RSNA CME
Brief Guide to Writing Good Multiple Choice Questions

BEFORE YOU START: Aim to test key concepts and vital information from the online course. All questions must include remediation.

Definitions:
Stem: the "question" part of the item
Distractors: the incorrect choices
Key: the correct answer

The Stem:
Should be "focused": that is, contain the *main idea* of the question. (Use the "cover test": can you cover the options and still answer the question?)
Do not use negative constructions:
A. "What finding is **NOT** associated with…"
B. "…all of the following **EXCEPT**…"
C. "Which of the following is **LEAST** likely…"

> **Sample Question:**
>
> Where do gastrointestinal stromal tumors most commonly occur?   **[STEM]**
>
> A. Esophagus   **[DISTRACTOR]**
>
> B. Stomach   **[KEY]**
>
> C. Small bowel   **[DISTRACTOR]**
>
> D. Colon   **[DISTRACTOR]**

Do use simple wording and sentence structure. No jargon or unusual abbreviations. Include no unnecessary information, and no "red herrings" that might be misleading.

The Key (correct answer):
- **MUST** be 100% , no doubt, accepted as correct
- Avoid nebulous, relative terms, like "frequently", "rarely", or "often".
- Randomize the position of the correct answer (most test-takers guess B or C).
- Each question must include a reference to back-up why it is the correct answer.

> **Focused Stem:**
> What is the most common site of hematogenous metastases from colon carcinoma?
>
> **Unfocused stem:**
> Which of the following is true regarding autoimmune pancreatitis?

The Distractors (wrong choices):
- How many---must include at least 3.
- **MUST** be plausible.
- **DO:** Keep the distractors:
  a.) All about the same length (and the answer, too)
  b.) Focused and parallel (for example, all are diagnoses, or radiographic findings, or therapies)
  c.) Short and simple. Avoid lengthy modifiers or combining concepts in one item
- **DON'T:**
  a) Use "always" or "never" (and no "maybe " terms, such as "…can sometimes…", or "…is often…")
  b) Use "all of the above" or "none of the above "
  c) Use mutually exclusive, paired options. For example:
      i. Worse with head turned to the right
      ii. Worse with head turned to the left
  d) "Highlight" any choices, such as with quotation marks or parentheses
  e) Give grammar clues. For example, if the stem asks for a plural response, be certain the distractors are plural, too.

If using Images in your questions:
A. They must be technically superb.
B. Choose classic examples.
C. The findings must be readily apparent. (no "eye tests")

Remediation:
All questions must include feedback that explains the answer to the question. List this answer explanation after each questions set of distractors. This information should easily be identified somewhere in the course. Highlight text containing the answer in the course and list the question number next to it. This will enable us to refer the learner back to the section of the course where the answer can be found.