**Rubric for a Rich Assessment Task**

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| **Teacher: Mrs. J** | **Grade:** 6 |
| **Curriculum Areas: Math** |
| **Topic: Covering an Object with Stickers and Paint** |
| **Learning Expectations (OME)****Overall Number Sense and Numeracy • solve problems involving the multiplication and division of whole numbers, and the addition and subtraction of decimal numbers to thousandths, using a variety of strategies****Measurement -** • estimate, measure, and record quantities, using the metric measurement system;**Specifics:**  Number Sense and Numeracy– solve problems involving the multiplicationand division of whole numbers (four digit by two-digit), using a variety of tools(e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation,algorithms);Measurement– estimate, measure, and record length, area~~, mass, capacity, and volume~~, using the metric measurement system. |
| **Assessment Task**  Students were asked to bring an object to class that they could cover in stickers and paint. The stickers would be created using a rectangular, printable sticker paper. Students were given 4 stickers to design and affix to their object. The students then covered the rest of their chosen object in paint. Students were asked to identify how much surface area was covered in stickers and how much was covered in paint. Coverage of surface area for irregular objects would be estimated by using friendly shapes (shapes where the area is more easily established). Students were required to write a short paragraph describing their thinking and problem solving process. Calculations were to be shown as well as how they had gathered their data and why they used the data collected.  |
| **Success Criteria** Students demonstrate:* An understanding of how to gather relevant data to perform calculations of surface area
* An ability to calculate surface area of the painted portion and the sticker portion of a chosen object
* An ability to create and apply an effective and logical strategy to produce an answer to the question asked
* An ability to use math vocabulary in explanation
* Effective usage of language and diagrams to explain data and calculations
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| **Resources/Citations**Ontario Ministry of Education of education and Training. (2010) *Growing Success: Assessment, evaluation, and reporting in Ontario Schools. Toronto, ON: Queen’s Printer.* Ontario: Queen’s Printer. <http://www.edu.gov.on.ca/eng/policyfunding/growSuccess.pdf>Ontario Ministry of Education of education and Training. (2005) *The Ontario curriculum, mathematics grades 1-8 (revised).* Ontario: Queen’s Printer. <http://www.edu.gov.on.ca/eng/curriculum/elementary/math.html> |

**Rubric**

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| **Categories** | **Level 1** | **Level 2** | **Level 3** | **Level 4** |
| **Knowledge and Understanding** | -Demonstrates a limited understanding of how to gather relevant data to perform calculations of surface area-Demonstrates a limited ability to accurately calculate surface area of a painted portion and a sticker portion of a selected item | -Demonstrates some understanding of how to gather relevant data to perform calculations of surface area-Demonstrates some ability to accurately calculate surface area of a painted portion and a sticker portion of a selected item | -Demonstrates a considerable understanding of how to gather relevant data to perform calculations of surface area-Demonstrates an ability to calculate surface area of a painted portion and a sticker portion of a selected item with accuracy | -Demonstrates a thorough understanding of how to gather relevant data to perform calculations of surface area-Demonstrates an ability to calculate surface area of a painted portion and a sticker portion of a selected item with precision |
| **Thinking and Inquiry** | Student demonstrates limited ability to create and apply an effective and logical strategy to produce an answer to the question asked | Student demonstrates some ability to create and apply an effective and logical strategy to produce an answer to the question asked | Student demonstrates an ability to create and apply an effective and logical strategy to produce an answer to the question asked | Student demonstrates an ability to create and apply an effective and logical strategy to produce an answer to the question asked with precision and creativity |
| **Communication** | -Uses math vocabulary in explanation to a limited degree | -Uses math vocabulary in explanation to some degree | -Uses math vocabulary in explanation to a considerable degree | -Uses math vocabulary in explanation to a high degree |
| **Application** | -Uses language and diagrams to explain data and calculations with limited clarity | -Uses language and diagrams to explain data and calculations with some clarity | -Uses language and diagrams to explain data and calculations with considerable clarity | -Uses language and diagrams to explain data and calculations with a high degree of clarity |