**MATHEMATICS STAGE 1**

**TEACHING AND LEARNING OVERVIEW**

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| TERM:  | WEEK: 8 | STRAND: Measurement and Geometry | **SUB-STRAND:** **Time 2** | **WORKING MATHEMATICALLY:** **MA1-1WM, MA1-2WM, MA1-3WM** |
| OUTCOMES: MA1-13MG |  |
| **CONTENT:**  | **Describe duration using months, weeks, days and hours*** Compare and discuss the relationship between time units, e.g. an hour is a longer time than a minute (Communicating, Reasoning)
* Make predictions about the duration of time remaining until a particular school activity starts or finishes, e.g. the length of time until lunch begins (Reasoning)
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| ASSESSMENT FOR LEARNING(PRE-ASSESSMENT) | * Make a class table showing the duration of different events e.g. Things that take minutes/ things that take one hour.
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| WARM UP / DRILL | * Event pictures – show students pictures of different events taking various durations e.g. brushing teeth/ playing soccer. Students need to call out the correct word for each picture e.g. seconds/ minutes/ hours.
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| TENS ACTIVITYNEWMAN’S PROBLEMINVESTIGATION  | Arthur had to stay in at lunch time today to finish some work. Lunch time goes for 40 minutes. Arthur had to stay in for 5 minutes. How much longer does he have left to play? |
| 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
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| RESOURCES | Event pictures, word cards ‘seconds’, ‘minutes’ and ‘hours’, CD player, magazines, glue, scissors, paper, candle, matches, daily timetable proforma. |

**TEACHING AND LEARNING EXPERIENCES**

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| WHOLE CLASS INSTRUCTION MODELLED ACTIVITIES | GUIDED & INDEPENDENT ACTIVITIES |
| Review and Teach – A student is selected to turn a CD player on and turn it off again when they estimate a minute has passed. The other students can play ‘Musical Statues’ during this time.* In small groups students create a poster of activities that take approximately one hour to complete. Discuss the posters at the end of the lesson to make students aware of time differences.

Other Suggestions – * See how far a candle burns down in an hour.
* Complete an activity e.g. model making/ cooking that lasts exactly one hour.
* Students predict the duration of time remaining before given events e.g. ‘time until lunch’, ‘time until home time’, ‘time until recess’. Record predictions in a table. Calculate the time it took to reach each chosen event and record on the table. Were any of the predictions close? Which events were closest to an hour?
 | LEARNING SEQUENCERemediationES1  | * Relate events to a particular day or time of day e.g. ‘Assembly is on Friday’, ‘We come to school in the morning’.
* Identify events that occur every day e.g. ‘We have News every day’.
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| LEARNING SEQUENCES1 | * In pairs students plan an activity that will last for an hour. They will need to write an activity plan stating what is to be done during the hour and the resources needed. The class can then vote for the top three activities and the class can participate in a fun day.
* Plan a daily routine timetable that involves activities that last ‘minutes’ to ‘hours’ e.g. spelling (5 minutes), painting (one hour)
* **Investigation:** Discuss with students the concept that the duration of one minute is constant e.g. ask if one minute of play takes as much time as a minute of push ups? Can we all do the same amount of activities in one minute? Explain.
* **Assessment** – Students order given activities in terms of the length of time it takes to complete e.g. clean teeth, write a story, cook a cake, have recess.
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| LEARNING SEQUENCEExtension Early S2 | * Solve simple time problems using appropriate strategies e.g. calculate the time spent on particular activities during the school day.
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| **EVALUATION & REFLECTION** | * Can students recognise the difference between minutes and hours?
* Can students make appropriate predictions relating to the amount of time remaining until a particular activity begins/ends?
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* 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.