

HANDOUT 11

MLR6 Three Reads

Mathematical Language Routine 6: Three Reads

Purpose:

To ensure that students know what they are being asked to do, create opportunities for students to reflect on the ways mathematical questions are presented, and equip students with tools used to actively make sense of mathematical situations and information (Kelemanik, Lucenta, & Creighton, 2016). This routine supports reading comprehension, sense-making, and meta-awareness of mathematical language. It also supports negotiating information in a text with a partner through mathematical conversation.

How it happens:

In this routine, students are supported in reading a mathematical text, situation, or word problem three times, each with a particular focus. The intended question or main prompt is intentionally withheld until the third read so that students can concentrate on making sense of what is happening in the text before rushing to a solution or method.

Read #1: Shared Reading (one person reads aloud while everyone else reads with them) The first read focuses on the situation, context, or main idea of the text. After a shared reading, ask students “what is this situation about?” This is the time to identify and resolve any challenges with any non-mathematical vocabulary. (1 minute)

Read #2: Individual, Pairs, or Shared Reading After the second read, students list any quantities that can be counted or measured. Students are encouraged not to focus on specific values. Instead they focus on naming what is countable or measurable in the situation. It is not necessary to discuss the relevance of the quantities, just to be specific about them (examples: “number of people in her family” rather than “people,” “number of markers after” instead of “markers”). Some of the quantities will be explicit (example: 32 apples) while others are implicit (example: the time it takes to brush one tooth). Record the quantities as a reference to use when solving the problem after the third read. (3–5 minutes)

Read #3: Individual, Pairs, or Shared Reading During the third read, the final question or prompt is revealed. Students discuss possible solution strategies, referencing the relevant quantities recorded after the second read. It may be helpful for students to create diagrams to represent the relationships among quantities identified in the second read, or to represent the situation with a picture (Asturias, 2014). (1–2 minutes).

Zwiers, J., Dieckmann, J., Rutherford-Quach, S., Daro, V., Skarin, R., Weiss, S., & Malamut, J. (2017). *Principles for the design of mathematics curricula: Promoting language and content development*. Retrieved from Stanford University, UL/SCALE website: <http://ell.stanford.edu/content/mathematics-resources-additional-resources>