

**Oklahoma School Testing Program  
Oklahoma Modified Alternate Assessment Program  
Biology I  
Test Blueprint  
School Year 2012-13**

The Test Blueprint reflects the degree to which each standard and objective is represented on the test. The overall distribution of operational items in a test form is intended to look as follows:

Process/Inquiry Standards and Objectives	Ideal Number of Items	Ideal Percentage of Items
<b>Observe and Measure (P1.0)</b>	<b>6</b>	<b>12%</b>
Qualitative/quantitative observations and changes (P1.1)	4	
Use appropriate System International (SI) units and tools (P1.2 & P1.3)	2	
<b>Classify (P2.0)</b>	<b>6</b>	<b>12%–13%</b>
Use observable properties to classify (P2.1)	2–4	
Identify properties of a classification system (P2.2)	2–4	
<b>Experiment (P3.0)</b>	<b>13–16</b>	<b>27%–32%</b>
Evaluate the design of investigations (P3.1)	3–4	
Identify a testable hypothesis, controlled variables, and experimental controls in an experiment (P3.2 & P3.4)	3–4	
Use mathematics to show relationships (P3.3)	3–4	
Identify potential hazards and practice safety procedures in all science activities (P3.5)	3–4	
<b>Interpret and Communicate (P4.0)</b>	<b>16–19</b>	<b>33%–39%</b>
Select predictions based on observed patterns of evidence (P4.1)	3–4	
Interpret line, bar, trend, and circle graphs (P4.3)	3–4	
Accept or reject a hypothesis (P4.4)	3	
Make logical conclusions based on experimental data (P4.5)	3–4	
Identify an appropriate graph or chart (P4.8)	3–4	
a. Translate quantitative information expressed in words into visual form (e.g., a table, chart, equation)		
b. Translate information expressed visually or mathematically (e.g., a table, chart, equation) into words		
<b>Model (P5.0)</b>	<b>6</b>	<b>13%</b>
Interpret a model which explains a given set of observations (P5.1)	3	
Select predictions based on models using mathematics when appropriate (P5.2)	3	
<b>Total Test</b>	<b>46–49<sup>1</sup></b>	<b>100%</b>

<sup>1</sup> The actual number of items scored for a student may be slightly lower pending a review of item statistics.

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**Test Blue Print (continued)**  
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Content Standards and Objectives	Ideal Number of Items	Ideal Percentage of Items <sup>1</sup>
<b>The Cell (1.0)</b>	<b>9–12</b>	<b>21%–27%</b>
Cell structures and functions (1.1)	3–5	
Differentiation of cells (1.2)	2–4	
Specialized cells (1.3)	2–4	
<b>The Molecular Basis of Heredity (2.0)</b>	<b>9–12</b>	<b>21%–27%</b>
DNA structure and function in heredity (2.1)	3–6	
Sorting and recombination of genes (2.2)	4–7	
<b>Biological Diversity (3.0)</b>	<b>9–12</b>	<b>21%–27%</b>
Variation among organisms (3.1)	2–4	
Natural selection and biological adaptations (3.2)	3–5	
Behavior patterns can be used to ensure reproductive success (3.3)	2–4	
<b>The Interdependence of Organisms (4.0)</b>	<b>6–8</b>	<b>14%–18%</b>
Organisms both cooperate and compete (4.1)	3–5	
Population dynamics (4.2)	3–5	
<b>Matter/Energy/Organization in Living Systems (5.0)</b>	<b>10</b>	<b>21%</b>
Complexity and organization used for survival (5.1)	3–4	
Matter and energy flow in living and nonliving systems (5.2)	3–4	
Earth cycles including abiotic and biotic factors (5.3)	3–4	
<b>Total Test</b>	<b>43–46<sup>2</sup></b>	<b>100%</b>

<sup>1</sup> While the blueprint specifies an ideal percentage of items for the content standards, some variation in the number of items per standard/objective is allowable. The number of items per content standard/objective in a given test should fit within the range specified in the blueprint.

<sup>2</sup> Three out of the 46 total items assess the “Safety” process standard, for which there is no corresponding content standard.

- Student performance on the multiple-choice test will be reported at the standard level. A minimum of 6 items is required to report a standard. While the actual numbers of items on the test may not match the blueprint exactly, each future test will move toward closer alignment with the ideal blueprint.
- The approximate percentages are based on the total number of items on a test that are matched to the content standards and do not include items added for safety.
- Biology I standards correspond to the PASS Biology I standard revision 2011.