

Which of the following would be used to find the weight of an apple?

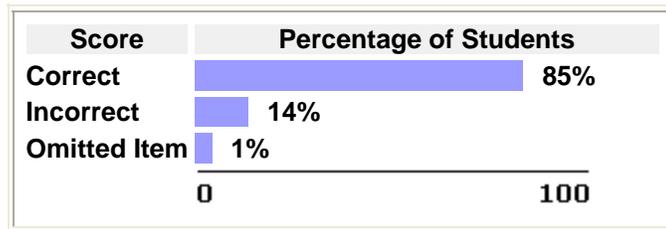
- A) A measuring cup
- B) A ruler
- C) A scale
- D) A thermometer

Key

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- D) A thermometer

2003 National Performance Results



Note:

- These results are for public and nonpublic school students.
- Percentage may not add to 100 due to rounding.

Mathematical Content Area

Measurement

This question was classified in the measurement content area. This content area focuses on students' understanding of the process of measurement and on the use of numbers and measures to describe and compare mathematical and real-world objects. Students are asked to identify attributes, select appropriate units and tools, apply measurement concepts, and communicate measurement-related ideas. Students at grade 4 should understand and be able to use the measurement attributes of time, money, temperature, length, perimeter, area, capacity, weight/mass, and angle measure. At grades 8 and 12, in addition to these topics, students will also be expected to understand and demonstrate knowledge of volume and surface area, and they will be expected to solve problems that involve proportional thinking, combining or translating shapes, and applications that involve the use of complex measurement formulas. For some questions, measurement is assessed with real measuring devices.

Mathematical Ability

Conceptual understanding

This question measures students' conceptual understanding. Students demonstrate conceptual understanding in mathematics when they provide evidence that they can recognize, label, and generate examples of concepts; use and interrelate models, diagrams, manipulatives, and varied representations of concepts; identify and apply principles; know and apply facts and definitions; compare, contrast, and integrate related concepts and principles; recognize, interpret, and apply the signs, symbols, and terms used to represent concepts. Conceptual understanding reflects a student's ability to reason in settings involving the careful application of concept definitions, relations, or representations of either.