**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 proformaTV 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 SEQUENCEExtension Late 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** |  |