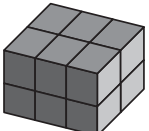
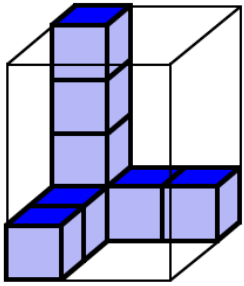


<p>LT Volume - Volume Quantifier (VQ)</p> <p>Builds without gaps. Counts on all faces of an object constructed of cubes, has a developing sense of the cube as a unit, begins to recognize that squares on adjacent faces of a rectangular prism sharing a side are faces of the same cube.</p> <p>Volume Task</p> <p>Place the 2 x 3 x 2 prism on the table and give the students 24 cubes. Then say, "Please put some cubes together to make a block that has the same volume as this block."</p> 	<p>LT Area - Physical Coverer and Counter (PCC)</p> <p>Attends to some aspects of the structure and may cover it completely. Covers a rectangular space with physical tiles. However, cannot organize, coordinate, and structure 2D space without perceptual support. In drawing (or imagining and pointing to count), can represent only certain aspects of that structure, such as approximately rectangular shapes next to one another.</p> <p>Area Task</p> <p>Provide the student with the 4 in x 6 in rectangle and a pile of square inch tiles. Allow student to place the tiles directly on the rectangle. I want to cover this rectangle (trace around the boundary of the larger rectangle) with these squares (point to one of the foam square inch units). Show me how the tiles completely cover the rectangle.</p>	<p>LT Length - Length Direct Comparer (LDC)</p> <p>Physically aligns two objects to determine which is longer or if they are the same length.</p> <p>May use a ruler (as a stick rather than a measuring tool) to directly compare it and another object.</p> <p>Length Task</p> <p>Select two objects close to the same length but not equal in length (we used a Crayola marker and a red pen)</p> <p>Question: Which one is longer? How do you know?</p>
<p>LT Length - Length Unit Relater and Repeater (LURR)</p> <p>Iterates a single unit to measure. Recognizes that different units will result in different measures and that identical units should be used, at least intuitively and/or in some situations.</p> <p>Uses rulers with minimal guidance</p> <p>Length Task</p> <p>Select an object that is close to an exact number of inches long and provide inch squares (we used a 12" green foam strip and inch squares)</p> <p>"This is 1 inch." (Show an inch square.) "How can you use these two tiles to show me how long this foam strip is?"</p>	<p>LT Volume - 3-D Row and Column Structurer (VRCS)</p> <p>Able to flexibly coordinate filling, packing, building aspects of volume. Uses additive comparisons (e.g., "this one has 12 more") but may show some multiplicative comparisons (e.g., "this one is four times as big").</p> <p>Initially counts or computes the number of cubes in one layer then uses addition or skip counting by layers to determine total volume; eventually moves to multiplication.</p> <p>Volume Task</p> <p>Show the picture of the partially-filled box below. Ask, "How many cubes would it take to fill the box?"</p> 	<p>LT Area - Array Structurer (AS)</p> <p>With linear measures or other similar indications of the two dimensions, multiplicatively iterates squares in a row or column to determine the area. Has an abstract understanding of the rectangular area formula.</p> <p>Area Task</p> <p>How many of the small rectangles would it take to cover the large rectangle?</p> 