Home Learning TV – Junior Maths – 9 September

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| **Segment lesson planning details** |  | |
| Title for segment: | Maths in Dance | |
| Year levels *(e.g. Yrs1 – 3)*: | Year 1 - 3 | |
| NZC learning areas: | Maths and Stats | |
| Purpose of lesson:  (What learners will learn) | Students will:  explore turns through movement  learn to identify half, quarter and full turns.  justify their explanations of a turn. | |
| Success Criteria – students will be able to:  (how they will know when they have learnt it) | Students will be able to:  make a variety of turns and name these.  identify the turns (used in a Cook Island dance).  justify their explanation using the word because e.g. “It is a half turn because…” | |
| **Segment production details** | | |
| Equipment requirements: |  | |
| Copyright requirements:  Please be specific: Source(*Seven Sizzling Sausages* by Sam Smith –url link to the source), intended use (to demonstrate alliteration), and length (timings for video clips) | Source – The Coconet tv - <https://www.thecoconet.tv/creative-natives/polyfest-performance-highlights/polyfest-2018-cook-islands-stage-alfriston/>  (from 16.04min to 18.56min) | |
| **Segment links and attachments *(list all links to recordings or attachments, the source and confirm that copyright permissions are granted)*** | | |
| Links to recordings /resources | <https://www.thecoconet.tv/creative-natives/polyfest-performance-highlights/polyfest-2018-cook-islands-stage-alfriston/> | |
| Attachments |  | |
| **Segment plan content** | | |
|  | Teaching and learning activities linked to purpose | High level script (key points/questions) |
| **Activate**: Activating prior learning, knowledge of contexts and relationships | Warm up to practice counting, notice patterns and numbers.Presenter ensures whiteboard record supports the learners to see the pattern Begin to introduce turns and activate knowledge about turns. | Presenter greets children - saying good morning and kia orana (Cook Islands greeting) We are going to start maths time with some counting.  [Using the whiteboard - writing the numbers as you count – record numbers so they line up with 2 and 12 underneath it)  Let’s start counting from hmmm the number 2 and count all the way to 23. I’ll write the numbers as we count. Let’s go!  [writing them on the board as they count  2 3 4 5 6 7 8 9 (stop here and ask what number do you think comes next?) 10  11 12 13 14 (let’s pause again, what number came before 15? Yes! You were right, 14). 15 16 17 18 19 20 21 22 23]  “Great counting tamariki”  “Look at the numbers I have written here. What patterns do you notice in these numbers? What can you see?  I can notice the numbers are increasing each time (point to 2, 3, 4, and count etc)  Look here, I notice that all of these numbers have a 2 in the ones column (point to that column and read aloud) “2, 12, 22”.  Let’s have a go with some other numbers, look at this: 3, 13, 23. What did you notice? What do you think the next number down will be?  What about 4, 14, 24. What did you notice? What do you think the next number will be? What will the next number down be?  Wow! There are so many more patterns in those numbers. Next time you do some counting or see some numbers around you see what you notice.  Okay, now that we are ready and warmed up I’m going to show you something. You may have done some of these at school in PE.  [presenter to stand and do a full turn]  Wow! Did you notice what I did?  I am going to do it one more time, watch closely.  [Presenter to do another full turn]  Did you notice that I turned all the way around? E Tu and try it yourself.  Let’s go! (presenter to do full turn a few times and in different directions) |
| **Learn**: Introducing learning  Reinforce routines, provide multiple exposure to concepts, and strategies. Scaffolding learning | Showing the turns through movements. Introduce vocabulary and model what the different turns look like. Model justification using the word “because”  Introducing representations for whole turn  And for half turn | “We call that a full turn **because** we turned around until we got back to where we started.”  [represent on the board]  I can do another type of turn. Stay standing and watch me now!  [presenter to stand and do a half turn to face the other way]  “Did you see what happened there? I will do it again one more time”  [turn again]  “You try it now - face me, and then turn around so you are facing the other way”  [turn again]  Wow, what could we call a turn like that?  Ka Pai! It is a half turn **because** we have only gone half way around  [represent on the board]    This time follow my instructions and take two steps forward, do a half turn and walk another two steps, like this  [model this]  Ka Pai - did you end up back where you started?  Here is a challenge for you and your whanau for later - tell them how many steps to take and how to turn to get from one place to another in your house. You could practise this today. I wonder when we might use different turns? Let's have a look at this video of some talented dancers performing a Cook Island dance Have a watch and see if you can notice the different turns the dancers use. Who in your whānau might be interested in this? Ask them to watch too! Then they can help with some maths that we’ll do together after this. |
| **Respond**: Providing opportunities to use and practice | Watching a clip of a Cook Island ura from Polyfest and identifying the turns that the dancers use.  The Coconet tv - <https://www.thecoconet.tv/creative-natives/polyfest-performance-highlights/polyfest-2018-cook-islands-stage-alfriston/>  (from 16.04min to 18.56min)  Presenter models ¼ turn  Presenter scaffolds the learning of ¼ and ¼ = ½  Learners have opportunity to do it with their bodies  Presenter represents ¼ + ¼ = ½ on the board  Draws representation as well  Developing their own dance sequence which uses different types of turns and representing these. | Play video (<https://www.thecoconet.tv/creative-natives/polyfest-performance-highlights/polyfest-2018-cook-islands-stage-alfriston/>) (from 16.04min to 18.56min) 03:00 minutesWow, wasn’t that amazing. There was so much maths in that dance!What turns did you notice the dancers doing? I noticed a full turn [model]  a half turn [model] and I also noticed a turn like this [model a quarter turn].  E tu and do this new turn with me. [model turning a few times and in different directions]  Hmm I wonder what sort of turn that is?  Do you know?  Yeah, Ka Pai it is a quarter turn **because** we have only gone a quarter of the way around.  [represent on the board]    I wonder what would happen if I do two quarter turns in the same direction like the dancers. What direction would I be facing? Try it with me.  (Presenter to model turning two quarter turns).  Did you notice what I did? Why did I end up facing the same way when I had done a half turn!  Let’s try it again. Let’s face each other and do two quarter turns. Go. 1.2. [presenter to do].  Now let's face each other and do a half turn.  Wow - we do end up facing the same way.  I wonder why?  That is **because** two quarter turns in the same direction is the same as a half turn.  [represent this on the board]  (write on whiteboard ¼ + ¼ = ½)  I wonder where we will end up facing if we do two half turns in the same direction like the dancers?  Let's do this together? E tu. Let’s go, one, two [presenter to count each turn]  Look! We are back where we started which must mean that two half turns is the same as a full turn.  (write on whiteboard ½ + ½ = 1 whole)  Hmmmm… I wonder how many quarter turns we would need to do to do a full turn? Have a think about that throughout the rest of the lesson and we’ll come back to it at the end. Right! We have explored and learnt about the different maths turns in a dance. Now let’s see if we can come up with our own dance. I am going to play some music now and you can E Tu and have a kanikani practising some turns. I wonder if you could use quarter, half and full turns in your dance. Maybe you could write your dance moves out on a piece of paper using the symbols here.  [gesture to the symbols on the board]  Play the music for a minute.  [Presenter to move and turn in different directions as music plays using quarter, half, and full turns]  Wow, that was fun! Did you do lots of different turns in your dance? Are you feeling dizzy? I did some full, half and quarter turns in mine. |
| **Share**: Learner and parent reflection on learning and engagement and what they can do next | Summarises key learning  Presenter reiterates the learning  Follow up activity to share their dance and what they have learnt about turns and to look at turns in dances from their own culture. | Now – who completed the challenge and thought about how many quarter turns are in a full turn? I’m going to give you a minute to talk to someone at home about what you think. Did you do it like this?  (Presenter turn and count four turns). Let’s do that together, one, two, three, four.  Or did you do it this way? [Then write on whiteboard ¼ + ¼ + ¼ + ¼ = 1 whole turn] Wow tamariki, that was a fun maths session. We have learnt about a full turn, a half turn and a quarter turn [presenter to model these]. How exciting that there is so much maths in dance. It would be great for you to share the dance that you have made up with your whānau. Perhaps you could teach them about the different types of turns you learnt about.  A great activity for you to do next is to think about dances from your culture. Maybe you could find videos of the dances and see if you can identify the different types of turns which are used.  Thank you for joining me for another fun maths lesson. |