Ohio Graduation Test (OGT) Blueprint for Science					
Standard		Multiple- Choice (1 point)	Short-Answer (2 points)	Extended- Response (4 points)	Total Points
Science and Technology	Items	1 -3	0 or 1	0 or 1*	
	Points	1 -3	0 or 2	0 or 4	3 – 5
Scientific Inquiry	Items	1 -3	0 or 1	0 or 1*	
	Points	1 -3	0 or 2	0 or 4	3 – 5
Scientific Ways of Knowing	Items	1 -3	0 or 1	0 or 1*	
	Points	1 -3	0 or 2	0 or 4	3 – 5
Subtotal	Items	4-8	2	0-1*	
	Points	4-8	4	0-4	12
Earth and Space Sciences	Items	8 or 10	0 or 1	0 or 1	
	Points	8 or 10	0 or 2	0 or 4	12
Life Sciences	Items	8 or 10	0 or 1	0 or 1	
	Points	8 or 10	0 or 2	0 or 4	12
Physical Sciences	Items	8 or 10	0 or 1	0 or 1	
	Points	8 or 10	0 or 2	0 or 4	12
Total	Items	32	4	2	38
	Points	32	8	8	48

* On any test form only 1 of these 3 standards will have an extended response item.

Item Distribution

Items are distributed among three item formats on each form of the test according to the following guidelines:

- Each of the four reportable categories is assessed by multiple-choice items and at least one constructed-response item on every form of the test
- Each standard is assessed by at least one, but not more than two, extendedresponse items over the course of two academic years (six operational forms)
- Each operational form will typically include 6 Field Test items.

Reporting of Results

Results will be reported using a scaled score for overall achievement as well for the number of points received for each of the following standards:

- Science and Technology, Scientific Inquiry and Scientific Ways of Knowing
- Earth and Space Sciences
- Life Sciences
- Physical Sciences

Additional categories for item development:

Careful attention is given in the design of the items and tasks to the performance expectations (cognitive demand) for students in regards to science skills and understandings. To assure a balance of a variety of ways for students to demonstrate science skills and understandings, each item on the science test will focus on one of four categories:

Recalling/Identifying Accurate Science: Items test student ability to accurately recall and/or identify fundamental science facts, concepts and relationships.

Communicating Understanding/Analyzing Science Information: Items test student ability to communicate in science with clarity, focus and organization. Students may be asked to organize, summarize and evaluate observations and data. Students may be asked to setup or complete computations and/or estimations. Students may be asked to choose among given models or representations in order to summarize observations and data. Students may be asked to make inferences from observations and data, describe patterns and trends in observations, explain concepts or describe relationships (e.g., structure and function, cause and effect, systems and interactions, constancy and changes). **Demonstrating Investigation Processes of Science:** Items test student ability to think scientifically. Students may be asked to make observations and select appropriate tools. Students may be asked to discuss procedures and methods of science. Students may be asked to describe procedures or to make measurements. Students may be asked to develop and evaluate questions or make predictions from information, including text, graphs, charts, tables, photographs, drawings or other graphic organizers. Students may be asked to design, evaluate or revise a given investigation including the effects of different variables.

Applying Concepts/Making Relevant Connections with Science: Items test student ability to apply science in the context of individuals and society and to analyze consequences and alternatives. Students may be asked to propose solutions, use and integrate knowledge and concepts in new situations and recognize scientific procedures appropriate to given real-world situations.

Each test form will assign approximately equal numbers of points to each category.