**07. Pattern Creation & 08. Collecting Data**

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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  **Number:** Numeration and Counting |
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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**  Student Book pages 18–21  *Maths My Way* Autumn 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** | **Algebra:** Patterns, Rules and Relationships | Explore, extend and create patterns and sequences. | * A pattern is an arrangement of elements organised according to a defined structure or rule. * A sequence is a list of objects or actions that follow an order. * There are patterns and sequences to everyday routines and events, from which predictions can be made. * Repeating patterns are made up of units of repeat and do not contain random elements. | pattern  repeat  sequence  pattern rule  same  different  order  before  after  next | 1. Recognise and copy patterns. |  | * Watch a video about patterns in the real world. * Create a patterned tower with blocks or cubes. * Create a pattern using a string and beads. * Use Maths Eyes to find, describe and record patterns in nature or patterns in the classroom. |
| 1. Copy and continue patterns. |  |
| 1. Explore and create patterns. |  |
| 1. Create more patterns. |  |
| **Week 2** | **Data and Chance**: Data | Explore, interpret and explain data in a variety of ways for a range of purposes. | * Data is all around us and helps us interpret the world. * A data set is a collection of information that can provide answers to questions we ask. * Data can be collected and represented in many ways. * Data displays (e.g. tables, graphs) are a useful way of conveying information. * Objects and sets can be sorted according to one or more attributes. | block graphs  tally marks  pictogram  ‘How many?’ more  less  same  different  most  least | 1. Introduce data collection. |  | * Write numbers from number cards using tally marks. * Listen to the songs ‘Humpty Dumpty’ and ‘Mr Golden Sun’ and keep a tally of certain words that repeat. * Create a pictogram to represent data collected from a question asked to classmates. |
| 1. Record data using tally marks. |  |
| 1. Represent data using pictograms. |  |
| 1. Represent data using block graphs. |  |

**Overview**



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| **Week 1** | **Lesson 1** | **Lesson 2** | **Lesson 3** | | **Lesson 4** | **Lesson 5** |
| **Focus of New Learning** | Recognise and copy patterns. | Copy and continue patterns. | Explore and create patterns. | | Create more patterns. | Weekly review. |
| **Slides** | 7.1 | 7.2 | 7.3 | | 7.4 | 7.5 |
| **Book** |  | p.18 |  | | p.19 |  |
| **Concrete Resources** | Beads, blocks, any classroom material that could be used to form a pattern like crayons or playdough | | | | | |
| **Digital Resources** | 7. Pattern Creation: Game  7. Pattern Creation: Printables | | | 7. Planet Maths: Blob Patterns  7. Planet Maths: Patterns | | |

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| **Week 2** | **Lesson 1** | **Lesson 2** | **Lesson 3** | | **Lesson 4** | **Lesson 5** |
| **Focus of New Learning** | Introduce data collection. | Record data using tally marks. | Represent data using pictograms. | | Represent data using block graphs. | Weekly review. |
| **Slides** | 8.1 | 8.2 | 8.3 | | 8.4 | 8.5 |
| **Book** |  |  |  | | p.20 | p.21 |
| **Concrete Resources** | Sticky notes, dice | | | | | |
| **Digital Resources** | 8. Collecting Data: Game  8. Collecting Data: Printables | | | 8. Planet Maths: What Can You See? | | |