Pictorial Representation Strategy

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DESCRIPTION: Pictorial representation allows students to draw diagrams and pictures and create lists, tables and graphs to help them recognize patterns, make connections and build meaning. These drawings, graphs and charts can be hand-drawn or created on a computer, and can be simple or complex and multi-dimensional.

EXAMPLE ACTIVITIES: This strategy is ideally suited for agricultural math problems that one might see in landscaping, greenhouse management, pesticide application and pasture management.

USE: No student worksheet accompanies this strategy. Instead, incorporate the use of pictorial representations into the assignment as needed. An example is provided below of how to incorporate it and what instructions to provide.

THESE ACTIVITIES ARE ALIGNED TO THE FOLLOWING STANDARDS:

Common Core- Math

- MP1: Make sense of problems and persevere in solving them.
- MP2: Reason abstractly and quantitatively.
- MP3: Construct viable arguments and critique the reasoning of others.
- MP5: Use appropriate tools strategically.
- MP6: Attend to precision.
- MP7: Look for and make use of structure.

EXAMPLE:

Jackson is designing a landscape for a neighbor. They have 40 paving tiles (20 which are dark brown in color and 20 which are a light sand color), and they want Jackson to use the tiles in the landscape. He has decided they will be used for the path that will connect the patio to the garden sitting area. What design should Jackson use for this path that utilizes the paving tiles? Use the outline of the path below to arrange the paving tiles.

ANSWER FOR EXAMPLE PROBLEM:

(Students may create any pattern or design they like, as long as they fill in the path and use a mixture of both light and dark colored paving tiles. They can also cut the tiles to any size they want.)