



# Venue and safety information for school excursions

Work Health and Safety Directorate

<b>Venue name: program name</b>	Museum of Applied Arts and Sciences' Sydney Observatory			
<b>Location</b>	1003 Upper Fort Street, Observatory Hill, Millers Point, NSW 2000			
<b>Phone number</b>	(02) 9217 0222	<b>Fax number</b>	(02) 9217 0622	
<b>Web address</b>	www.maas.museum			
<b>Insurance</b>	Does the venue have public liability cover? No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>			
<b>Activity/program</b> <i>Please list</i>	<b>Recommended age group/fitness level/prerequisite skills</b>	<b>Staff accreditation/competence</b> <i>for this activity/program</i>	<b>Potential risks</b> <i>List hazards/risks related to each activity/program and the venue</i>	<b>Control Strategies</b> <i>Outline strategies for ensuring visitor safety for this potential risk</i>
Prior to arrival. Check adult to learner ratio and select and print any DIY materials to be used on site	ES1 to Stage 6	Teachers	Oversized groups cannot enter Sydney Observatory.  DIY materials and activities will not be available	All 90-minute programs visit THREE different locations onsite in groups of no more than 20 learners, plus ONE adult (Teacher or adult) and one MAAS staff member.  <b>We cannot admit groups that do not meet a 1:20 teacher/adult to learner ratio.</b>  DIY materials must be selected and printed at school before attending the programs. The Observatory cannot print DIY materials on the day of the visit. Pencils are required.
Arriving and proceeding to group entrance	ES1 to Stage 6	Teachers / Carers	Traffic. Late arrival, extended toilet break and or 'play lunch' causing shortened or	Schools should plan to arrive 15min before their allocated session start time in order to use the toilets and permit children to have a quick break. With multiple school and public tours every day, lost time cannot

			<p>abandoned program</p> <p>Trip and fall. Mixing with the general public on site</p> <p>Motor vehicle accident. Narrow access to gravel car park. Limited parking with contractor and museum cars.</p> <p>Trip and fall. Occasional maintenance work on site.</p> <p>Accessibility</p> <p>Crush injury</p> <p>Stranger danger</p>	<p>normally be regained for late schools. We recommend teachers carry a mobile phone to advise staff in the event of traffic congestion or other delays. If delayed, please contact: Sydney Observatory on 9921 3485 or 0412 748 033 Geoff WYATT Education Program Producer.</p> <p>Teachers / Carers should ensure that Learners do not run at any stage within the Observatory and its grounds.</p> <p>On-site parking for 20 seat minibuses and vehicles with accessible permits can be arranged only with advance notice. Contract services and emergency service vehicles have priority.</p> <p>Keep out of fenced-off areas. Stay with allocated group. Follow staff instructions.</p> <p>Wheelchair access is only to the ground floor of the main building with no-step entry via the group entrance at the rear of the building. The East dome is accessible as is the fort wall. An accessible toilet is available behind the main Observatory building.</p> <p>Group entry / exit from the Observatory of 20 learners at a time is via the REAR door. Proceed up the path through the green lattice gate if entering via the main southern gates. The schools entrance is opposite to the separate toilet block at the rear of the main building. Bag storage for small bags is inside Observatory after entry and/or in moveable cages.</p> <p>All learners are encouraged to wear a name badge to promote dialogue with Observatory staff. This contributes to the creation of a lively and participatory learning environment.</p>
Breaking into supervised groups of 20 learners with ONE adult	ES1 to Stage 6	Teachers / Carers	Unaccompanied children	Most rooms in Sydney Observatory have a capacity of 20 learners plus staff. Groups of 60 will need to be split

				into three smaller groups. Groups of 40 will be split into two groups and 20 or less will remain as one.
Checking in	ES1 to Stage 6	Teachers / Carers	Lost Learners	At least <b>ONE teacher / Carer</b> and ONE MAAS staff member must remain with each group of 20 learners at all times. Teachers must ensure attendance rolls are kept and checked at the beginning and end of the program.
Cloaking	ES1 to Stage 6	Teachers / Carers	Lost or stolen property  Trips and falls near the group entry/exit	Large bags and valuables should not be brought to the Observatory. Make sure the group brings only lunches or small bags as cloaking facilities are limited. Other items including hats should be stored in bags to avoid lost property.  Any items found will be placed with Museum Security.  Unattended bags will be moved from exits and passageways.
Briefing and Acknowledgment of Country	ES1 to Stage 6	Trained staff  Teachers / Carers  Site First-aid Officer	Trips and falls on pavement  Stranger danger  Emergencies  Unruly behaviour  First aid events	On arrival, the group will be introduced to the Observatory team and reminded of the safety rules relating to the areas of the museum the group will visit. Respect for the traditional owners and custodians will be shared and encouraged via an <i>Acknowledgement of Country</i> .  Staff will wear a name badge. Evacuation procedures explained.  Teachers need to maintain direct supervision of their learners at all times during the visit.  First aid officers and locations are identified to the group. <b>Anyone injured while on site should, where possible, be taken to the first-aid officer for treatment and to record the incident.</b>
Space theatre	ES1 to Stage 6	Trained staff and teachers / carers	Trips and falls in the darkened Theatre  Electric shock, burns from touching electrical equipment	Learners are ushered into seats for an interactive computer presentation. The theatre complies with the requirements of the Building Code of Australia.  Teachers must ensure that no student touches any power points, electrical wires, or power boards, nor approaches the screen. All power outlets are protected by circuit breakers.

			Evacuation	Staff will indicate positions of exits.
			Motion sickness	Staff will advise how to react to motion sickness as a result of video movement.
The planetarium	ES1 to Stage 6	Trained staff and teachers / carers	Trips and falls in the Planetarium	The planetarium consists of a simulated night sky projected onto the interior of a large umbrella-like structure in a darkened room. Children, teachers and Observatory staff sit on a curved lounge during the program. It is essential that everyone remain seated during the program and follow instructions upon entering and leaving the room.
			Lost property	Check lounge before exit for lost property.
			Bumping into the projector box and suspended dome	Always ensure that Learners walk around the projector box and duck under the suspended dome as instructed.
<i>By the Light of the Southern Skies, Cadi Eora Birrung and Observing the Weather</i> exhibitions	ES1 to Stage 6	Trained staff and teachers / carers	Bumping into objects around the museum	<i>By the Light of the Southern Skies</i> and <i>Observing the Weather</i> exhibitions. Learners are instructed by staff to walk through the exhibition on the ground and first floors.
			Lost or unaccounted Learners	Learners are advised not to leave their group unless accompanied by a supervising adult.
			Learners mixing with public visitors	The exhibition is open to the general public at the same time and children need to be aware of "stranger danger". On-site Duty Officers and Security Officers regularly patrol the building and grounds.
			Electrocution from powered exhibits	Power points should not be touched. Child proof plugs are inserted into unused power points. Faulty equipment will be switched off and labelled. Repairs are prioritised. All powered objects are 'tag and tested'
<i>Accessing the Sky</i> exhibition	ES1 to Stage 6	Trained staff and teachers / carers	Climbing railing to astrographic telescope	This is an unattended open building which has video and PIR alarms to the Observatory reception desk monitored by the Duty Officer. General induction to advise of expected and safe behaviours while in the building.
			Bumping into objects around the museum	<i>Accessing the Sky</i> exhibition. Learners are instructed by staff to walk through the exhibition.

			<p>Lost or unaccounted learners</p> <p>Learners mixing with public visitors</p> <p>Electrocution from powered exhibits</p>	<p>Learners are advised not to leave their group unless accompanied by a supervising adult.</p> <p>The exhibition is open to the general public at the same time and children need to be aware of "stranger danger". On-site Duty Officers and Security Officers regularly patrol the building and grounds.</p> <p>Power points should not be touched. Child proof plugs are inserted into unused power points. Faulty equipment will be switched off and labelled. Repairs are prioritised. All powered objects are 'tag and tested'</p>
North and South dome telescopes	ES1 to Stage 6	Trained staff	<p>Eye damage by looking directly at the unfiltered Sun</p> <p>Fingers, hair, or clothing may be caught in the rotating dome mechanism</p> <p>Fall from open dome Trip and falls climbing and descending the stairs to the domes</p> <p>Child protection</p> <p>Staff falls</p>	<p>Some of the Observatory's telescopes are capable of looking at the Sun in complete safety, but it is essential that children and adults are made aware, prior to the visit, of the dangers of looking directly at the Sun without the correct solar filters. Safety protocols are in place and clearly communicated to visitors.</p> <p>Heavily greased chains are in both domes and should not be touched by anyone under any circumstances. Both domes have a metal barrier to prevent chain access. Learners must be told to NOT reach behind the barriers. Several warning signs instructing everyone to keep clear have been attached to the barriers. All staff are vigilant about policing proximity to the dome mechanisms.</p> <p>Access through the dome openings is too high for primary age children. Instructions by staff will alert visitors to the danger of exiting via the dome opening. The stairs inside the Observatory are steeply raked and Learners should keep to the left where possible and remain in "single file". No one should sit or remain standing on the stairs.</p> <p>Children are not permitted to ascend or descend the stairs within the immediate vicinity of a supervising adult. Staff will issue safety instructions before ascent and descent.</p> <p>Entry to the domes is as follows. Staff first, and adult second and children last. Leaving the domes the order is children first, They will be instructed to wait at the base</p>

				<p>of the stairs within approximately 4m of the adults and staff, adults second last and the staff last.</p> <p>Staff must ascend and descend the stairs alone. No other person is to be on the stairs at the same time as staff.</p> <p>Domes are limited to 21 children, one adult/teacher and one staff member for a total of 23 people.</p>
			Overcrowding	
East dome accessible telescope	ES1 to Stage 6	<p>Trained staff and teachers / carers</p> <p>Trained staff</p> <p>Trained staff and teachers / carers</p> <p>Trained staff</p>	<p>Same issues with other domes listed above</p> <p>Wheelchair lift: crush injury</p> <p>Overcrowding near stairs, falls.</p> <p>Fingers, hair and clothes caught is dome mechanism</p> <p>Pendulum effect of Articulated Relay Eyepiece (ARE)</p>	<p>Same control measures as listed for other domes listed above.</p> <p>Wheelchair lift is certified and maintained as directed. Only staff to operate. Roll-up screen to be in good working order to prevent access under the lift.</p> <p>Wheelchair limits as determined by BCA to be observed. Staff and visitors must not stand near the top of the stairs.</p> <p>Induction before entering dome.</p> <p>Nothing is to be permitted access behind the dome lip. Demonstration of emergency dome shutdown switch.</p> <p>The ARE must only be handled by trained staff and the person at the telescope. Padding has been placed around the ARE. It must not be permitted to swing freely.</p>
Accessible outdoor telescope	ES1 to Stage 6	Trained staff and teachers / carers	<p>Eye damage by looking directly at the unfiltered Sun</p> <p>Fingers, hair, or clothing may be caught in the</p>	<p>This telescope can be set up, with prior arrangement, to permit access to a telescope in the Observatory grounds. This telescope is capable of looking at the Sun in complete safety, but it is essential that children and adults are made aware, prior to the visit, of the dangers of looking directly at the Sun without the correct solar filters. Safety protocols are in place and clearly communicated to visitors. The telescope is covered and signed when unattended. Video surveillance is also in place of the general area.</p> <p>Instructions by staff will alert visitors to the risks of the mount. No one should use the mount except staff.</p>

			<p>cantilever mounting mechanism</p> <p>Learners mixing with public visitors</p>	<p>Teachers and carers must assist in monitoring student usage.</p> <p>The accessible telescope is located in the grounds which are open to the general public at the same time. Children need to be aware of “stranger danger”. On-site Duty Officers and Security Officers regularly patrol the building and grounds and the site is covered by surveillance video.</p>
Weather activities	ES1 to Stage 6	Trained staff and teachers / carers	<p>Exposure to weather: sunburn, rain, wind, cold</p> <p>Fall from balcony</p> <p>Trip and fall</p> <p>Physical injury through incorrect usage</p> <p>Learners mixing with public visitors</p>	<p>Each student will conduct meteorological exercises with Observatory equipment. These measurements are conducted outside regardless of the weather to a point deemed safe by Observatory staff in consultation with the teacher / carer. Sun protection and raincoats may be required.</p> <p>In the event of extreme weather conditions this component can be moved into the marquee.</p> <p>The railings around the balcony comply with the current building and safety codes of Australia. Learners are to be instructed not to lean over the railing</p> <p>Learners will walk around the site to locate areas appropriate to the instruments. These include direct sunlit, shady and windy locations. Care walking with instruments must be exercised. Detailed instructions prior to the visit and onsite will be delivered. Shoelaces must be tied.</p> <p>Glass instruments such as thermometers are enclosed in plastic housings for protection. Whirling hygrometers must be used with care and held above head height.</p> <p>The site is always open to the public. Learners are advised NOT to leave their allocated group unless with a teacher.</p>
PowerPoint presentation and temperature/ pressure readings in Discovery room and Shade house on the front lawn	ES1 to Stage 6		<p>One key entry /exit point</p> <p>Trip and fall.</p> <p>Learners mixing with</p>	<p>For one portion of the tour the group will descend to the Discovery Room basement. It has one regular entry / exit point via stairs however in the event of an emergency, exit can be made via a window and access grating.</p>

			public visitors	Learners will leave the Discovery room to take the temperature in the nearby shade house. Learners must not leave their group unless supervised
Signal Station Indigenous planisphere workshop	ES1 to Stage 6	Trained staff and teachers / carers	Stick injury from split pins  Electrocution from powered exhibits/interactive whiteboard  Crush injury from white board  Fall from Fort Philip wall  Trip and fall in flag mast forecourt	Construction of the Indigenous planisphere involves the use of soft split pins. While unlikely to pierce the skin they could damage eyes if used incorrectly. Learners will be instructed and monitored while using the pins. Teachers and adults are expected to assist.  Power points should not be touched. Child proof plugs are inserted into unused power points. Faulty equipment will be switched off and labelled. Repairs are prioritised.  The white board is only for use by Observatory staff.  The railings around the top of Fort Phillip comply with the current building and safety codes of Australia. Learners are to be instructed not to lean over the railing. Entry to the flag mast forecourt is prohibited and prevented by a padlocked gate.
Marquee/Outside Performance Space	ES1 to Stage 6	Trained staff and teachers / carers	Trips and falls  Electrocution	The marquee is kept clean and dry. Unnecessary items cannot be left in the marquee.  A three phase power board is kept in the marquee. It is enclosed within an approved safety housing to prevent tampering.
Leaving the site	ES1 to Stage 6	Trained staff and teachers / carers	Lost Property  Lost or unaccounted Learners	Report any lost property to staff at the reception desk or Museum of Applied Arts and Sciences Security / Contactors.  Keep Learners together and under direct supervision at all times. Teachers should conduct a head count before leaving the site and inform Observatory staff if any student is missing.

### Equipment

List any equipment, including personal protective equipment, to be provided for use during the activities/programs.

Exhibition interactives	1874 Hugo Schroeder telescope
DFM 400mm Ritchey Chretien telescope	Wheelchair lift to East dome
DFM Articulated Relay eyepiece (ARE) in the East dome	DFM 400mm Ritchey Chretien telescope



North, South and East domes	Meade LX200 Schmidt-Cassegrain 400mm (16inch) telescope with Mathis Instruments 500/750
1874 Hugo Schroeder telescope	Water powered rockets and launchers
William Optics telescope with Coronado Hydrogen alpha solar filter	Digitarium Zeta planetarium
Posca non-toxic paint pens	Magnifying glasses
Planispheres and split pins	Sun dial
VuVuVenus solar viewing telescope	Thermometers, anemometers, UV Index meters, whirling hygrometers, Campbell Stokes Solar recorder
Skywatcher telescope with neutral density solar filter	Accessible telescope with solar filter on a cantilevered mount  <i>Is all equipment at the venue maintained in accordance with the WHS Regulation, appropriate standards and codes of practice?</i> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

<b>Other requirements</b> <i>Where relevant, list other requirements such as clothing, footwear and sun screen that participants are required to bring. Indicate if any items are provided by the venue</i>	Shade Protection. A temporary shade marquee is available and will be opened in conditions of extreme heat, cold, or rain. Areas are also available suitable for luncheon or short breaks.
	Student bags are to be kept in an unsecured cloaking room. Teacher / carer bags may be taken into the building along with a First Aid kit if desired.
	No food or drink may be taken beyond the cloaking room.

**Supervision/services**

*List services provided by venue including briefings, guided tours, supervision of activities etc*

On arrival, the group will be reminded of the safety rules, introduced to the areas of the Observatory the group will visit. Teachers need to maintain direct supervision of their Learners at all times during the visit.

Sydney Observatory staff are responsible for the following duties.

Upon school group arrival

Site induction for all adults accompanying Learners.

- a. Evacuation procedures
- b. First aid procedures
- c. Cloaking
- d. Toilets
- e. Structure of the tour
- f. Introduction of staff to Learners

Conducting astronomical tours consisting of up to four main components:

1. The 3-D Space Theatre, where Learners are ushered into seats for movies &/or an interactive presentation.
2. The Sydney planetarium, which consists of a simulated night sky projected onto the interior of a large umbrella-like structure in a darkened room. Children, teachers, and Observatory staff sit on a curved segmented lounge during the program. It is essential that everyone remain seated during the program and follow instructions upon entering and leaving the room.
3. By the Light of the Southern Skies and/or Observing the Weather exhibitions. Learners are instructed by the Observatory staff to walk through the exhibitions on the ground and first floors. Learners are advised not to leave the building unless accompanied by a supervising adult. The exhibitions are open to the general public at the same time and children need to be aware of "stranger danger".
4. Telescope domes. Some of the telescopes are capable of looking at the Sun in complete safety but it is essential that children and adults are made aware, prior to the visit, of the dangers of looking directly at the Sun without the correct solar filters. Heavily greased chains behind safety barriers are also in both domes and should not be touched by anyone under any circumstances.

Supervision - teachers / carers need to maintain direct supervision at all times during their visit to the Observatory. Every adult accompanying the Learners is required to be in a supervisory role and must have adequate authority and experience (as determined by the school) to control the group alone for risk assessment purposes. Please ensure that teacher supervision is evenly spread throughout your group while at the Observatory.

**ONE adult supervisor from the school per 20 children is required.**

<b>Access</b>	<p>Are access to and egress from the premises safe and without risk to health? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Is the venue wheelchair accessible? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (East dome, ground floor of Sydney Observatory and accessible telescope)</p> <p>Are disabled toilets available? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<b>Emergencies</b>	<p>Are emergency procedures in place in the venue? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Are employees and others undertaking work (including volunteers) trained to deal with emergency situations? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>The museum has full evacuation procedures in case of emergency, threat, fire, and other natural disasters. All fire exits are clearly marked and all staff have received training in evacuation procedures. Please ensure that your group understands the importance of following such procedures in the event of an evacuation. The Museum will liaise closely with NSW state emergency services in the case of external threats such as bomb threat or terrorism and will respond accordingly to any directions given by the authorities.</p>
<b>Construction/ Maintenance/ Repair</b>	<p>Are licensed personnel used for all construction, maintenance and repair work? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<b>First Aid</b>	<p>Are first aid kits available for each activity? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Is there a trained first aid officer at the venue? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Is a first aid room available? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<b>Child-related employment</b>	<p>Are employees and others undertaking work (including volunteers) of your organisation engaged in child-related employment as defined by the Commission for Children and Young People Act 1998? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, which Approved Screening Agency in NSW has registered your organisation as a child-related employer for the purpose of employment screening?  <b>Employment Screening Unit. (NSW Government Education and Communities)</b></p> <p>If your organisation is registered with an Approved Screening Agency in NSW, Have all employees and others undertaking work (including volunteers) undergone employment screening? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Have all employees and others undertaking work (including volunteers) completed an Applicant Declaration and Consent form? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If unsure about the status of your organisation or these legislative requirements, contact should be made with the Employment Screening Unit of the NSW Department of Education and Communities on (02) 9836 9200.</p>

Please note that the information provided above was current as at the date above. It has been provided by the venue to assist employees in their risk management planning for excursions. If further information is required please directly contact the venue. If this information changes, the venue will advise the Department of Education and Communities and provide an update.