

Mathematical Practice in the Classroom

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Illustrative Mathematics

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Looking for mathematical practices is like bird watching



- Go where the birds are—in order to exhibit a mathematical practice, students have to be practicing mathematics.
- You don't see a duck in a tree—which practices you see depends on the specific content being studied.
- Sometimes you don't see any birds—sometimes you don't see any practices.
- Precise identification is difficult.

Standards for Mathematical Practice

- 1 Make sense of problems and persevere in solving them
- 2 Reason abstractly and quantitatively
- 3 Construct viable arguments and critique the reasoning of others
- 4 Model with mathematics
- 5 Use appropriate tools strategically
- 6 Attend to precision
- 7 Look for and make use of structure
- 8 Look for and express regularity in repeated reasoning

Tour One

- Classroom Video (1:40–2:46)
- Dan Meyer video
- Student work

Tour Two

- Purple Paint
- (1:45, 4:00)

Tour Three

- On Saturday, 5 girls and 5 boys came to the swimming pool. How many children were there?
- On Sunday, 5 girls and 6 boys came to the swimming pool. How many children were there? How can you use your work on the first problem to help you with the second problem?
- Classroom video

Tour Four

- Model with Mathematics
- Attend to Precision