

Job Task Analysis

Department of Education

Science Technician

General Role Description	Working Hours
<ul style="list-style-type: none"> Science Technicians support high quality teaching and learning by providing technical and administrative assistance within the school's science department. They help ensure the safe, efficient operation of laboratories through the preparation and maintenance of equipment, materials and practical activities. Working independently within established guidelines, they assist the Head of Department, teachers and laboratory staff to maintain well organised, compliant and effective science learning environments. 	<ul style="list-style-type: none"> Standard 1.0 Full-Time Equivalent (FTE): 36.25 hours per week (7.25 hours/day, Monday – Friday) Employees are entitled to meal breaks and rest pauses in accordance with the provisions of their applicable industrial award or agreement. Ability to accrue and take Accumulated Days Off (ADO) and overtime in accordance with the provisions of the applicable industrial award or agreement. School operations are structured across 4 terms per year, with each term running for approximately 10 weeks. May vary between schools and operational demands.

Work Activities Summary (Refer to the task descriptions section for detailed information)

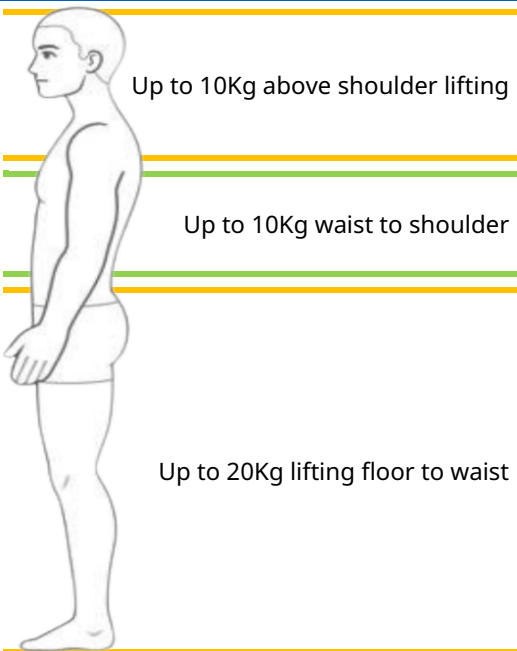
1	Administration tasks	Sedentary work
2	Preparation of practical activities (Practical setup)	Medium work
3	Support during practical sessions	Light work
4	Cleaning and resetting after practicals	Light work
5	Store-room and inventory management	Medium work
6	Excursions support	Medium work
7	Participate in lockdowns/fire evacuations (planned drills and unplanned occurrences)	Light work

Work Environment	Employees
<ul style="list-style-type: none"> School environment – stairs, ramps, slope, grass Laboratory/Office/indoor environment – Generally, climate-controlled (air conditioning/fans), with variation between classrooms Outdoor - (while mobilising through school) heat, humidity, UV exposure, wet, cold, weather conditions Noise – classroom noise, including low pitch ambient noise and high pitch from students Low level exposure to dust, aerosols (e.g., from coughing or sneezing), body fluids (e.g., sweat), standard cleaning products, hand sanitiser, and possible environmental contaminants (e.g., mould, aged building asbestos risks). May also involve routine handling of low to high risk chemicals and biological materials relevant to science practicals and demonstrations 	<ul style="list-style-type: none"> The number of Science Technicians employed at a school varies depending on the size of the science department and operational requirements Working hours may also differ based on available funding allocations
	Tools and Equipment
	<ul style="list-style-type: none"> Glassware, equipment, trays Storage boxes
	Manual Handling Devices
	<ul style="list-style-type: none"> Trolley Step ladder
	Personal Protective Equipment (PPE)
	<ul style="list-style-type: none"> Gloves Lab coat Safety glasses Face shield - Occasional Closed in shoes

FREQUENCY % OF SHIFT	Rare (R)	Occasional (O)	Frequent (F)	Constant (C)	Repetitive (Rep)
	0% – 5%	6% – 33%	34% – 66%	67% - 100%	Performed more than twice per minute for several minutes
TIME EXAMPLE	0 – 22 min	23 min – 2.4 hrs	2.5 – 4.8 hrs	4.9 – 7.25 hrs	

Physical Demands Summary

Weighted (Kg)	R	O	F	C	Rep	Comments
Waist to overhead		Up to 10				<ul style="list-style-type: none"> Resources/chemicals/stock <5kg.
Waist to shoulder		Up to 10				<ul style="list-style-type: none"> Resources/equipment/boxes/stock <10kg.
Floor to waist			Up to 20			<ul style="list-style-type: none"> Practical equipment/stock <20kg.
Carrying – unilateral/bilateral			Up to 15			
Push/Pull (Kg-force)		Up to 10				<ul style="list-style-type: none"> Trolleys with practical equipment or stock <20Kg.



General and Trunk	R	O	F	C	Rep	Comments
Sit		✓				Administrative tasks, data entry, or planning periods
Stand			✓			Preparing pracs, working at benches, supervising practical sessions, and performing clean-up tasks
Walk – even and uneven surfaces			✓			Regular movement between classrooms, labs, prep rooms, and storerooms
Kneel/squat		✓				To reach lower shelves, accessing storage
Bend forwards/stoop			✓			Lifting equipment, handling chemicals, reaching into cupboards
Bend backwards	✓					
Trunk twist/side bend		✓				Reaching for materials, turning between benches
Neck flexion – look down			✓			Preparing materials, measuring chemicals, inspecting equipment
Neck extension – look up		✓				Retrieving items from high shelves
Neck rotation		✓			✓	Scanning the workspace, monitoring students during pracs
Upper Limb	R	O	F	C	Rep	Comments
Forward reach			✓			Handling equipment, preparing practicals
Side reach		✓				Accessing items placed beside the work area or during storage tasks
Overhead reach		✓				Retrieving or storing items on upper shelves or overhead cupboards
Wrist movement			✓		✓	Required during precise tasks such as measuring chemicals, using tools
Finger/thumb manipulation			✓		✓	Used extensively when handling small equipment, opening containers
Grip/grasp			✓		✓	Handling of glassware, equipment, trays, storage boxes

Other	R	O	F	C	Rep	Comments
Climb - steps/stairs/ ladder		✓				Occasional ladder use for high storage areas. Stairs throughout schools
Balance		✓				Negotiating busy environment
Vibration – whole body or upper limb	✓					
Voice projection	✓					Voice projection rarely required

Psychosocial Demands Summary		
High job demands	Frequent	Workload can increase during peak practical periods with quick turnaround between classes
Emotional demands	Occasional	Occasionally required to manage minor interpersonal challenges, respond calmly to staff needs, or adjust to unexpected timetable or practical changes
Low job demands	Rare	
Low job control	Frequent	Daily tasks and pacing are largely driven by class schedules, teacher requests and curriculum timelines
Low support	Rare	Supervisor or colleagues may not always be immediately available due to teaching responsibilities, though support is generally accessible when needed
Remote or isolated work	Rare	
Traumatic events, including vicarious trauma	Rare	
Violence/aggression – student behaviour	Occasional	Could range from disruption, non-compliance to verbal and physical intimidation or aggression
Violence/aggression – parent interactions	Rare	
Poor role clarity	Rare	Role expectations are generally well-defined through departmental procedures and direction from the Head of Department
Communication/team work/interaction with colleagues	Constant	Continuous communication with teachers, laboratory staff and the Head of Department is required to coordinate practical activities

Cognitive Demands Summary		
Attention	Constant	Requires sustained attention while preparing chemicals, measuring materials, following safety procedures
Memory	Frequent	Regularly needed to recall procedures, storage locations, safety protocols, equipment requirements
Concentration	Constant	Maintaining focus during detailed preparation tasks, handling hazardous substances, and managing multiple practical setups
Vision	Constant	Constant use of near and far visual acuity to read labels, measure volumes, monitor equipment
Hearing	Frequent	Required to hear instructions, alarms, timers, and communication
Decision making	Occasional	Occasional need to problem-solve equipment issues, adjust practical setups, or make safe judgments regarding chemical handling or resource allocation
Situational awareness	Frequent	Required to be continually aware of laboratory hazards, chemical safety, movement of students and staff, and the general conditions of the workspace

This job task analysis is also available online. The QR code provides direct access to the full document and the associated work capabilities checklist.



Work Activities - Task description details

Task 1 - Administration tasks

Total time/shift: Variable - up to 1 hour

Task duration: Up to 1 hour

Physical demand level – Sedentary work

Task description details	Key physical demands (frequency related to task)
<ul style="list-style-type: none">• Checking and responding to emails from teachers, the Head of Department, and other school staff.• Updating schedules and planning daily or weekly preparation tasks in alignment with class timetables.• Printing, photocopying, and organising worksheets or practical instruction sheets for teachers.• Completing basic administrative documentation such as stock lists, equipment booking sheets or maintenance records.• Entering information into spreadsheets, databases or school management systems as required.• Filing documents and maintaining orderly administrative records within the science department.• Communicating general information to staff regarding equipment availability, upcoming practicals, or resource changes.	<ul style="list-style-type: none">• Sitting (F)• Forward reach (O)• Finger/thumb manipulation (C)• Wrist movement (F)• Neck flexion – looking down (F)

Task 2 - Preparation of practical activities (Practical setup)

Total time/shift: Up to 3 hours

Task duration: Variable - up to 2 hours

Physical demand level – Medium work

Task description details	Key physical demands (frequency related to task)
<ul style="list-style-type: none">• Preparing equipment, glassware, chemicals, and materials required for upcoming science practicals across multiple year levels and subjects.• Measuring and mixing solutions, dilutions, reagents, or samples following safety guidelines and curriculum requirements.• Setting up demonstration stations, student practical trays, experiment kits, microscopes, and classroom equipment.• Transporting materials between prep rooms, laboratories, and classrooms using trays or trolleys.• Checking and calibrating equipment.• Ensuring all materials align with teacher instructions and safety data sheets (SDS) and preparing any necessary safety equipment (e.g., PPE, spill kits).• Ensuring risk assessment is signed by teacher.• Labelling and organising prepared materials for efficient distribution and smooth lesson delivery	<ul style="list-style-type: none">• Sitting (O)• Standing (F)• Walking (F)• Sustained forward and side reach (F)• Gripping (C)• Finger/thumb manipulation (F)• Wrist movement (F)• Bending/stooping (O)

Task 3 – Support during practical sessions

Total time/shift: Variable - up to 2 hours

Task duration: Variable - up to 1 hour

Physical demand level – Light work

Task description details	Key physical demands (frequency related to task)
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<ul style="list-style-type: none"> • Providing in-class support to teachers during practical lessons, including clarifying instructions, assisting with equipment setup, and ensuring safe operation of materials. • Responding to teachers who enter the prep room seeking assistance, advice, or additional resources during lessons. • Fielding teacher requests and queries related to equipment issues, missing materials, troubleshooting experiments, or safety concerns. • Supervising practical activities to ensure safe student behaviour, appropriate equipment use, and adherence to laboratory protocols. • Offering hands-on assistance during practical activities, such as helping operate specialised equipment, demonstrating techniques, or addressing equipment malfunctions. • Monitoring resource usage during the session and replenishing items as required. • Communicating any issues, equipment shortages, or safety concerns to teaching staff promptly. 	<ul style="list-style-type: none"> • Sitting (O) • Standing (F) • Walking (O) • Forward reach (F) • Side reach (O) • Gripping (F) • Finger/thumb manipulation (F) • Visual focus (C) • Neck rotation (O)
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Task 4 – Cleaning and resetting after practicals

Total time/shift: Up to 2 hours
Task duration: Up to 1 hour

Physical demand level – Light work

Task description details	Key physical demands (frequency related to task)
<ul style="list-style-type: none"> • Cleaning glassware, equipment, benches, and sinks following practical sessions, ensuring items are washed, dried and stored appropriately. • Safely disposing of chemical waste, biological materials and other consumables in accordance with school procedures and safety guidelines. • Resetting laboratory spaces, including reorganising benches, returning equipment to storage, replacing consumables and preparing the room for the next class. • Inspecting equipment for damage or malfunction and reporting issues to teaching staff or the Head of Department. • Managing spills, breakages or contamination incidents using appropriate PPE and clean-up procedures. • Transporting dirty or used equipment from classrooms back to prep areas and returning cleaned items to their designated storage locations. • Restocking practical trays, chemical bottles, and frequently used materials to maintain readiness for future sessions. 	<ul style="list-style-type: none"> • Standing (F) • Walking (F) • Forward reach (F) • Side reach (O) • Bending/stooping (O) • Kneeling/squatting (O) • Gripping (F) • Finger/thumb manipulation (F) • Wrist movement (F)

Task 5 – Store-room and inventory management

Total time/shift: Variable - up to 2 hours
Task duration: Up to 1 hour

Physical demand level – Medium work

Task description details	Key physical demands (frequency related to task)
<ul style="list-style-type: none"> • Monitoring stock levels of chemicals, consumables, glassware, equipment and general laboratory supplies to ensure availability for upcoming practicals. • Receiving deliveries, checking quantities against orders, and safely unpacking and storing items according to chemical safety and departmental guidelines. • Organising storerooms by maintaining labelled shelves, rotating stock, and ensuring materials are stored in the correct hazard categories. • Updating inventory records, stock registers and chemical manifests in accordance with school procedures and legislative requirements. 	<ul style="list-style-type: none"> • Standing (F) • Walking (F) • Forward reach (F) • Side reach (O) • Overhead reach (O) • Bending/stooping (O) • Kneeling/squatting (O) • Gripping (C) • Finger/thumb manipulation (F) • Wrist movement (F)

<ul style="list-style-type: none"> Identifying low-stock items, damaged equipment or expired chemicals and notifying the Head of Department or initiating reordering processes. Transporting items between storerooms, prep rooms and laboratories using trays, boxes, or trolleys. Ensuring safe storage conditions by monitoring ventilation, temperature, segregation requirements and general cleanliness of storerooms. 	<ul style="list-style-type: none"> Lifting/carrying (O)
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Task 6 – Excursions support

Total time/shift: Variable
Task duration: Up to full day

Physical demand level – Medium work

Task description details	Key physical demands (frequency related to task)
<ul style="list-style-type: none"> Assisting teachers in preparing materials, equipment and resources needed for science-related excursions, field studies or off-site activities. Helping load, transport and unload equipment, supplies or field kits required for practical activities conducted outside the school environment. Providing on-site support during excursions, helping set up field stations, demonstrations, data-collection tools or portable equipment. Supervising student groups in collaboration with teaching staff to ensure safe participation and adherence to activity guidelines. Monitoring the use of equipment during the excursion and addressing any issues or adjustments needed throughout the activity. Packing up at the end of the excursion, cleaning or organising equipment, and returning items to school storage areas. Reporting any damaged, missing or malfunctioning items after the excursion 	<ul style="list-style-type: none"> Standing (F) Walking (F) Forward reach (F) Side reach (O) Bending/stooping (O) Kneeling/squatting (O) Gripping (F) Finger/thumb manipulation (F) Lifting/carrying (O) Wrist movement (F)

Task 7 – Participate in lockdowns/fire evacuations (planned drills and unplanned occurrences)

Total time/shift: One per term total planned – can be additional unplanned in response to emergent situations
Task duration: 30 to 60 minutes, variable when unplanned

Physical demand level – Light work

Task description details	Key physical demands (frequency related to task)
<ul style="list-style-type: none"> Participate in both planned and unplanned evacuation drills in accordance with site emergency procedures Communicate and follow directions from fire wardens and emergency services personnel as required 	<ul style="list-style-type: none"> Standing (F) Walking (F) Kneeling, crouching, forward bending (O) Neck rotation and movement (F) Stairs (F)

Appendix

- U.S Department of Labour (1991) Dictionary of Occupational Titles, Fourth Edition Appendix C, Components of the definition trailer, section IV. Physical Demands – Strength Rating / O*NET online
- Hazardous Manual Task Code of Practice, Safe Work Australia 2018
- Model Code of Practice: Managing psychosocial hazards at work, SWA 2022

PHYSICAL DEMANDS	Definition: Strength rating represents the strength requirements which are considered to be important for average, successful work performance
Sedentary work	<i>Manual handling <4.5kg of force occasionally and/or <1kg frequently. Sedentary work involves sitting most of the time but may involve walking or standing briefly occasionally.</i>

Light work	Manual handling <9kg of force occasionally, and/or <4.5kg frequently, and/or <1kg constantly to move objects. A job should be rated Light Work: (1) walking or standing to a significant degree; or (2) sitting most of the time but entails using arm or leg controls; and/or (3) constant pushing and/or pulling of materials
Medium work	Manual handling 9-22kg of force occasionally, and/or 4.5-9kg frequently, and/or <4.5kg constantly to move objects.
Heavy work	Manual handling 22-44kg of force occasionally, and/or 9-22kg of force frequently, and/or 4.5-9kg constantly to move objects.
Very heavy work	Exerting >44kg of force occasionally, and/or >22kg of force frequently, and/or >9kg of force constantly to move objects.

FREQUENCY CLASSIFICATIONS	Rare (R)	Occasional (O)	Frequent (F)	Constant (C)	Definitions: Sustained > 30 secs at a time Long duration > 30 mins at a time Repetition > 2 per minute Static - body area remains in stationary, fixed position Exposure - time spent completing task over whole shift Intermittent - when there is a repeated physical demand but with significant intervals between cycles.
% time	1 - 5	6 - 33	34 - 66	67 - 100	
Reps per day	1	2 - 100	101 - 500	500+	
Reps per hour		0 - 12	12 - 63	>63	
Reps per minute		1 every 5 - 15	1 every 1 - 5	1 or more	

This Job Task Analysis (JTA) was co-designed and developed by AXIS Rehabilitation in partnership with the Department of Education. This collaboration ensures the JTA is evidence-based, practical and aligned with workplace and organisational requirements, supporting informed decision-making in workplace rehabilitation, employment and safe work practices.

The JTA is a tool to be used in workplace rehabilitation and does not capture every intricate duty or responsibility for each individual role within the department. Rather, it is intended to provide medical practitioners and providers with a clearer understanding of the role and its expectations in greater detail.