## Australian Curriculum: Mathematics - where is time? Collated by Mike Chartres

Content descriptions Substrand – Using units of Measurement	Proficiency strands	Achievement Standard	Numeracy continuum "operate with clocks, calendars and timetables"
Foundation year Compare and order the duration of events		Students connect events and the days of the week	1A sequence familiar actions and events in a variety of ways 1B sequence familiar actions and events using the everyday language of time
Year 1  ♣ Tell time to the half-hour  ♣ Describe duration using months, weeks, days and hours	♣ Fluency – naming the days of the week	Students explain time durations.	
Year 2  ♣ Tell time to the quarter-hour, using the language of 'past' and 'to'  ♣ Name and order months and seasons  ♣ Use a calendar to identify the date and determine the number of days in each month	♣ Fluency – using informal units iteratively to compare measurements?	♣ Students tell time to the quarter hour and use a calendar to identify the date and the months included in seasons.	<ul> <li>read digital and analogue clocks to the half and quarter hour,</li> <li>sequence events by months and seasons and identify a date on a calendar</li> </ul>
Year 3  ♣ Tell time to the minute and investigate the relationship between units of time	↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language to communicate times  ↓ Understanding – using appropriate language lang	♣ They tell time to the nearest minute	
<ul> <li>Year 4</li> <li>♣ Convert between units of time.</li> <li>♣ Use am and pm notation and solve simple time problems (calculations)</li> </ul>	<ul> <li>♣ Understanding – using appropriate language to communicate times</li> <li>♣ Fluency – using instruments to measure accurately?</li> <li>♣ Problem solving – comparing time durations.</li> </ul>	<ul> <li>♣ Students solve problems involving time duration.</li> <li>♣ convert between units of time</li> </ul>	<ul> <li>read digital and analogue clocks to the minute,</li> <li>convert between hours and minutes, use 'am' and 'pm',</li> <li>use calendars to locate and compare time events</li> </ul>
Year 5      ↓ Compare 12- and 24- hour time systems and convert between them.	♣ Problem Solving – includes formulating and solving authentic problems using measurements?	♣ Students convert between 12 and 24 hour time	

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Year 6         ↓ Interpret and use timetables	♣ Fluency – interpreting timetables	♣ Students interpret timetables	<ul> <li>convert between 12- and 24-hour systems to solve time problems,</li> <li>interpret and use timetables from print and digital sources</li> </ul>
Year 7	♣ Problem Solving – includes formulating and solving authentic problems using measurements?		
Year 8 – Real Numbers  ♣ Solve a range of problems involving rates and ratios, with and without digital technologies  Year 8 – Using units of measurement  ♣ Solve problems involving duration, including using 12-and 24-hour time within a single time zone		♣ students solve everyday problems involving rates	<ul> <li>use 12- and 24-hour systems within a single time zone to solve time problems,</li> <li>place personal and family events on an extended time scale</li> </ul>
Year 9 – Using units of measurement  ♣ Investigate very small and very large time scales and intervals		Students apply the index laws to numbers and express numbers in scientific notation?	
Year 10 and 10A – Using units of measurement			<ul> <li>use 12- and 24-hour systems within a multiple time zone to solve time problems,</li> <li>use large and small timescales in complex contexts</li> <li>place historical and scientific events on an extended time scale</li> </ul>