**25. Quarters & 26. Transformations**

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| **Elements** | * Understanding and Connecting | * Communicating | * Reasoning | * Applying and Problem-Solving |  |
| **Pedagogical Practices** | * Using cognitively challenging tasks | * Promoting maths talk | * Fostering productive disposition | * Encouraging playfulness | * Emphasising mathematical modeling |

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| **Linkage and**  **Integration** |
| **Number:** Sets and Operations  **Shape and Space:** Shape  **Algebra:** Patterns, Rules and Relationships |
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| **Differentiation** |
| Alter pace as required.  Use low-threshold high-ceiling tasks and parallel tasks.  Provide concrete resources.  Use the Extension Activities to provide extra challenge. |
| **Assessment** |
| **Intuitive Assessment**  Use maths talk, key questions and observation to assess children as they engage in learning experiences.  **Planned Interactions**  Use key questions to discuss children’s work with them as they engage in learning experiences.  **Assessment Events**  Use the end of unit Practice Pages (pp. 154–155 and pp. 160–161) and the *Maths My Way* Summer Assessment. |
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| **Strand and Strand Unit** | | **Learning**  **Outcome(s)** | **Mathematical**  **Concept(s)** | **Mathematical**  **Language** | **Focus of**  **New Learning** | ✓ | **Learning**  **Experiences** |
| **Week 1** | **Number:** Fractions | Recognise and name fractions (quarter) according to their part-whole relationships. | * Each equal share of a set has the same value. * The greater the number of portions of a whole, the smaller the size of each portion. | half (halve), quarter, share, set, split, divide, whole, part, equal | 1. Split shapes into 4 equal parts. |  | * Recognise quarters in sets and shapes. * Reassemble equal quarters to form a whole. * Solve problems involving quarters. |
| 1. Make a whole with 4 equal parts. |  |
| 1. Share sets of objects into 4 equal groups. |  |
| 1. Understand that 1 quarter of a set is 1 of 4 equal groups of a set. |  |
| **Week 2** | **Shape and Space:** Transformation | Understand that shapes and line segments can be reflected, rotated and translated. | * Transformations involve actions on shapes. The mathematical terms reflect, rotate and translate can be used to describe the movement of shapes and objects. * A shape or line is reflected when it is the same perpendicular distance from the mirror line. A shape or line is rotated when it is turned around a point. A shape or line is translated when it is moved a certain distance from its original position (without turning). * A shape or pattern has reflective symmetry if it remains the same when reflected through a mirror line. The mirror line can be part of the shape/object or external to it. | symmetry, symmetrical, line(s) of symmetry, shape, half, reflect (flip), reflection, mirror line, rotate (turn), rotation, translate (slide), translation, tessellate, tessellating, pattern | 1. Explore symmetry in 2D shapes. |  | * Identify lines of symmetry in different shapes. * Illustrate transformations of 2D shapes. * Understand the difference between shapes that have lines of symmetry or reflective lines of symmetry. * Create tessellating patterns using 2D shapes. |
| 1. Explore reflections through a mirror line. |  |
| 1. Explore reflections, rotations and translations of simple 2D shapes. |  |
| 1. Explore tessellations of simple 2D shapes. |  |

**Overview**

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| **Week 1** | **Lesson 1** | **Lesson 2** | **Lesson 3** | **Lesson 4** | **Lesson 5** |
| **Focus of New Learning** | Split shapes into 4 equal parts. | Make a whole with 4 equal parts. | Share sets of objects into 4 equal groups. | Understand that 1 quarter of a set is 1 of 4 equal groups of a set. | Consolidate learning. |
| **Slides** | 25.1 | 25.2 | 25.3 | 25.4 |  |
| **Book** | p. 150 | p. 151 | p. 152 | p. 153 | pp. 154–155 |
| **Concrete Resources** | paper scissors | 2D shapes | interlocking cubes | interlocking cubes | Interlocking cubes |
| **Digital Resources** | 25. Quarters: Game  Planet Maths: Halves and Quarters  Maths Eyes: The Butterfly | | | | |

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| **Week 2** | **Lesson 1** | **Lesson 2** | **Lesson 3** | **Lesson 4** | **Lesson 5** |
| **Focus of New Learning** | Explore symmetry in 2D shapes. | Explore reflections through a mirror line. | Explore reflections, rotations and translations of simple 2D shapes. | Explore tessellations of simple 2D shapes. | Consolidate learning. |
| **Slides** | 26.1 | 26.2 | 26.3 | 26.4 |  |
| **Book** | p. 156 | p. 157 | p. 158 | p. 159 | pp. 160–161 |
| **Concrete Resources** | printable 26.1  scissors | cubes mirrors | printables 26.3 and 26.4 2D shapes | Printable 26.4 2D shapes |  |
| **Digital Resources** | 26. Transformations: Game  Planet Maths: Lines of Symmetry  Maths Eyes: The Butterfly | | | | |