
- assist and encourage the teacher to correct and avoid situations that could result in liability to the Teacher and the school
- provide for proper safety equipment in all technology areas
- hold staff accountable for safety practices in their respective areas
- analyze accident records in order to determine the most frequent causes of accidents and the more severe types of accidents
- take corrective measures to change accident-causing conditions
- ensure that staff health and safety training and information is current
- make safety literature, posters, and safety promotional material available to all persons associated with the technology program

- set up a program for the safety orientation for new staff
- ensure that all Occasional Teachers working in the Technology areas are informed about and understand the standard accident and emergency procedures
- not permit the overcrowding of classes, taking into account the physical size of a room, the
 arrangement of the equipment, furniture and facilities in the room, and the kind of activities
 that are being carried out in the room
- ensure that the use of space has not changed unless changes have been designed by a qualified architect or engineer
- at the beginning of the year/semester, make the Technological Education Teacher aware of any student medical condition that could result in a safety problem
- ensure that individuals are designated to be responsible for safety in the Technology Department
- limit after-hours access to the Technological Education facilities and equipment to qualified personnel

Department Heads

The Department Head is the intermediary between the individual Teacher and Administration. Each Department Head is accountable to his or her Principal to ensure input into the administrative process and enforcement of both the *Occupational Health and Safety Act* and Board policies.

The Department Head should:

- ensure that each Technology area has a floor plan posted in a strategic place to show the locations of items such as:
 - √fire extinguishers
 - √ fire blankets
 - ✓ emergency power stop buttons
 - ✓ emergency kit
 - ✓ eyewash station(s)
 - √ emergency exits
 - ✓ special shut-off valves (gas, etc.)
 - ✓ nearest fire pull station
- ensure that a first-aid kit is available in each Technology area
- ensure implementation and understanding of the safety policies and procedures. This includes developing specific departmental safety procedures or rules for specific areas.
- ensure a designated Teacher is responsible for specific areas of safety in his or her specific areas

- inform the Principal when the physical condition or other factors in the classroom may detrimentally affect safe instruction
- when a program is disbanded, ensure equipment is locked-out and room is not accessible (rekeyed)
- inform the Principal, in writing, of any known or potential safety hazard
- incorporate, in some form, the Live Safe! Work Smart! Program (http://www.livesafeworksmart.net/) into the various course curricula
- encourage the use of safety posters, literature, and audiovisual aids
- advise the Technological Education staff to ensure that all student projects are able to be completed with safety guards in place. Keep safety guard and anti-kickback devices in position, if possible. Use approved alternate safety devices where appropriate.
- advise Teachers to ensure that safety guards are placed back immediately when process is finished
- where applicable, ensure that there is an appropriate spill kit and spill procedure present
- develop, implement, and post a standard accident emergency procedure in each Technology area
- ensure that current inventories of Material Safety Data Sheets (MSDSs) are maintained
- ensure that no unapproved or unsafe equipment, materials, or procedures are used in the area. Equipment should be purchased through Board-approved vendors.
- advise Technology staff that any equipment deemed not to be safe must be taken out of service immediately, tagged, locked out, and reported to the Principal
- advise the Technological Education staff to ensure that no practical shop work requiring the
 use of tools shall take place during their absence or when an unqualified Teacher in
 Technological Education is supervising the class
- advise any certified Occasional Technological Education Teacher working in a specific subject area not to engage in practical work until familiar with the shop environment
- encourage the Technology staff to receive first-aid training
- ensure that all accidents and incidents are recorded and reported on the appropriate forms
- conduct, along with the Health and Safety representative where appropriate, a follow-up analysis of all accidents and incidents
- notify the Chief Custodian, Facility Services of any special needs or deficiencies in the area
- review, at least annually, all procedures and rules

Technology Teacher

In order to provide a safe environment for students involved in any Technological Education course, the following procedures must be adhered to:

Teachers must be aware of their Board Safety Documents that outline safety procedures for machinery, tools, equipment, and procedures by completing advised Board Training.

Use of Board Safety Documents is required as the minimum basis for safety instruction. Enhancements and additions to these documents are permitted to meet program needs.

Students and employees must receive instructions on the safe and proper operating procedures for specific machinery and equipment by a qualified Technological Education Teacher before permission is given to use tools, machinery, and equipment. The following excerpt from the Ontario Curriculum document for Technological Education explains this point further:

Teachers are responsible for ensuring the safety of students during technology lab, shop, and classroom activities. Health and safety issues must also be addressed when learning involves cooperative education and other workplace experiences. Teachers need to encourage and motivate students to assume responsibility for their own safety and the safety of others, and they must help students develop the knowledge and skills needed for safe participation in all technology-related activities. For these reasons, teachers must model safe practices at all times and communicate safety expectations to students in accordance with school board policies and procedures, Ministry of Education policies, and Ministry of Labour regulations.

To carry out their responsibilities with regard to safety, it is important not only that teachers have concern for their own safety and that of their students, but also that they have:

- the knowledge necessary to use the materials, tools, and procedures involved in science and technology safely
- the skills needed to perform tasks efficiently and safely

Note: Teachers supervising students using power equipment such as drills, sanders, and saws need to have *specialized* training in handling such tools. This specific training requirement applies to listed equipment in all areas of technology education specialization.

Teachers of Technological Education courses must carefully maintain records of student attendance and records of safety instruction given.

Teachers are expected to be able to provide documentation:

- 1. that the student was present on the date each safety lesson was taught (dated lesson plans, attendance records clear and unambiguous)
- 2. of the safety lesson that was delivered (e.g., PowerPoint, note taking, signed safety pledge, pre-printed sheets, successful passing on an announced written test that is dated and stored by the teacher, correction of errors completed)

- 3. that indicates student understanding of the safety lesson (e.g., completed evaluation tool, student notes)
- 4. of how students are reminded of safe practice throughout the course (e.g., notation in teacher daybook)
- 5. that the work and learning environments are kept safe, tidy, and in good condition (e.g., photos, focus on machines with guards in place, maintenance records, safety inspections, cleanup procedures, student safety stewards, modeling of best practices), and that the Head Caretaker is informed of any maintenance issues
- 6. that students' different learning styles and needs are taken into account, both during the delivery of the safety lessons and during any follow-up evaluation (e.g., use of visuals, opportunities to demonstrate understanding orally)
- 7. that safety procedures are explained using various strategies such as verbal explanation, demonstrations through modeling, and accompanied by both written and pictorial explanations that are posted throughout the work and learning environments
- 8. that accommodations and, if necessary, modifications are made to the curriculum and included in the Individual Education Plan (IEP) in the event that the student cannot manage all curriculum expectations safely
- 9. that each student has signed the annual acknowledgment form, stating that he/she has been informed of the safety procedures

LOCKING OUT AND TAGGING OUT EQUIPMENT

The process for Teachers for locking out and tagging out equipment is as follows:

- If the equipment can be locked out by way of a power switch located on the actual piece of equipment, by use of a padlock, then the Teacher can lock it out.
- If the power cannot be locked out at the equipment, then the Head Caretaker must be notified and the power should be locked out at the panel box.
- Lockout is always required when repairs/adjustments are being performed on any piece of equipment.
- Once the equipment is locked out, it must be "Tagged Out" by attaching an appropriated tag
 in a conspicuous location, showing the worker's name and reason for lockout, along with the
 date and time.
- Notify the school Administration and the Head Caretaker once lockout and tag-out have occurred.

Students

Students demonstrate that they have the knowledge, skills, and habits of mind required for safe participation in Science and Technology activities when they:

- maintain a well-organized and uncluttered workspace
- follow established safety procedures
- · identify possible safety concerns
- suggest and implement appropriate safety procedures
- · carefully follow the instructions and example of the Teacher
- consistently show care and concern for their own safety and that of others

Board Facilities

- Inspect the Technology areas on at least an annual basis with respect to maintenance items such as gas leaks, electrical outlets, safety indicators or signs, ventilation, and any other potential hazards.
- Report the results of the inspection to the Principal.
- If work is planned in a Technology area, ensure the Teachers are informed and check for special hazards which may be present.
- Before working in a shop or on any of the shop services, inform the Teacher what will be done, and when the work will be starting and finishing. The classroom Teacher is responsible for ensuring that work area within the room is free from physical and chemical hazards.
- In situations where the hazard cannot be totally removed, specific work procedures must be developed in conjunction with the Teacher and the Health and Safety Officer.

Custodian / Maintenance

- Daily removal of garbage, scraps, and waste must be organized and coordinated with the Caretaking staff.
- After the Teacher informs the Head Caretaker, it is the Head Caretaker's responsibility to
 clean the hoppers. Hoppers, hoods, filters, and ducts that are subject to accumulation of
 sawdust deposits should be inspected and cleaned at least every two weeks. Education
 areas that utilize chemicals such as photography supplies, chemical etchers, inks or paints
 should be familiarized with the caretakers and maintenance department for proper cleanup
 and disposal procedures.
- Be aware of the hazards in the Technological Education areas.
- Know the hazard warning signs and symbols and proper safety precautions.
- Do not handle unfamiliar materials. Do not handle or move chemicals in the shop.
- In the event of an emergency or concern, know the individuals who should be contacted and how to reach them.
- Know the proper handling and disposal of materials before disposing.
- If the contents of any containers are spilled, the school must adhere to the Spill Procedures. DO NOT TOUCH OR ATTEMPT TO CLEAN UP. Contact the Principal or your supervisor, who will then contact the appropriate person/department.
- Ensure that the Technology shops are secure during non-class hours after school, and at night. This is especially important if the school building is used after school by the community user groups.

Safety Perspective Overview

Health and Safety Resources and Curriculum

These resources identify safety rules associated with hazards and processes. They are applicable to a wide range of occupations and situations.

e.g. Occupational Health and Safety Act, 1990, Live Safe! Work Smart!

Based on the Ontario curriculum this resource contains safety lessons for technology subjects

Classroom Safety Resources

These resources identify safety policies and procedures that ensure the safety of people in schools.

e.g. WHMIS Training Sessions, Board Safety Policies, **SAFEdocs-** These resources provide a framework for developing safety procedures in school classrooms

It is highly recommended that all teachers complete an **OCTE SafetyNET** template for their individual experience / program / classroom / school / board. This is an excellent starting point for self-reflection and preparation for MOL/MOE inspection.

Equipment and Hazard-Specific Safety Rules

These resources are Just-in-Time (JIT) safety rules. They are applicable to specific equipment in the facility and may apply to specific hazards associated with a program emphasis.

These rules are developed at the classroom/school level to implement safe work practices. They may be adapted from a variety of sources including equipment manufacturer's manuals. A summary is often posted near equipment.

Safety Management

The teacher develops these resources. The daily classroom safety routines and policies are based on the above safety resources and applied to each individual facility/classroom. Protocols developed to teach safe behaviour directly should include managing safe work practices and behaviour through demonstration and reinforcement of safe working procedures, establishment of clear safety rules, safety passports, assignments, quizzes, and research.

Again, it is highly recommended that teachers complete a SafetyNET template to review their unique projects and procedures and consider risks as advised by OSBIE, and other professional health and safety partners.

Safety Topics for the Classroom

The following are suggested topics for teaching in the classroom. See Appendix A for available resources pertinent to general safety and particular safety rules and procedures for your subject area. See Appendix B for specific resources or links that are associated with this TIJ. See also your Board, school and relevant municipal policies for local safety rules and procedures.

Emergency Procedures procedures for handling fire, security threats, and other

emergencies

First Aid procedures for handling breathing difficulties, bleeding, burns,

allergic reactions, epileptic seizures, etc.

Personal Protective Equipment use of eye, hearing, foot, body, respiratory protection

Ergonomics safe posture when using equipment, avoiding repetitive stress

injuries

Material Handling procedures for safely handling heavy loads, chemicals, potentially

hazardous materials

Housekeeping and Storage procedures and rules regarding maintaining safe facilities and

proper storage of materials and equipment

Fire Protection location and types of fire protection equipment, procedures to follow

in the event of a fire or fire alarm

WHMIS (Workplace Hazardous Materials Identification

System)...identification and safe use of hazardous materials

Communication

It is important to the safety of all students and staff at a school that safety be taught and reinforced on a daily basis. Some basic methods of communication are:

- Safety Notice Board, containing posted minutes from the joint health and safety committee and the Occupational Health and Safety Act (must be posted by law)
- visible WHMIS binders, symbols and MSDS sheets
- readily available manuals for the operation of various types machinery, tools or equipment
- safety posters around major equipment and work areas
- clear and precise instructions, reinforced each time a procedure or equipment is used
- clearly marked areas that contain safety items such as fire extinguishers, eye wash stations, first aid kits, etc.

Safety Expectations

The following are safety related expectations from The Ontario Curriculum 2009 9Revised) - Technological Education for:

TIJ1O Exploring Technologies Grade 9 - Open

D. PROFESSIONAL PRACTICE AND CAREER OPPORTUNITIES

- D1. follow safe practices and procedures when using materials, tools, and equipment;
- D1.1 use appropriate personal protective equipment (e.g., gloves, safety glasses or goggles, hard-hat, hearing protection, respirator mask);
- D1.2 use the safety features of tools and equipment (e.g., bandsaw guard, stock guides, tire balancer cover) appropriately;
- D1.3 follow proper shop practices, which help protect the safety of workers (e.g., keep work area clean and organized, avoid horseplay);
- D1.4 use appropriate aids (e.g., push stick, feather-board, soldering iron holder) to minimize the risk of injury;
- D1.5 use appropriate strategies to prevent health problems (e.g., follow proper sanitation and sterilization practices; ensure proper ventilation; use proper lifting techniques; follow Workplace Hazardous Materials Information System [WHMIS] and Material Safety Data Sheet [MSDS] guidelines).

SAMPLE TIJ GRADE 9 PROJECTS BY DISCIPLINE

Below is a sampling of potential projects that can be performed in an Exploring Technology course at the grade 9 level.

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- Oil Change
- Tire Rotation
- Exterior wash and paint detail
- Interior clean
- Small Engines service and repair
- Styrofoam Airplanes
- Self-Propelled Vehicles (Mousetrap Car)
- Boats Hull Design and Test
- Pop Bottle Rockets
- CO₂ Race Cars
- Bicycle Repair
- Skateboard Repair

Manufacturing

- Candle Stick Holder
- Dog Tags
- Stanley Cup
- Pen/Pencil Holder
- Desk Set

Welding/Blacksmithing

- Plant Hanger
- Towel Rack
- Ornamental gate
- Locker Organizer
- Book Ends
- Key Chain Tags
- Nuts and Bolt Figurines

Construction

- CO₂ Race Cars
- Bird House
- Shelf
- Book Ends
- Paper Towel Rack
- Cutting Board

Hairstyling and Aesthetics

- Shampoo/Dry Hair
- Scalp Treatments
- Scalp Massage
- Hot Tools
- Styling Straightening, Curling, Draping

_	_	
•	-	Box
•		

- CNC Plaque
- Desk Set
- Wood Pen
- Picture Frame Wood Joints Project

Braiding

- Nail Care Manicure/Pedicure
- Hand Massage
- Polishes Gel, Acrylic
- Facials
- Customer Service Skills

Hospitality

- Baking Cookie, Quick Breads, etc.
- Bread
- Planning an Event
- Fruits and Vegetable Platters
- Health and Nutrition
- Breakfast Club/Program
- Staff Lunches Plan and prepare a staff lunch (Fridays)

Green Industries

- Landscaping
- Landscaping Design
- Groundskeeping and Care
- Greenhouse Basics
- Solar/Wind Energy Systems
- Planting / Soil Assessment

SAMPLE TIJ GRADE 9 PROJECTS BY DISCIPLINE (cont'd)

Electricity/Electronics

- Fundamentals of Electricity
- Build a Circuit Residential or electronics kit
- Circuit Board Projects Buzzer, Motion Detector, Timer, Transistor Radio
- Etching Circuit Boards
- Soldering Techniques

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Health Care

- First Aid
- CPR
- AED
- Health Care Basics Proper Hand Washing, Personal care
- Sterilizing
- PPE
- Signs of Health/Disease 5 senses, colour, eye dilation, weight, fitness level, hydration levels, etc.
- Common Tests Blood Pressure, Blood Test, Breath Test, Oxygen Levels, Cholesterol, Blood Sugar

Communications

- Photoshop Designs, Photo cropping, touch up/ manipulation, etc.
- Website Design
- Business Card/Poster/Brochure
- Packaging Project
- Video
- Video Editing
- Photography and Digital Photography
- Green Screen
- Special Effects

Tech Design

- Elements of Design
- Drafting
- Blueprint Reading
- Mechanical Design
- Architectural Design
- Software used to create designs
 (ie: AutoCAD, Envisioneer, CAD Key,

Key Creator, Mastercam, Inventor, SketchUp, etc.)

- Model Building
- Vinyl Cutting
- Cell Phone Cases
- Spaghetti Bridges

INTERNET ACCEPTABLE USE AGREEMENT FORM

The form below is a sample agreement form that can be used with your board Internet use policy and guidelines.

INTERNET ACCEPTABLE USE AGREEMENT FORM

To Students:

I, the undersigned, indicate by my signature that I have read and understand fully the Acceptable Use Policy and related guidelines. I agree that I will abide at all times to the rules and responsibilities as outlined in the Acceptable Use Policy and related guidelines. I also agree that I clearly understand the consequences of my failure to abide by these rules and regulations.

To Parents/Guardians

As a parent or guardian signing below, I indicate that I understand the rules, regulations and consequences of misuse governing my son or daughter's use of the Board's computer and information technology facilities and resources. I understand that all Board staff will make every attempt to ensure proper and acceptable use in line with relevant policies, laws and regulations. I hereby allow my son or daughter to access the Board's supervised facilities and resources.

Student Name:		
Student Signature:		
Date:		
Parent/Guardian Full Name:		
Parent/Guardian Signature		
Date;		

To Be Used As An Example Only; Please See Board/School Policy

EXPL Student Conduct Agreement

A signed agreement that outlines the student responsibilities is one way of establishing the seriousness of daily safety vigilance. An agreement covers the elements common to all technology classrooms and labs and lays out the framework for a safe and healthy working environment for both staff and students. An example of an agreement is given below.

Safety Awareness

Personal Protective Equipment [PPE]

- 1. Wear gloves, safety eyewear, aprons, masks, and other PPE as per instructed when using chemicals, heat, biological materials hand or powered instruments and tools.
- 2. Ensure other workers and customers are protected before performing operations that can be dangerous.

Lift Support and Movement

- 1. Move heavy objects only with teacher approval.
- 2. Use assistance to lift items over 20 kilograms (40 pounds) or 2 meters (six feet) in length
- 3. Secure and support heavy or long objects on approved shelves.

Equipment

- 1. Operate equipment, chemicals or tools only after receiving proper instruction and permission from the teacher.
- 2. Never leave equipment, chemicals or tools unattended.
- 3. Do not attempt to repair any electrical connections, see your instructor.
- 4. Remove from service any equipment or tools that need repairing.

Storage and Handling of Chemical Substances

- Understand and follow WHMIS, and MSDS instruction before handling chemical substances.
- 2. Secure all flammable chemicals and corrosives in approved cabinets.
- 3. Maintain good housekeeping practices when dealing with chemical substances.
- 4. Be responsible for cleaning up your workstation, tools and work area.
- 5. Sort recyclable liquids and solids and biological materials into proper approved storage containers

STUDENT CONDUCT AGREEMENT

A signed agreement that outlines the student's responsibilities is one way of establishing the seriousness of daily safety vigilance. An agreement covers the elements common to all technology classrooms and labs and lays out the framework for a safe and healthy working environment for both staff and students. An example of an agreement is given below.

STUDENT CONDUCT AGREEMENT FORM			
I, agree to:			
 Inform teachers of all injuries, damaged equipment and potentially dangerous situations. Make sure I know all fire exits and power shutdown switches and how to use them during emergency situations. Not compromise the safety of others through horseplay or aggressive action. Only use equipment when properly trained, always with any necessary personal protective equipment, and when I fully understand all related safety issues Ask for assistance from the teacher when I am unsure of the proper procedures or health and safety issues 			
Prescribed and Non-prescribed Medications 1. Report any use of prescription medications and inform teachers of any possible side effects of the medication [e.g. penicillin, phenobarbital] 2. Report any use of non-prescription medication and any possible side effects of the medication [e.g. Reactine, Benadril, cough syrups] 3. Never enter a shop or lab carrying, or under the influence of illegal substances			
Consequences for Improper Action I understand that failure to comply with this agreement may result in injury to myself or others, and that failing to comply with safety procedures may result in my temporary removal from the class or shop.			
I have read the above and understand the expectations and consequences.			
Student signature:			
Parents signature			
Date:			

SECTION 2: SAFETY DATA SHEETS

This section contains Safety Data Sheets (listed in alphabetical order) that can be used as:

- Student handouts
- Safety posters (can be mounted in and around specific equipment or bulletin boards)
- Teacher notes in project binders, safety binders or assessment plans
- Information that can support a lesson(s)

Safety Data Sheets contain information specific to various common tools and procedures. Before using them, ensure they accurately describe your own particular facilities and equipment, and that they align with specific manufacturer's safety instructions.

NOTE:

All materials within this document are to be considered as suggestions and recommendations only. These are not legal documents and are not to be considered as legal requirements or as official policy. OCTE or the individual contributors makes no claim to the accuracy or the completeness of the enclosed documents and accepts no responsibility for any damages pertaining to their use. Users of this document should not assume all warnings and precautionary measures are contained herein, that additional information or measures are not required, or that local by-laws, regulations or Board policies are explicitly included.

Please see specific equipment manuals for further safety information, as well as local, Board and school policies and regulations. Please review exemplar TIJ OCTElab SafetyNET resource documents for experienced teacher tips and customization options for your course projects.

Biohazards

When working with people always be aware of biohazards. Wearing of appropriate protective devices, keeping work areas clean and sanitized, and knowing proper procedures can minimize or reduce risks associated with biological hazards.

- 1. Wear proper Personal Protective Equipment PPE as directed at all times (e.g. safety eyewear, masks, gloves, aprons, etc.)
- 2. Properly sterilize all tools and equipment as required.
- 3. Sterilize and sanitize all tools and equipment after each use. If tools or equipment are dropped on the floor, ensure that they are sanitized or sterilized as required before being used again.
- 4. Handle sharp objects with extreme care.
- 5. Store all equipment, tools and materials in approved containers ONLY.
- 6. Dispose of biological material in approved containers ONLY.
- 7. Clean any spills and remove any contaminated materials immediately.
- 8. Call attention to any potential contamination or dangerous conditions to your supervisor and/or instructor immediately.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

Chemical Handling

Many operations in exploring technologies involve different types of chemicals. Make sure you know how to handle these chemicals: their use, as well as storage and disposal procedures.

- 1. Before handling any chemicals, ensure you understand the safe handling procedures as outlined on container labels, WHMIS data sheets, designated instructions or posted classroom procedures as appropriate. If you are unsure, see your instructor before proceeding.
- 2. Place any chemicals in approved, labeled containers ONLY.
- 3. DO NOT mix chemicals without prior knowledge of the consequences.
- 4. Discard any used chemicals in approved disposal containers ONLY. Inform your instructor of near-full containers. DO NOT dispose of chemicals down drains. Ask your instructor for proper disposal methods and procedures.
- 5. Ensure that there is adequate ventilation when using chemical substances.
- 6. Do not use any chemical for any other purpose other than what it is designed for.
- 7. Use appropriate PPE (personal protection equipment) at all times when handling chemicals. PPE includes eye protection, skin protection, gloves, aprons or coveralls, foot protection, as required under safe operating procedures.
- 8. Take note of expiry dates and storage requirements of chemicals. Do not use chemicals beyond their expiration.

Electrical Hazards

Touching an exposed electrical wire or electrical equipment that has not been grounded properly causes shocks. Shock can vary from a slight tingle to a rocking jolt. A very severe shock can cause death. Do not touch equipment or electrical wires that have been exposed to fluids.

Protect yourself against shocks by following these rules:

- 1. Check the condition of electrical cords on equipment. Report all problems to your instructor immediately. Replace worn or damaged cords.
- 2. When disconnecting a cord, pull on the plug. Never pull on the cord. You may loosen the wires and get a shock.
- 3. Never handle electrical equipment with wet hands or while standing in water.
- 4. Wear rubber-soled shoes to prevent shocks. Rubber does not conduct electricity.
- 5. Be sure an appliance is turned off before plugging it into an outlet.
- 6. Make sure you use proper power supplies and cables designated for use with specific pieces of equipment.
- 7. Store all electrical equipment in areas designated by your instructor.
- 8. Never change or interfere with the operating environment set up by someone else without permission.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

Facility Emergency Procedures

- 1. Make sure you know the location of all fire alarms, emergency exits, and emergency power stop buttons
- 2. EMERGENCY PROCEDURES AND EVACUATION ROUTES must be clear at all times, and occupants must know and understand these procedures and routes.

Location of Emergency Exits and Fire Alarms:

Locations of Emergency Stops:

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

Fall Protection

Studies of accidents in the service industry show that most injuries are caused by falls. Observing a few simple rules will help to avoid most accidents of this type.

The points below give guidelines for preventing falls.

- 1. Walk; do not run.
- 2. Keep floor clean and dry. A wet floor is slippery, so wipe up any spills immediately. Sprinkle salt on any spots that are still slippery until the floor can be thoroughly washed. Warn others of slippery conditions.
- 3. Wear low-heeled comfortable shoes with rubber soles, these grip the floor well.
- 4. Keep floor mats flat to prevent stumbling. Wrinkled mats or ones with curled corners can cause falls.
- 5. Keep work areas and traffic lanes clear. Electrical cords should not extend across traffic lanes. Put mops and brooms away promptly. Never leave boxes or crates in the aisles.
- 6. Look where you are going at all times. Get assistance to carry items that can block your vision.
- 7. Use a stepladder, never a chair or table, if you need to reach something on a high shelf.

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

Fire Extinguishers

- 1. If you see a fire, call for attention, get everyone out, pull fire alarm.
- 2. Stay calm.
- 3. If using a fire extinguisher:
 - PULL THE PIN, AIM LOW AT BASE OF FIRE
 - SQUEEZE HANDLE, SWEEP SLOWLY AT BASE OF FIRE
 - STAY LOW TO AVOID HEAT AND SMOKE
- 4. Have the fire department check to make sure the fire is out.
- 5. Ventilate when fire is completely out.

Learn and know the types of fire extinguishers (see below):

CLASS A water	Λ	Ordinary Combustibles: paper, cloth, wood, rubber, many plastics.
CLASS B	B	Flammable Liquids: oil, grease, gasoline, some paints, solvents etc.
CLASS C dry chemical		Electrical: wiring, fuse boxes, electrical equipment etc.
CLASS D special liquid or powder	D	Combustible Metals: magnesium, sodium.

First Aid

The immediate response to an emergency often involves First Aid. First Aid involves assisting an injured person until professional medical help can be provided.

The general action tips in the list below should be followed in an emergency. They do not replace the need to be properly trained in first aid. Your teacher will provide you with instructions in what to do in cases of emergencies.

- 1. Check the scene for dangers, (e.g. electrical shock hazards, chemical spills, hot objects, fire), stay calm and call out for help. Do not touch the victim until immediate dangers such as electrical current are removed.
- 2. Assist if asked by your teacher to keep the victim comfortable and calm.
- 3. Call the office for medical help if requested by the teacher.
- 4. Care for the victim by administering first aid according to your teacher's instructions.
- 5. Help keep people who are not needed away from the victim.

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

First Aid for Burns

To distinguish a minor burn from a serious burn, the first step is to determine the extent of damage to body tissues. The three burn classifications of first-degree burn, second-degree burn and third-degree burn will help you determine emergency care.

1st-degree burn

The least serious burns are those in which only the outer layer of skin is burned, but not all the way through.

- The skin is usually red
- Often there is swelling
- Pain sometimes is present

Treat a first-degree burn as a minor burn unless it involves substantial portions of the hands, feet, face, groin or buttocks, or a major joint, which requires emergency medical attention.

2nd-degree burn

When the first layer of skin has been burned through and the second layer of skin (dermis) also is burned, the injury is called a second-degree burn.

- Blisters develop
- Skin takes on an intensely reddened, splotchy appearance
- There is severe pain and swelling.

If the second-degree burn is no larger than 3 inches (7.6 centimeters) in diameter, treat it as a minor burn. If the burned area is larger or if the burn is on the hands, feet, face, groin or buttocks, or over a major joint, treat it as a major burn and get medical help immediately.

For minor burns, including first-degree burns and second-degree burns limited to an area no larger than 3 inches (7.6 centimeters) in diameter, take the following action:

Cool the burn. Hold the burned area under cool (not cold) running water for 10 or 15 minutes or until the pain subsides. If this is impractical, immerse the burn in cool water or cool it with cold compresses. Cooling the burn reduces swelling by conducting heat away from the skin. Don't put ice on the burn.

Cover the burn with a sterile gauze bandage. Don't use fluffy cotton, or other material that may get lint in the wound. Wrap the gauze loosely to avoid putting pressure on burned skin. Bandaging keeps air off the burn, reduces pain and protects blistered skin.

Minor burns usually heal without further treatment. They may heal with pigment changes, meaning the healed area may be a different color from the surrounding skin. Watch for signs of infection, such as increased pain, redness, fever, swelling or oozing. If infection develops, seek medical help. Avoid re-injuring or tanning if the burns are less than a year old — doing so may cause more extensive pigmentation changes. Use sunscreen on the area for at least a year.

Caution

- Don't use ice. Putting ice directly on a burn can cause a person's body to become too cold and cause further damage to the wound.
- Don't apply egg whites, butter or ointments to the burn. This could cause infection.
- Don't break blisters. Broken blisters are more vulnerable to infection.

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3rd-degree burn

The most serious burns involve all layers of the skin and cause permanent tissue damage. Fat, muscle and even bone may be affected. Areas may be charred black or appear dry and white. Difficulty inhaling and exhaling, carbon monoxide poisoning, or other toxic effects may occur if smoke inhalation accompanies the burn.

For major burns, call 911 or emergency medical help. Until an emergency unit arrives, follow these steps:

- Don't remove burned clothing. However, do make sure the victim is no longer in contact with smoldering materials or exposed to smoke or heat.
- Don't immerse large severe burns in cold water. Doing so could cause a drop in body temperature (hypothermia) and deterioration of blood pressure and circulation (shock).
- Check for signs of circulation (breathing, coughing or movement). If there is no breathing or other sign of circulation, begin CPR.
- Elevate the burned body part or parts. Raise above heart level, when possible.
- Cover the area of the burn. Use a cool, moist, sterile bandage; clean, moist cloth; or moist cloth towels.

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Get a tetanus shot. Burns are susceptible to tetanus. Doctors recommend you get a tetanus shot every 10 years. If your last shot was more than five years ago, your doctor may recommend a tetanus shot booster.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

First Aid for Cuts

Stop the bleeding. Minor cuts and scrapes usually stop bleeding on their own. If they don't, apply gentle pressure with a clean cloth or bandage. Hold the pressure continuously for 20 to 30 minutes and if possible elevate the wound. Don't keep checking to see if the bleeding has stopped because this may damage or dislodge the clot that's forming and cause bleeding to resume. If blood spurts or continues flowing after continuous pressure, seek medical assistance.

Clean the wound. Rinse out the wound with clear water. Soap can irritate the wound, so try to keep it out of the actual wound. If dirt or debris remains in the wound after washing, use tweezers cleaned with alcohol to remove the particles. If debris still remains, see your doctor. Thorough cleaning reduces the risk of infection and tetanus. To clean the area around the wound, use soap and a washcloth. There's no need to use hydrogen peroxide, iodine or an iodine-containing cleanser.

Cover the wound. Bandages can help keep the wound clean and keep harmful bacteria out. After the wound has healed enough to make infection unlikely, exposure to the air will speed wound healing.

Get stitches for deep wounds. A wound that is more than 1/4-inch (6 millimeters) deep or is gaping or jagged edged and has fat or muscle protruding usually requires stitches. Adhesive strips or butterfly tape may hold a minor cut together, but if you can't easily close the wound, see your doctor as soon as possible. Proper closure within a few hours reduces the risk of infection.

Watch for signs of infection. See your doctor if the wound isn't healing or you notice any redness, increasing pain, drainage, warmth or swelling.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

First Aid Kits

ALL INJURIES MUST BE REPORTED TO MAIN OFFICE REPORT ANY USE OF FIRST AID KIT TO TEACHER TO ENSURE THAT ANY SUPPLIES THAT ARE USED ARE REPLACED

Suggested list (add items specific to your needs) See WSIB Regulation 1101, Required first aid kit items (at http://www.wsib.on.ca/wsib/wsibsite.nsf/Public/PreventionYHSRR)

DATE CHECKED: CHECKED BY:

ITEM	Number
St. Johns Ambulance First Aid Manual	
Masks	
Disposable latex gloves	
Pair of scissors	
Plastic Emesis basin	
Wooden splints	
Rolls of splint padding	
Adhesive strip bandages	
3"x3" sterile gauze pads	
4" compress bandages	
6" Tensor bandages	
Triangular bandages	
Safety Pins	
Sterile gauze bandages	
Sterile gauze field dressing	
1 ½" width roll adhesive tape	
Antiseptic swabs	
Burn cream	
Instant cold packs	

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

General Housekeeping

- 1. Everything has a proper storage location. If you don't know where it is, please ask. If you do know, put it back.
- If it is broken, report it.
 If it doesn't work, report it.
 If it's broken or doesn't work, don't use it.
- 3. Dirt, dust, debris are harmful to your safety and health. Even if you didn't put it there, pick it up, clean it up, or move it aside.
- 4. If you spill or drop any fluid on the floor, clean it, or use absorbent materials. You are responsible for prevention of injuries.
- 5. Never block fire exits, fire pull alarms, doorways, aisles, and electrical breakers of machine switches for any reason at any time.
- Chemicals all have proper storage containers.
 Make sure you use them.
 Never mix chemicals.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

Grease and Oils

Grease or oil fires spread quickly. As soon as you spot one, alert others to the problem. Call the fire department immediately. Be sure you know where all exits are located. If the fire spreads, help customers from the building and stay outside. If the air is smoky, crawl to safety. The smoke will be lighter near the floor.

The points below give guidelines for preventing grease or oil fires.

- 1. Do not overheat fat. A flash fire may result.
- 2. Do not fill the fryer to the top.
- 3. Never leave hot fat unattended.
- 4. If oil or fat spills, wipe it up with a paper towel and clean the surface with warm water and detergent.
- 5. After cooking with grease, fat or oil, clean accumulated grease from range hoods, grills, and deep fat fryers. Use warm water and detergent.
- 6. Check electrical equipment and extension cords frequently. Faulty wiring and fraying cords can cause electrical fires.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

GUIDELINES FOR TRANSFERRING PATIENTS

Direct Carry

- Position the stretcher at a right angle to the patient's bed with the head end of the stretcher at the foot of the bed.
- Prepare the stretcher by unbuckling the straps, removing other items, and lowering the closest railing.
- Both care-givers stand between the stretcher and the bed, facing the patient.
- The partner at the head end of the stretcher slides one arm under the patient's neck and shoulders, cupping the far shoulder with his or her hand and cradling the head.
- The other partner slides one arm under the small of the patient's back, slides the arm under the buttocks and lifts slightly to allow the first partner to slide an arm under the waist.
- The second care-giver reaches under the patient's lower legs.
- The patient is pulled to the edge of the bed, then lifted and curled toward the care-giver's chest.
- The care-givers rotate to be in line with the stretcher, then place the patient gently on to it.

Draw Sheet Method

- Loosen the bottom sheet on patient's bed.
- Adjust stretcher to height of bed, unbuckle straps, lower both rails, and remove all items from stretcher.
- Place the stretcher against the side of the bed.
- Both care-giver's reach across the stretcher and grasp the sheet firmly beside the patient's head, chest, hips and knees.
- Slide the patient gently across and onto the stretcher. If enough personnel are available, the patient may be lifted by grasping the sheet on both sides of the patient at the chest and hip simultaneously.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

HACCP System

The food safety system used by many food service establishments is called the HACCP system. The **Hazard Analysis Critical Control Points** system combines food-handling procedures, monitoring techniques and record keeping.

It helps food service employees:

- Identify foods and procedures that are likely to cause food borne illness.
- Develop facility procedures that will reduce the risk of food borne illness.
- Monitor Procedures in order to keep food safe.

.Potential Hazard	Control Point	Corrective Action
Selection of hazardous items; improper food preparation.	Menu Items and Recipes	Proper training.
Receipt and acceptance of contaminated food products.	Receiving	Inspect each delivery, reject contaminated goods.
Cross-contamination; improper storage resulting in spoilage; bacteria.	Storing	Follow FIFO procedures; maintain proper storage temperatures; discard old items.
Cross-contamination; bacteria.	Food Preparation	Good personal hygiene; gloves; hand washing; clean and sanitize utensils and work surfaces.
Bacteria not killed; physical and chemical contaminants.	Cooking	Achieve minimum internal temperature.
Bacteria; physical contaminants.	Food Holding and Serving	Maintain proper temperatures, use clean serving equipment.
Bacteria.	Cooling	Apply rapid cooling methods; store food properly.
Bacteria.	Reheating	Heat foods rapidly; don't mix old food with new food.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

Hand Washing

Hand- washing and effective hand sanitation are extremely important methods of preventing the transmission of dangerous bacteria. A food service worker's hands should be washed regularly using the following procedure:

- 1. Wet forearms and hands with hot water.
- 2. Apply enough soap to build up a good lather.
- 3. Rub hands and arms for at least 20 seconds.
- 4. Clean fingernails with a brush.
- 5. Rinse off soap thoroughly under running hot water.
- 6. Turn off water faucet using a paper towel.
- 7. Dry hands and arms using a separate paper towel.

Always wash your hands:

- Before starting work.
- After any work breaks, including those to eat, smoke, drink or chew gum.
- Before and after handling raw foods such as meat, fish or poultry.
- After touching your face, hair or body.
- After sneezing, coughing or using a tissue.
- After using the restroom.
- After using any cleaning or sanitizing product.
- After taking out the garbage.
- After cleaning dirty dishes and tables.
- After touching anything else that could contaminate food, such as a phone, money, door handles or soiled tablecloths.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

HOSPITAL BED SAFETY

Never use a bed you have not been trained on.

Be sure the bed is plugged in and that the plug is in good condition before using the bed.

Be sure that long hair is secured for both the patient and the attendee.

Always enter and exit a patient with the bed in lowest horizontal (flat) position.

Be sure that bed rails are up when a patient is in the bed.

Be sure all personal items are stored away from the bed to prevent tripping hazards.

The main risk is entrapment, which occurs when a patient is caught in spaces in or around the bed rail, mattress, or bed frame. Entrapped individuals can become strangled.

Hospital Bed Entrapment Zones

The head, neck, and chest are key body parts at risk of entrapment.

There exist seven potential "zones of entrapment" where special care is required:

- 1. within the rail
- 2. under the rail, between the rail supports or next to a single rail support
- 3. between the rail and the mattress
- 4. between the rail, at the ends of the rail
- 5. between split bed rails
- 6. between the end of the rail and the side edge of the head or foot board
- 7. between the head or foot board and the mattress end

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

Hot Food Handling

Although cooking involves handling hot food and equipment, a little care can prevent most burns.

- 1. Protect your hands by using hot pads. Use thick, dry hot pads that will not conduct heat quickly. When reaching into an oven, protect the back of your hands by pulling the rack out. Use a mitt.
- 2. Protect yourself from steam burns. Always tilt the lid of a pot away from you to let the steam escape. Be sure all steam is gone from a pressure cooker before opening the lid. Wet hot pads can also cause steam burns.
- 3. Hot fat can cause very painful burns. Never put cold or wet food into hot fat because it will cause the fat to splatter. It may also cause the hot fat to boil over and perhaps catch fire.
- 4. Keep handles on pans turned away from the front of the range so the pan cannot be tipped over easily.
- 5. Wear close-fitting clothes. Keep long hair tied back and do not wear dangling jewelry. Loose sleeves and jewelry can catch the handle of a pan and turn it over. Loose sleeves and hair can also catch fire.
- 6. Avoid filling containers more than half full. They will be less likely to spill when carried.
- 7. Get help when moving heavy pans of hot fat.
- 8. Warn others when you are walking with hot food.
- 9. Keep flammable materials such as towels away from open flames. Flammable materials are ones that catch fire easily.

Knife Handling

Food service workers handle knives daily to cut, mix, chop, slice, and grate. Workers should know how to use them correctly in order to avoid cuts. Cuts often result from the improper use of knives. A sharp knife is safer than a dull one because it will cut food more easily and with less pressure.

- 1. Always use the correct knife.
- 2. Always use a sharp knife. You're more likely to cut yourself with a dull knife because you will need to use more force.
- 3. Always cut with the blade facing away from your body. Always use a cutting board.
- 4. Never let the knife's blade or handle hang over the edge of a cutting board or a table.
- 5. When carrying a knife, hold it by the handle with the point of the blade facing down at your side. Make sure that the sharp edge is facing behind you.
- 6. Don't try to catch a falling knife. Step away and let it fall.
- 7. When you're passing a knife to someone, lay the knife down on the work surface or pass it by carefully holding the dull side of the blade with the handle facing toward the other person.
- 8. Never use a knife to perform inappropriate tasks, such as opening a can or a bottle or prying something apart. These tasks could damage or even break the blade.
- 9. Never leave a knife in the sink filled with water. Someone could reach into the sink and be cut by the knife.
- 10. Carefully wipe the blade from its dull side.
- 11. Always wash, sanitize, and wipe knives before putting them away.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

Lifting

A strain is a feeling of stiffness or soreness from using muscles too long or the wrong way. Strains usually occur in the lower back, the weakest point of the spinal column. In food service, lifting heavy loads incorrectly often causes strains. Once your back has been strained or weakened, it can easily be injured again.

- 1. You can prevent back strain by lifting with your strong leg muscles. When you must lift a heavy object, squat with knees bent, feet apart, and back straight. With your arms straight, get a firm grip on the load. Stand up keeping your back straight. Make your leg muscles do the work. Do not twist or bend.
- 2. Set objects down by using the same method in reverse. Ask for help if the object is too heavy. Use a cart to carry heavy objects any distance.
- 3. Heavy articles should be stored on the bottom shelves.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

LIFTING & MOVING PATIENTS

Lifting a patient improperly can lead to injury of the patient or the care-giver.

Always get as close to the patient as you can when lifting.

Keep your arms and patient as close to your body as you can to help create leverage and maintain balance.

Bend at the knees while keeping your back as straight as possible.

Lift with your legs and not your back!

Recognize your limitations and call for back-up when needed to lift patient.

Guidelines for Safe Lifting

- 1. Consider the weight of the patient together with the weight of the stretcher or other equipment being carried and determine if additional help is needed.
- 2. Know your physical ability and limitations. Know your combined ability with your lifting partner. If absolutely necessary, you can ask bystanders to help. You or your partner must be in charge and give the orders, not the bystander.
- 3. Lift without twisting. Avoid any kind of swinging motion when lifting as well.
- 4. Position your feet shoulder width apart with one foot slightly in front of the other.
- 5. Communicate clearly and frequently with your partner. Decide ahead of time how you will move the patient and what verbal commands will be used.

Tell the patient what you will be doing ahead of time. A startled patient may reach out or grab something and cause a loss of balance.

Guidelines for Carrying Patients and Equipment

- Whenever possible, move patients on devices that can be rolled.
- Minimize the distance needed to carry patients
- Know the weight to be carried.
- Work in a coordinated manner with your partner.
- Keep the weight as close to your body as possible.
- Keep your back in a locked-in position and refrain from twisting.
- Flex at the hips, NOT the waist, and bend at the knees.
- Do not hyperextend your back (do not lean back from the waist).
- Try to lift with a partner that has similar height and strength.

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

Personal Hygiene

Food service workers have direct contact with food and as a result are often the cause of contamination and food-born illnesses. These occurrences can be reduced if the worker practices good grooming habits.

The following points outline some of the things the food service worker can to maintain good hygiene.

- 1. Bathe daily and wash hair regularly.
- 2. Fingernails should be clean, trimmed neatly, and relatively short.
- 3. Always wear clean clothes to work.
- 4. Shoes should be appropriate to the workplace: closed toe with non-slip soles.
- 5. Always restrain your hair with a hairnet or hat.
- 6. Always wear a clean apron.
- 7. Always wear gloves when serving food items.
- 8. Never reuse gloves that have touched raw food.
- 9. Never use soiled or ripped gloves.
- 10. Do not work with food if you are ill.
- 10. Keep cuts completely covered.

WHMIS Regulations

- The acronym WHMIS stands for Workplace Hazardous Materials Information System
- This regulation was introduced into the Occupational Health and Safety Act of Ontario in 1987
- WHMIS gives a worker the right to know what they are handling
- Federal WHMIS applies to importers, manufactures, and suppliers of hazardous materials
- The Hazardous Products Act for controlled products states that national suppliers are to provide labels and Material Safety Data Sheets to all buyers
- MSDS stands for Material Safety Data Sheets
- MSDS is a print out on paper that identifies how to handle, store, use, health effects if exposed, emergency procedures, and protective measures
- MSDS must be updated by the supplier every 3 years
- Under the *Occupational Health and Safety Act* in Ontario, employers are to make sure that all hazardous materials are labeled appropriately and that a MSD sheet accompanies the product
- On any controlled hazardous product two labels must be properly labeled with a supplier and a workplace sticker

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

WHMIS Labels

Supplier labels must be attached to the controlled product container which has detailed information about the product. Legislation states that 10 kg or more of a controlled product or hazardous material from a supplier must contain the following information:

- both official languages
- have a WMHIS border
- identifies the material or product name (i.e. common name, chemical name, trade name, generic name, brand name, code name or number)
- name and address of the supplier
- reference to a MSD sheet
- WHMIS hazard symbols

In addition to this and if the container has more than 100 milliliters the following information must be on the label:

- risk time factors
- precautionary measures while using or being exposed to the product/chemical
- First aid measures to address immediate injuries and not progressive illnesses

Workplace labels must be identified on a container that is not from the supplier, and must contain the following information:

- material identifier or product name
- reference to a MSD sheet
- precautionary steps
- first aid measures

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

MSDS Safety Labels

GENERIC MATERIAL SAFETY DATA SHEETS FOR PERSONAL ENHANCEMENT PRODUCTS PROTECTED BY TRADE SECRET LAWS (MSDS)

MATERIAL IDENTIFICATION

TRADE NAME/MATERIAL NAME	PRODUCT USE
OTHER NAMES:	
MANUFACTURER'S/SUPPLIER'S NAME:	
ADDRESS:	
EMERGENCY TELEPHONE:	
FIRST AID PROCEDURE	

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

BAND SAW SAFETY RULES

- 1. Wear Personal Protective Equipment (PPE) such as safety glasses, safety goggles, face shields, gloves and proper clothing as appropriate.
- 2. No loose clothing, long hair or jewelry is allowed in the shop.
- 3. Do not operate the band saw without the instructor's permission.
- 4. Follow the manufacturer's instructions for changing tool accessories.
- 5. Be aware of the position of the on/off switches and emergency STOP button.
- 6. Make all adjustments with the power off.
- 7. Use both hands and keep fingers at least 10cm (4") from the blade at all times; adjust guard prior to turning the saw on.
- 8. Keep the upper guide less than 5mm (1/4") from the material being cut.
- 9. Plan your cuts carefully. Saw curves gradually. Sudden twists may cause the blade to bind or break. Use relief cuts if necessary.
- 10. If the blade breaks, turn the power off immediately and step back. Inform the instructor immediately.
- 11. Always make short cuts first. Avoid backing out of cuts with the power on. Backing out of a cut may cause the blade to come off of the drive wheel.
- 12. Do not cut cylindrical stock without the use of a V block clamp. Remove scrap pieces from the table only after the blade has stopped.
- 13. Always operate the saw from the front, never from the side.
- 14. Do not leave the band saw until the blade has stopped.
- 15. Ensure that the blade is running at full speed before starting a cut.
- 16. Cut on the waste side of your line, leaving the pattern line on the work.
- 17. Keep your hands beside or behind the blade. Never in front. Use a push stick on small pieces.

- 18. Make sure all guards are in place and properly adjusted. Ensure all band wheels are enclosed.
- 19. Ensure the blade is tracking correctly and runs freely in the upper and lower guide rollers. Ensure the blade is under proper tension. See your instructor for guidance.
- 20. Use band saw blades that are sharp, properly set and otherwise suitable for the job (e.g., the right tooth pitch; tooth form; blade width).
- 21. Hold stock firmly and flat on the table to prevent the stock from turning and drawing your fingers against the blade.
- 22. Use a push stick when you remove cut pieces from between the fence and saw blade or when your hands are close to the blade. Keep your hands on either side of the blade not in line with the cutting line and the blade.

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

DRILL PRESS SAFETY RULES

- 1. Make sure that your FACE SHIELD OR SAFETY GLASSES are in place before you start the drill press.
- 2. Always tie back long hair and keep your head and clothes well away from all moving parts of the drill press.
- 3. Select only drills that are sharp, in good condition and suitable for the job.
- 4. Remove CHUCK KEYS/WRENCHES from the drill chuck before starting the machine.
- 5. CLAMP THE WORK SECURELY to the table before starting the machine. Attempting to hold the work under the drill with one hand can result in serious and painful injuries.
- 6. Operate drills at the proper speed and feed. Forcing or trying to feed too quickly can cause drills to break or splinter with the chance of serious injuries.
- 7. If work slips from the clamp, never attempt to stop it with your hands. Never reach around or in back of any rotating drill. Use a V-block for round stock.
- 8. Always ensure that the machine has come to a COMPLETE STOP and has been switched off before you attempt to change the belt for speed regulation.
- 9. If the drill sticks in the work, stop the motor and rotate the drill by hand to free it from the work.
- 10. File or scrape all burrs from drilled holes. Be sure that the file is fitted with a proper handle.
- 23. Always clear away chips and curls with a HAND BRUSH not your hands.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

HYDRAULIC JACK SAFETY RULES

- 1. Make sure the jack being used is load rated sufficiently to lift the load (vehicle).
- 2. Maintain the jackcheck that it is properly lubricated and the wheels are free of dirt and debris, and the hydraulic fluid is full. Check that the handle turns activating and deactivating the pump pressure valve as designed. Check on a regular basis for wear and leaks.
- 3. When placing jacks under a vehicle to be raised make sure the lifting point is a designated location as set out in the owners manual. If unsure of the lifting location see your instructor.
- 4. Never raise a vehicle on a sloped, unlevel, or loose surface.
- 5. Always use jack stands to support a vehicle's weight. Never crawl under a vehicle supported only by a jack.
- 6. When lifting a vehicle engage the parking brake or chock the wheels so that it does not move or roll when raising/lowering the vehicle.
- 7. Lift only one end of the vehicle at a time. Place it on proper rated safety stands.
- 8. Never lift or lower a vehicle with anyone underneath the vehicle. Ensure the area is clear before proceeding.
- 9. Jacks need to be raised and lowered with control and prepared to stop at any given moment
- 10. Do not use a jack for purposes of transportation (as a skateboard, as moving vehicles, etc.) Unless otherwise instructed to do so by the teacher/instructor.
- 11. Do not remove a jack from it's supporting position unless authorized to do so by the original technician/student whom placed it there in the first place or by the teacher/instructor.
- 12. Keep jack handles as vertical as possible to prevent tripping hazards.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

HYDRAULIC LIFT SAFETY RULES

- 1. Be sure you are trained on the lift before using.
- 2. Inspect the lift prior to using it. Make sure the lift's locking devices engage.

Wear safety glasses for work done under the car.

3. Make sure the vehicle is centered and balanced on the lift as described in a service manual.

If the lift is of the drive-on type, be sure to use chocks behind the wheels

- 4. Check ceiling clearance before raising larger vehicles
- 5. Gently check to see if the car is stable when it is at knee height.
- 6. Clear the area of tools and bystanders before lowering the lift.
- 7. Never raise a vehicle that has occupants.
- 8. Do not exceed the capacity of the lift.
- 9. Never stand below a vehicle on a lift that does not have the locking devices engaged.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

JOINTER SAFETY RULES

- 1. Wear Personal Protective Equipment (PPE) such as safety glasses, safety goggles, face shields, gloves and proper clothing as appropriate. No loose clothing, long hair or jewelry is allowed in the shop.
- 2. Do not operate the wood jointer without the instructor's permission.
- 3. Be aware of the position of the on/off switches and emergency **STOP** button.
- 4. Check the cutter head to make sure it is in good working order. Make all adjustments with the jointer turned off, and locked out where the blade could be touched.
- 5. Before investigating any jammed pieces shut the power off and lock it out.
- 6. Check the stock for foreign objects. Never joint stock containing loose or unsound knots.
- 7. Ensure the guard is installed and working properly. Adjust the fence to slightly larger than material size. Set cutting depth to 3mm (1/8 in.) or less.
- 8. Never make "free hand" cuts on the jointer. Always use the fence. Ask for assistance when working with large pieces.
- 9. Wear a dust mask when cutting treated wood or when there is a fine dust hazard.
- 10. Stand clear of possible kickback. Be sure to have firm footing when operating the jointer.
- 11. Never reach directly over the moving blade to remove stock. Use a push stick for thin work.
- 12. Never let a finger come within 10 cm (4") of blade when running. Always push the work well beyond the blade when finishing a cut. Never let go of the stock during the cut.
- 13. Make sure stock is at least 25cm (10") long. Make sure stock is no narrower than 1" (25.4mm) when edge jointing and 1/2" (12.7mm) when face jointing.
- 14. Turn the jointer off immediately if it does not sound right or if slivers of wood catch between the blade and table.

AT ALL TIMES – IF IN DOUBT, SEE YOUR INSTRUCTOR

MITRE SAW SAFETY RULES

- 1. Wear Personal Protective Equipment (PPE) such as safety glasses, safety goggles, face shields, gloves and proper clothing as appropriate. No loose clothing, long hair or jewelry is allowed in the shop.
- 2. Do not operate the mitre saw without the instructor's permission.
- 3. Follow the manufacturer's instructions for changing tool accessories.
- 4. Clamp all material firmly and properly.
- 5. Ensure you are aware of the blade path before you make your cut.
- 6. When you cut short pieces make sure your left hand is clear of the blade path.
- 7. Watch for kick back when cutting short pieces.
- 8. Long stock pieces should be supported safely.
- 9. Students who are left handed must use their right hand for cutting operations.
- 10. When making angle cuts ensure the blade has adequate clearances.
- 11. Your body position should always be left of the blade assembly when operating this saw.
- 12. When using a sliding mitre saw, ensure the blade clears stock sizes before cutting operations.
- 13. Make sure all guards are in place and properly adjusted.

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

Planer Safety Rules

- 1. Wear Personal Protective Equipment (PPE) such as safety glasses, safety goggles, face shields, hearing protection as appropriate.
- 2. No loose clothing, long hair or jewelry is allowed in the shop.
- 3. Do not operate the Surface Planer without the instructor's permission.
- 4. Be aware of the position of the on/off switches and emergency **STOP** button.
- 5. Check the blades for flaws (replace if damaged, worn, or dull). Replace or set only when power is off. Follow the manufacturer's instructions for changing tool accessories.
- 6. Be sure stock is free of foreign materials, nails, other hardware, grit, dirt, loose knots.
- 7. Before investigating any jammed pieces shut the power off and lock it out. Never reach into the planer.
- 8. Use a push stick when necessary.
- 9. Keep fingers from under the stock while feeding or retrieving. This will prevent being pinched between planer bed and stock.
- 10. Wear a dust mask when cutting treated wood or when there is a fine dust hazard.
- 11. Stand clear of possible kickback.
- 12. When working with a partner ensure you have clear communication.
- 13. Make successive passes removing shallow amounts. Take no more than 1/16" (1.5 mm) off at a time.
- 14. Do not plane two pieces of stock at the same time. Do not plane stock shorter than the distance between front and back rollers. Minimum material length is 14" (350 mm)
- 15. Use a backer board when planning stock thinner than 1/2" (12.7mm)

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

TABLE SAW SAFETY RULES

- 1. Wear Personal Protective Equipment (PPE) such as safety glasses, safety goggles, face shields, gloves and proper clothing as appropriate. No loose clothing, long hair or jewelry is allowed in the shop.
- 2. Do not operate the table saw without the instructor's permission. Follow the manufacturer's instructions for changing tool accessories.
- 3. Be aware of the position of the on/off switches and emergency STOP button.
- 4. Make sure the floor is clear in the work area.
- 5. Check the blade for flaws (replace if damaged, worn, or dull) Make sure auto kick-back is in place. Secure the fence position before beginning. Always keep the work firmly down on the table while pushing it past the blade.
- 6. Always "lock-out" the table saw before changing blades.
- 7. Never reach over the blade.
- 8. Always use a push stick when the fence is set under 3" to the blade.
- 9. Ask for assistance when working with large pieces.
- 10. Wear a dust mask when cutting treated wood or when there is a fine dust hazard.
- 11. Stand clear of possible kickback. Keep your hands clear of the blade path.
- 12. When working with a partner ensure you have clear communication. The second person should stand behind and to the left of the blade.
- 13. Do not feed the material faster than the saw will accept.
- 14. Use a fence when making a rip cut and a mitre gauge to make cross-cuts. Never cut a piece of material free-hand. Keep the work against the fence throughout the operation.
- 15. Report all unquarded and inadequately guarded equipment promptly to your instructor.
- 16. Always check the machine guards to make sure they are in place and operating, before using the machine.

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

USING SHARP INSTRUMENTS AND NEEDLES

Whenever possible use a needleless device or a safety-engineered needle for any dental or medical procedure that poses a risk of an accidental needle-stick injury, including—but not limited to—the following:

- administering medications or fluids (including anaesthetic)
- withdrawing body fluids
- accessing a vein or artery

Establish safe work procedures—along with appropriate training and supervision—to minimize exposure to blood and body fluids, including the following:

- prohibiting re-capping and manual removal of contaminated needles
- activating safety features on needles after use
- properly disposing of needles after use
- ensuring workers' vaccinations are current
- wearing gloves, face protection, and gowns as required

Remain in your seat when using needles and sharp instruments.

Pass sharp instruments using a safe tray.

Never Pass a sharp instrument hand to hand.

Dispose of sharp instruments in a sharps container. Bring the container to the instrument, never walk with the instrument in you hands.

AT ALL TIMES - IF IN DOUBT, SEE YOUR INSTRUCTOR

SECTION 3: SAFETY ASSIGNMENTS AND TESTS

SECTION OVERVIEW

This section contains sample tests and assignments related to safety. They are designed as samples that can be used as written or edited for your purposes. They can be used for evaluation of the safety expectations of the course, or as tools to assess the student's knowledge and understanding of safety. It is recommended that all teachers keep a record of all test or assignment results and/or passports (next section) as verification of each student's understanding of safe concepts and practices.

The equipment and safety practices in individual facilities will determine how a teacher can best use these resources in the teaching of safe work practices. As well, with the SafetyNET resources online at OCTElab, there are additional resources always being updated, and available for download in .zip files.

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Please see specific equipment manuals for further safety information, as well as local, Board and school policies and regulations. Please review exemplar TIJ OCTElab SafetyNET resource documents for experienced teacher tips and customization options for your course projects.

Assignment # 1 – Room Inventory and Safety Identification

Use a ruler/straight edge to draw a <u>neat</u> floor plan of your shop and identify the location of the following. Show the work zones around major equipment. Check off each item to ensure you have covered everything:

Entrance/exit doors	
Safety exit	
Fire extinguishers	
Fire alarm	
First aid kit	
Power shut-off or emergency "stop"	
buttons	
Electrical outlets	
Exhaust fans/hoods	
Sink areas	
Waste disposal containers	
Work surfaces	
Computer work areas	
Equipment and tool cleaning areas	
Cleaning chemicals storage	
Consumable supplies storage	
Gloves storage	
Apron storage	
Safety glasses storage	
Water temperature controls	
Traffic areas	
Coolers/freezer storage areas	
Stove/heat areas	
Cutting surfaces	

Safety Assignment # 2 – General Safety

In groups of two, analyze the issue you have been assigned and provide a detailed description of the safety requirements for thatissue. Information for research may be found in a variety of places including textbooks, the Internet, equipment manuals, or from local suppliers. A 5 -10 minute group presentation will be made to the class in which your group will describe the topic and the importance of safety in a hospitality and tourism environment.

- Group 1 Working with meats, poultry, game
- Group 2 Safe knife handling procedures
- Group 3 Safe cooking procedures
- Group 4 Safe food storage procedures
- Group 5 Proper hygiene
- Group 6 Food allergies
- Group 7 Safe cleaning procedures
- Group 8 Chemical use and storage
- Group 9 Dealing with cuts, burns, strains
- Group 10 Ensuring safe customer handling

Safety Assignment # 3 – Perform a Safety Audit

Once a month, a group of you will be assigned to perform a safety audit of the studio and/or lab. To accomplish this task, the group must first design a safety checklist that will be used for the inspection. The checklist must include the headings of:

- 1. First aid kit content status
- 2. Status of safety equipment
- 3. Status of fire protection equipment
- 4. Status of cleaning supplies and equipment
- 5. Status of storage areas
- 6. Status of tools and equipment
- 7. Status of food storage and disposal
- 8. Status of housekeeping

Your teacher will give you information about safety standards. Prepare a checklist for a safety audit of the shop. When you have approval for your checklist, perform the initial audit and report back to your teacher.

Sample

Food Facilities Health and Safety Inspection Checklist

Teacher Inspecting:	
Student Inspecting:	
Date of Inspection:	

AREA INSPECTED	CONDITION	ACTIONS NEEDED	DATE RECTIFIED
Outlets			
FI (: 1F : (
Electrical Equipment			
and extension cords			
Emergency Power			
Switches/Breakers			
Fire Extinguishers			
Exit and Light Fixtures			
Exhaust Fans and			
Hoods			
Traffic Areas			
Ceiling Tiles and			
Fixtures			
Floor Tiles/Carpet and Surfaces			
Sink Area and			
cleaning areas			
Chemical Storage and			
Labeling			
Eye Wash Station			
First Aid Kit			
Vinyl/Latex/Rubber			
Gloves			
Cooking Areas			
Safety			
glasses/goggles			
Food storage facilities			

Sample WHMIS and MSDS Quiz

Section 1

Define WMHIS and MSDS.

What is the responsibility of the employer in regards to WHMIS according to the Occupational Health and Safety Act of Ontario?

Section 2: Multiple Choice

- 1. If a hazardous material has more than 100 milliliters in one container, the label must have additional information which includes:
 - a) the companies chemist
- b) risk time factor

c) b and d

- d) precautionary measures while exposed to the product
- 2. Workplace labels must contain a material identifier or product name, reference to a MSDS, precautionary steps, and:
 - a) an emergency phone number
- b) the hospitals phone number
- c) first aid measures
- d) the company's phone number
- 3. In Canada a suppliers WHMIS label must be written in:
 - a) French

b) English

b) Chinese

- d) both Official Languages
- 4. A supplier when selling a hazardous material product must include:
 - a) a rebate

b) MSDS

b) WHMIS

- d) OH&S
- 5. A Material Safety Data Sheet should be:
 - a) kept on file forever
- b) read and then thrown out
- c) photo copied for all workers
- d) placed in a binder and kept for 3 years

Answer Key:

Section 1

1. Workplace Hazardous Material Information System, Material Safety Data Sheets

2. To inform employees of hazardous materials.

Section 2: Multiple Choice: 1. c 2. c 3. d 4. b 5. d

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Student Safety Procedure Checklist: Kitchen

St	tudent:
	Date of Proficiency and Teacher's Comments

Procedure	Preparing	Cooking	Serving
Student prepared work area and surfaces using proper safety and cleanliness procedures.			
Student wore PPE and used safety specifics for all procedures.			
Student proficiently demonstrated appropriate use of tools/equipment			
Student demonstrated health and safety awareness during procedure.			
Student safely and hygienically cleaned and stored all tools and disposed of waste properly.			

Date of Demonstration and Teacher's Comments

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stored knives.

Student Safety Procedure Checklist: Knives

Procedure	Vegetables/ fruits	Meat/ Poultry	Other
Student prepared physical environment prior to using knives.			
Student wore PPE and used safety specifics for each procedure.			
Students proficiently demonstrated appropriate use of knives.			
Student demonstrated health and safety awareness throughout procedure.			
Student safely cleaned and			

Name	Date

Exploring: ElectricityElectrical Safety

	(Based on Construction Health and Safety Manual 2006, pages 151-153)
1.	What basic rule should <u>always</u> be followed when working with electricity?
2.	Describe three conditions that may result from an electrical shock.
3.	What types of fire extinguishers may be used on electrical fires?
4.	List five safety recommendations that deal with cords and plugs.
5.	Under what two conditions must a GFCI (ground fault circuit interrupter circuit) be used when working with portable power tools?

SECTION 4: SAFETY PASSPORTS

SECTION OVERVIEW

This section contains Safety Passports, which provide a means to track individual student safety knowledge and skills. These Safety Passports insure that students have passed the required safety tests and understand the safety procedures and rules specific to the tools and equipment. It is recommended that all teachers keep records of signed passports at all times.

Safety Passports may be signed by teachers, parents and students before working on any workshop machine or tool. Signing signifies completion of safety training and testing. There are three variations; teachers may select the most appropriate method to suit their needs. Ensure that the selected safety passport addresses board and school safety policies.

Safety Record Card: for individual student, records their proficiency rating for each machine on one sheet.

Safety Passport: Form 1: single sheet for individual student and machine, has signature area and note area to be used in student notebook

Safety Passport Form 2: sheets for individual students listing machines, for teacher record book

Safety Passport Form 3: individual machine for each individual student, has line for parent signature to be used as a safety reinforcement or authorization, (see principal for permissions)

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Please see specific equipment manuals for further safety information, as well as local, Board and school policies and regulations.

Exploring: Construction Band Saw Safety Passport

Name:	Date:
General Conditions	
Students must be trained on the safe and p	proper use of the Band Saw before they may begin using it.
Fach student must demonstrate safe and i	proficient procedures

Personal Protective Equipment

Safety glasses (mandatory) Safety footwear (closed toed shoes) Hearing protection (optional)

Possible Risk Factors

Entanglement (hands and hair) Small projectiles (chips) Hand injuries Cuts and abrasions Eye injuries

Performance Test

The student performs the following while using the Band Saw:

	Yes	No	N/A
1. Safety glasses are worn.			
2. Safety guards are kept in place.			
3. The table is cleared of other materials.			
4. Non hazardous clothing and jewelry are worn.			
5. The guard is adjusted to ¼" (5 mm) above stock.			
6. Stock is fed properly into band saw.			
7. All adjustments are made with power off.			
8. The band saw and the work area are cleaned after use.			
9. Work procedures are safe and acceptable.			
10. Correct procedures are used when cutting stock.			

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EXPL

Band Saw Safety Passport Continued.

- The student has been trained on this equipment.
- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors
- I do hereby certify that the student has satisfactorily demonstrated the ability to operator the band saw by passing the above performance test.

Signed (Student)	Date	Signed (Teacher)	Date

Exploring: Hospitality Char Broiler Safety Passport

Name:	Date:

General Conditions

Students must be trained on the safe and proper use of the Char Broiler before they may begin using it. The student must demonstrate safe and proficient procedures.

Personal Protective Equipment

Coloured Tongs Long Sleeves
Clean Dry Towel Hair is tied back

Hot Mitts available

Possible Risk Factors

Burns to hands and arms
Clothes can catch on fire
Hand injuries
Cuts and abrasions
Eye injuries
Smoke inhalation
Grease Fire

	Yes	No	N/A
1. Kitchen Exhaust hoods are on.			
2. Non-flammable clothing is worn, including chef jacket with long sleeves, hair is secure.			
3. Student has been trained on the use of the fire extinguisher and the fire suppression system for the hoods.			
4. Grill is set to the proper temperature (600°F).			
5. Never pour butter or oils on to the grill while in use.			
6. Use proper length/ coloured tongs for the proper food – ie. Yellow for chicken, red for beef.			
7. Student demonstrates how to safely adjust the grill temperature.			
8. Student demonstrates how to safely clean the grill while it is on.			
9. Student demonstrates how to safely clean the grill when done.			
10. Student demonstrates how to safely oil the grill while it is on.			

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EXPL

Char Broiler Safety Passport continued.

 The student has been trained on this equi 	ıipment.
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- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors.
- I do hereby certify that the student has satisfactorily demonstrated the ability to operator the Mitre Saw by passing the above performance test.

Signed (Student)	Date	Signed (Teacher)	Date

Exploring: Construction Drill Press Safety Passport

Name:	
General Conditions	
Students must be trained on the safe and	proper use of the Drill Press before they may begin using it

Personal Protective Equipment

Safety glasses (mandatory) Safety footwear (closed toed shoes) Hearing protection (optional)

Possible Risk Factors

Eye injuries Hand Injuries Entanglement of clothing and hair Slipping

Performance Test

The student performs the following while using the Drill Press:

Each student must demonstrate safe and proficient procedures.

	Yes	No	N/A
1. Safety glasses are worn.			
2. Safety guards are kept in place.			
3. The table is cleared of other materials.			
4. Non-hazardous clothing and jewelry are worn. Long hair is tied back.			
5. Stock is secured in a vise or clamped down while being drilled.			
6. A proper size bit, with shank matched to chuck, is used.			
7. All adjustments are made with power off. Chuck key is removed before starting.			
8. The drill press speed is matched to the work.			
9. Work procedures are safe and acceptable.			
10. Correct procedures are used when cutting stock.			

Drill Press Safety Passport continued.

- The student has been trained on this equipment.
- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors
- I do hereby certify that the student has satisfactorily demonstrated the ability to operator the Drill Press by passing the above performance test.

Signed (Student)	Date	Signed (Teacher)	Date

Exploring: Construction Jointer Safety Passport

Name:	Date:
General Conditions	
Students must be trained on the safe and proper use of th	e Mitre Saw before they may begin using it.

Personal Protective Equipment

Safety glasses (mandatory) Safety footwear (closed toed shoes) Hearing protection (optional)

Possible Risk Factors

Small and large projectiles [wood chips] Contact with moving blades Hearing loss [unprotected ears] placement of hands] Entanglement of clothing or hair

Slips and falls [wood dust] Eye injuries Serious hand injuries [Improper

Performance Test

The student performs the following while using the Mitre Saw:

The student must demonstrate safe and proficient procedures.

	Yes	No	N/A
Safety glasses are worn.			
2. Safety guards are kept in place.			
3. The table is cleared of other materials.			
4. Non hazardous clothing and jewelry are worn.			
5. The depth of cut is set for no more than 1/16 inch.			
6 The jointer fence is set at the correct angle.			
7. All adjustments are made with power off.			
8. Stock is fed properly onto the jointer with the grain.			
9. A push stick or push block is used on narrow and thick stock.			
10. Correct procedures are used in jointing stock.			

Jointer Safety Passport continued.

- The student has been trained on this equipment.
- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors.
- I do hereby certify that the student has satisfactorily demonstrated the ability to operator the Mitre Saw by passing the above performance test.

Signed (Student)	Date	Signed (Teacher)	Date

Exploring: Hospitality Knife Safety Passport

Select the proper knife for the job

Always use a sharp knife

Always carry the knife at your side, pointed down with the edge to the back

Always use a cutting board

Always put a damp cloth under your cutting board so it does not slip

Always cut on a flat level surface

Always try to cut something that is flat

Always use a guard

Always let people know when moving in the kitchen with a knife by using the term "Sharp Behind"

Never try to catch a knife that is falling

Never leave a knife unattended

Never leave a knife in the sink

When you are finished with the knife, wash and dry it and return it to where you got it.

You are responsible for a knife from the time you pick it up until the time it is returned.

I have been instructed on the proper use of a knife and agree to follow above rules.			
Name -	Date Date		

Exploring: Construction Mitre Saw Safety Passport

Name:	Date:	
General Conditions		

Students must be trained on the safe and proper use of the Mitre Saw before they may begin using it.

Personal Protective Equipment

Safety glasses (mandatory)
Safety footwear (closed toed shoes)
Hearing protection (optional)

Possible Risk Factors

Entanglement (hands and hair) Small projectiles (chips) Hand injuries Cuts and abrasions Eye injuries

Performance Test

The student performs the following while using the Mitre Saw:

The student must demonstrate safe and proficient procedures.

	Yes	No	N/A
1. Safety glasses are worn.			
2. Safety guards are kept in place.			
3. Electrical cord is out of the way of the blade and work when cuts are being made.			
4. The stock is held securely or clamped while being cut.			
5. Hands and finger are at least 4 inches away from the saw blade at all times.			
6. Student demonstrates how to safely start and stop the Mitre Saw.			
7. Student demonstrates how to safely adjust the saw and make mitre cuts.			
8. Student demonstrates how to safely adjust the saw and make bevel cuts.			
9. Student demonstrates how to safely adjust the saw and make compound angle cuts.			
10. The Mitre Saw and work area are cleaned after use.			

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EXPL

Mitre Saw Safety Passport continued.

- The student has been trained on this equipment.
- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors.
- I do hereby certify that the student has satisfactorily demonstrated the ability to operator the Mitre Saw by passing the above performance test.

Signed (Student)	Date	Signed (Teacher)	Date

Exploring: Construction Planer Safety Passport

Name:	Date:	

General Conditions

Students must be trained on the safe and proper use of a Surface Planer [wood]before they may begin using it. The student must demonstrate the ability to use the equipment safely and proficiently. All guards must be in place and ventilation system must be free and clear.

Personal Protective Equipment

Safety glasses (mandatory)
Safety footwear (closed toed shoes)
Hearing protection (optional)

Possible Risk Factors

Entanglement (hands and hair) Small projectiles (chips) Hand injuries Cuts and abrasions Eye injuries Slips and Falls (wood dust) Strain Injuries Eye Injuries

Abrasions (wood slivers)

Hearing Loss from unprotected ears

Performance Test

The student performs the following while using the Mitre Saw:

	Yes	No	N/A
Safety glasses are worn.			
2. Safety guards are kept in place.			
3. The table is cleared of other materials.			
4. Non hazardous clothing and jewelry are worn.			
5. Depth of cut adjustments are made correctly.			
6. Stock is fed properly into the planer.			
7. All adjustments are made with power off.			
8. The operator stands to the side of the board while it is being planed.			
9. Work procedures are safe and acceptable.			
10. A helper is used to catch the planed lumber.			

OCTE SAFEdoc

EXPL

Planer Safety Passport continued.

- The student has been trained on this equipment.
- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors.
- I do hereby certify that the student has satisfactorily demonstrated the ability to operator the Mitre Saw by passing the above performance test.

Signed (Student)	Date	Signed (Teacher)	Date

Exploring: Hospitality Stand Mixer Safety Passport

Name:	Date:			
General Conditions				

Students must be trained on the safe and proper use of the Char Broiler before they may begin using it.

Personal Protective Equipment

The student must demonstrate safe and proficient procedures.

Chef hat, jacket and apron Non-slip footwear Kitchen dress code is in place

Possible Risk Factors

Entanglement
Choking and death
Broken bones
Pulled muscles from improper lifting
Eye injuries
burns

	Yes	No	N/A
1. Kitchen Exhaust hoods are on.			
2. No dangly jewelry is being worn.			
3. Student has been trained on the use of the fire extinguisher and the fire suppression system for the hoods.			
4. No hot liquids are put into the mixer.			
5. The student demonstrates how to use the guard before turning on the mixer.			
6. Everyone is clear of the mixer before it is turned on. Stand to the side where the controls are located.			
7. Student demonstrates how to safely adjust the speed of the mixer.			
8. Student demonstrates how to safely raise and lower the bowl.			
9. Student demonstrates how to safely attach the bowl and lock it into place.			
10. Student demonstrates how to safely remove the bowl and move it to a work Station using the cart.			
11. Student demonstrates how to safely remove items from the mixer bowl.			
12. Student demonstrates how to safely add ingredients while mixer is off or on using the chute.			

Stand Mixer Safety Passport continued.

- The student has been trained on this equipment.
- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors.
- I do hereby certify that the student has satisfactorily demonstrated the ability to operator the Mitre Saw by passing the above performance test.

Signed (Student)	Date	Signed (Teacher)	Date

Exploring: Construction Table Saw Safety Passport

Name:	Date:	
		_

General Conditions

Students must be trained on the safe and proper use of the Table Saw before they may begin using it. The student must demonstrate to the teacher proficiency and safe work procedures, which must be followed before usage. All guards must be in place and ventilation system must be free and clear. Anti-kickback devices must be in place and used. Push sticks must be used.

Personal Protective Equipment

Safety glasses (mandatory)
Safety footwear (closed toed shoes)
Hearing protection (optional)
Dust Mask (optional)

Possible Risk Factors

Small projectiles [wood chips]
Slips and falls [wood dust]
Contact with moving blade
Eye injuries
Abrasions [wood slivers]
Hearing loss [High noise area] [unprotected ears]
Entanglement of clothing or long hair

Serious hand injuries
Wood trapping between blade and fence

Performance Test

The student performs the following while ripping, crosscutting and dadoing with the table saw.

	Yes	No	N/A
1. Safety glasses are worn at all times.			
2. Loose clothing and jewelry are not worn.			
3. The saw blade height is adjusted properly for the cut being made. ie., ripping, dadoing			
4. The saw guard is in place.			
5. The saw splitter and anti-kickback devices are in place (when applicable).			
6. The saw table top is clear of tools and materials.			
7. The fence is adjusted and locked in place for ripping cuts.			
8. The miter head is properly adjusted and the rip fence is out of the way for crosscutting.			
9. The dado blade is properly installed and adjusted when making dado cuts.			
10. A push stick is used for all ripping cuts less than 6 inches in width.			
11. A helper or support stand is used for cutting long and wide stock.			
12. All work procedures are safe and acceptable.			

Table Saw Safety Passport Continued.

- The student has been trained on this equipment.
- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors.
- I do hereby certify that the student has satisfactorily demonstrated the ability to operator the table saw by passing the above performance test.

Signed (Student)	Date	Signed (Teacher)	Date

Sample Student Safety Record Card

Student Information	Levels Chart	
Name:	Rating 1: May set-up equipment only, Instructor must do the work.	
	Rating 2: Use only with an Instructor's assistance.	
Ctudent #	Rating 3: Full use with an Instructor standing by to supervise.	
Student #:	Rating 4: Full use of machine with an Instructor's permission.	
	(Note: Lower levels can be upgraded to higher levels with further	
Grade:	instruction, practice and proof of competence. All students must have	
Course/Section:	Instructor's permission before using any equipment.)	
Food Preparation	Related Service Related	

			s permission before using any equipment.)					
Food P	Food Preparation Related				Service Related			
Equipment	Rate	Sign	Date	Equipment	Rate	Sign	Date	

Technology Lab Safety Passport

The purpose of the safety passport is to ensure that students are fully aware of all safety features on each piece of equipment in the technical facility prior to using them independently.

The general process is as follows:

- 1. Teacher Demonstration: When the teacher introduces a new piece of equipment, the student records the date of the safety demonstration on their safety passport. This is to be initialed by the teacher (see sample below). The teacher demonstrates techniques for the safe operation and procedures, as well as use of personal protective equipment (e.g. eye protection, secure loose hair, remove jewelry, protective clothing, etc.). Students prepare notes in their notebooks. This safety note is carefully recorded in each student's notebook along with the signed passport. The teacher also carefully notes attendance for that day in their daybook if any students are absent for the safety lesson; makeup opportunities must be provided.
- 2. Test: Each student should complete a written (or oral) test on the safe operation or procedure, outlining all safety features that must be observed. The individual tests are designed to compliment any general facility safety rules. Upon satisfactory completion of the test the student dates the "tested" column and teacher initials this as complete. **IMPORTANT NOTE: A copy of the test should be kept by the teacher.**
- 3. Student Demonstration: Students must demonstrate to the teacher that they have a thorough knowledge of the safety rules for the equipment and are able to demonstrate their competency on the equipment. Once the teacher has observed the required safe setup and operation of the equipment by a student the teacher signs off that portion of their passport.
- 4. Once the student has completed #1, 2 and 3, the teacher signs the final column of student's safety passport indicating they have permission to use that equipment or perform the procedures. Students must be able to provide the teacher with their signed passport for that equipment each time they wish to use that equipment.

Note: Three forms are provided, Form 1 can be used as a student notebook form for each machine; Form 2 can be used for signing several machines per student. With the 2nd form, students keep safety notes on separate paper. The third form requires one sheet per tool per student, and may be used in the student notebook or kept on file by the teacher (or both).

HOSPITALITY - SHSM

EQUIPMENT SAFETY GUIDELINES

CULMINATING ACTIVITY

Each piece of equipment we use in the kitchen has specific safety and operating guidelines and procedures. The purpose of this activity is to research the equipment and produce safety information sheets on all of the equipment. The safety sheets will be laminated and used as reference material for all hospitality students. You must include the following information on all safety information sheets:

- 1. name of equipment (ie. hobart mixer)
- 2. function of equipment (ie. large batch mixer dough, etc)
- 3. safety guidelines
- 4. correct operating procedures

You are developing important mandatory material that will be used by all hospitality students. The information sheets must be precise and easy to follow. Material reference information such as equipment manuals provided by the manufacturer is your main source. The web may give you additional information as well as the training you received through the hospitality program. If you have any questions at any time, please ask!

<u>Equipment list:</u>	<u>Due Date:</u>
Hobart Mixer	Tuesday March 10 th
Convection Oven	Tuesday March 24 th
Conventional Oven	Tuesday March 31st
Deck Oven	Tuesday April 7 th
Proofer	Wednesday April 15 th
Deep Fryer	Tuesday April 21st
Stovetop	Tuesday April 28 th
Flattop	Tuesday May 5 th
Kitchen Aid Mixer	Tuesday May 12 th
Food Processor	Tuesday May 19 th
Meat Slicer	Tuesday May 26 th
Blender	Tuesday June 2 nd
Immersion Blender	Tuesday June 9 th
Ice Cream Maker	Tuesday June 16 th
Form 2	•
Student Name:	Course/Class:
Equipment/Procedure:	

Safety Ir and Dem	Teacher estruction onstration ecorded)	Passed Written or Oral Testing		Demonstrated Safe Set-up and Operation to Teacher		Granted Permission by Teacher	
Date of Lesson	Teacher Initial	Date Tested	Teacher Initial	Date of Demo.	Teacher Initial	Date	Teacher Initial

Equipment/Procedure:							
Safety In	Teacher estruction onstration ecorded)	Passed Written or Oral Testing		Demonstrated Safe Set-up and Operation to Teacher		Granted Permission by Teacher	
Date of Lesson	Teacher Initial	Date Tested	Teacher Initial	Date of Demo.	Teacher Initial	Date	Teacher Initial

Equipme	Equipment/Procedure:						
Safety In	Teacher estruction onstration ecorded)	Passed Written or Oral Testing		Demonstrated Safe Set-up and Operation to Teacher		Granted Permission by Teacher	
Date of Lesson	Teacher Initial	Date Tested	Teacher Initial	Date of Demo.	Teacher Initial	Date	Teacher Initial

FORM 3: Equipment/Procedure Passport

[EQUIPMENT/PROCEDURE]
General Conditions
Personal Protective Equipment
Possible Risk Factor
 The student has been trained on this equipment and procedure. The student understands the required personal protective equipment to operate this equipment and perform this procedure. The student is aware of the possible risk factors
Student signature
Teachers signature
Date of training

AUTO DISHWASHER PASSPORT

General Conditions

Students must be trained in the proper procedures (WHMIS and MSDS) of cleaning chemicals and their uses within the hospitality environment to be able to perform any dishwashing and sanitizing tasks. The student must demonstrate the ability to follow manufacturers' instructions and employ cleaning agents for a specific sanitation procedure.

Personal Protective Equipment

- Rubber Gloves
- Non-Slip Soled Enclosed Shoes
- Lab Coat/Apron
- Hat or Hairnet

Possible Risk Factor

- Respiratory Problems (inhalation)
- Skin Irritation
- Slippage
- Muscle Strain
- Burns or Scalds
- Cuts or Lacerations

_

- The student has been trained on this equipment and procedures.
- The student understands the required personal protective equipment to operate this equipment or perform these procedures.
- The student is aware of the possible risk factors

Student signature	
Teachers signature	
J	
Date of training	
•	

ERGONOMICS PASSPORT

General Conditions

Improper posture, equipment placement, and repetitive use of equipment may cause injuries and pain. Students must be trained on the safe and proper use of equipment before they may begin using them. The student must demonstrate the ability to use the equipment safely.

Personal Protection

- Proper posture
- Proper equipment placement
- Change in sitting arrangements, etc. to avoid repetitive stress injuries

Possible Risk Factor

- Spine and back injuries
- Hand Injuries
- Eye strain
- The student has been trained on this equipment.
- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors

Student signature	
Teachers signature	
Date of training	

Equipment Safety Passport - Wood Shop

Student Name:

	Safety In	Teacher estruction recorded)		itten or Oral est	Set-up and of Equip	rated Safe I Operation oment to cher		ermission to uipment
Machine	Date of Lesson	Teacher Initial	Date Tested	Teacher Initial	Date of Demo	Teacher Initial	Date	Teacher Initial
Mitre Saw								
Table Saw								
Jointer								
Planer								
Band Saw								
Drill Press								
Wood Lathe								
Scroll Saw								
Router								
Circular Saw								
Reciprocating Saw								
Biscuit Joiner								
Mortiser								
Power Planer								
Brad Nailer								
Shaper								
CNC Router								

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Hospitality Services Personal Safety Kitchen Rules and Expectations

In order to function safely in a professional kitchen, the following rules must be adhered to:

- 1. **Respect** for the teacher and fellow students is an absolute must! The kitchen operates on a "team" basis. We must get along and respect each other in order for the kitchen to function successfully. Therefore bullying of any nature will be dealt with immediately and consequences will follow.
- 2. "Horseplay" will not be tolerated at any time in the kitchen. This includes any disruptive behaviour that may be dangerous.
- 3. Cell phones and electronic equipment of any kind (mp3's, ipods, games, etc) are not permitted in the kitchen.
- 4. If you need to leave the kitchen for any reason you must ask permission to do so.
- 5. Coats, bags and purses belong in your locker. We cannot be responsible for any lost or stolen personal items that are not permitted in the kitchen.
- 6. You must wash your hands before handling any food items.
- 7. Proper dress is essential in the kitchen. Students are not permitted to wear shorts or kilts in the kitchen due to safety reasons. Therefore, students must wear pants while working in the kitchen. Storage will be available to the students for any extra clothing. Shoes should be closed-toe and rubber soled.
- 8. The kitchen uniform consists of a skull cap and bib apron. Long hair **must** be tied back and all students are expected to be in uniform while in the kitchen.

10. Food products will be given to the students for consummation at the discretion of the teacher.

9. Aprons must be worn full bib style at all times in the kitchen and must be tied up properly.

eating food other than that is considere	ed stealing and will be dealt with accordingly.
, hem at all times while in the kitchen.	have read these guidelines. I understand and will abide by
Student's Signature:	Date:
Parent's Signature:	Date:

INTERNET USE PASSPORT

******TO BE USED AS AN EXAMPLE ONLY - PLEASE SEE BOARD/SCHOOL POLICY*****

General Conditions

Students must be trained on the safe and proper use of the Internet before they may begin using it. The student must demonstrate to the teacher, knowledge of safe and secure procedures as outlined in the Internet Use Policy Document.

Personal Protection

- Knowledge of school and school board Internet Use Policy
- Never releasing personal information
- Avoidance of insecure and questionable sites
- Respect for self and others
- Awareness of security issues in communications technology

Possible Risk Factor

- Threats to personal safety and/or security
- Loss of privacy
- Threats to emotional security
- Spread of damaging computer viruses
- Damage to computer operating and networking systems
- The student has been trained on this equipment.
- The student understands the required personal protective equipment to operate this equipment.
- The student is aware of the possible risk factors

Student signature	
Teachers signature	
Date of training	

SANITATION PASSPORT

General Conditions

Students must be trained in the procedures of sanitation within the food services environment to be able to perform any food preparation technique. The student must demonstrate the ability to follow manufacturers' instructions and prepare the appropriate cleaning agent for a specific sterilization/sanitation procedure.

Personal Protective Equipment

- Rubber Gloves
- Non-Slip Soled Enclosed Shoes
- Coat/Apron
- Eye protection

•

Possible Risk Factor

- Respiratory Problems (inhalation)
- Skin Irritation
- Slippage
- Eye Infections and/or Damage

•

- The student has been trained on this equipment and these procedures.
- The student understands the required personal protective equipment to operate this equipment and perform these procedures.
- The student is aware of the possible risk factors

Student signature	
Teachers signature	
Date of training	

Exploring Technology: Machine Shop

PΟ TGNINNIPSXWHDDYWH SAVRBRAZ INGEAGEORGAG R TFREMMAHNSSLNAG ILYB DAEE ΚT Ρ Ε ΥO \mathbf{F} Q Ρ Ι Τ Τ S SIEE T O E JAFYEHN Τ ALUG 0 KTMHLYEM 0 S Ν Q $_{
m L}$ IRGM R 0 Τ C UAYHE S 0 A Ι S R G 0 Ι F G Α B M S M X A U L IRT RWC A Ζ \mathbf{E} A N Ρ S H Y O Ρ CRLAHC С ΕA Τ C U J Ι L GRINDEHPE S I I L M S G X E D \mathbf{E} Ζ G S U M X L ΙM Ι 0 Ρ Ρ V D C Ρ Ε E E N L S S Q X M E F SYKNLE Τ U BNRDE BURRINGSSMO ΧА S W Τ Τ CVXN Τ EELBXAGN Ι U В Y V R I A T B I U A P I J O I O ZDELV J F R I A L M J J S F X Q L O T U F X W

ALUMINUM BAND SAW BRAZING CUTOFF SAW CUTTING DEBURRING DOG TAGS DRILL FILES GRIND HAMMER
HEAT TREAT
LATHE
MACHINING
MEASURE
MICROMETER
MILL
PENCIL HOLDER
POLISH

SAFETY
GLASSES
SHEAR
SPINNING TOP
STAMP
STEEL
STEEL RULE
SURFACE PLATE
VERNIER
WELDING

WASTE DISPOSAL PASSPORT

General Conditions

Students must be trained in the proper disposal of all consumables and waste materials.

Personal Protective Equipment

- Vinyl/Latex/Polymer Gloves
- Non-Slip Soled Enclosed Shoes
- Lab Coat/Apron

Possible Risk Factor

- Skin Irritation (chemical sterilization/sanitation)
- Fungal/Parasite/Bacterial/Viral Infection
- The student has been trained on this equipment and procedures.
- The student understands the required personal protective equipment to operate this equipment and perform these procedures.
- The student is aware of the possible risk factors

Student signature	
Teachers signature	
Date of training	

Food Safety

LAEHCAJMWN В ACCCOB L Q ${
m E}$ Α Ζ Ι \mathbf{E} Ν Τ P M L С Ν ΚE Ι A A N Α Τ Ε Τ S G Ι D L Ε Τ G A 0 L Ι Ρ AKE R O Ν 0 Y L Y Ρ L Υ Т K В Μ R Τ Χ Α Η 0 Ε S F Η Y R G I G Ι Ι Τ S G M S Ι U С Ι Ι Ι L S Р Ρ A N D Α S 0 \mathbf{E} A L Τ S Т ZM C ΡL Η 0 0 Α Т S S S ΚJ Τ Т R F Ρ \mathbf{E} J R EJ W Ι D Ι Ν F Ε C Τ Ι 0 Ν S G 0 J Ε 0 LΑ C Ι ΜЕ C K Η U NX F X N LAC Ι G O L O Ι В 0 Τ Ι АН U L SM DRA Ζ K ERXIOUXFQU WAT

ACIDITY
INFECTION
PARASITES
BIOLOGICAL
BOTULISM
CONTAMINATION
HAZARD
PHYSICAL
SHIGELLA
WATER

ANALYSIS
INTOXICATION
BACTERIA
BLEACH
CHEMICAL
CROSS
PATHOGENS
SALMONELLA
SYSTEM
WORKPLACE

Small Engines Word Search

F D E J S Q C S R A S U I X R W Y L S Q U R Q U E U A AUR M V V R R I X G E A H Z S H K A W G U X В X N 0 0 N N A J K I M L R M K J X S K G W H M W A 0 I I E E D A R Η Η W Ν OE Y L A SH S P A U R N Ε U I F R S I M L 0 N J K E D T U S 0 G В R E N Ν E S H T S E E L M C R S A F E T Y G L A S U L X F L E I E Ε I 0 E В В В R G Y N В K G K G G R U T A T U F 0 W U H O R S F P 0 W E R T E R Η T S F F S S R U N G C I W 0 N 0 M S HEWA EKK WA В P Y Z U Y

C D S K L I B L D I C A M S H A F T Y X Y X S H E W A Y E K K W

AIRFILTER
CARBURETOR
COMPRESSION
DISPLACEMENT
GOKART

AIRFUELMIXTURE CHAINSAW CRANKSHAFT EXHAUST GUARD

Exploring: Construction Band Saw Safety Lesson Record

I have a copy of the operation and safety guidelines for the Band Saw.

I was present for the lesson, understand its meaning and will operate the above mentioned machine in the safe method described in the lesson.

Date:	Course:	Semester:
Student Signatu	ıres	
1		_ 2
3		_ 4
5		_ 6
7		_ 8
9		10
11		12
13		_ 14
15		16
17		18
19		_ 20
21		_ 22
Absent Students	Date Lesson Taught	
1		
3		

Exploring: Construction Drill Press Safety Lesson Record

I have a copy of the operation and safety guidelines for the Drill Press.

I was present for the lesson, understand its meaning and will operate the above mentioned machine in the safe method described in the lesson.

Date:	Course:	Semester	:
Student Signatu	res		
1		2	
3		4	
5		6	
7		8	
9		10	
11		12	
13		14	
15		16	
17		18	
19		20	
21		22	
Absent Students	s Date Lesson Taught		
1			

Exploring: Construction Jointer Safety Lesson Record

I have a copy of the operation and safety guidelines for the Jointer.

I was present for the lesson, understand its meaning and will operate the above mentioned machine in the safe method described in the lesson.

Date:	Course:	Semest	er:
Student Signatu	ıres		
1		2	
3		4	
5		6	
7		8	
9		10	
11		12	
13		14	
15		16	
17		18	
19		20	
21		22	
Absent Students	s Date Lesson Taught		
1			
3.			

Exploring: Construction Mitre Saw Safety Lesson Record

I have a copy of the operation and safety guidelines for the Mitre Saw.

I was present for the lesson, understand its meaning and will operate the above mentioned machine in the safe method described in the lesson.

Date:	Course:		Semester:	
Student Signatu	ıres			
1		2		
3		4		
5		6		
7		8		
9		10		
11		12		
13		14		
15		16		
17		18		
19		20		
21		22		_
Absent Students	s Date Lesson Taught			
1				
3.				

Exploring: Construction Planer Safety Lesson Record

I have a copy of the operation and safety guidelines for the Surface Planer.

I was present for the lesson, understand its meaning and will operate the above mentioned machine in the safe method described in the lesson.

Date	Course	Semester	
Student Signatur	es		
1		22.	
3		4	
5		6	
7		8	
9		10	
11		12	
13		14	
15		16	
17		18	
19		20	
21		22	
Absent Students	Date Lesson Taught		
1			
2			

Exploring: Construction Table Saw Lesson Record

I have a copy of the operation and safety guidelines for the Table Saw.

I was present for the lesson, understand its meaning and will operate the above mentioned machine in the safe method described in the lesson.

Date:	Course:	Sen	nester:	
Student Signatu	ures			
1		2		
3		4		
5		6		
7		8		
9		10		
11		12		
13		14		
15		16		
17		18		
19		20		
21		22		
Absent Student	s Date Lesson Taught			
1				
3.				

Sample: Record of Safety Training

Student: Class:

Over the course of the semester or term(s) you will receive direct instruction in the safe and appropriate use of the all the equipment, tools, materials, and facilities required to complete your classroom activities. Instruction consists of a combination of demonstration and written and verbal instruction. A satisfactory mark on a safety quiz following the instruction demonstrates the acquisition of sufficient knowledge to use and access the relevant equipment and materials. Your ongoing demonstration of safe practice is assessed in the project marking. Your teacher will put the date and sign-off beside each topic in acknowledgement of your attendance at the discussion or demonstration.

STUDENTS MAY NOT USE ANY EQUIPMENT, TOOL, OR FACILITY UNTIL:

- his or her training has been signed off by the teacher
- he or she has received a satisfactory mark on the related safety quiz.

Topic	Date	Teacher's Signature
Computer Resources and the Internet		-
Acceptable Use Policy		
Safety on the Internet		
Computer Ergonomics		
Patient or Client Care		
Safe use of chemical treatments		
Use of personal protective equipment (PPE) for patient/client		
 Safe and proper handling of patient or client 		
•		
Facility Care		
 Proper cleaning and setup procedures 		
 Maintaining safe working environment 		
 Use of personal protective equipment (PPE) for self 		
 Proper sanitation and sterilization procedures 		
Safe and proper disposal of consumables and hazardous materials		

Exploring: Transportation SAFETY QUIZ – PROPERLY LIFTING A VEHICLE WITH A HYDRAULIC JACK

Marks - Questions 36

) Name	e 6 precautions to be observed while jacking up a vehicle.
	e o precaditions to be observed write jacking up a verticle.
. Unde	r what parts of the vehicle can the lift pad be placed?
	r what parts of the vehicle can the lift pad be placed?
Front	
Front Rear	
Front Rear	
Front Rear I. Name	e 2 conditions where safety stands should not be placed under the rear axle other common names for safety stands.
Front Rear . Name	e 2 conditions where safety stands should not be placed under the rear axle
Pront Rear I. Name	e 2 conditions where safety stands should not be placed under the rear axle other common names for safety stands.

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EXPL

	9. Name 6 parts that are easily damaged by improper placement of the safety stands or hydiack.	Iraulic
	1	
	2	
	3	
	5	
	5	
	<u> </u>	
	10. What two actions can be taken so that the vehicle does not roll while you are raising or lowering it?	
	1	2
	1	2_
1	1. What precaution should be taken when raising or lowering the front end when the rear end is raised?	

Exploring: Health Moving Patients Safety Quiz

1.	What part of the body has the most powerful muscles for lifting?
2.	List the seven guidelines for carrying patients and equipment.
 3.	List two ways to transfer a patient to a bed.
 4.	If a patient is too heavy to lift with a partner, the care-giver's should
5.	When lifting, it is important to try to never do this to prevent injury.

Exploring: Construction Band Saw Safety Quiz

Name:	Date:
1.	When using the band saw,are required when making curved cuts.
2.	You should adjust the above the work before beginning to cut.
3.	Narrow blades are best suited for cutting
4.	When cutting with the band saw, the blade should cut on the side of the work piece.
5.	When using the band saw, plan your cuts carefully. Saw curves gradually. Sudden twists will cause the blade to or
6.	When using the band saw, keep your hands or the blade. Never in front.
7.	Inspect all before using any saw.
8.	Always support pieces.
9.	Use sticks on small pieces.
10.	Use the when changing blades.
WORD	BANK:

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behind, beside, bind, break, guards, lock-out, push, relief cuts, round, tight, upper guide, waste

V-block

Exploring: Construction Drill Press Safety Quiz

Name:	Date:	
1.	When using the drill press, ais required when cutting cylindrical stock.	
2.	Make sure your face shield or are on before you start the machine	} .
3.	Make sure all clothes are restrained and long tied back.	_ is
4.	Choose a drill bit that is and in good condition.	
5.	Remove the from the chuck before starting the machine.	
6.	Check for the proper for the drill size and material you are working	on.
7.	the work securely before drilling.	
8.	Never attempt to a piece of work if it slips from the clamp.	
9.	Always make sure the drill press has before attempting to change speeds.	
10.	If the drill sticks in the work piece, the motor and rotate the chuck	
	by to free it up.	
11.	Always clear away and curls with anot by bare hands.	your
	BANK:	arah

Exploring: Construction Jointer Safety Quiz

Name:		Date:		
1.	Wear	goggles or a face shield.		
2.	Secure the	position before beginning	g cutting procedures.	
3.	Check the	of the blade. Set it at or	ne-eighth of an inch or less	
4.	Check the	. Make sure it returns to cover the blades.		
5.	Use a	stick .		
6.	Get	when working on large piec	es.	
7.	Wear a	mask when cutting treated w	ood .Put the vacuum on.	
8.	Stand	of the path of a kickback.		
9.	Remove	and tie back	hair.	
WORD	BANK:			

۷

safety, fence, depth, jewellery, long, guard, assistance, push, dust, clear

Exploring: Construction Mitre Saw Safety Quiz

ame: Date:		
Secure the mitre saw to the v	work surface with	or holts
Your body should be	of blade assembly.	
Ensure the blade clears the _	before cutting.	
Always use your	hand to operate the t	rigger.
Ensure the	is functioning correctly before operat	ing the saw.
When making	cuts ensure the blade ha	s adequate clearance.
	pieces should be supported.	
Watch for	when cutting small pieces.	
		cutting short
	Secure the mitre saw to the vertical Remove all	Secure the mitre saw to the work surface with and tie back of blade assembly. Ensure the blade clears the of blade assembly. Ensure the blade clears the before cutting. Always use your hand to operate the tensure the is functioning correctly before operate. When making cuts ensure the blade hate pieces should be supported. Watch for when cutting small pieces. Keep your clear of the blade path when piece that can not be clamped down.

WORD BANK:

kickbacks, long, left hand, clamps, jewellery, left, right, guard, angular, stock ,left

Exploring: Construction Planer Safety Quiz

Name:	Date:				
1.	Check the floor for any				
2.	Replace	when worn or dull.			
3.	Make adjustments only when the _		is off and the off switch is		
4.	Check hood and make sure the		is on.		
5.	Use a	stick when necessary.			
6.	Wear a dust	where planing treated	d wood.		
7.	Assume a position with your body _		of a possible kickback.		
8.	Remove all	and tie back	hair.		
9.	Before investigating any jammed pi	ieces	the power off and		
	it out.				
_) BANK: ock, mask, blades, clear, vacuum, pu	ush, power, locked, deb	oris, jewellery, long		

clear

Exploring: Construction Table Saw Safety Quiz

Name:	:	Date:		
1.	Wear	goggles or a face shield.		
2.	Secure	position before beginning cutting procedures.		
3.	Check the	of the blade.		
4.	Check	clearance and adjust accordingly.		
5.	Use a	stick.		
6.	Get	when working on large pieces.		
7.	Wear a	mask when cutting treated wood.		
8.	Stand	of the path of a kickback.		
9.	Remove	and tie back	hair.	
10	. Never use the	when crosscutting.		
11	. Use a	gauge when crosscutting.		
12	. Never cut			
WORE) BANK:			

freehand, safety, mitre, fence, fence, condition, jewellery, long, guard, assistance, push, dust,

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Avoiding Accidents Quiz

_16. If you drop a knife, let it fall.

EXPL SAFEdoc

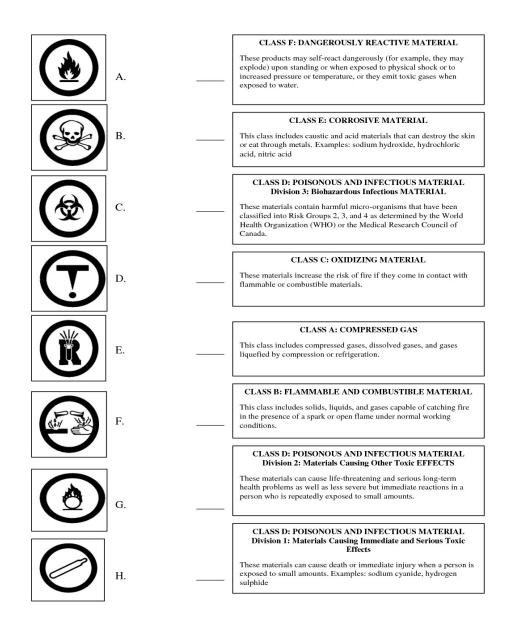
<u>DIRECTIONS:</u> Match each of the Safety Hazards from the top line with the descriptions of how to avoid an accident. Write the letter of the safety hazard in the space provided.

Safety F	lazards				
A. Burns	B. Cuts	C. Falls	D. Fires	E. Shocks	F. Strains
Ways to	Avoid Accide	nts			
1.	After cooking w hoods, griddles	_		accumulated gr	rease from range
2.	Never put cold	or wet food in	to hot fat beca	ause it will caus	e the fat to splatter.
3.	Never handle e	lectrical equip	ment with we	t hands or while	e standing in water.
4.	Always cut awa	y from your b	ody.		
5.	Walk, do not ru	n.			
6.	Heavy articles	should be stor	ed on the bot	tom shelves.	
7.	Protect your ha	nds by using	thick, dry hot	oads.	
8.	Do not overhea	t fat.			
9.	Lift heavy object	ts using your	leg muscles.		
10	. Use correct do	oor to enter ar	nd exit the kitc	hen.	
11	. Use knives co	rrectly.			
12	. Be sure an ap	pliance is turr	ed off before	plugging it into	an outlet.
13	s. Keep flammat	ole materials s	uch as towels	away from ope	en flames.
14	. Keep work are	eas and traffic	lanes clear.		
15	. Check electric	al equipment	frequently for	faulty wiring an	d fraying cords.

17. Use a stepladder, never a chair or table, if you need to reach something on a high shelf.
18. Keep the floor clean and dry.
19. When you must lift a heavy object, squat with knees bent, feet apart, and back straight.
20. Always tilt the lid of a pot away from you to let the steam escape.
21. Keep handles on pans turned away from the front of the range so the pan cannot be tipped over easily.
22. When disconnecting electrical equipment, pull the cord by the plug.
23. Look where you are going.
24. Keep floor mats flat to prevent stumbling.
25. Never leave hot fat unattended.
26. Use a cart to carry heavy objects any distance.
27. Clean knives carefully with the cutting edge away from your fingers.
28. Never put knives in the dishwater where they are hidden.
29. Always wear closed toe shoes.
30. Never use a slicer without the guards in place.

WHMIS Labels Quiz

EXPL



APPENDIX A: HEALTH AND SAFETY RESOURCES

WorkSmartOntario!

http://www.worksmartontario.gov.on.ca

Is the official website of the Ontario Ministry of Labour for young workers and new workers. Utilize this website to find out how to be safe at work. Find out how to be treated fairly! Includes key information on: My Health and Safety at Work, My Employment Standards and I've Got a Problem – What Do I Do Now?

Workplace Safety and Insurance Board

http://www.wsib.on.ca

Legislated by the Ontario government and responsible for administering the *Workplace Safety and Insurance Act* (WSIA). Governed by a Board of Directors made up of representatives of workers, employers and others.

Under the Resources tab, this website provides information on how WSIB make decisions, by reviewing the Operational policy manual, Employer Classification Manual, and Adjudication support documents. You'll also find useful forms and fact sheets on a variety of topics, including benefit payments, and rights and responsibilities.

- Fact Sheets are also available:
- Fact Sheets for Workers
- Fact Sheets for Prevention
- WSIB Fact Sheets

Workplace Safety Resources Inc.

http://workplacesafetyresources.ca

This site provides a personalized approach to planning for safety. Workplace Safety Resources Inc.'s mission is to create healthy, safe, secure and environmentally responsible workplace, to work with industry to better protect all employees, to improve the quality of life in workplaces and communities and become a recognized leader in providing effective safety programs, products and services for the prevention of injury and illness.

Take Our Kids to Work – Teacher's Guide; Workplace Guide The Learning Partnership

http://www.tlp.on.ca

These resources have been custom designed to help teachers and workplaces prepare for Take Your Kid to Work day. The new booklets have an excellent section on activities to help prepare the students for a safe learning day.

Canadian Centre for Occupational Health and Safety

http://www.ccohs.ca/resources

The Free Resources section is a collection of websites, databases, and other online resources suggested and reviewed by CCOHS. Many of the websites are designed and maintained by CCOHS, while some of the resources are provided by external, third-party providers.

Purpose

- Promote the importance of workplace health and safety in Canada
- Identify current and reliable health and safety information
- Create and maintain an accessible, convenient, and easy-to-use resource to anyone who needs
 it
- Provide access to information from a variety of sources including federal, provincial, and territorial governments, agencies, and non-profit organizations

Target Audience

The Free Resources are useful to workers, employers, managers and supervisors, joint health and safety committees, workplace health and safety professionals, and students.

HEALTH CANADA

http://www.hc-sc.gc.ca

Health Canada is the Federal department responsible for helping Canadians maintain and improve their health, while respecting individual choices and circumstances.

Health Canada administers many pieces of legislation and develops and enforces regulations under this legislation that have a direct impact on the health and safety of Canadians. The Department consults with the Canadian public, industry, non-governmental organizations (NGOs) and other interested parties in the development of these laws. Health Canada also prepares guidelines in order to help interpret and clarify legislation and regulations.

Of particular interest would be regulations such as the Hazardous Product Act, Controlled Products Regulations, Environmental and Workplace Health.

HEALTH & SAFETY ONTARIO (HSO)

http://www.healthandsafetyontario.ca/HSO/Home.aspx

Ontario is already a great place to do business, live and work. Making our province, and indeed our country, the healthiest and safest place to work in the world is a prize worth winning.

Ontario's Prevention System is made up of the Ministry of Labour (MOL), Workplace Safety and Insurance Board (WSIB), Workers Health & Safety Centre, Occupational Health Clinics for Ontario Workers Inc. and 12 Health and Safety Associations (HSAs).

Health & Safety Ontario (HSO) is the result of a bold move to reorganize the independent efforts of 12 health and safety associations into four streamlined organizations to better serve more than 236,000 Ontario businesses.

HSO is comprised of:

- Workplace Safety & Prevention Services
- Public Services Health & Safety Association
- Workplace Safety North
- Infrastructure Health & Safety Association.

ONTARIO BUILDING CODE

http://www.mah.gov.on.ca/Page7393.aspx

The Ontario Building Code's website has information on qualification and registration, available training, dispute resolution, news on recent code developments and more. The Ontario Building Code is administered by the Building and Development Branch of the Ministry of Municipal Affairs and Housing.

CANADIAN STANDARDS ASSOCIATION (CSA)

http://www.csagroup.org

Standards contribute to safer homes, workplaces and public spaces. They address issues related to sustainability and the environment. And they encourage the adoption of new technologies and best practices that enhance trade and help make industry more competitive in the global marketplace. Standards help advance today, while anticipating tomorrow.

CANADIAN SOCIETY OF SAFETY ENGINEERING (CSSSE)

http://www.csse.org/

The Canadian Society of Safety Engineering (CSSE) is the leading health, safety and environmental organization for professionals in Canada. They work with industry, governmental agencies, and other safety organizations to promote a greater awareness of health, safety, and environmental issues in workplaces and communities across the nation and around the world. Our vision is "An Advocate for Safety in Every Workplace".

CSSE's mission is to be the resource for professional development, knowledge and information exchange to our members, and the Canadian public.

PROFESSIONAL ASSOCIATIONS

Professional Associations can be a great health and safety resource relating to discipline specific occupational health and safety. The following Tech Design related associations provide resources on professional practice relating to health and safety.

Professional Engineers of Ontario (PEO)..... www.peo.on.ca/ Architectural Association of Ontario (OAA)..... www.peo.on.ca/

Ontario Certified Engineering Technicians and Technologists (OACETT)..... www.oacett.org/

Association of Registered Interior Designers of Ontario (ARIDO) www.arido.ca/

Live Safe! Work Smart! Grade 9/10 and Grade 11/12

http://www.livesafeworksmart.net

Written by health and safety professionals, produced by the Ministry of Labour in partnership with the Ministries of Education and Training, Colleges and Universities, *Live Safe! Work Smart!* provides the only comprehensive resource for Ontario teachers developed to match health and safety curriculum expectations from Grades 9 – 12. It has received top marks from the Ontario Curriculum Center. Reviews can be viewed on the OCC website: (*www.curriculum/occ/resources.org*). Within the two-volume set are lessons, overheads, handouts and exercises well suited to cooperative education and apprenticeship.

Binders and CDs have been distributed to all secondary schools in Ontario. If you can't locate either, check the website at *www.livesafeworksmart.net* for who to contact in your Board to get more information on your local resources, or to order a CD of your own. If you don't have access to the web, you can place an order by calling 1-800-268-8013.

http://www.edu.gov.on.ca/eng/studentsuccess/pathways/files/septNews.pdf

http://www.livesafeworksmart.net/english/grade%209-12/course streams.htm

http://www.livesafeworksmart.net/english/special_needs/index.htm

Ontario Ministry of Labour

Web address: http://www.labour.gov.on.ca/english/

For news and information about Ontario's health and safety and employment legislation, the Ministry of Labour's website is an excellent place to visit. It provides current information on both employment standards and health and safety legislation, recent fines, alerts, etc. and allows you to ask a question that will be answered by Ministry staff. To directly access information for students, use the web address: http://www.worksmartontario.gov.on.ca/scripts/default.asp or http://www.labour.gov.on.ca/english/es/pubs/factsheets/fs_young.php

This section of the Ministry of Labour website ensures that students are aware of their rights and obligations and their employer's rights and obligations under the *Occupational Health and Safety Act* and the *Employment Standards Act*. It includes: young worker safety education information; information for working students – know your rights and obligations; information for new workers and students working in Ontario; fact sheets for employees; your guide to the Employment Standards Act; and links to related websites.

Workplace Safety and Insurance Board

http://www.wsib.on.ca

Contains information for both employers and employees about workplace safety. Includes advice on prevention, important news releases, policies and other work-related information.

http://www.wsib.on.ca/en/?in tx query=students&in hi space=SearchResult&in hi control=bannerstar t&cached=false&in hi req apps=1&in hi req objtype=18&in hi spell=1&in hi req ddfolder=595&in hi req subfolders=1&num=25&search.y=15

http://www.wsib.on.ca/en/community/WSIB/230/ArticleDetail/24338?vgnextoid=52bfe1880bc5c210VgnVCM100000469c710aRCRD&vgnextchannel=a7620b368d5dd110VgnVCM1000000e18120aRCRD

http://www.wsib.on.ca/en/community/WSIB/230/ArticleDetail/24338?vgnextoid=8f7d3260ffc88210VgnVCM100000469c710aRCRD

Ontario School Boards Insurance Exchange

http://www.osbie.on.ca

The primary goals of the Exchange are to insure member school boards against losses, and to promote safe school practices. The Ontario school "Risk Management at a Glance" material is intended to provide guidance and direction in the major risk management areas facing school administrators, principals, vice-principals, teachers and all other school staff on a daily basis.

http://www.osbie.on.ca/risk-management/

http://www.osbie.on.ca/risk-management/#resources

http://www.osbie.on.ca/risk-management/presentations/presentation-form.aspx

Although this reference material is not intended to replace school board policies and procedures, it is intended to supplement the risk management considerations, which should go into making the decisions on the most common day-to-day school activities. The design of this publication is to promote the display of this document in a calendar-like format in every classroom to facilitate ready "Risk Management at a Glance". Every employee who may be called upon to make a decision about the permitting of or the organizing of any activity listed can use this.

For any activities not listed in this material, it is recommended that you contact your board office, or refer to the policies and procedures as stated by your school board.

APPENDIX B: OCTE SAFETYNET BLANK TEMPLATE

Overview

A sample of a blank SafetyNET template provided by the Ontario Council for Technology Education as well as their Materials and Resources sheet has been provided here as an additional resource for computer technology teachers.

Completing it once for a risky project can take teachers through a pre-project planning process, a review of the materials in their shops, the suppliers and processes they use, and encourage documentation of their safety training for themselves, their students, and classrooms. It collects safety information in one place for their own use, and respects their experience, pedagogy, and professionalism. It's a crucial step in standardizing safety training in your technology program at your school, and can assist in collegial communication in your department.

Please note that the online updated version is available at www.octelab.com, however any teacher that considers and documents their answers to the questions will have created an important document for their personal professional practice. It's also available in fillable .pdf format, and is also available in French from OCTE

Establishing A Safety Binder

The goal is a <u>safety binder</u> that teachers keep in their rooms as evidence of due diligence taken towards safety in the classroom.

Assembled safety binders often include teacher/room/board specific:

- SafetyNET Template
- Project Specific Safety Resources
- MSDS Sheets
- Student Safety Training Tracking Sheets
- Permission Forms Copies
- Class Lists
- • Equipment Maintenance/Manuals
- Training Quiz Samples
- •Teacher Training Documentation Copies
- Emergency Procedures Docs
- Board Repair Contacts
- Room Safety / PPE Location Map

Starting Your SafetyNET

TIJ Subject Area: Tech department heads can provide leadership asking teachers to consider the following questions to choose a focus for completing their own SafetyNET.

- What are the most risky projects I do in my classroom? (List them here.)
- What ones of these use the riskiest materials?
- Which ones of these use the highest risk-associated equipment?
- Which ones of these include recycled, found, repurposed, or donated materials?
- Which one of these is the hardest to train and track the kids for safety on?
- Reflecting on this listing, which project do you think you may want to do a SafetyNET on?
- What resources of mine would make it easier instructive for another teacher to try this project?
- What would be the best "safety lens" advice I could give for another teacher from my experience?

Then try it out!

SafetyNET Lesson Plan

SafetyNET STEP 1: Tell Us About You

First Name:
Last Name:
Last Name:
E-mail Address:
Ontario School Board:
School:

Community

Urban
Suburban
Rural

Number of Students:

Student Work is Completed (individually, pairs, groups, mixed methods)

Mixed Methods ▼

I agree to the Terms and Conditions and have read the Teacher Guidelines.

SafetyNET STEP 2: Describe Your Lesson

Classroom Management Pre-Planning

1. F	Provide a descriptive title for your learning activity.
2. (Choose the length that best describes your lesson.
20	Full semester
. di	Multiple weeks
20	One week
	One period

3. Choose the Ontario course code (e.g.).

TEJ - Computer Engineering	Ŧ	
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4. Provide learning goals of the activity.

Names of Resource Files Included: (Please format as .pdf where possible.)

- 5. Generally describe your **classroom lab setup** with main equipment and areas.
- 6. There is a link <u>here</u> to your subject area's **full** Overall and Specific required **Ministry Expectations**. Click <u>here</u> for **safety expectations summarized for each tech course code**. These will create a popup window for copying and pasting into the field below. Copy and paste some safety expectations your lesson will cover.
- 7. There may also be **local by-laws** or **staff guidelines** applicable to your school community in general that affect how you teach your subject area for health and safety. Being in an urban or rural environment can offer unique challenges to a technological education program. Your department or school may also have a health and safety manual you can attach as a file later. Include any details or best practices here on what you refer to.
- 8. Coming from industry and experience as a technological educator, there is **prior teacher knowledge** that you would recommend for your classroom, focused on health and safety. Include information on recommended certifications for your subject area.

	Many teachers use these as a basis of training for prior student knowledge . Check off which ones use currently. A pop-up window is available through these links. Passport to Safety
	Introduction to WHMIS
	Prior to specific project work, describe your general introductory unit on health and safety in ir classroom.
for	Check off what Personal Protective Equipment may be applicable in your classroom in general health and safety.
	safety glasses (shatterproof - may need side guards)
	coveralls / lab coat / apron (protective clothing)
18	gloves (latex and standard)
	gloves (chemical resistant)
180	welding gloves and face shield
	dust mask (breathing protection)
	respirator (breathing protection)
	appropriate footwear (may imply steel-toed work boots or closed toe and heel shoes)
	hair net
	hair tied back
Sel.	hearing protection - ear plugs

removing jewellery and fashion accessories hard hat	
safety harness reflective vest no electronic devices	
12. Describe your student safety training assessment strategies. Click Growing Success document that defines assessment for learning and	
13. Some technological classroom areas are more complex and need and special resources available, especially when sharing rooms. Detail organization standards and student clean-up procedures from your experience.	general housekeeping,
14. Detail safe storage facilities in your classroom for course specific	materials.
15. Explain any special learning considerations and best practices f safety. Are there left-handed students in your class? You may naturally modifications. Showcase special approaches or methods you use for eintelligences, differentiated instruction, ESL, gifted, or physically-challed	y include accommodations and exceptional students, multiple-
16. Include information on your safety procedures for disposal of was food scraps, hairstyling chemical, dust collection, combustible wipes, or	
17. Company's coming! Educational Assistants, volunteers, student to with administrators are in your classroom. Provide your experience on need to be communicated to these participants for your subject area somaintaining distance from machines, or how to communicate an emergence of the communicate and t	elements of safety training that uch as wearing safety glasses,
18. Emergency procedures to pre-plan in general for your technologic depends on your subject area. There may be steps for students, steps teachers, or directions for emergency assistance arriving at school. Declassroom. Include fire exits, extinguishers, first aid station, eye washes switches (panic buttons). Possibly detail AED location (if available) and locations for your records.	for administration, for assisting etail how you cover these in your station, and electrical shut-off
19. Does your Board have a technological project approval process Yes No Unknown	s ?

20.	Select (all that apply) that complete equipment inspections in your board.
	Teacher
	Department Head
	Board Instructional / Subject Area Leader
83	Board Facilities Teams
120	Independent Contractors
22	Ministry of Labour
As	Select Federal and Provincial Safety Legislation and Policies, Government Departments, and sociations which may be applicable to your subject area. Click on any of them to open up a pop-up dow to reference their website. Consider adding any resources you find to your lesson.
130	Health Canada
120	Ministry of Labour
13	Ontario Workplace Safety and Insurance Act
326	Food Safety and Quality Act
恩	Ontario Health Protection and Promotion Act
	Ontario Highway Traffic Act
	Ontario Fire Code
13	Ontario Building Code
133	Workplace Hazardous Materials Information System (WHMIS)
133	Workplace Safety and Insurance Board (WSIB)
130	Occupational Health and Safety Act (OSHA)
133	Apprenticeship and Certification Act (ACA)
133	Canadian Standards Association (CSA)
134	Canadian Society of Safety Engineering (CSSE)
13	Ontario Service Safety Alliance (Hospitality and Tourism) (OSSA)
133	Canadian Centre for Occupational Health and Safety (CCOSH)
23	Construction Health and Safety Association of Ontario (CSAO)
130	Ontario School Boards Insurance Exchange (OSBIE)
	Industrial Accident Prevention Association (IAPA)
	Transportation Health and Safety Association of Ontario (THSAO)
130	Health Care Health & Safety Association of Ontario (HCHSA)

That's the end of general classroom management info. You can copy and paste the content from this section to any project you submit to the SafetyNET.

	Check off planning tasks you complete for this lesson.
	examine materials list (new, used, recycled materials)
	review tool use plan (power and hand tools)
	consider special preparation of recycled materials for this project.
186	review hazardous materials use - WHMIS, MSDS (attach files later)
	safety check on specific equipment
	review chemical and fire safety procedures
. kd	prepare tools
. kd	count or measure materials, evaluate efficiencies
	check 'past due' dates on supplies
	check student-accessible material supply areas are safe
186	re-do a safety demonstration
	confirm all students completed training diagnostic assessment
	confirm web resources and handouts are current
	reconsider assessment and evaluation strategies
20	plan direct supervision time for difficult or high-risk production steps
	plan direct supervision for flammable / toxic / corrosive materials handling
	plan safe storage of in-progress student projects
	plan cut off times for lab cleanup to begin
	plan waste disposal, recycling
140	plan debrief on safety risk experiences with students
	detail notes for teacher sharing classroom/lab

	The Ontario Skills Passport identifies <i>working safely</i> as a work habit. Check off the skills relevant this lesson here. For more information click <u>here</u> to go to their website.
M	Work Habits: Working Safely
12	Work Habits: Teamwork
120	Work Habits: Reliability
M	Work Habits: Organization
N.	Work Habits: Working Independently
N.	Work Habits: Initiative
82	Work Habits: Self-advocacy
23	Work Habits: Customer Service
20	Work Habits: Entrepreneurship
23	Essential Skills: Reading Text
23	Essential Skills: Writing
23	Essential Skills: Document Use
23	Essential Skills: Computer Use
	Essential Skills: Oral Communication
	Numeracy: Money Math
23	Numeracy: Scheduling or Budgeting and Accounting
	Numeracy: Measurement and Calculation
123	Numeracy: Data Analysis
	Numeracy: Numerical Estimation
23	Thinking Skills: Job Task Planning and Organizing
	Thinking Skills: Decision Making
	Thinking Skills: Problem Solving
20	Thinking Skills: Finding Information

24. The Ontario Skills Passport (OSP) **National Occupation Classification** (NOC) code is a number that Human Resources and Skills Development Canada (HRSDC) has assigned to a particular occupation. To make safety training more relevant to students, check <u>here</u> and copy an example of career choice that has to be aware of the same classroom safety requirements.

- 25. Detail **instructional strategies** and **assessment strategies** for focusing on safety during this learning activity. Consider any IEP considerations applicable in your classroom.
- 26. Define the **materials and equipment** used for this learning activity. You can use the blank form that's provided <u>here</u> and save it to make it your own. The layout helps you collect details showing the materials and equipment. It also provides space for equipment maintenance schedules, disposal of waste materials, training tracking, shielding or guarding details.
- 27. Include any **best practices** or tips, tricks, and advice in your experience of completing this learning activity. Focus your answer on how you document safety training, and share information about your shop with other tech teachers. That's an OCTElab **SafetyNET!**
- 28. Provide a **short description** of your project that can go with a reference image for the database. (Max 256 characters.)

SafetyNET STEP 3: Add Files and Videos

Please attach a **project image** for us to display with your short description in the database. Please upload any **supporting documents** including safety components, lesson materials, assessment tools, digital resources, images, or videos. To bring your lesson to life, include **online videos URL link** files on the lesson plan page. Add as many as you like.

Do you have a **safety features map** of your classroom you can share? Attach it here! Find the **Material Safety Data Sheet (MSDS)** for any of your materials clicking and searching <u>here</u>. Save it and add it to your digital resources to attach with your lesson.

The Ontario Ministry of Labour makes available a resource named *Live Safe! Work Smart!* It has a wide range of general safety and subject-specific resources available for use in the classroom and beyond. Click <u>here</u> to open a pop-up and copy and paste links that are your favorites here or download a resource you can use with this lesson and attach it later. You can also add any other URL links here that you think enhance this safety learning activity.

SafetyNET STEP 4: Tag Your Lesson

Add your own descriptive tag(s) to help users search for content like yours. **Print** your lesson to document your SafetyNET for your classroom. **Submit** your SafetyNET lesson. Plan to update lesson content or add digital resources later with your user login. Think about adding another lesson! Remember, most of your general classroom info is already in. You can 'Save As' and 'Modify' to submit a new lesson with new resources!

OCTElab SafetyNET – Materials, Physical Resources Planning Sheet

Teachers can copy and add rows to this blank form to address specific project needs and include it in their safety binder.

PROJECT / LEARNING ACTIVITY TITLE: COURSE CODE AND TITLE: VERSION PREPARED DATE: SUBMITTED BY: CONTACT:

MATERIALS LIST

MATERIAL	QUANTITY	DESCRIPTION	SOURCE	WHMIS MSDS ATTACHED	SAFE STORAGE	WASTE DISPOSAL
			[] new, purchased [] new, donated from community, industry [] recycled from inside school [] recycled from outside school PREPARATION REQUIRED FOR USE:	[]Y []N		

PHYSICAL RESOURCES USED

EQUIPMENT, TOOL,	SUBJECT - SPECIFIC NEEDS	INSPECTED FOR SAFETY	STUDENT TRAINING PLAN IDENTIFIED	MAINTENANCE SCHEDULE
	SUBJECT - SPECIFIC		PLAN IDENTIFIED DETAIL STEPS: Student attended teacher safety instructions, lessons, demonstration(notes recorded) Student passed oral or written assessment (test) Student demonstrated safe setup and operation of equipment to teacher Student prepared and delivered power point presentations on all class tools and machines Student granted permission to use equipment SIGNAGE: safety sign posted RESOURCES: safety lesson tool safety video tool power point presentation	
			manual	
			FREQUENCY OF RETRAINING ADVISED: Students should be re-	
			trained every semester Safety passports expire at the end of every semester	

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