

# Questions To Support Your Students In The Mathematizing Sandbox

## General Questions for Entering Problem Situations

- *Think about the numbers in each situation. What do they represent? Which are quantities? Which are not? What work do they do? How are the quantities related to the each other?*
- *How can you represent the quantities in the word problems with your manipulatives, pictures, tables, or graphs?*
- *What equations can you write that represent the problem situations?*

## Addition/Subtraction Questions for Exploring Problem Situations

- *Are these problems about action or relationships?*
- *If you see action, what is the change?*
- *If you see relationships, how would you describe the relationships? Are they about groups or about comparing?*
- *Where are the quantities in the word problems represented in your manipulatives or pictures?*
- *How is the operation in your equation represented in your physical or visual model?*

## Multiplication/Division Questions for Exploring Problem Situations

- *Think about the factors in each situation. What do they represent? What work do they do?*
- *Look at the units in the factors and product in the problem. Do the factors have the same unit, or do the factors have two different units?*
- *Are the quantities or units related to each other, with the same or different units?*
- *If the factors have the same unit, do they create a new unit?*
- *If the factors have two different units, what are the containers or groups? What is in each container or group?*
- *How many possible outcomes could there be?*
- *Where are the quantities in the word problems represented in your manipulatives or pictures?*
- *How is the operation in your number sentence represented in your physical or visual model?*