

Using Manipulatives

Instructional Routine

Visualizing

Golden Ticket Lesson Design



Opening

- Prominently display Target Standards Poster for unit.
- "Touch" the standard for the day on the Target Standards Poster to begin each lesson.
- *Emotional Hook * Prior Knowledge * Relevance * Curiosity
- Question or discussion around the hook or a real-world problem that you want to be answered



I Do:

Concrete

Hands-On Opportunities for Students to Explore

- Define the manipulative.
- Identify the problem.
- Identify the question you are trying to answer.
- Use the manipulatives to model how to solve the problem while explaining your thinking and how you are solving the problem.



We Do:

Semi-Concrete

Guided Practice: Students using illustrations, drawing or modeling to represent the math concept

- Students use manipulatives to solve a novel problem.
- Teacher checks for understanding.
- Students use manipulatives to solve the problem with feedback.
- Teacher models a problem with drawing the manipulatives.
- Students use drawing or illustration to represent the manipulatives to solve problems.
- Teacher models a problem that will be difficult to do when using manipulatives, or illustrations.
- Teacher guides discussion with students on what they would do to solve that problem. Discussion leads to the **discovery or reveal of the algorithm**.



You Do:

Abstract

Independent Practice with Feedback: Demonstrate an understanding of conceptual using math terms

- Students solve the problems aligned to the lesson using the strategy that supports their understanding and learning.
- Teacher checks for understanding
- Teacher pulls a small group of students that did not have the correct answers during guided practice to reteach.
- Exit Ticket



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