

Risk Assessment – Light and Sound Incursion

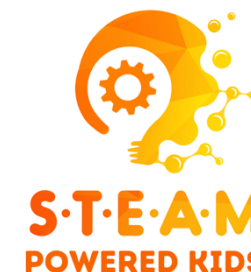
Incursion Provider: STEAM Powered Kids

Activity: Light and Sound

Duration: Typically 1 hour

Age Group: Suitable for Primary School Students (Year 1-6)

Location: School Classroom or Hall



Students Explore the Basic concepts of Light and Sound through hands on experiments

Light: Properties of Light, Newtons Wheel, UV light demo, Wave machine Construction/Demo, Bending light demo, take home glow stick distribution

Sound: Properties of sound, Hearing test, Vibro speaker ,Tuning Fork Demo and Percussion tubes

Hazard	Potential Risks	Risk Rating	Control Measures	Revised Risk Rating
Vibro Speaker	- Sound levels causing discomfort	Medium	- Control volume levels - Supervise usage	Low
Tuning Forks	- Pinched fingers when striking - Misuse leading to hitting others	Medium	- Demonstrate correct use - Use soft striking pads - Close supervision	Low
Plastic Percussion Tubes	- Swinging or hitting others - Tripping hazard if left on floor	Medium	- Set clear behaviour rules - Ensure equipment is packed away after use	Low
Wave Machine	- Sharp ends of skewers - Choking hazard from lollies	Medium	- Supervise handling closely - Ensure lollies are not eaten - Blunt skewer tips	Low
Laser Pointer	- Eye damage if pointed directly at eyes	Low	- Only facilitator operates laser - Clear safety briefing to students	Low
Lenses (Glass/Plastic)	- Breakage leading to sharp edges	Medium	- Use plastic lenses where possible - Supervise handling - Store safely	Low
Newton's Colour Wheel	- Paper cuts	Low	- Demonstrate safe spinning technique	Very Low
UV Glow Sticks (Take home present)	- misuse	Low	- Instruct students on usage	Low
Workspace Management	- Trip/slip hazards from equipment or student belongings	Low	- Keep floor clear - Instruct students where to place bags/coats	Low
Student Behaviour	- Misuse of materials (e.g., swinging tubes,)	Medium	- Set clear rules at start - Maintain active supervision	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).