**MATHEMATICS STAGE 3**

**TEACHING AND LEARNING OVERVIEW**

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| TERM: | WEEK: 6 | STRAND: Measurement & Geometry | **SUB-STRAND:** **Time 2** | **WORKING MATHEMATICALLY: MA3-1WM** |
| OUTCOMES: MA3-13MG | | **Uses 24-hour time and am and pm notation in real-life situations, and constructs timelines** | | |
| **CONTENT:** | | **Interpret and use timetables (ACMMG139)**   * Interpret timetable information to solve unfamiliar problems using a variety of problem solving strategies. | | |
| ASSESSMENT FOR LEARNING (PRE-ASSESSMENT) | |  | | |
| WARM UP / DRILL | | * Order specified events from fastest to slowest, and vice versa, based on actual time. | | |
| TENS ACTIVITYNEWMAN’S PROBLEMINVESTIGATION | |  | | |
| 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 | |  | | |

**TEACHING AND LEARNING EXPERIENCES**

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| WHOLE CLASS INSTRUCTION MODELLED ACTIVITIES | GUIDED & INDEPENDENT ACTIVITIES | |
| * Provide opportunities for students to access TV programs etc * Ask students to volunteer their favourite TV programs. Discuss that, as individuals, it’s OK to have a different favourite list than somebody else. * Model the concept of recording appropriate information such as starting time, finishing time and duration. * Students discuss the use of 24 hour time and why it is important. * Students should be able to communicate using the following language:- timetable, timeline, scale, 12-hour time, * 24-hour time, hour, minute, second, am notation, pm notation. | LEARNING SEQUENCERemediationS2 or Early S3 | * Read and interpret simple timetables, timelines and calendars. |
| LEARNING SEQUENCES3 | * Investigation: Students are presented with a scenario that they have 240 minutes to record their favourite shows. The students then prepare their plan for recording, by listing the show, the start time, finish time and duration. |
| LEARNING SEQUENCEExtensionEarly S4 | * Interpret calculator displays for time calculations, eg 2.25 on a calculator display for a time calculation means http://syllabus.bos.nsw.edu.au/js/_libs/mathjax/fonts/HTML-CSS/TeX/png/Main/Regular/120/0032.pnghttp://syllabus.bos.nsw.edu.au/js/_libs/mathjax/fonts/HTML-CSS/TeX/png/Main/Regular/085/0031.pnghttp://syllabus.bos.nsw.edu.au/js/_libs/mathjax/fonts/HTML-CSS/TeX/png/Main/Regular/085/0034.png hours or 2 hours 15 minutes |
| **EVALUATION & REFLECTION** |  |

* All assessment tasks should be written in **red** and planning should be based around developing the skills to complete that task.
* Assessment rubrics or marking scale should be considered.