Primary RiskAssess www.riskassess.com.au

Risk Assessment Tool for Primary Science • Make your STEM investigations safer • Meet your legal obligations

• Feel more confident



Primary schools are legally required to conduct risk assessments prior to science investigations. The safety information in Primary RiskAssess allows teachers to design and carry out scientific investigations with greater confidence and lower risk. More than 200 Primary schools in Australia subscribe to Primary RiskAssess.

Primary RiskAssess is a web-based system that makes performing risk assessments quick and easy. Primary RiskAssess has been specifically designed for use by Primary teachers.

Primary R Safe, fun and easy STEM	iskAssess	
Safe, fun and easy STEN	d	
Risk Assessment and	Practical Order	
School:	Ecosolve Primary Schoo	4
Author:	Phillip Crisp	-
Experiment name:	Volcano (vinegar and bak	ine code)
Text reference: (or procedure) Can include web links. Eg, http://www.example.com	PC p26	n.au/infoiteaming_resources
Classes for Which Experimen	nt is Required	
Teacher:	Eva Crisp	
Year group:	6	•
Chemical training codes: Explanation of codes	Teacher 6 -	
Scheduling: You can leave off the year for classes in 2018	Room Date (d/m/y) 611 5/7/18 More classes	
Scheduling notes: eg, Weeks 3-4 before lunch	more classes	
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Teachers will find using Primary RiskAssess simple, as it includes:

- an electronic template for risk assessments, following the Australian ISO Standard on Risk Management
- safety information for chemicals, equipment and living organisms
- online help and learning resources
- hot-links to documents, diagrams, websites, Safety Data Sheets, etc
- recording of risk level and control measures
- easy sharing of experiments between school staff
- experiment scheduling system and chemical labelling
- access for unlimited numbers of simultaneous users
- use on computers, iPads, tablets and smart phones
- storage of risk assessments for legal purposes
- easy-to-read user manual.

The cost of a year's subscription to RiskAssess is \$350+GST per school campus. A subscription lasts 365 days from the date that payment is received and includes all upgrades during that period.

You can subscribe online at www.riskassess.com.au or email your school name to info@riskassess.com.au to arrange a free 2-week trial.

> EcoSolve Australia Pty Ltd ABN 48 145 464 204 3 Valley View Close, Roseville NSW 2069 Ph: 02 9415 8677 Email: info@riskassess.com.au Website: www.riskassess.com.au

Requirements of the Australian Curriculum for Science

The Australian Curriculum for Science¹ for Years F to 6 requires students to learn a wide range of basic science. This provides knowledge and skills for use throughout life and supports STEM (Science, Technology, Engineering and Mathematics) studies in later years. STEM studies have been identified as a matter of national importance and require a solid foundation in Years F to 6.

Science inquiry skills include

- questioning and predicting
- planning and conducting scientific investigations
- processing and analysing data and information
- evaluating
- communicating

From Year 3, students

With guidance, plan and conduct scientific investigations to find answers to questions, **considering the safe use of appropriate materials and equipment** (ACSIS054)

In Years 5 and 6, students

Identify, plan and apply the elements of scientific investigations to answer questions and solve problems **using equipment and materials safely and identifying potential risks** (ACSIS086)

Primary teachers are required by the curriculum to carry out scientific investigations, including ones with materials, equipment and chemicals which might cause injury. In many cases, teachers have not been provided with specific training on how to carry out these investigations safely. Primary RiskAssess allows teachers to be aware of potential hazards and access a range of safety information. This lowers the risk of injury to students and teachers, and allows teachers to feel more confident in developing and carrying out interesting investigations and demonstrations to develop student understanding.

^{1.} https://www.australiancurriculum.edu.au/f-10-curriculum/science/

Written by: Phillip Crisp Commenced on: 12 Jun 2018 Expires: 12 Sep 2019 Classes for which experiment is required Room Date Feacher: Eva Crisp (training code 6) Year Group: 6 Room Date 011 Thu 5/7/18 Procedure or reference, including variations Cr 26 102 rdp 2 Ithus/stasses.com.au/info/learning_resources Equipment to be used aluminium tray dishwashing detergent Potential hazards Do not drink. Four flour Potential hazards Do not drink. Standard handling procedures ALLERCY ALERT. May cause an allergic reaction in some individuals. Do not drink. Standard handling procedures Potential hazards Standard handling procedures Easily flammable. Standard handling procedures Patter to the fully alwards Standard handling procedures Bastic cup Standard handling procedures Potential hazards Standard handling procedures Bastic cup Standard handling procedures Potential hazards Standard handling procedures Flammable. May release toxic fumes if burnt. Cup Use insulating fore organic solvents. Do not hase with bu	RISK ASSESSMENT	r and ha	king codo	Ecosolve Primary Sch
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Potential hazards Check label to ensure ingredients are not toxic. Do not ingest. May cause skin irritation.	Potential hazards Check label to ensure ingredients are not toxic. Do not			
Chemicals to be used				
)	CH3COOH(aq CAS: 64-19

GHS data: Not <i>Potential hazar</i> Irritant vapour	rds	hazardous chemical.		
Class: nc	PG: none classified as a	hate, solid (baking Users: K-12* hazardous chemical.	g soda, bicarbonate of soda, sodium bicarbonate) Training: 1-6*	NaHCO₃ CAS: 144-55-8
Chemicals to	be produce	k		
carbon diox Class: 2.2	ide, gas gen PG: none	erated during ex Users: K-12	periment Training: 1-6	CO₂ CAS: 124-38-9

GHS data: Not classified as a hazardous chemical.	
Potential hazards	Standard handling procedures
Harmless, in quantities generated during experiments.	DO NOT GENERATE CARBON DIOXIDE IN A CLOSED
Toxic at high concentrations in air due to absorption	CONTAINER SINCE THE CONTAINER MAY EXPLODE.
through lungs into blood, lowering the pH.	Magnesium burns in carbon dioxide to form magnesium oxide and carbon.

Knowledge

I have read and understood the potential hazards and standard handling procedures of all the equipment, chemicals and biological items, including living organisms.

I have read and understood the (Material) Safety Data Sheets for all chemicals used and produced. I have copies of the (Material) Safety Data Sheets of all the chemicals available in or near the classroom.

Risk assessment

I have considered the risks of:

fire	breakage of equipment	electrical shock	radiation
explosion	cuts from equipment	escape of pathogens	waste disposal
chemicals in eyes	sharp objects	heavy lifting	inappropriate behaviour
inhalation of gas/dust	rotating equipment	slipping, tripping, falling	allergies
chemicals on skin	vibration and noise	falling objects	special needs
runaway reaction	pressure	heat and cold	other risks
runaway reaction	pressure	heat and cold	other risks

Certification by Teacher

I have assessed the risks associated with:

preparing the equipment, chemicals and biological items, including living organisms, for this experiment, performing this experiment with students in the class room, and cleaning up after the experiment and disposing of wastes,

on the basis of likelihood and consequences using the School's risk matrix, according to International Organization for Standardization Standard ISO 31000:2009.

I consider the inherent level of risk (risk level without control measures) to be:

Low risk Medium risk High risk Extreme risk

Monitoring and review			
Name:	Signature:	Date:	
•	sures in place, I have found that all the es in the classroom, in combination with	risks are "low risk". Risks will therefore be the specified control measures.	
Ensure that students do not Don't let students drink the r	inhale vinegar fumes or get vinegar in e ed "lava" fizz.	yes or in cuts on skin.	
Control measures:			

This risk assessment will be monitored using comments below and will be reviewed within 15 months from the date of certification.

Attach further pages as required