Unit 9: Location and Transformation (January: Weeks 3&4)

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| **Strand(s) > Strand unit(s)** | Shape and Space > Spatial Awareness and Location; Transformation. |

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| **Learning Outcome(s)** | Through appropriately playful and engaging learning experiences children should be able to use spatial knowledge for the purposes of orientation and navigation; visualise and model location using symbolic co-ordinates; understand that shapes and line segments can be reflected, rotated and translated; examine, categorise and model 3-D and 2-D shapes. |

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| **Lesson** | **Focus of Learning (with Elements)** | **CM** | **Learning Experiences** | **Assessment** |
| **1** | **Different Views:** Recognises the relationship between different modes of representing position and location (e.g. bird’s-eye view versus street view) (R) |  | [D] Notice & Wonder L1–2, 6  [D] Think-Pair-Share L1–2, 6–8  [D] Reason & Respond L1–8  [D] [C] Write-Hide-Show L2–3  [C] Build it; Sketch it; Write it! L1  [C] [P] Capture the Counters! L2  [C] Making Right Angles L5  [C] Symmetry Stations L6  [D] Concept Cartoon L7  [C] Moving Shapes L7  [C] Exploring and Creating Tessellations L8  [C] Solving Tessellating Puzzles L8  **Print resources**  Pupil’s Book pages 61–67  Home/School Links Book pages 23–24  PCM 29–31, 33–34 | **Intuitive Assessment:**  responding to  emerging misconceptions  **Planned Interactions:**  responding to insights gleaned from  children’s responses  to learning  experiences  **Assessment Events:**  information gathered  from completion of  the unit assessment in the Progress  Assessment Booklet  pages 18–19 |
| **2** | **Location:** Identifies and describes the general location of an object using a grid system (U&C); Explores grid references in the context of barrier games, or other playful activities (A&PS) |  |
| **3** | **Turns:** Gives and follows directions involving half and quarter turns (C); Discusses, models, visualises and predicts how an object will look when rotated through a half or quarter turn (R); Reasons about alternative ways to perform the same transformation (R) |  |
| **4** | **Directions:** Gives and follows directions involving turns and simple distances or landmarks in the context of simple plans/grid maps/aerial photos of familiar environments (C); Records directions as a series of simple steps (C); Analyses and evaluates representation and directions for movement and refines for clarity and accuracy (R); Devises and analyses routes on maps, plans or grids that satisfy certain constraints (A&PS) |  |
| **5** | **Right Angles:** Recognises square and non-square corners in the environment, identifying square corners as right angles, or a quarter turn (U&C) |  |
| **6** | **Reflections:** Discusses, models and visualises reflection of shapes (U&C); Completes  missing reflections, of shapes or images (C) |  |
| **7** | **What Move?:** Discusses, models, visualises and predicts reflection, rotation and translation of objects, images and shapes (U&C); Reasons about alternative ways to perform the same transformation (R) |  |
| **8** | **Tessellations:** Explores and creates simple tessellations (U&C); Explores tessellations where a single shape is repeated (A&PS); Examines tessellations and identifies if shapes have been reflected, rotated and/or translated (U&C) |  |
| **9** | **Review and Reflect:** Reviews and reflects on learning (U&C) |  |

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| **Key: Elements:** (U&C) Understanding and Connecting; (C) Communicating; (R) Reasoning; (A&PS) Applying and Problem-Solving. **CM: Cuntas Míosúil:** please tick when you have completed the focus of learning. **Learning Experiences:** [C] concrete activity; [D] digital activity; [P] activity based on printed materials, followed by lesson numbers. |