

## OVERVIEW OF THE CAPT SCIENCE TEST THIRD GENERATION

### Item Distribution

Strand	Content Knowledge	Scientific Inquiry, Literacy and Numeracy		Total
	MC Items*	MC Items*	CR Items*	Points
I. Energy Transformations	8	4	1	15
II. Chemical Structures & Properties	8	4	1	15
III. Global Interdependence	8	4	1	15
IV. Cell Chemistry & Biotechnology	8	4	1	15
V. Genetics, Evolution & Biodiversity	8	4	1	15
<b>Totals</b>	<b>40 MC Items</b>	<b>20 MC Items</b>	<b>5 CR Items</b>	<b>75 Points</b>

\* Each multiple-choice (MC) item is worth 1 point. Each constructed response (CR) item is worth 3 points.

**General Test Format** There will be a total of 65 test questions: 60 multiple choice and five constructed response items. Each content strand will be assessed by 13 items: 12 multiple-choice and one constructed response item. Eight of the multiple-choice items will assess content knowledge and four will assess scientific inquiry, literacy and numeracy.

**Test Scoring** The selected response items will be scored electronically as correct or incorrect. Constructed response items will be hand-scored by trained readers using a 4-point scale (0-3).

### **Curriculum-Embedded Performance Tasks**

CSDE has developed a suggested performance task for each of the five content strands in the science framework for Grades 9-10. Teachers are encouraged to use these tasks in the normal course of instruction when teaching the related content strand. The five constructed response items on the CAPT will assess scientific inquiry, literacy and numeracy using the context of the curriculum embedded tasks. These constructed response items would total 15 points or 20 percent of the total test.

### **Reporting**

A Total Science Score will be reported based on all 75 points. In addition, the following subtest scores will be reported:

- |   |           |     |
|---|-----------|-----|
| • Energy Transformation                     | 15 points | 20% |
| • Chemical Structures and Properties        | 15 points | 20% |
| • Global Interdependence                    | 15 points | 20% |
| • Cell Chemistry and Biotechnology          | 15 points | 20% |
| • Genetics, Evolution and Biodiversity      | 15 points | 20% |
| • Content Knowledge                         | 40 points | 53% |
| • Scientific Inquiry, Literacy and Numeracy | 35 points | 47% |

**Testing Time** The science test will be divided into two sessions, each 50 minutes in length.