

NCTM 2019

Wonder-Forward: Creating a Classroom Culture that Inspires Creativity and Wonder

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### [Slide Deck](#)

Student Led Discourse [Gold Standard](#) describing student leaders and team moves

Some Complex Instruction roles:

- Reader
  - Read the info card aloud to keep your group together. Clarify what info you are given, and what you need to figure out.
- Temperature checker
  - Ensure that everyone in the group understands before moving on to the next problem. Say things like, "\_\_\_\_ can you re-phrase what \_\_\_\_ said?" Get everyone ready for the shuffle quiz!
- Skeptic
  - Appropriately interrogate conclusions; push the group to justify rigorously, beyond a single case. Can we generalize? Can we find a counterexample?
- Spark Plug:
  - Once your group has made some solid progress, spark mathematical questions and ideas building off of what you've learned. Invite members to generate questions and celebrate interesting ideas.
- Stage Manager
  - Use the dry erase board to write out the group's work & thinking. Make sure all work is happening in the center, where everyone can see it.
- Voice Monitor & Relay
  - Ensure that all group members are participating. Invite new voices into the discussion if it seems like some people are talking more than others. You are the only person who may ask me questions or call me over.

Narratives from our Exponential unit:

- a. *One Grain of Rice*
- b. Paper folding to the moon
- c. Marshall Islands radioactivity
- d. Yonkers New York
- e. Predatory Lending project