



Stronger, Clearer Each Time

Procedure

- 1. Pre-write** - Students draft response to prompt. *It is not necessary for students to have finished their response to move into the Pair Shares, but they should have an opportunity to prepare and record some initial ideas.* (2-3 minutes)
- 2. Pair share-** (1-2 minutes per meeting)
 - Speakers share ideas, ideally without looking at draft
 - Listeners ask questions, press for details or examples, and give relevant feedback
- 3. Switch partners and repeat**
- 4. Revise pre-write** - Students write final response to the prompt. Students will naturally borrow ideas from partners, and refine their own ideas through repeated communication rounds. (2-3 minutes)



Stronger, Clearer Each Time

Procedure

- 1. Pre-write** - Students draft response to prompt. *It is not necessary for students to have finished their response to move into the Pair Shares, but they should have an opportunity to prepare and record some initial ideas.* (2-3 minutes)
- 2. Pair share-** (1-2 minutes per meeting)
 - Speakers share ideas, ideally without looking at draft
 - Listeners ask questions, press for details or examples, and give relevant feedback
- 3. Switch partners and repeat**
- 4. Revise pre-write** - Students write final response to the prompt. Students will naturally borrow ideas from partners, and refine their own ideas through repeated communication rounds. (2-3 minutes)

Stronger, Clearer Each Time

Teacher Information

What: This routine provides a purpose for student conversation through the use of a discussion-worthy and iteration-worthy prompt and provides students with an opportunity to strengthen both their conceptual understanding of data science ideas and their ability to communicate as data scientists.

How it happens:

(1) Pre-Write: First students draft an initial response to a prompt by writing or drawing their initial thoughts in a first draft. It is not necessary that students finish this draft before moving to the structured pair meetings step.

(2) Pair-Share: Next, use a structured pairing strategy to facilitate students having 2–3 meetings with different partners. Each meeting gives each partner an opportunity to be the speaker and to be the listener.

(3) Second Draft: Finally, students write a second draft. This draft should naturally reflect borrowed ideas from partners, as well as refinement of ideas through repeated communication.)

Why: Through repeated conversations, students will show evidence of refinement in precision, communication, expression, and reasoning about data science concepts.

Adapted from "Instructional Routine Cards" CC BY Illustrative Mathematics ©

This material is based upon work supported by the National Science Foundation under Grant No. 2122485. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Stronger, Clearer Each Time

Teacher Information

What: This routine provides a purpose for student conversation through the use of a discussion-worthy and iteration-worthy prompt and provides students with an opportunity to strengthen both their conceptual understanding of data science ideas and their ability to communicate as data scientists.

How it happens:

(1) Pre-Write: First students draft an initial response to a prompt by writing or drawing their initial thoughts in a first draft. It is not necessary that students finish this draft before moving to the structured pair meetings step.

(2) Pair-Share: Next, use a structured pairing strategy to facilitate students having 2–3 meetings with different partners. Each meeting gives each partner an opportunity to be the speaker and to be the listener.

(3) Second Draft: Finally, students write a second draft. This draft should naturally reflect borrowed ideas from partners, as well as refinement of ideas through repeated communication.)

Why: Through repeated conversations, students will show evidence of refinement in precision, communication, expression, and reasoning about data science concepts.

Adapted from "Instructional Routine Cards" CC BY Illustrative Mathematics ©

This material is based upon work supported by the National Science Foundation under Grant No. 2122485. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.