The final exams for six medical school courses—Gerontology, Histology, Neurology, Organic Chemistry, Pediatrics and Toxicology—will each be held in a different one of exactly six lecture halls—101, 102, 103, 104, 105 and 106. The assignment of the exams to the lecture halls must satisfy the following conditions:

The Gerontology exam room is one number lower than the Organic Chemistry exam room.

The Pediatrics exam is in either room 101 or room 106.

The Histology exam is in a lower–numbered lecture hall than the Toxicology exam.

If the Gerontology exam is not in room 103, then the Neurology exam is.

- 1. Which one of the following could be an accurate assignment of exams to lecture halls?
- A. 101: Pediatrics, 102: Neurology, 103: Histology, 104: Gerontology, 105: Organic Chemistry, 106: Toxicology
- B. 101: Toxicology, 102: Histology, 103: Neurology, 104: Gerontology, 105: Organic Chemistry, 106: Pediatrics
- C. 101: Organic Chemistry, 102: Gerontology, 103: Neurology, 104: Histology, 105: Toxicology, 106: Pediatrics
- D. 101: Neurology, 102: Histology, 103: Gerontology, 104: Organic Chemistry, 105: Toxicology, 106: Pediatrics
- E. 101: Histology, 102: Pediatrics, 103: Gerontology, 104: Organic Chemistry, 105: Neurology, 106: Toxicology
- 2. If the Gerontology exam is held in a lecture hall immediately to the right of the hall where the Neurology exam is held, which one of the following could be true?
- A. Histology is in room 105.
- B. Organic Chemistry is in room 106.
- C. Neurology is in room 101.
- D. Organic Chemistry is in room 102.
- E. Neurology is in room 104.

- 3. If the Toxicology exam is held in room 102, then which one of the following must be true of the exams?
- A. Gerontology is in room 101.
- B. Neurology is in room 103.
- C. Organic Chemistry is in room 104.
- D. Organic Chemistry is in room 105.
- E. Pediatrics is in room 106.
- 4. Which one of the following CANNOT be true?
- A. The Histology exam is held in a higher numbered classroom than the Gerontology exam.
- B. The Neurology exam is held in a higher numbered classroom than the Pediatrics exam.
- C. The Organic Chemistry and Histology exams are held in adjacent rooms.
- D. The Pediatrics and Toxicology exams are held in adjacent rooms.
- E. The Pediatrics and Gerontology exams are held in adjacent rooms.
- 5. If both the Gerontology exam and the Histology exam are held in odd numbered classrooms, then each of the following could be true EXCEPT
- A. The Neurology exam is held in room 102.
- B. The Neurology exam is held in room 104.
- C. The Organic Chemistry exam is in room 104.
- D. The Toxicology exam is held in room 106.
- E. The Neurology exam is held in room 106.
- 6. The exact room of each exam can be completely determined if it is known that
- A. the Toxicology exam is in a room with a lower number than either the Gerontology or Organic Chemistry exams
- B. the Organic Chemistry exam is in a room with a lower number than either the Histology or Pediatrics exams
- C. the Gerontology exam is in a room with a lower number than either the Neurology or Pediatrics exams
- D. the Histology exam is in a room with a lower number than the Gerontology exam
- E. the Toxicology exam is in a room with a lower number than the Gerontology exam

Game 32 – Med School Exams

- 1. D
- 2. A
- 3. E
- 4. E
- 5. E
- 6. B

Question 1 is the standard rule testing question that typically begins a game. Answers A, B, C and E all break a rule. On Question 2 you can deduce a "block" of Neurology, Gerontology and Organic Chemistry that must begin in either 102 or 103, which excludes the four wrong answers. For Question 3, you can deduce that the Histology exam is first based on the implicated rule, and therefore the Pediatrics exam must be sixth, based on its rule.

Question 4 is E because Gerontology is to the immediate left of Organic Chemistry, the only way it can be next to Pediatrics is if Pediatrics is in 101 and Gerontology is in 102. This would break the rule that Neurology or Gerontology must be in 103.

On Question 5, if Neurology is in Room 106, Pediatrics must be in room 101. Thus Histology cannot go anywhere—not in 101 because Pediatrics is there, not in 103 because of Rule 4, and not in 105 because Toxicology must follow it.

The final question is matter of looking at each and drawing out the inferences—plug them out meticulously if you're struggling. B is the correct answer because if this is the case, Gerontology must be first and Neurology must be third. (In choice C, Gerontology could be either first or third)

In games that involve order with both relational clues as well as absolute ones, often times it's bested to "anchor" any relational deductions. For example, you might be able to deduce the relation of certain objects and the exact position of one. In a case like this, you can put a little subscript object or some other denotation. (i.e., X is before Y, which is before Z–and Y is fourth)As always, do not get hung up on trying to figure out what exact place the elements are in.