## Who's Who?

Steve, Felicia, and Kai—a ninth grader, a tenth grader, and an eleventh grader, but not necessarily in that order—were seated around a circular table, playing a game of Hearts.

Each passed three cards to the person on the right. Felicia passed three hearts to the ninth grader. Steve passed the queen of spades and two diamonds to the person who passed cards to the eleventh grader.

Who was in ninth grade? Tenth grade? Eleventh grade? How were they seated?



- 1. *Process:* Describe what you did in attempting to solve this problem. Write about such things as
  - how you got started
  - where you got stuck and how you got unstuck
  - how you knew when to stop

Write about your process of working on the problem, *even if you didn't solve the problem*.

**2.** *Solution:* Your solution should state what grade each student was in and how they were seated. It should also explain how you can be *absolutely certain* of your answer. Show that your answer fits the information and that it is the *only* answer that fits the information.

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