***Patterning***

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| **Assessment Category** | **Level 1** | **Level 2** | **Level 3** | **Level 4** |
| **Knowledge and Understanding**  **The student…** |  |  |  |  |
| – describes and creates numeric patterns | Limited  Knowledge | Some  Knowledge | Considerable  Knowledge | Thorough  Knowledge |
| – compares patterns |
| - use concrete materials to represent patterns between adding & subtracting |
| **Thinking**  **The student…** |  |  |  |  |
| – demonstrates mathematical thinking (e.g., orally, written and visual representations) | Limited  Effectiveness | Some  Effectiveness | Considerable  Effectiveness | High Degree of Effectiveness |
| – deconstructs problems to determine necessary information |
| – uses problem solving skills and selects appropriate strategies (repeated pattern, growing pattern, shrinking pattern) |
| **Communication**  **The student…** |  |  |  |  |
| - explains number patterns involving addition & subtraction | Limited  Effectiveness | Some  Effectiveness | Considerable  Effectiveness | High Degree of Effectiveness |
| - communicates and identifies patterns on a number line |
| - uses appropriate vocabulary  and terminology (repeated pattern, growing pattern, shrinking pattern) |
| **Application**  **The student…** |  |  |  |  |
| - applies pattern skills in familiar contexts | Limited  Effectiveness | Some  Effectiveness | Considerable  Effectiveness | High Degree  Of Effectiveness |
| - transfers knowledge through investigation & number patterns |
| - makes connections among patterns |