**Grade 6 - Mass, Capacity, Volume & Surface Area Achievement Chart**

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| **Assessment Category** | **Level 1** | **Level 2** | **Level 3** | **Level 4** |
| **Knowledge and Understanding**  **The student…** |  |  |  |  |
| - demonstrates an understanding of the relationship between an estimated and precise measurement | Limited  Knowledge | Some  Knowledge | Considerable  Knowledge | Thorough  Knowledge |
| - estimate, measure and record mass capacity and volume using metric units |
| - demonstrate an understanding of how to convert metric units from larger to smaller (e.g. Kg to g, L to ml) |
| **Thinking**  **The student…** |  |  |  |  |
| - determine the relationship between the height, the area of the base and the volume of a prism | Limited  Effectiveness | Some  Effectiveness | Considerable  Effectiveness | High Degree of Effectiveness |
| - deconstructs problems to determine necessary information |
| - explains how the surface area of rectangular and triangular prisms are related |
| **Communication**  **The student…** |  |  |  |  |
| - communicates mathematical thinking when determining surface area and measuring mass/capacity/volume | Limited  Effectiveness | Some  Effectiveness | Considerable  Effectiveness | High Degree of Effectiveness |
| - communicates using a variety  of modes (short answers,  lengthy explanations, verbal reports, diagrams, numerically) |
| - uses appropriate vocabulary  and terminology (e.g mass, capacity, volume, |
| **Application**  **The student…** |  |  |  |  |
| - applies knowledge and skills about 3D measurement to in-class assignments | Limited  Effectiveness | Some  Effectiveness | Considerable  Effectiveness | High Degree  Of Effectiveness |
| - transfers knowledge and skills about 3D measurement to new contexts  (e.g. homework, creating new word problems) |
| - makes connections between a variety of real life situations where knowledge of surface area and volume can occur |