

<b>Scope and sequence summary</b>	<b>Duration:</b> 2 weeks
<b>Mathematics substrand:</b> <a href="#">S1 MG Time 1</a> <b>Science and Technology substrand:</b> <a href="#">S1 Earth and Space</a> , <a href="#">S1 Information</a> <b>History substrand:</b> <a href="#">S1 Present and Past Family Life</a>	<b>Detail:</b> 11 activities, 3 of which are ongoing activities

Outcomes	Key considerations	Overview
<ul style="list-style-type: none"> <li>&gt; describes mathematical situations and methods using everyday and some mathematical language, actions, materials, diagrams and symbols MA1-1WM</li> <li>&gt; uses objects, diagrams and technology to explore mathematical problems MA1-2WM</li> <li>&gt; describes, compares and orders durations of events, and reads half- and quarter-hour time MA1-13MG</li> <li>&gt; describes some observable changes that occur in the sky and landscape ST1-8ES</li> <li>&gt; describes a range of familiar information sources and technologies and how their purposes influence their design ST1-15I</li> <li>&gt; communicates an understanding of change and continuity in family life using appropriate historical terms HT1-1</li> </ul>	<p><i>Mathematics key ideas</i></p> <ul style="list-style-type: none"> <li>• Name and order the months and seasons</li> <li>• Use a calendar to identify the date and determine the number of days in each month</li> </ul> <p><i>Mathematics language</i></p> <p>Students should be able to communicate using the following language: <b>calendar</b>, days, <b>date</b>, <b>month</b>, <b>year</b>, <b>seasons</b>.</p> <p><i>Mathematics background information</i></p> <p>In Aboriginal communities, calendars may vary in accordance with local seasonal and environmental changes, such as the flowering of plants and the migration patterns of animals, or according to significant events in the local community. Consult with local communities regarding specific local perspectives.</p> <p><i>History key inquiry question</i></p> <ul style="list-style-type: none"> <li>• How do we describe the sequence of time?</li> </ul> <p><i>History language</i></p> <p>Students should be able to communicate using the following language: yesterday, today, tomorrow, past, present, future.</p>	<p><i>This unit of work encompasses:</i></p> <ul style="list-style-type: none"> <li>• some of the content of <a href="#">Mathematics S1 MG Time 1</a> (black text)</li> <li>• some of the content of Science and Technology <a href="#">S1 Earth and Space</a> and <a href="#">S1 Information</a> (green background)</li> <li>• some of the content of History <a href="#">S1 Present and Past Family Life</a> (pink background)</li> </ul> <p><i>Links to learning across the curriculum</i></p> <p>This unit can facilitate the development of important <b>literacy</b> elements, such as questioning and listening skills. Students' understanding of the language of time can be extended as they engage in a variety of calendar-based learning experiences and as they anticipate and review important events.</p> <p>Students can develop their <b>intercultural understanding</b> by learning about and sharing their own culture and the cultures of others through the exploration of seasons, celebrations and calendars. They can learn about the importance of environmental observation in the calendars associated with <b>Aboriginal and Torres Strait Islander histories and cultures</b>.</p> <p>Students can develop their skills in <b>information and communication technologies</b> through using images sourced from the internet or digital cameras, creating books or posters, and communicating with others via video calls over the internet or via email.</p>

Content	Teaching, learning and assessment	Resources
<p>Use a calendar to identify the date and determine the number of days in each month (ACMMG041)</p> <ul style="list-style-type: none"> <li>identify a day and date using a conventional calendar  <ul style="list-style-type: none"> <li>identify personally or culturally significant days (Communicating)  </li> <li>identify the different uses of calendars in various communities (Communicating)   </li> </ul> </li> <li>identify days, holidays and events celebrated by students and their families and discuss cultural differences in the days celebrated   </li> </ul>	<p><b>Activity 1: Class Calendar (ongoing activity)</b></p> <p><i>At the beginning of the school year</i></p> <ul style="list-style-type: none"> <li>With teacher guidance, the class constructs a calendar for each month of the year using paper, cardboard or an interactive whiteboard. A variety of calendars (online or otherwise) could be used to show possible layouts, including calendars with Monday in the left-most column and those with Sunday in the left-most column. Teachers guide students to consider and determine the layout of their class calendar, including by asking: <ul style="list-style-type: none"> <li>How many months do we need for a whole year?</li> <li>How many months should we place on each page?</li> <li>Will we read the dates horizontally or vertically?</li> <li>How many columns will be needed for each month?</li> <li>What day of the week will the columns start with?</li> <li>Does each month start on a Monday? Why or why not?</li> <li>If the first day of February is a Sunday this year, does that mean that February starts on a Sunday every year? (This could easily be investigated using an online calendar.)</li> <li>How many days are required for each individual month?</li> <li>What labels do we need for our empty calendar and where should we put them? (Consider: year, month, days of the week, dates.)</li> </ul> </li> <li>Each student locates the date of his or her birthday on the calendar and marks it appropriately with his or her name or photograph. Teachers should be mindful of students whose cultural backgrounds preclude involvement in birthday celebrations and should make appropriate adjustments.</li> </ul> <p><i>At the beginning of each month</i></p> <ul style="list-style-type: none"> <li>Students share and identify dates on which important cultural events occur in that particular month and add these to the class calendar, including recognising: <ul style="list-style-type: none"> <li>cultural events that are held on fixed dates every year, eg Harmony Day (21 March), Anzac Day (25 April)</li> <li>cultural events whose dates are determined by the lunar calendar and consequently vary from year to year, eg Good Friday, Chinese New Year, Eid al-Fitr</li> <li>major school events, eg sports carnivals, fundraising events, grandparent days</li> </ul> </li> </ul>	<p><i>Resources</i></p> <ul style="list-style-type: none"> <li>A3 paper or cardboard, or access to an interactive whiteboard</li> <li>A variety of calendars with different layouts (a search in <a href="#">Google Images</a> for 'calendar' should yield sufficient images)</li> <li>Internet access to look up the dates of culturally significant days</li> <li>An online tool that allows the creation of customised calendars, eg <a href="http://www.timeanddate.com/calendar/basic.html">www.timeanddate.com/calendar/basic.html</a></li> <li>An online simplified interactive calendar, eg <a href="http://www.starfall.com/n/holiday/calendar/play.htm?f">www.starfall.com/n/holiday/calendar/play.htm?f</a></li> </ul> <p><i>Variations/Extensions</i></p> <ul style="list-style-type: none"> <li>Students explore the origin of the words 'January', 'February', etc.</li> <li>Some students may be interested in investigating how the word stems sept-, oct-, nov- and dec- (which usually refer to 7, 8, 9 and 10 respectively) came to form the first parts of the names of the 9th, 10th, 11th and 12th months.</li> </ul>

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	<ul style="list-style-type: none"> <li>– events particular to their class or year group, eg excursions, guest visits.</li> </ul> <p>Note: Culturally significant events should not be limited to those observed by the students of a particular class. They should also include a selection of culturally significant events observed by other students and communities.</p> <ul style="list-style-type: none"> <li>• On or near the date of the particular event, invite students to share information about days that have cultural significance for them.</li> <li>• Students describe the events of the previous month using the term ‘past’, the events of the new month as being in the ‘future’, and the events of that day as the ‘present’.</li> </ul> <p><i>Each school-day morning</i></p> <ul style="list-style-type: none"> <li>• Students locate the day and date on the calendar and identify the events for that day and the next few days. Appropriate acknowledgement should be given to culturally significant days.</li> <li>• Students use the terms ‘yesterday’ and ‘tomorrow’ to describe events on the calendar in relation to ‘today’.</li> </ul> <p><i>Periodically</i></p> <ul style="list-style-type: none"> <li>• Students identify events that occurred in the past and those that will occur in the future using language such as ‘The athletics carnival was last week’, ‘Our grandparents will visit the school next month’.</li> <li>• Students use the calendar to determine ‘how long it will be’ until a particular event occurs. Teachers may also review past events and identify ‘how long it has been’ since a particular event of significance to the class took place.</li> </ul>	<p><i>Resources</i></p> <ul style="list-style-type: none"> <li>• A3 paper or cardboard, or access to an interactive whiteboard</li> <li>• A variety of calendars with different layouts (a search in <a href="#">Google Images</a> for ‘calendar’ should yield sufficient images)</li> <li>• Internet access to look up the dates of culturally significant days</li> <li>• An online tool that allows the creation of customised calendars, eg <a href="http://www.timeanddate.com/calendar/basic.html">www.timeanddate.com/calendar/basic.html</a></li> <li>• An online simplified interactive calendar, eg <a href="http://www.starfall.com/n/holiday/calendar/play.htm?f">www.starfall.com/n/holiday/calendar/play.htm?f</a></li> </ul> <p><i>Variations/Extensions</i></p> <ul style="list-style-type: none"> <li>• Students explore the origin of the words ‘January’, ‘February’, etc.</li> <li>• Some students may be interested in investigating how the word stems sept-, oct-, nov- and dec- (which usually refer to 7, 8, 9 and 10 respectively) came to form the first parts of the names of the 9th, 10th, 11th and 12th months.</li> </ul>
	<p><b>Activity 2: Alternative Calendar Systems</b></p> <ul style="list-style-type: none"> <li>• Investigate alternative calendar systems, eg: <ul style="list-style-type: none"> <li>– the lunar calendar used to determine culturally significant days, such as Easter Sunday, in various cultures and religions</li> <li>– ancient calendars, such as those of the Mayans</li> <li>– religious calendars, such as the Hebrew and Islamic calendars.</li> </ul> </li> <li>• Students and/or their relatives from different cultural backgrounds share information about their own experiences in using different calendars.</li> </ul>	<p><i>Resources</i></p> <ul style="list-style-type: none"> <li>• A variety of alternative calendar systems (a search in <a href="#">Google Images</a> for ‘lunar calendar’, etc should yield sufficient images)</li> <li>• Invitations may need to be issued to the relatives of students from different cultural groups</li> </ul>

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<p>Name and order months and seasons (ACMMG040)</p> <ul style="list-style-type: none"> <li>name and order the months of the year 📅</li> </ul>	<p><b>Activity 3: Months in Order</b></p> <ul style="list-style-type: none"> <li>Say simple rhymes or sing songs that list the months of the year in order.</li> <li>Students work in groups to order cards on which are written the months of the year. Compare students' results and revise as necessary.</li> </ul>	
<ul style="list-style-type: none"> <li>recall the number of days in each month</li> </ul>	<p><b>Activity 4: Days in a Month</b></p> <ul style="list-style-type: none"> <li>Use a calendar to identify and record how many days are in each month of the year.</li> <li>Say simple rhymes or sing songs that assist students in remembering how many days are in each month, such as:  <i>Thirty days hath September,  April, June and November.  All the rest have 31,  Except for February alone,  Which hath 28 days clear  And 29 in each leap year.</i> </li> </ul> <p>Note: there are many variations of this rhyme. This version is consistent with the Australian Mathematical Sciences Institute (AMSI) teacher notes for time.</p>	<p><i>Scoutle resources</i></p> <ul style="list-style-type: none"> <li><a href="#">M008610</a> AMSI teacher notes on time (search in document for 'calendar')</li> </ul>
	<p><b>Activity 5: Match that Month!</b></p> <ul style="list-style-type: none"> <li>Students are given two sets of cards: <ul style="list-style-type: none"> <li>set A – 12 cards with the names of the 12 months of the year</li> <li>set B – 12 cards with the number of days in each month of the year.</li> </ul> They place all cards facedown.</li> <li>Working in pairs, students take turns selecting one card from each set to turn over. If the cards selected are a 'match' between the name of the month and the number of days in the month, the student keeps the cards. If not, the cards are turned facedown again. After all the cards have been accounted for, the student with the most pairs of cards wins.</li> </ul>	<p><i>Variation</i></p> <ul style="list-style-type: none"> <li>The 'number' cards could show pictures of calendars, indicating the number of days in a month but not the name of the month.</li> </ul>

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<ul style="list-style-type: none"> <li>name and order the seasons, and name the months for each season <ul style="list-style-type: none"> <li>describe the environmental characteristics of each season, eg 'Winter is cool and some trees lose their leaves' (Communicating) 🌿</li> <li>recognise that in some cultures, seasonal changes mark the passing of time, eg the flowering of plants and migration patterns of animals are used by many cultures, including Aboriginal people (Reasoning) 🙌🌿</li> <li>recognise that in countries in the northern hemisphere, the season is the opposite to that being experienced in Australia at that time (Reasoning) 🌐</li> </ul> </li> </ul> <p>Observable changes occur in the sky and landscape (ACSSU019)</p> <ul style="list-style-type: none"> <li>observe and record environmental changes that occur over a longer time to identify patterns of events, eg seasonal changes in temperature and the appearance of the moon 🌕📅</li> </ul> <p>There is a range of information sources and technologies</p> <ul style="list-style-type: none"> <li>use a range of information technologies to communicate with others, eg letters,</li> </ul>	<p><b>Activity 6: Seasons Book or Poster</b></p> <p>For this activity, students can work in groups or individually with one or more seasons per group or individual.</p> <ul style="list-style-type: none"> <li>Students construct a 'seasons' book or poster (either paper or electronic) using drawings, digital photos and/or images sourced online or from magazines.</li> <li>Students compile lists of words or sentences to go with each season, including descriptions of some or all of the following: <ul style="list-style-type: none"> <li>weather, eg sunny, rainy, windy</li> <li>temperature, eg hot, cold</li> <li>observable changes in the environment, eg 'Some trees lose their leaves in autumn', 'Flowers bloom in spring and summer'</li> <li>how people respond to the season in terms of clothing, household adjustments and activities, eg 'We wear coats and scarves in winter', 'We go to the beach in summer', 'We need to turn the heater on in winter because it is cold'</li> <li>how animals respond to the season, eg 'My pet loses more fur in summer than winter', 'Some birds fly to other places in winter'.</li> </ul> </li> <li>Each group or student presents their book or poster to the class and explains the relevance of the particular images and words or sentences chosen for each season.</li> </ul>	<p><i>Resources</i></p> <ul style="list-style-type: none"> <li>Digital camera</li> <li>Images depicting the features of different seasons</li> <li>Books, or cardboard for posters</li> </ul> <p><i>Scoutle resources</i></p> <ul style="list-style-type: none"> <li><a href="#">M008610</a> AMSI teacher notes on time (search in document for 'season')</li> </ul>

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<p>telephones, cameras and emails  </p> <ul style="list-style-type: none"> <li>interact with an information source or technology to explore the ways that different forms of information are combined, including text, image and sound, eg a website or digital game  </li> <li>explore communication methods used by Aboriginal and Torres Strait Islander peoples to share ideas and information, eg dance, stories, music and art  </li> </ul> <p>sequence days of the week, months and seasons of the year </p>	<p><b>Activity 7: Seasons Around Us (ongoing activity)</b></p> <ul style="list-style-type: none"> <li>Students visit a local park or the school playground several times throughout the year to observe and describe seasonal changes in the environment, such as flowers, bird life and leaves on trees.</li> <li>Students observe and describe the seasonal features of the park or playground. On subsequent visits, they are prompted to recall their previous visit and to describe any changes that they notice in the environment.</li> <li>Photographs are taken of the same location in the park or playground in different seasons to record the changes that take place from season to season. These photographs are used to create a seasons picture gallery of the local area over the course of the year, or are added to the seasons book or poster created in Activity 6. Students write a short description to accompany each photograph.</li> </ul> <p><b>Activity 8: Season Sort</b></p> <ul style="list-style-type: none"> <li>Students are given two sets of cards: <ul style="list-style-type: none"> <li>set A – 12 cards with the names of the months of the year</li> <li>set B – 4 cards with the names of the seasons and pictures that represent the seasons.</li> </ul> </li> <li>Students sort the names of the seasons in order, and compare with other groups. Some groups may start with summer, others with spring, etc. Teachers can use such differences to guide students to identify that the seasons occur in a repeating pattern.</li> <li>Students match the months to the seasons, taking care to order the months correctly within each season.</li> <li>Students record the months in each season on the seasons book or poster created in Activity 6.</li> </ul>	<p><i>Resources</i></p> <ul style="list-style-type: none"> <li>Access to a local park or the school playground</li> <li>Digital camera</li> </ul> <p><i>Variation</i></p> <ul style="list-style-type: none"> <li>Video/Sound recordings can be made at the same location in different seasons. The teacher assists students in creating a sound/video compilation that can be made available online.</li> </ul>
	<p><b>Activity 9: Prepare for the Weather</b></p> <ul style="list-style-type: none"> <li>Students work in groups or individually to select appropriate types of clothing and fabrics to suit the characteristics of particular seasons of the year.</li> <li>Students select appropriate clothing to dress a representative of the group, a bear or a cut-out figure for a particular season nominated by the teacher, considering: <ul style="list-style-type: none"> <li>type of clothing, eg hats, tops, bottoms, footwear</li> <li>type of fabric, eg lightweight cotton, knitted wool, cotton knit, polar fleece, flannel.</li> </ul> </li> <li>Students present their representative bear or cut-out figure to the class and</li> </ul>	<p><i>Resources</i></p> <ul style="list-style-type: none"> <li>A selection of clothing of different types and fabrics to suit either students, bears or cut-out figures, eg hats, shorts, long-sleeved tops, T-shirts, scarves, jackets, coats, trousers, dresses – alternatively, students provide a variety of fabric swatches, eg lightweight cotton, knitted wool, cotton knit, linen, polar fleece, tracksuit material, flannel</li> </ul>

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	<p>explain how each selected item of clothing is appropriate for the particular season. Teachers provide prompts, if necessary, to assist students in considering the following (and to elicit a response from each student, if working in a group):</p> <ul style="list-style-type: none"> <li>– weather conditions, eg sunny, rainy, windy</li> <li>– temperature, eg hot, cold.</li> </ul> <ul style="list-style-type: none"> <li>• Students record the clothing worn in the nominated season by taking photographs of themselves or their bear, or by pasting the dressed cut-out figure onto paper or cardboard.</li> <li>• Students annotate their pictures with simple sentences to describe the appropriate clothing for the season, eg ‘We wear shorts in spring and summer because it is hot’, ‘Woollen clothes keep us warm in winter when it is cold’. Some students may be able to write full sentences without assistance. Others may need a scaffold, such as ‘You need to wear _____ in _____ because it is _____’.</li> <li>• Students paste fabric swatches that are appropriate for the characteristics of particular seasons onto the seasons book or poster created in Activity 6.</li> <li>• Invite students who have travelled to other countries to share information about clothing worn for different seasons and climatic conditions, or the seasonal activities that they have experienced.</li> </ul>	<p><i>Variations</i></p> <ul style="list-style-type: none"> <li>• Students could draw and colour clothes on the cut-out figure in place of cutting it out.</li> <li>• Invitations could be issued to the relatives of students from different cultural groups to discuss clothing worn in different seasons in other countries.</li> </ul>
	<p><b>Activity 10: Seasons Q&amp;A</b></p> <ul style="list-style-type: none"> <li>• One or more guest speakers are invited to speak to the students about the seasons and to answer their questions: <ul style="list-style-type: none"> <li>– A local grocer speaks about seasonal produce, showing examples. Discuss how different fruits and vegetables are suited to different climates and seasons.</li> <li>– A member of the local Aboriginal community gives students information and/or tells stories about traditional Indigenous ways of marking the passing of time, eg observing breeding patterns and migratory patterns of animals, changes in the environment.</li> <li>– A zookeeper or park ranger speaks about changes in animal appearance and/or behaviour to accommodate seasonal changes, eg moulting, increased activity, hibernation, migration. Invite students to share information about changes that they observe in their pets’ appearance and/or behaviour.</li> </ul> </li> </ul>	<p><i>Resources</i></p> <ul style="list-style-type: none"> <li>• Guest speakers</li> </ul> <p><i>Scoutle resources</i></p> <ul style="list-style-type: none"> <li>• <a href="#">R7708</a> Video on seasons observed by Aboriginal and Torres Strait Islander peoples</li> </ul>

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	<p><b>Activity 11: Same Time, Different Season (ongoing activity)</b></p> <ul style="list-style-type: none"> <li>• The teacher sets up a relationship with another school (or carefully selects a location) in the northern hemisphere where seasons are clearly distinguishable, such as in Beijing, Tokyo or Dunedin.</li> <li>• Each month, students communicate with students from the other school to exchange information about the weather being experienced at that time (or find photographs of the selected location to compare with photographs of the local environment – this could be turned into a month-to-month wall display). Discussion should centre on the characteristics of the season being experienced in the local area compared to that being experienced in the northern hemisphere location.</li> <li>• Students recognise that, at any given time, different parts of the world experience different seasons, eg while it is summer in Australia, it is winter in countries in the northern hemisphere.</li> </ul>	<p><i>Resources</i></p> <ul style="list-style-type: none"> <li>• Access to video conferencing facilities or a program that allows voice–video calls over the internet, such as Skype</li> </ul> <p><i>Variation</i></p> <ul style="list-style-type: none"> <li>• Students can email text and images to students in the northern hemisphere.</li> </ul>

<b>Assessment overview</b>
<ul style="list-style-type: none"> <li>• Students cut and paste a jumbled list of the months of the year, rearranging it into the correct order.</li> <li>• Students sort and paste each month of the year into tables according to the categories: <ul style="list-style-type: none"> <li>– ‘30 days’, ‘31 days’, ‘28/29 days’</li> <li>– ‘spring’, ‘summer’, ‘autumn’, ‘winter’.</li> </ul> </li> <li>• Students draw themselves dressed appropriately for the different seasons and/or participating in seasonal activities.</li> <li>• Students draw pictures or select images (online or from magazines) to represent the observable changes in the environment for each season, eg animal behaviours, changes in plants, changes in weather.</li> <li>• Students follow a series of verbal instructions to identify and/or mark specific days and dates on an empty calendar, eg ‘What day of the week is the 23rd of September?’, ‘Colour the third Tuesday of August green’, ‘How many months start on a Monday?’</li> </ul>