

Constructing test questions for the ACT Certifying Exam



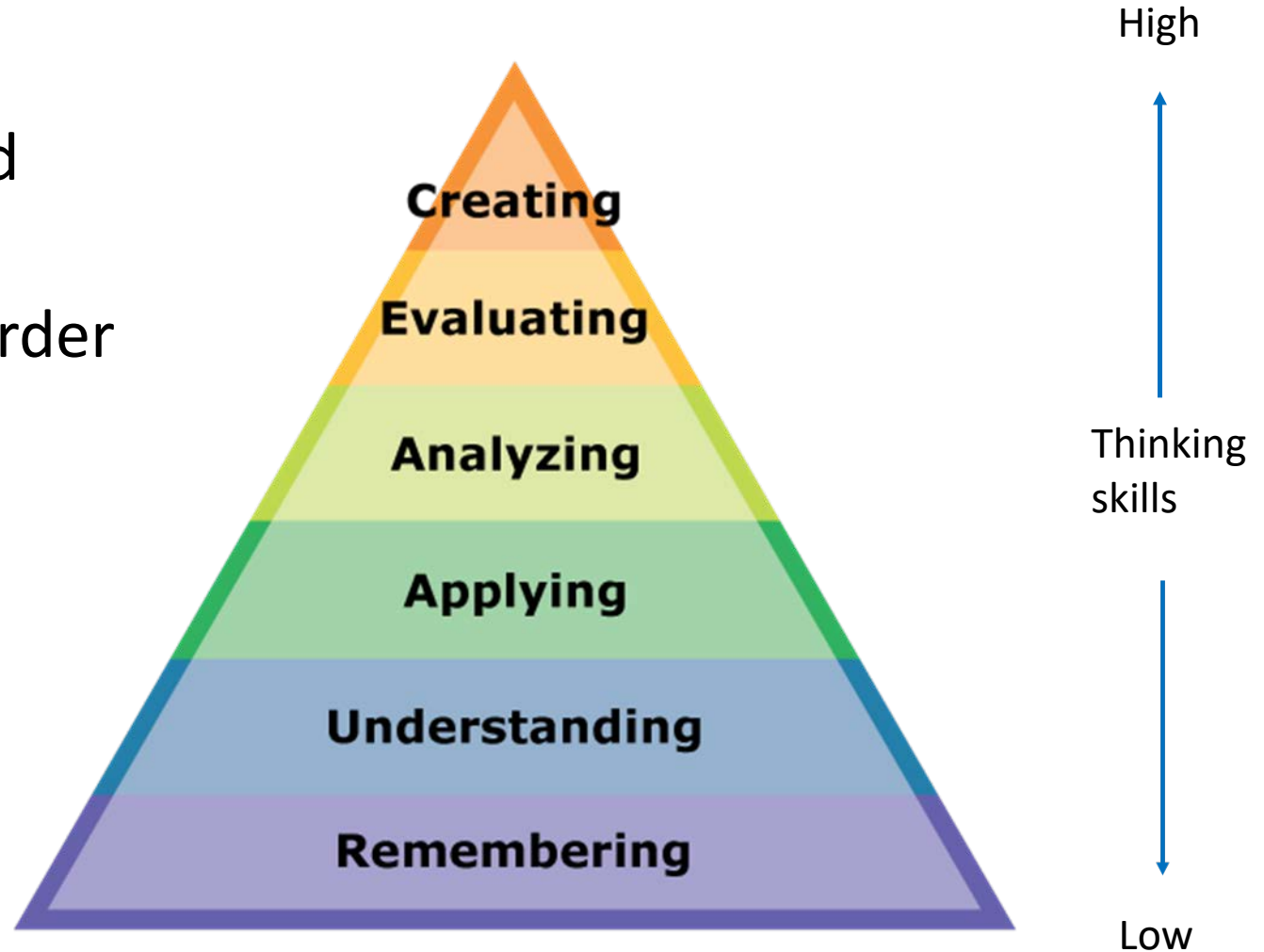
Objective and outline

- **Brief overview** of key elements, things to do and things to avoid when writing exam questions
- Intended to be used in association with longer, more comprehensive descriptions
- Includes multiple choice and essay questions

Revised Bloom's Taxonomy

Testing objectives

- Knowledge of key concepts and principles
- Questions that assess higher-order skills, rather than simply remembering, are strongly preferred



Multiple choice questions

- Two basic parts: problem (stem) and 5 solutions (alternatives), with 1 best answer and 4 distractors that are incorrect or inferior
- Stem is most commonly a direct question
- Stem can elicit a single correct answer or the best answer
- The stem is the foundation; it is usually longer than alternatives and should clearly indicate the problem or expectation, independent of the alternatives

Technical considerations

- Stem should have a clearly stated, specific question/problem that is brief but complete
- Stem should include as much of the item as possible (minimizes length and repetition in the alternatives)
- **Avoid** negative or completion-type questions (incomplete statements)
- Alternatives should be clear, concise, homogenous and mutually exclusive
- Alternatives should not contain vague terms, trivial differences, all/none of the above, or combinations (e.g. both A and B)

Tips to avoid technical flaws that make it easier to eliminate incorrect alternatives

- Alternatives plausible and of similar length and form
- Grammar of alternatives consistent with stem
- Avoid specific determiners (e.g. always, never, only)
- Avoid keywords that appear in both stem and alternatives
- Avoid textbook, verbatim phrasing

Essay questions

- Intended to generate evidence of higher-order thinking and understanding
- Poorly written essay questions may simply assess recall

General technical considerations

- Clearly define the learning outcome to be assessed
- Clearly define the task and use a directive verb and object to align it to the intended learning outcome
- Give the candidate clear direction regarding what is expected, including setting clear boundaries
- Present the task as a direct question or imperative task (e.g. compare and contrast)
- Situate the task within a problem
- Use structured prompts to divide the question into distinct parts (to elicit desired responses)