**MATHEMATICS WEEKLY/UNIT PLANNER**

**Level:** Gr 3/4     **Term:**4 **2018       Weeks: 4-5**

**Teachers:** Sinead, Fran and Marg

**Dimension:** Measurement and Geometry

**Specific Focus for Unit:** Location

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| **Victorian Curriculum Content Descriptions**  [**http://victoriancurriculum.vcaa.vic.edu.au/mathematics/introduction/rationale-and-aims**](http://victoriancurriculum.vcaa.vic.edu.au/mathematics/introduction/rationale-and-aims) | **Key Concepts**  [**https://drive.google.com/file/d/0B3ydL4IWBSAbbk5laWtLOEprYXc/edit**](https://drive.google.com/file/d/0B3ydL4IWBSAbbk5laWtLOEprYXc/edit) |
| Gr 2: Interpret simple maps of familiar locations and identify the relative positions of key features  Gr 3: Create and interpret simple grid maps to show position and pathways  Gr 4: Use simple scales, legends and directions to interpret information contained in basic maps  Gr 5: Use a grid reference system to describe locations. Describe routes using landmarks and directional language | **Position**   * The position of an object in a plane or in space can be specified and described.   **Direction**   * Movement in relation to the position can be indicated and described.   **Coordinate systems**   * Systems used to locate points in space in relation to their distance from an origin. |
| **Learning Intentions**  **We are learning to use compass points and the language of direction and distance to give locations and describe paths**  I will be successful if…  I can learn the compass points and how they are set out  I can use direction and distance language to give locations and describe paths  **We are learning to use co-ordinates to give locations and describe paths**  I will be successful if…  I am able to use co-ordinates to find and give locations  I am able to use co-ordinates to track a path  **We are learning to draw and interpret simple scale maps and learn what the symbols on maps mean.**  I will be successful if…  I am able to understand maps to answer questions about direction and location. | |

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| **SESSION NUMBER**  **KEY IDEA**  **LEARNING INTENTION** | **TOOL SESSION**  A short, sharp task relating to fluency in mental computation or the focus of the lesson.  **WHOLE CLASS FOCUS**  Sets the scene/context for what students do in the independent session. | **INVESTIGATION SESSION**  Extended opportunity for students to work in pairs, small groups or individually. A time for teacher to probe children’s thinking or work a small group for part of the time. | **REFLECTION**  Focused teacher questions and summary to draw out the mathematics and assist children to make link/s. | **TEACHER ASSESSMENT**  We are looking for... |
| **Session 1**  **LEARNING INTENTION**  **We are learning to use compass points and the language of direction and distance to give locations and describe paths**  I will be successful if…  I can learn the compass points and how they are set out | **TOOL SESSION**  **Matific**  **20 Sum Challenge**  **WHOLE CLASS FOCUS**  Introduction of topic and guidance through the learning intentions on the cover sheet.  **Tuning In: Videos**  <https://www.youtube.com/watch?v=f2I81_BFb-s>  Cardinal Directions Song  <https://www.youtube.com/watch?v=Te0Td0QVoj0>  North South East West | Cardinal Directions | Geography for Kids  **Game: Simon Says**  Go North South East West  Point North South East West  (over unit, play with half directions included) | **INVESTIGATION**  **Task:  Compass Rose**  Students draw a compass rose and label. Use the mnemonic ‘Never Eat Soggy Wheaties’ or make their own to write under  **Task: Where’s North?**  Students take a compass and explore the school grounds, locating north in different parts inside and out. | **REFLECTION**  Share mnemonics that have been invented | **ASSESSMENT**  Check that roses are correct  Check mnemonics spell out NESW |

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| **Session 2**  **LEARNING INTENTION**  **We are learning to use compass points and the language of direction and distance to give locations and describe paths**  I will be successful if…  I can use direction and distance language to give locations and describe paths | **TOOL SESSION**  **Matific**  **20 Sum Challenge**  **WHOLE CLASS FOCUS**  **Review and Extend: Videos**  <https://www.youtube.com/watch?v=pIuVN5GcB60>  North South East West | Directions For Kids | Geography Videos For Grade 3 Kids | KidsClassroom (the one from last year) Get 2 kids to write the direction words on the white board as they’re watching. | **INVESTIGATION**  **Demonstration** – **Logo**  Teacher demonstrates how to use the programming language of logo to draw objects  **Task: Logo**  <https://turtleacademy.com/lessons/en>  <https://www.transum.org/software/Logo/>  Students use logo to draw shapes, paths and letters  **Worksheets: Targeting Maths**  ‘Simple Directions’  ‘Following Directions | **REFLECTION**  What was hard?  What do you need to remember to be successful?  What would you do differently next time?  Keep working for 10 more minutes then we’ll finish | **ASSESSMENT**  Worksheet correction |

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| **Session 3**  **LEARNING INTENTION**  **We are learning to draw and interpret simple scale maps and learn what the symbols on maps mean.**  I will be successful if…  I am able to understand maps to answer questions about direction and location. | **TOOL SESSION**  **Logo**  **WHOLE CLASS FOCUS**  **Tuning In: Videos**  <https://www.youtube.com/watch?v=L_JGxJgq980>  Maps and Cardinal Directions -Reading Maps for kids - different types of maps and symbols of maps | **INVESTIGATION**  **Task** – **Which Room is This?**  Given a map of one of the classrooms in the school, student must work out which room it is. | **REFLECTION**  Revisit success criteria | **ASSESSMENT**  Check logo paths drawn for improvement since last session |

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| **Session 4**  **LEARNING INTENTION**  **We are learning to use co-ordinates to give locations and describe paths**  I will be successful if…  I am able to use co-ordinates to find and give locations  I am able to use co-ordinates to track a path | **TOOL SESSION**  **Logo**  **WHOLE CLASS FOCUS**  **Tuning In** – You Tube  <https://www.youtube.com/watch?v=h26o9GKusK4>  Dr. Nagler's Laboratory: Plotting Coordinates  <https://www.youtube.com/watch?v=d6vhjpnfd3c&t=3s>  Coordinate Plane and Ordered Pairs Song  Discuss the use of letters and numbers to make co-ordinates easier  **Game: Battleships** | **INVESTIGATION**  **Worksheets: Targeting Maths**  ‘Positions on Maps’  ‘Map Coordinates’  ‘Position and Mapping 1’  ‘Position and Mapping 2’ | **REFLECTION**  What was easy?  Was there anything that was confusing?  Revisit success criteria  Keep working for 10 more minutes then we’ll finish | **ASSESSMENT**  Worksheets |