**MATHEMATICS STAGE 2**

**TEACHING AND LEARNING OVERVIEW**

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| TERM: | WEEK: 6 | STRAND: Measurement and Geometry | **SUB-STRAND:** **Time 2** | **WORKING MATHEMATICALLY:** MA2-1WM, MA2-2WM |
| OUTCOMES: MA2-13MG | | **Reads and records time in one-minute intervals and converts between hours, minutes and seconds** | | |
| **CONTENT:** | | **Read and interpret simple timetables, timelines and calendars**  \* Read and interpret timetables and timelines | | |
| ASSESSMENT FOR LEARNING (PRE-ASSESSMENT) | | * ***Discuss with students….***   *What is a timetable? Where/When might we see them/use them?*  *What is a timeline? Where/When might we see one? What would be the use of a timeline?* | | |
| WARM UP / DRILL | | * Counting on and back, on and off the decade (up to thousands) * Counting on to a particular number * Counting back to a particular number | | |
| TENS ACTIVITYNEWMAN’S PROBLEMINVESTIGATION | | http://www.teachingideas.co.uk/maths/files/solvingproblemstime.pdf | | |
| QUALITY TEACHING ELEMENTS | | **INTELLECTUAL QUALITY** | **QUALITY LEARNING ENVIRONMENT** | **SIGNIFICANCE** |
| * Deep knowledge * Deep understanding * Problematic knowledge * Higher-order thinking * Metalanguage * Substantive communication | * Explicit quality criteria * Engagement * High expectations * Social support * Students’ self-regulation * Student direction | * Background knowledge * Cultural knowledge * Knowledge integration * Inclusivity * Connectedness * Narrative |
| RESOURCES | | Timeline proforma  TV guides (newspaper, magazine, internet)  Timetables | | |

**TEACHING AND LEARNING EXPERIENCES**

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| WHOLE CLASS INSTRUCTION MODELLED ACTIVITIES | GUIDED & INDEPENDENT ACTIVITIES | |
| * ***Activity 1 – Simple timetables***   Display a variety of timetables. Examples of timetables could include:   * Weekly class timetable * Television guides listing the times for TV programs * Examination timetables * Transport timetables listing the arrival and departure times for trains, planes, buses etc   As a class, compare these timetables and identify how they are similar and different.  Discuss:   * *What is one timetable that you might use regularly?* * *Why do you use this timetable?* * *What could happen if you did not have this timetable?* * ***Activity 2***   **Discuss** timelines with students. Jointly construct the timeline of a fictitious character. | LEARNING SEQUENCERemediationS1 or Early S2 | * ***Activity 1***   Students collect a variety of television guides from different sources, such as magazines and newspapers. They:   * Identify and discuss features that are common to the different television guides * Use the television guides to plan an evening of television viewing and record their plan in a table. * Answer a series of questions, based on the information in a timetable. * ***Activity 2***   Following the joint construction activity, students construct a simple timeline of their life, from birth until now. Provide each student with a template for a timeline. |
| LEARNING SEQUENCE | * ***Activity 1***   ***Investigation***  Students collect a variety of television guides from different sources such as magazines, newspapers and the internet. They:   * Identify and discuss features that are common to the different television guides. * Use the television guides to plan an evening of television viewing and record their plan in a table. * Pose a series of questions, based on the information in the timetable for their peers. * ***Activity 2***   Following the joint construction activity, students construct a simple timeline of their life, from birth until now. Provide each student with a template for a timeline. |
| LEARNING SEQUENCEExtensionLate S2 or Early S3 | * ***Activity 1***   Students collect a variety of television guides from different sources such as magazines, newspapers and the internet. They:   * Identify and discuss features that are common to the different television guides. * Use the television guides to plan an evening of television viewing and record their plan in a table. * Pose a series of questions (including ‘thick’ inferential questions) , based on the information in the timetable for their peers. * ***Activity 2***   Following the joint construction activity, students research an Australian sporting icon and construct a simple timeline of their life from birth until present time. Have students plan and develop the timeline. |
| **EVALUATION & REFLECTION** |  |