Mathematics sample unit: Life Skills | **Out and about in the community** | **Stage 5**

Scope and sequence summary	Duration: 10 weeks
(specific subject requirements to appear on scope and sequence)	

Strands: Number and Algebra, Measurement and Geometry, Statistics and Probability **Substrands:** Money, Time, Position, Data Links to additional key learning areas: **English:** Objectives A, C and E **PDHPE:** Self and Relationships, Lifelong Physical Activity **History:** The Modern World and Australia: The Globalising World – Popular culture	When undertaking this unit, it is important to take into account the individual communication strategies used by students. Students' responses may be communicated through: • gestures and/or facial expressions • the use of visual aids or symbols, such as a communication board • assistive or augmentative technology • varying degrees of verbal or written expression. The activities presented may need to be adapted to allow students to respond using their individual communication strategies.

Unit overview	Unit context
In this unit, students learn about planning and managing their personal leisure time. They explore their preferred leisure activities and the range of activities available to them. Through modelling and guided practice, students undertake activities to select, plan and engage in a community-based leisure activity. Opportunity is also provided for students to use their knowledge, skills and understanding to plan and engage in a class community-based activity. Finally, students engage in independent practice by planning and undertaking a community-based activity in their own leisure time, then present their experience to the class.	This program focuses on students' development and consolidation of mathematics concepts and skills within a real-life context. It provides opportunities for outcomes and content from additional key learning areas to be integrated into the teaching and learning activities included. **Note:** Teachers should consult their school's excursion policy and guidelines, including work health and safety and risk management regulations, before planning a class community-based activity. Students' individual plans, particularly behaviour management plans, will also need to be carefully considered.

Outcomes	Assessment overview
Mathematics MALS-12NA recognises and matches coins and notes MALS-15NA calculates with money MALS-20MG recognises time in familiar contexts MALS-22MG reads and interprets time in a variety of situations MALS-23MG calculates and measures time and duration in everyday contexts MALS-24MG organises personal time and manages scheduled activities MALS-32MG responds to and uses the language of position in everyday contexts MALS-34MG uses maps and plans in a range of contexts MALS-36SP gathers, organises and displays data MALS-37SP interprets information and draws conclusions from data displays Links to additional outcomes: **English** ENLS-2A communicates for a variety of purposes, audiences and contexts ENLS-3A selects and uses language to communicate according to purpose, audience and context ENLS-5A recognises and uses visual texts, media and multimedia for a variety of purposes, audiences and contexts ENLS-7A uses strategies to obtain meaning from and interpret a range of texts ENLS-13C engages critically with texts using personal experiences ENLS-17E uses individual and collaborative skills in the learning process **PDHPE** LS.5 uses appropriate behaviours in social situations LS.7 uses appropriate strategies to initiate and manage relationships LS.18 recognises components of a balanced lifestyle **History** HTLS-4 explores the features of a particular society or time Mathematics syllabus content is specified in the 'Content' column. Content from additional key learning areas has been included under the heading 'Links to additional content'.	Evidence of student learning could be gathered through: • contributions to class discussions and brainstorming about leisure and leisure activities • construction of data displays, such as frequency distribution tables and column graphs • use, exploration and construction of timetables • using calendars/planners to plan events • observation of role-play to assess communication/interaction skills • interpreting and using maps to locate places • goal setting • reading and using transport timetables • opportunities for students to demonstrate money skills, such as calculating amounts, estimating and calculating change, using ATMs. Opportunities also exist for project-based tasks and presentations: • completion of planning checklist/scaffold/template for class-based and individual community access experiences • photos and videos to demonstrate students' engagement • student presentation of individual community access experience.

Content	Teaching, learning and assessment	Resources
Links to additional content *History* *Popular culture in Australia* • recognise and participate in preferred leisure and recreation activities, eg entertainment, sport 👥	**Leisure activities** What activities do students like to do to relax and have fun? Construct a mindmap of the sorts of activities students engage in. This can be done through digital technology as a class, or individually. Responses could include: • indicating yes/no to a series of activities presented visually or verbally • using gesture to identify activities • selecting from a series of activities presented visually, or from a list of activities • verbal/written responses to teacher questioning. Introduce the term 'leisure' and explain that these activities are things we do in our leisure time.	Mindmap software, such as: • Inspiration • bubbl.us

• associate familiar activities with days and weeks
  ▸ identify activities that occur on weekdays, eg school and class timetables, after-school activities (Understanding) 👥
  ▸ identify activities that occur on the weekend, eg sport, outings (Understanding) 👥
  ▸ identify activities that occur on specific days and at specific times, eg gym group is on Wednesday evenings during school terms, the dance is held every second Saturday in the afternoon (Understanding) 👥
• sequence regular daily activities 👥
  ▸ use a pictorial, written or electronic diary or timetable to sequence activities (Communicating, Understanding, Fluency)
	Students recognise weekdays, weekends and school holidays. This may involve identifying or colour coding these days on a print or digital calendar.
	
	Students construct a timetable to show the activities they do in a typical week. This may involve:
	
	• placing activities (images or words) onto a timetable
	
	• filling in a pre-prepared timetable.
	
	(Teachers may need to prepare a timetable for some students.)
	
	Students identify the leisure activities from their timetable. This may involve:
	
	• indicating yes/no in response to teacher questioning
	
	• using gesture/facial expression to indicate particular activities
	
	• selecting from two or more visuals each day
	
	• circling or colour coding the leisure activities.
		Print or digital calendars
		
		Print or digital timetables
		
		Visual prompts for a range of leisure activities
		
		Variety of apps for creating visual schedules, such as:
		
		• First Then Visual Schedule
		
		• Pocket Picture Planner
		
		• Visules

• collect data about themselves and their environment 📖
  ▸ record collected data using a variety of means, eg concrete materials, symbols, words, tally marks (Communicating, Understanding)
• sort collected data into groups ⚙
• display data using tables, column graphs, line graphs and/or sector graphs (pie charts) ⚙
  ▸ use appropriate strategies, including the use of digital technologies, to display data (Communicating, Fluency, Understanding) 💻
	Make a list of the class's leisure activities and count up the number of students who engage in each activity, This can be done as a frequency distribution table by tallying the number of students. Students can then count up the tally for each activity to complete the table.
	
	Students explore a visual representation, such as a column graph, of the range of leisure activities the class has done during the week. The graph may be pre-prepared or constructed as a class or individually. Students may require assistance to construct the graph, such as:
	
	• predetermining groups for data, eg 0–10, 1–20, 21–30
	
	• providing a pre-prepared template or axes for students to construct
		Pre-prepared column graph
		
		Template for constructing a column graph
		
		Applications such as Excel and Geogebra (freeware) can be used to create graphs
		
		Labels for parts of the graph

Content	Teaching, learning and assessment	Resources
▸ follow conventions for displaying data, including equal spacing, same-sized symbols, key for symbols, headings, labels for axes (Communicating, Understanding, Fluency) 📖 • interpret information presented in tables and graphs to answer questions, eg 'The columns show that there are more boys than girls', 'Swimming is the most popular sport among students in our class' 📖 ⚙ **Links to additional content** *History* *Popular culture in Australia* • identify popular leisure and recreation activities in their family or school community 👥 🦘	the graph • providing labels for students to include in their graph, eg graph title, titles of axes. Students describe the graph by communicating the most popular and least popular activities. This may involve completing a cloze passage or using sentence starters, such as 'The most popular leisure activity in the class is _____'. Some students may be able to include the number of students who do the activities in their descriptions.	
• associate familiar activities with days and weeks ▸ identify activities that occur on specific days and at specific times, eg gym group is on Wednesday evenings during school terms, the dance is held every second Saturday in the afternoon (Understanding) 👥 **Links to additional content** *PDHPE* Students learn to: • recognise that a healthy lifestyle requires a balance of work, rest, sleep, physical activity, leisure and recreation • identify the benefits of a balanced lifestyle, eg physical, social and emotional health	Students consider activities that are appropriate at different times and in different contexts. This may involve: • matching visual representations of activities with particular times, eg school, weekend, holidays • matching visual representations of activities with particular contexts, eg home, school, community • completing a chart classifying a range of activities by time and context. Discuss with students the idea of having a variety of age-appropriate interests and the importance of this to maintaining a balanced lifestyle.	Print or digital calendars or timetables Visual prompts for a range of activities Classification chart Variety of apps for creating visual schedules, such as: • [First Then Visual Schedule](#) • [Pocket Picture Planner](#) • [Visules](#)
Links to additional content *History* *Popular culture in Australia* • recognise and participate in preferred leisure and recreation activities, eg entertainment, sport 👥 *English* *Respond to and compose texts* • contribute to class discussions using a range of skills, including turn-taking, questioning, rephrasing for clarification 👥	**Planning an activity** Explain to students that one aspect of a balanced lifestyle involves participating in community experiences, such as group/club/organisation activities, shopping, or going to the movies with friends and family. Identify activities from the class's list of leisure activities that are done outside the home. Responses could include: • indicating yes/no to teacher questioning • using gesture/facial expression to identify activities • verbal/written responses. Explore with students other examples of community experiences that they might like to do as part of their leisure time. A visual display of community experiences can be created.	

Content	Teaching, learning and assessment	Resources
Links to additional content ***English*** *Respond to and compose texts* • select and use appropriate means of communication, including technology, for a particular audience, eg use social media to communicate with friends, write a letter of thanks 🖥 • use digital communication responsibly 👥 ⚖	When we decide to participate in a community experience, we first need to do some planning. Explain to students that they are going to prepare a plan for going to the movies: • Who would we want to go to the movies with? How would we invite these people? Students compose a communication to their selected people. This may be a text message, email or phone call.	

• make choices and decisions about activities on the basis of time available, eg 'I can't make that movie because I have training at that time' 👥
 	
• prepare and follow a personal timetable/schedule 🎓 ⚙ 👥
   ▶ use electronic formats of calendars and planners (Fluency) 🎓 👥 🖥
   ▶ use a calendar to plan events and activities, eg camp, birthday party (Understanding, Fluency) 👥
 	
Links to additional content
 	
English
 	
Respond to and compose texts
 	
• use appropriate interaction skills across a range of contexts, eg group work 👥
 	
Engage personally with texts
 	
• justify a point of view, drawing on personal experience, eg 'I like that character because he's just like my friend' 👥
 	
PDHPE
 	
Students learn about:
 	
• maintaining relationships
 	
Students learn to:
 	
• demonstrate the skills to maintain relationships, eg empathy, conflict resolution, negotiation, expressing views and feelings appropriately and openly, accepting personal responsibility, responding to the needs, values and feelings of others
	How do we decide what movie we will see and when?
	
	Students explore favourite movies and types of movies they enjoy seeing, such as action, comedy, thriller. Provide students with a range of print or digital movie images or reviews for current movies.
	
	Students view the images or read the reviews (reviews may be read independently or as a class). Students indicate preferences for movies. Responses may include:
	
	• indicating yes/no to teacher questioning
	
	• using gesture or facial expression to indicate preference
	
	• completing a plus–minus–interesting table (this could be done for each movie, or one table for all movies)
	
	• verbal/written responses, including justifications for their preferences.
	
	Explore the concepts of negotiating, compromising and collaborating to decide on a movie and date. Students role-play situations where they are required to negotiate choice of movie and date with someone. Scaffolding sentence starters using appropriate language might assist some students, such as:
	
	• I would like to go on that date, but I can't because _____.
	
	• I would rather see _____.
	
	• Would you mind if we saw _____ instead?
	
	• Instead of that date/movie, _____.
	
	• We could see _____ on _____ and then go and see _____ on another day.
	
	Students use print or digital planners or calendars to identify free time and enter the activity. If using a digital planner or calendar, students may require some modelling followed by guided practice.
		Print or digital movie reviews (refer to brochures and websites for video rental stores, as well as sites such as *At the Movies with Margaret & David* and Rotten Tomatoes)
		
		Plus–minus–interesting table
		
		Sentence starter cards
		
		Print or digital planners or calendars

Content	Teaching, learning and assessment	Resources
Links to additional content *English* *Develop and apply contextual knowledge* • recognise how technology is used for different purposes and audiences in film, websites and other multimedia texts 💻 ⚙ *Understand and apply knowledge of language forms and features* • use text structures and organisers to locate specific information, eg title page, table of contents, menu tool bar, index, glossary, breadcrumb trail *Develop and apply contextual knowledge* • select and use language forms and features, such as intonation, tone and vocabulary, to communicate for a variety of purposes, eg making an apology, acting the part of a character in a play, requesting a refund 👥 • adjust communication to suit purpose and audience, eg select appropriate vocabulary and tone 👥	***How do we know where the movie is showing, when it is on, how much it costs, and how we buy tickets?*** Students use newspapers, the internet or cinema apps to research cinema locations, movie session times and costs. Students may need to use a map to identify the closest cinema, although some internet sites and apps will show closest cinemas when a postcode or suburb is entered. Explore the ways tickets can be purchased, such as online and at the ticket counter, and the best method for each student. Activities might include: • use of a smartboard to show how tickets can be purchased online • role-play of purchasing tickets at the ticket-counter – focus on courtesy and providing adequate information • revision of money skills and concepts, such as possible notes/coins that could be used to make payment.	Newspapers, cinema websites, cinema apps Digital or print map Notes/coins (real or simulated)

• use the language of position 💬
  ▸ give instructions relating to the language of position in a range of contexts, eg 'Stand behind the line to throw the ball', 'Walk towards the doorway', 'Turn left at the top of the stairs' (Communicating, Understanding) 💬 👥
 	
• use maps for a variety of purposes, eg a street directory, web-based maps, GPS technology 💻
  ▸ use a map to find a location (Problem Solving, Understanding)
 	
Links to additional content
 	
English
 	
Respond to and compose texts
 	
• select and use appropriate means of communication, including technology, for a particular audience, eg use social media to communicate with friends, write a letter of thanks 💻
 	
• use digital communication responsibly 👥 ⚖
 	
Understand and apply knowledge of language forms and features
 	
• adjust communication to suit purpose and audience, eg select appropriate vocabulary and tone 👥
	Where will we meet?
	
	Negotiating a meeting place – explore possibilities for a place to meet, eg entrance to cinema, cinema ticket-counter, nearby food court or café/restaurant, train or bus stop (real or simulated images can be used to represent each location; Google Earth or shopping centre maps may be useful resources). Students complete a T chart to identify the pros and cons of each location. What information would they give their friend about the meeting place? Students compose a text message or email, or role-play communicating with their friend.
		Google Earth
		
		Shopping centre maps/directories
		
		T chart:
		
		| Pros
			Cons

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Content	Teaching, learning and assessment	Resources
- measure and calculate the time taken for a variety of activities or events, eg use a stopwatch to time a race - use addition/subtraction strategies to calculate the duration of an activity or event (Fluency) - read and interpret a written timetable in a range of formats and a variety of contexts, eg in coordinating travel arrangements 🎓 - investigate and determine travel arrangements by using online transport timetables (Problem Solving, Fluency) 🎓💻👥 - use maps for a variety of purposes, eg a street directory, web-based maps, GPS technology 💻 - use a map to find a location (Problem Solving, Understanding) **Links to additional content** ***English*** *Respond to and compose texts* - contribute to class discussions using a range of skills, including turn-taking, questioning, rephrasing for clarification 👥 *Engage personally with texts* - identify personal learning strengths and needs 👥 - discuss the achievements and difficulties associated with a particular task 👥	***How do we get there, and when do we have to leave to get there on time?*** What do we mean by being 'late', 'on time' and 'early'? Explore why it is important to be on time or early for activities. As a class or individually, students identify reasons why they might be late to an activity. Responses may include: - indicating yes/no to teacher questioning - using gesture/facial expression to indicate a reason - selecting from visuals or word cards - verbal or written responses, drawing on personal experiences and providing examples. Explain to students that they need to plan a time to meet their friend at the meeting place. Encourage students to consider how far the meeting place is from the cinema, and what they have to do before going into the movie theatre, eg buy tickets, buy food, use the bathroom. Students estimate the time they would need to do these things and use the movie start time to calculate the best meeting time. How might they get to the cinema? Explore methods of transport: private versus public. Students identify which types of transport they are confident using independently. *(Note: This information can be used to develop independent travel goals for students.)* Explain to students that for this particular activity, they are going to plan to use public transport. Provide students with a range of print and/or digital public transport timetables. Provide guided practice of reading public transport timetables, eg if you catch a train at 4.30 pm, what time would you arrive? What time does the train that arrives at 5.45 pm depart from your station? Students use a map to locate the bus/train stops they would need to use to get to the cinema. They complete the following activities, using transport timetables and online trip planners or maps: - estimate the amount of time they would need to get from the bus/train stop near the cinema to their designated meeting place - thinking about the meeting time established, calculate the time they should arrive at the bus/train stop near the cinema - look up bus and/or train times and decide which bus/train they need to catch. This might involve calculating travel time and reading the timetable, or working backwards on the timetable by starting with the arrival time at the point of destination - estimate the amount of time they need to get from home to the	Print and digital public transport timetables Trip planner: www.131500.com.au/plan-your-trip

Content	Teaching, learning and assessment	Resources
	bus/train stop they need to use • thinking about the departure time of the bus/train they need to catch, calculate the time at which they should leave home • calculate the total time it would take to get from their home to the meeting place.	

• recognise and use appropriate coins to purchase items ✸
• recognise and use groups of coins to purchase items ✸
• recognise and use appropriate notes to purchase items ✸
  ▶ indicate the most appropriate note to purchase an item in a shop (Communicating, Understanding) 👫
• calculate amounts of money to purchase goods or services using mental strategies, written processes and/or calculator strategies 👫
• recognise the cost of goods or services, eg read price tags attached to clothing, identify the cost of items in a supermarket as indicated on the shelf, read a noticeboard at a theatre to determine the price of entry 📖👫
• calculate the amount of change due in relation to a transaction for goods or services, using mental strategies, written processes and/or calculator strategies
  ▶ calculate the change to be given when purchasing an item, eg calculate the change to be given when purchasing a $2.50 magazine with a $5 note and count the coins received in change (Problem Solving, Reasoning) ⚙👫
• estimate the amount of change due in relation to a transaction for goods or services ⚙👫
  ▶ estimate the amount of change due for a purchase and check using a calculator, eg the change due following a purchase of $3.50 if a $5 note is tendered (Problem Solving, Reasoning) ⚙👫
	How much will it cost? (How will I pay?)
	
	Students use the internet to research individual costs of return transport, movie tickets and food and use this information to calculate how much money they might need. Explore the importance of having extra or spare money.
	
	Students identify the coins and notes they might use to pay for one or more of the items they will need to buy. They practise estimating and/or calculating the change they would receive for purchasing items using specific coins or notes.
	
	Explore alternative methods of paying for items, rather than using cash, eg prepaid bus tickets, debit/credit cards. Some students may need to practise using ATMs and/or EFTPOS machines. This can be done using online simulations or visual images of the machines.
		Notes/coins
		(real or simulated)
		
		Online simulations of using ATMs:
		• www.gcflearnfree.org/everydaylife/atm
		• www.moneymatterstome.co.uk/interactive-workshops/atm.htm
		
		Banks also provide EFTPOS Quick Reference Guides for businesses, which contain an image of an EFTPOS machine

• read and interpret a written timetable in a range of formats and a variety of contexts, eg in coordinating travel arrangements 🎓
  ▶ investigate and determine travel arrangements by using online transport timetables (Problem Solving, Fluency) 🎓💻👫
• measure and calculate the time taken for a variety of activities or events, eg use a stopwatch to time a race
  ▶ use addition/subtraction strategies to calculate the duration of an activity or event (Fluency)
	How will I get home?
	
	Explore possible methods for getting home. Students consider things such as meeting place and time if being picked up, nearest suitable bus/train stop if travelling by public transport, how long the journey will take, and when they will arrive home.	

Content	Teaching, learning and assessment	Resources
Links to additional content *English* *Respond to and compose texts* • recognise the nature of the task • recognise the steps involved in achieving the task ✹	***Have I got everything?*** Students practise preparing written (print or digital) and mental checklists of things they will need for their activity: phone and/or watch, money, travel ticket, public transport times, movie location and time, appropriate contact numbers (home, parents, friends).	Reminder apps and tools on portable devices can be used to assist students with planning and preparations

• use maps and plans to locate position and follow routes
  ▸ locate a seat on a plan of a movie theatre (Understanding)
 	
Links to additional content
 	
English
Respond to and compose texts
• greet and farewell people in an appropriate manner in a variety of contexts, eg say goodbye to a friend, shake hands to welcome a visitor to the school 👥
• communicate with peers and adults in an appropriate manner, eg enter and leave conversations, maintain conversations, remain on topic 👥
• use recognised conventions when communicating in a range of contexts, eg use eye gaze/gesture to select an activity, put hand up in class to answer a question, use appropriate gesture to attract attention 👥
• use appropriate interaction skills across a range of contexts, eg group work 👥
 	
PDHPE
Students learn about:
• behaviour that is appropriate in a range of situations
Students learn to:
• demonstrate behaviours that are socially appropriate in a range of situations
  − use good manners, eg when eating, asking for assistance
  − greet familiar and unfamiliar people, eg shake hands rather than hug
  − follow protocols and procedures in a variety of relevant contexts, eg on public or private transport, at a theatre or cinema, in a queue to be served
	What do we do when we get there?
	Explore appropriate social behaviours:
	• greetings
	• cinema behaviour
	• communication with friends, the public and service personnel
	• buying food at the food court or snack bar.
	Students recognise a variety of interactions they could have during this activity, such as travelling on public transport, meeting their friend, buying or picking up tickets, purchasing food, finding the movie theatre, identifying their seats in the theatre using a seating plan.
	Explore what students might talk about with their friend before and after the movie. This may involve:
	• completing sentence starters or cloze passages
	• role-play
	• using animation software to simulate interactions.
		Seating plans can be found on cinema websites when purchasing tickets online
		
		Sentence starter cards
		Topic cards
		Animation software, such as [Xtranormal](#)

Content	Teaching, learning and assessment	Resources
Content points addressed previously in relation to planning and engaging in the activity will be covered.	**Class-based community access** Students participate in a class excursion/outing. This may be an informal local activity, such as going to the local pool or park, or a more formal activity, such as going to a theatre, museum or restaurant. Provide opportunities for students to practise the skills they have developed in this unit: • selecting the activity • selecting the date • planning meeting times and locations • planning travel arrangements • calculating costs • getting to and from the meeting place • engaging in appropriate social interactions while participating in the activity.	Checklist or scaffold/template to guide students through steps for planning and engaging in the activity
Content points addressed previously in relation to planning and engaging in the activity will be covered.	**Individual community access** Students select their own activity to plan and engage in as independent practice. Students carry out the same steps as above in relation to planning the activity. After the students have engaged in the activity, they prepare a presentation on their participation, outlining: • what they did • who they went with • how they got there • what they purchased and how much they spent • whether they enjoyed the activity • some of the difficulties and achievements they experienced, eg arriving on time, underestimating costs, interacting with their friend and service personnel. Photos and video footage may be used to support the presentation.	Checklist or scaffold/template to guide students through steps for planning and engaging in the activity Presentation tools, such as: • PowerPoint • Photo Story • Movie Maker • Animoto Cameras and video devices