

Risk Assessment – States of Matter Incursion

Incursion Provider: STEAM Powered Kids

Activity: Hands-On Exploration of Solids, Liquids, and Gases (Dry Ice, Slime, Reactions)

Duration: Typically 1 hour

Age Group: Suitable for Primary School Students (Prep-7)

Location: School Classroom or Hall

Activity Details: Intro presentation States of Matter, Pop rockets, mentos and coke experiment, Slime demo, Dry Ice demo



Hazard	Potential Risks	Risk Rating	Control Measures	Revised Risk Rating
Dry Ice Demonstration	- Cold burns from direct contact - CO₂ build-up in enclosed spaces	High	- Dry ice handled only by facilitator with gloves - Used in well-ventilated area - Clear instructions to students not to touch	Low
Mentos & Coke Reaction	- Sudden liquid eruption - Sticky floors creating slip hazard	Medium	- Outdoor or tray-based demo only - Students kept at a safe distance - Clean-up plan in place	Low
Bicarbonate & Vinegar Rockets	- Pop bottle cap may launch with force - Spillage or eye contact with liquid	Medium	- Use outdoors - Safety distance maintained	Low
Slime Making	- Skin irritation or allergy to ingredients - Mess causing slippery surfaces	Medium	- Use non-borax recipes - Gloves optional - Protect with tables/clothes - Supervise all mixing	Low
Small Parts (Lids, Bottles)	- Choking hazard - Items dropped, causing trips	Medium	- Keep materials away from mouth - Keep workspace organised	Low
Behavioural Risks	- Excitement leading to running, rough play during demonstrations	Medium	- Set behaviour expectations before activity - Active supervision at all times	Low

Emergency Procedures:

- **First Aid:** Incursion staff carry a basic first aid kit. School first aid officer to be notified of the session time.
- **Incident Reporting:** Any incidents will be reported immediately to the supervising teacher and documented by STEAM Powered Kids staff.
- **Emergency Contacts:** Follow school's emergency protocols.

Supervision Requirements:

- Minimum of 1 STEAM Powered Kids facilitator per session.
- School staff to always remain present for duty of care.
- Recommended ratio: 1 adult per 20 students.

Additional Notes:

- All STEAM Powered Kids staff hold valid Working with Children Checks (Blue Card).
- A pre-activity safety briefing will be conducted with all students.
- All equipment is checked prior to the session for safety and functionality.

Risk Matrix

Inherent ¹ risk level			Action required
☒	Low	Little chance of incident or injury	– Document the activity within the three levels of planning.
☐	Medium	Some chance of an incident and injury requiring first aid	– Document the activity within the three levels of planning. – A OneSchool CARA record may also be required in accordance with school-based decisions.
☐	High	Likely chance of a significant incident and injury requiring medical treatment	– Document the activity within the three levels of planning. – Complete a CARA record in OneSchool. – Obtain approval from the principal or school leader (i.e. DP, HOD, HOSES, HOC) prior to conducting this activity. This approval is automatically requested in OneSchool when the CARA record is completed. – Obtain and document parent consent (highly recommended).
☐	Extreme	High chance of a serious incident resulting in highly debilitating injury	– An alternative activity must be considered. If the activity is essential for delivery of the curriculum, control measures must be implemented to reduce the risks to achieve comparable learning outcomes. – Document the activity within the three levels of planning. – Complete a CARA record in OneSchool. – Obtain approval from principal prior to conducting this activity. This approval is automatically requested in OneSchool when the CARA record is completed. – Obtain and document parent consent (mandatory).