Home Learning TV – Lesson Plan – 15 September

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| **Segment lesson planning details** |  |
| Title for segment: | What is time? |
| Year levels *(e.g. Yrs1 – 3)*: | Years 1-3 |
| NZC learning areas/ KCs:  | * thinking
* using language, symbols, and texts
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| Purpose of lesson:(What learners will learn based on the above) | Mathematics and Statistics**Measurement*** Order and compare objects or events by length, area, volume and capacity, weight (mass), turn (angle), temperature, and **time** by direct comparison and/or counting whole numbers of units. (Level One)
* Create and use appropriate units and devices to measure length, area, volume and capacity, weight (mass), turn (angle), temperature, and **time**. (Level Two)

ScienceAstronomical systems* Share ideas and observations about the Sun and the Moon and their physical effects on the heat and light available to Earth. (Levels One and Two)
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| Success Criteria – students will be able to:(how they will know when they have learnt it) | State how the rotation and orbit of Earth, and the orbit of the moon, created the historical measures of time, day, month and year.Read hour and half hour times on a clock.Estimate the number of elapsed seconds, using consistent counting. |
| **Segment content/context details *(describe)*** |
| Māori content/context: | Greeting and farewell. Traditional view of dreaming.Whakatauki. | Pasifika content/context: |  |
| Learning Support content/context: | Physical modelsActive participation | Other (specify): |  |
| **Segment production details** |
| Teacher talking time: | **20 mins** | Studio requirements: | **Table, recording materials.** |
| Equipment requirements: | Analogue (or digital) clock, stopwatch or sports watch, bathroom basin and soap, [Three tasks that take about 15 seconds to complete, e.g., simple jigsaw, colouring in picture, flower arrangement, …] |
| **Segment links and attachments *(list all links to recordings or attachments, the source and confirm that copyright permissions are granted)*** |
| Links to recordings /resources | Episode of Suzy’s World, What is time?  <https://youtu.be/pozZz3p7I7w> |
| Attachments  |  |
| **Segment plan content** |
| Stage | Teaching strategies linked to purpose  | Learning tasks and activities | High level script (key points/questions for presenter)  |
| **Beginning of lesson:**Activating prior learning and relationships | Greeting.Orientate students to subjective nature of feeling about elapsed time through personal experience of sleep.Use of clock as a tool for telling time. | The main purpose of this programme is the familiarise students with measurement of time, from historic methods related to astronomical phenomena, to more modern use of measurement tools.Students need to understand that time passes in a consistent way, and that their personal activities, and feelings, can influence their perception about how much time has elapsed.Please emphasise the use of units of time (counts) being consistent in the second part of the segment.Read hour and half hour times. | Kia Ora, Talofa, HelloHow are you this morning?I had a great sleep last night. Did you?I was out like a light and I don’t remember a thing. Our Māori ancestors believed that your wairua (spirit) left your body and wandered about while you slept. Dreaming feels a lot like wandering sometimes.The clock looked like this when I put on my pyjamas. (Show 10:00pm on digital or analogue clock)Do you know what time this is? Yes. Ten o’clock. The big hand is on 12 and the little hand is on 10.When I woke up the clock looked like this. (Show 6:30). Do you know this time? Some people would say “six thirty” and some would say ‘half past six.” I wonder why?Here’s six o’clock. The big hand is on twelve and the little hand is on six. Watch what happened while I was asleep. Wind the hand around to 6:30. The big hand has gone half-way around the clock.So that’s why it is called “half past six.”That made we wonder what happened while I was asleep. Did time stop and that’s why I can’t remember anything? Or did time just keep on going?What do you think?Here’s an episode of Suzy’s World about time. It’s high time you watched it! |
| **Main part of lesson (a) :** Introducing learningReinforce routines, provide multiple exposure to concepts, and strategies. Scaffolding learning  | Physical modelling of the movement of celestial bodies (Earth, moon and Sun).Introduction of historical machines to measure time. | Connect day to rotation of Earth, year to orbit of Earth around the Sun and month to orbit of moon about the Earth.Understand that time progresses in a consistent way. | View episode of Suzie’s World.I bet time flew while you watched that. We say time flies when you are having fun. Imagine you started watching at 9:30, “half past nine.” (Show clock) This is what the clock did while you watched. It counted ten minutes. (Show the movement of the clock 9:30 to 9:40). So even when you sleep and don’t notice, time does not wait. Whakatauki: Kaore te wa e tatari (Time does not wait) |
| **Main part of lesson (b)**Providing opportunities to use and practice  | Physical involvement in counting in seconds.Connection to washing hands introduced in previous episodes. | Count in a consistent way to measure elapsed time in seconds.Compare events by measuring time. | That’s why it is really important to measure time. Many peoples, including Māori, used phases of Marama (The moon) and Ra (The Sun) to measure months and days. Months and days are big amounts of time. It is hard to know how much time short jobs really take.I have to wash my hands for 20 seconds. But how long is that? Let’s learn to count in seconds first.One way is count like this, “One second - one, two seconds - two, three seconds - three, four seconds - four, …” [Camera focus on clock ticking over seconds while you count]. A second is longer than you think.[Maybe practice counting in seconds a bit]I’m going to wash my hands while you count 20 seconds for me. Tell me when to stop [No clock visible. Ham up a degree of impatience with how long it takes without saying anything. Stop on 20 seconds] Did you get your seconds counting right? Kapai!Here are three things I am going to do. [e.g., simple jigsaw, hammer in a nail, colour in a picture, brush your teeth. The events must take about 15 seconds to do]Which mahi (task) will take me the most time? Which mahi (task) will take the least time? Let’s find out. Can you please count time, in seconds, for me?[Carry out the tasks while students count] Here is the number of seconds my stopwatch measured [record the actual seconds each time to give students a chance to get more accurate].Look at that. X took longer to do than Y. I enjoy jigsaws so much time went by in a flash!I wonder how close to the actual times you got. Did you get closer to the stopwatch measurement? |
| **End of lesson:**Learner and parent reflection on learning and engagement and what they can do next | Set possible follow-up tasks to do at home. |  | Well that’s all we‘ve got time for. Perhaps you could measure how long it takes you to do things around your house.Does it take you longer to eat breakfast or put on your clothes?Perhaps you could practise reading clocks with member of your whanau.Tena koe a muri ake, Goodbye until next time. |