



# PSSA-M Reading and Science Performance Level Descriptors

**Grade 04 Reading** 

**Grade 05 Reading** 

**Grade 06 Reading** 

**Grade 07 Reading** 

**Grade 08 Reading** 

**Grade 11 Reading** 

Grade 08 Science

**Grade 11 Science** 

## **Pennsylvania Department of Education Grade 4 Reading Modified Performance Level Descriptors**

The Pennsylvania Modified Performance Level Descriptors (MPLDs) guide the interpretation of the test scores of the PSSA-M. They reflect the ranges of performance typical of the student population eligible to participate in the modified test. Although the modifications reduce the cognitive load on test-takers, it should not be assumed that the expectations are based on below-grade-level content. Examples of reading passages and associated test items (Modified Item Samplers) are posted on the PDE website.

The PSSA-M contains embedded supports that may include fewer items, reading passage segmentation, positioning of particular test items with associated text, increased white

Below Basic-M Level	Basic-M Level	Proficient-M Level	Advanced-M Level
When given modifications, a student scoring at the Below Basic-M Level:  demonstrates limited use of reading strategies to comprehend grade-level fiction and nonfiction text in	When given modifications, a student scoring at the Basic-M Level generally utilizes some reading strategies to comprehend grade-level fiction and nonfiction text.	When given modifications, a student scoring at the Proficient-M Level can do everything at the Basic-M Level and routinely utilizes a variety of reading strategies to comprehend and interpret grade-level fiction and nonfiction.	When given modifications, a student scoring at the Advanced-M Level can do everything at the Basic-M and Proficient-M Levels and consistently utilizes a variety of reading strategies to comprehend and interpret gradelevel fiction and nonfiction text.
the two Pennsylvania Reading Reporting Categories.	A student performing at the <i>Basic-M Level</i> :	A student performing at the <i>Proficient-M Level</i> :	A student performing at the Advanced-M Level:
	A. identifies simple word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; identifies details in support of a given conclusion; identifies stated main ideas; partially summarizes text, using some key points or details; identifies author's purpose (e.g., explain, inform, entertain) within some narrative, informational, or poetic text.	A. identifies word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; makes inferences and draws conclusions, using textual support; identifies stated main ideas and relevant details; summarizes text, using some key details or some major points; identifies author's purpose (e.g., explain, inform, entertain) within some narrative, informational, and poetic text.	A. interprets word meanings using context as support; constructs inferences and draws conclusions based on textual support; explains main ideas using textual support; summarizes text, using key details or major points; identifies author's purpose (e.g., explain, inform, entertain) within narrative, informational, and poetic text.
	B. identifies literary elements (character and setting); makes simple connections within and between texts; identifies factual statements and explicitly stated opinions in nonfiction; locates information using features (e.g., headings) and subsections of text; locates some information in graphics and charts; identifies some sequence of	<b>B.</b> identifies literary elements (character, setting, plot); makes connections within and between texts; identifies figurative language (e.g., personification, simile, alliteration); identifies fact and opinion in nonfiction; identifies exaggeration (bias) in nonfiction; identifies text organization (e.g., sequencing, comparison/contrast, problem/solution); locates information in	B. explains and describes literary elements (character, setting, plot); describes connections within and between texts; explains the use of figurative language (e.g., personification, simile, alliteration); explains the use of fact and opinion in nonfiction; explains exaggeration (bias) in nonfiction; explains text organization (e.g., sequencing, comparison/contrast, problem/solution);

steps.

graphics, charts, and headings; identifies

sequence of steps.

locates and interprets information in graphics,

charts, and headings; identifies and explains

sequence of steps.

## Pennsylvania Department of Education Grade 5 Reading Modified Performance Level Descriptors

The Pennsylvania Modified Performance Level Descriptors (MPLDs) guide the interpretation of the test scores of the PSSA-M. They reflect the ranges of performance typical of the student population eligible to participate in the modified test. Although the modifications reduce the cognitive load on test-takers, it should not be assumed that the expectations are based on below-grade-level content. Examples of reading passages and associated test items (Modified Item Samplers) are posted on the PDE website.

The PSSA-M contains embedded supports that may include fewer items, reading passage segmentation, positioning of particular test items with associated text, increased white space and larger font, simplified wording and elimination of extraneous language in test questions and answer choices, addition of definitions and hints for terminology and complex vocabulary, and scaffolding of open-ended prompt and response formats when appropriate for the item.

	complex vocabulary, and scaffolding of open-ended prompt and response formats when appropriate for the item.			
	Below Basic-M Level	Basic-M Level	Proficient-M Level	Advanced-M Level
When given modifications, a student scoring at the Below Basic-M Level: demonstrates limited use of reading strategies to comprehend grade-level	When given modifications, a student scoring at the Basic-M Level generally utilizes some reading strategies to comprehend grade-level fiction and nonfiction text.	When given modifications, a student scoring at the Proficient-M Level can do everything at the Basic-M Level and routinely utilizes a variety of reading strategies to comprehend and interpret grade-level fiction and nonfiction text.	When given modifications, a student scoring at the Advanced-M Level can do everything at the Basic-M and Proficient-M Levels and consistently utilizes a variety of reading strategies to comprehend and interpret gradelevel fiction and nonfiction text.	
	fiction and nonfiction text in the two Pennsylvania Reading Reporting	A student performing at the <i>Basic-M Level</i> :	A student performing at the <i>Proficient-M Level</i> :	A student performing at the Advanced-M Level:
	Categories.	A. identifies some word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; identifies details in support of a given conclusion; identifies stated main ideas and relevant details; partially summarizes text, using some key points or details; identifies author's purpose (e.g., explain, inform, entertain) within some narrative, informational, persuasive, or poetic text.	A. identifies word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; makes inferences, generalizations, and draws conclusions, using textual support; identifies stated and implied main ideas and relevant details; summarizes text, using key details or major points; identifies author's purpose (e.g., explain, inform, entertain, persuade) within narrative, informational, persuasive, and poetic text.	A. interprets word meanings using context as support; explains inferences, generalizations, and draws conclusions, using supporting details; explains stated or implied main ideas and relevant details; summarizes text effectively, using key details or major points; identifies author's purpose (e.g., explain, inform, entertain, persuade) and interprets or explains examples of support within narrative, informational, persuasive, and poetic text.
		B. identifies literary elements (character, setting, plot); makes simple connections within and between texts; identifies explicitly stated figurative language (e.g., simile); locates factual statements and explicitly stated opinions in nonfiction; identifies exaggeration (bias) in nonfiction; identifies simple text organization (sequencing, comparison/contrast); locates some information in graphics, charts, and headings; identifies sequence of steps.	B. identifies literary elements (character, setting, plot, theme, and point of view); makes connections within and between texts; identifies figurative language (e.g., personification, simile, alliteration, and metaphor); identifies or explains fact and opinion in nonfiction; identifies exaggeration (bias) in nonfiction; identifies text organization (e.g., sequencing, comparison/contrast, problem/solution); locates and describes information in graphics, charts, and headings; identifies and explains sequence of steps.	B. explains and describes literary elements (e.g., character, setting, plot, theme, and point of view); explains connections within and between texts; explains figurative language (e.g., personification, simile, alliteration, and metaphor); interprets the use of fact and opinion in nonfiction; explains the use of exaggeration (bias) in nonfiction; interprets text organization (e.g., sequencing, comparison/contrast, problem/solution); locates and interprets information in graphics, charts, and headings; compares and explains sequence of steps.

## Pennsylvania Department of Education Grade 6 Reading Modified Performance Level Descriptors

The Pennsylvania Modified Performance Level Descriptors (MPLDs) guide the interpretation of the test scores of the PSSA-M. They reflect the ranges of performance typical of the student population eligible to participate in the modified test. Although the modifications reduce the cognitive load on test-takers, it should not be assumed that the expectations are based on below-grade-level content. Examples of reading passages and associated test items (Modified Item Samplers) are posted on the PDE website.

The PSSA-M contains embedded supports that may include fewer items, reading passage segmentation, positioning of particular test items with associated text, increased white space and larger font, simplified wording and elimination of extraneous language in test questions and answer choices, addition of definitions and hints for terminology and complex vocabulary, and scaffolding of open-ended prompt and response formats when appropriate for the item.

Below Basic-M Level	Basic-M Level	Proficient-M Level	Advanced-M Level
When given modifications, a student scoring at the Below Basic-M Level: demonstrates limited use of reading	When given modifications, a student scoring at the Basic-M Level generally utilizes some reading strategies to comprehend grade-level fiction and nonfiction text.	When given modifications, a student scoring at the Proficient-M Level can do everything at the Basic-M Level and routinely utilizes a variety of reading strategies to comprehend and interpret grade-level fiction and nonfiction text.	When given modifications, a student scoring at the Advanced-M Level can do everything at the Basic-M and Proficient-M Levels and consistently utilizes a variety of reading strategies to comprehend and interpret grade-level fiction and nonfiction text.
strategies to comprehend grade- level fiction and	A student performing at the <i>Basic-M Level</i> :	A student performing at the <i>Proficient-M Level</i> :	A student performing at the Advanced-M Level:
nonfiction text in the two Pennsylvania Reading Reporting Categories.	A. identifies some word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; identifies details in support of a given conclusion; identifies stated main ideas and relevant details; partially summarizes text, using some key points or details; identifies author's purpose (e.g., explain, inform, entertain, persuade) within narrative, poetic, informational, biographical, and persuasive text.	A. identifies word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; makes inferences, generalizations, and draws conclusions, using textual support; explains stated and implied main ideas and relevant details; summarizes text, using key details and major events; identifies author's purpose (e.g., explain, inform, entertain, persuade) and explains examples of support within narrative, poetic, informational, biographical, and persuasive text.	A. explains and applies word meanings and multiple meaning words in context; explains inferences, generalizations, and draws conclusions, using textual support; explains stated and implied main ideas and relevant details; summarizes effectively all ideas within text; identifies author's purpose (e.g. explain, inform, entertain, persuade) and explains or describes examples of support within narrative, poetic, informational, biographical, and persuasive text.
	B. identifies literary elements (character, setting, plot, and point of view); makes simple connections within and between texts; identifies explicitly stated figurative language (e.g., simile); identifies factual statements and explicitly stated opinions in nonfiction; identifies exaggeration (bias) in nonfiction; identifies simple text organization (e.g., sequencing, comparison/contrast); identifies information in graphics, charts, and headings; identifies sequence of steps.	B. identifies, describes, and/or interprets literary elements (character, setting, plot, theme, and point of view); makes connections within and between texts; explains the use of figurative language (e.g., personification, simile, alliteration, metaphor); explains or interprets the use of fact and opinion in nonfiction; explains the use of exaggeration (bias) in nonfiction; identifies text organization (e.g., sequencing, comparison/contrast, problem/solution, cause/effect); identifies and explains information in graphics, charts, and headings; identifies and explains sequence of steps.	B. interprets and/or analyzes literary elements (character, setting, plot, theme, and point of view); explains connections within and between texts; interprets and/or analyzes figurative language (e.g., personification, simile, alliteration, metaphor); interprets the use of fact and opinion in nonfiction; interprets the use of exaggeration (bias) in nonfiction; explains text organization (e.g. sequencing, comparison/contrast, problem/solution, cause/effect); interprets and explains information in graphics, charts, and headings; compares and explains sequence of steps.

## **Pennsylvania Department of Education Grade 7 Reading Modified Performance Level Descriptors**

The Pennsylvania Modified Performance Level Descriptors (MPLDs) guide the interpretation of the test scores of the PSSA-M. They reflect the ranges of performance typical of the student population eligible to participate in the modified test. Although the modifications reduce the cognitive load on test-takers, it should not be assumed that the expectations are based on below-grade-level content. Examples of reading passages and associated test items (Modified Item Samplers) are posted on the PDE website.

The PSSA-M contains embedded supports that may include fewer items, reading passage segmentation, positioning of particular test items with associated text, increased white space and larger font, simplified wording and elimination of extraneous language in test questions and answer choices, addition of definitions and hints for terminology and complex

comparison/contrast, problem/solution,

explains sequence of steps.

cause/effect); identifies and explains information

in graphics, charts, and headings; compares and

nonfiction; explains and interprets text

comparison/contrast, problem/solution,

explains and analyzes sequence of steps.

information in graphics, charts, and headings;

cause/effect); interprets and explains

organization (e.g., sequencing,

Below Basic-M Level	Basic-M Level	Proficient-M Level	Advanced-M Level
When given modifications, a student scoring at the Below Basic-M Level: demonstrates limited use of reading	When given modifications, a student scoring at the Basic-M Level generally utilizes some reading strategies to comprehend grade-level fiction and nonfiction text.	When given modifications, a student scoring at the Proficient-M Level can do everything at the Basic-M Level and routinely utilizes a variety of reading strategies to comprehend and interpret grade-level fiction and nonfiction text.	When given modifications, a student scoring at the Advanced-M Level can do everything at the Basic-M and Proficient-M Levels and consistently utilizes a variety of reading strategies to comprehend and interpret grade-level fiction and nonfiction text.
strategies to	A student performing at the <i>Basic-M Level</i> :	A student performing at the <i>Proficient-M Level</i> :	A student performing at the Advanced-M Level:
comprehend grade- level fiction and nonfiction text in the two Pennsylvania Reading Reporting Categories.	A. identifies some word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; identifies details in support of a given conclusion; identifies stated main ideas and relevant details; partially summarizes text, using some key points or details; identifies and describes author's purpose (e.g., explain, inform, entertain, persuade) within narrative, poetic, informational, biographical, and persuasive text.	A. identifies word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; makes inferences, generalizations, and draws conclusions, using textual support; explains stated and implied main ideas and relevant details using textual support; summarizes text, using key details and major points; identifies and describes author's purpose (e.g., explain, inform, entertain, persuade) and identifies or explains examples of support within narrative, poetic, informational, biographical, and persuasive text.	A. explains and applies word meanings and multiple meaning words in context; explains inferences, generalizations, and draws conclusions, using textual support; explains stated and implied main ideas and relevant details; summarizes effectively all ideas within text; identifies and explains author's purpose (e.g. explain, inform, entertain, persuade) and explains or analyzes examples of support within narrative, poetic, informational, biographical, and persuasive text.
	B. identifies literary elements (character, setting, plot, and point of view); makes simple connections within and between texts; identifies explicitly stated figurative language and distinguishes the difference between literal and figurative language (e.g., simile, metaphor); identifies factual statements and explicitly stated opinions in nonfiction; identifies some examples of	<b>B.</b> explains and/or interprets literary elements (character, setting, plot, theme, and point of view); makes connections within and between texts; explains use of figurative language (e.g., personification, simile, alliteration, metaphor); explains or interprets the use of fact and opinion to support arguments in nonfiction; explains the use of bias and propaganda in nonfiction; explains text organization (e.g., sequencing,	B. interprets and/or analyzes relationships among literary elements (character, setting, plot, theme, and point of view); explains connections within and between texts; interprets and/or analyzes figurative language (e.g. personification, simile, alliteration, metaphor, hyperbole, imagery); interprets use of fact and opinion to support arguments in nonfiction; analyzes the use of bias and propaganda in

bias in nonfiction; identifies simple text

organization (sequencing,

sequence of steps.

comparison/contrast); identifies

information in graphics, charts, and

headings; identifies and/or explains

## Pennsylvania Department of Education Grade 8 Reading Modified Performance Level Descriptors

The Pennsylvania Modified Performance Level Descriptors (MPLDs) guide the interpretation of the test scores of the PSSA-M. They reflect the ranges of performance typical of the student population eligible to participate in the modified test. Although the modifications reduce the cognitive load on test-takers, it should not be assumed that the expectations are based on below-grade-level content. Examples of reading passages and associated test items (Modified Item Samplers) are posted on the PDE website.

The PSSA-M contains embedded supports that may include fewer items, reading passage segmentation, positioning of particular test items with associated text, increased white space and larger font, simplified wording and elimination of extraneous language in test questions and answer choices, addition of definitions and hints for terminology and complex vocabulary, and scaffolding of open-ended prompt and response formats when appropriate for the item.

Below	Basic-M	Level
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When given modifications, a student scoring at the Below Basic-M Level:

demonstrates limited use of reading strategies to comprehend grade-level fiction and nonfiction text in the two Pennsylvania Reading Reporting Categories.

#### Basic-M Level

When given modifications, a student scoring at the Basic-M Level generally utilizes some reading strategies to comprehend grade-level fiction and nonfiction text.

A student performing at the *Basic-M Level*:

- A. identifies some word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; identifies details in support of a given conclusion; identifies stated main ideas and relevant details; partially summarizes text, using some key points or details; identifies and/or describes author's purpose (e.g., explain, inform, persuade, entertain) within narrative, poetic, informational, biographical, and persuasive text.
- **B.** identifies literary elements (character, plot, setting, and point of view); makes simple connections within and between texts; identifies explicitly stated figurative language and distinguishes the difference between literal and figurative language (e.g., simile, metaphor); identifies factual statements and explicitly stated opinions in nonfiction; identifies some examples of bias in nonfiction; identifies or describes text organization (e.g., sequencing, comparison/contrast, problem/solution, cause/effect); identifies information in graphics, charts, and headings; identifies and/or explains sequence of steps.

#### **Proficient-M Level**

When given modifications, a student scoring at the Proficient-M Level can do everything at the Basic-M Level and routinely utilizes a variety of reading strategies to comprehend and interpret grade-level fiction and nonfiction text.

A student performing at the *Proficient-M Level*:

- A. identifies word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; makes inferences, generalizations, and draws conclusions, using textual support; explains stated or implied main ideas and relevant details; summarizes text, including key details and major events; identifies and describes author's purpose (e.g., explain, inform, entertain, persuade) and explains and describes examples of support within narrative, poetic, informational, biographical, and persuasive text.
- B. explains and/or interprets literary elements (character, setting, plot, theme, and point of view); makes connections within and between texts; explains use of figurative language (e.g., personification, simile, alliteration, metaphor); explains or interprets the use of fact and opinion to support arguments in nonfiction; explains the use of bias and propaganda in nonfiction; explains and/or interprets text organization (e.g., sequencing, comparison/contrast, problem/solution, cause/effect); identifies and explains information in graphics, charts, and headings; compares and explains sequence of steps.

#### Advanced-M Level

When given modifications, a student scoring at the Advanced-M Level can do everything at the Basic-M and Proficient-M Levels and consistently utilizes a variety of reading strategies to comprehend and interpret grade-level fiction and nonfiction text.

A student performing at the *Advanced-M Level*:

- A. explains and applies word meanings and multiple meaning words in context; explains inferences, generalizations, and draws conclusions, using textual support; explains stated and implied main ideas and relevant details; summarizes effectively all ideas within text; analyzes author's purpose (e.g., explain, inform, entertain, persuade) and explains and analyzes examples of support within narrative, poetic, informational, biographical, and persuasive text.
- B. interprets and/or analyzes relationships among literary elements (character, setting, plot, theme, and point of view); explains connections within and between texts; interprets and/or analyzes figurative language (personification, simile, alliteration, metaphor, hyperbole, imagery); interprets and/or analyzes use of fact and opinion to support arguments in nonfiction; analyzes the use of bias and propaganda in nonfiction; identifies and/or analyzes text organization (e.g. sequencing, comparison/contrast, problem/solution, cause/effect); interprets and explains information in graphics, charts, and headings; explains and analyzes sequence of steps.

## Pennsylvania Department of Education Grade 11 Reading Modified Performance Level Descriptors

The Pennsylvania Modified Performance Level Descriptors (MPLDs) guide the interpretation of the test scores of the PSSA-M. They reflect the ranges of performance typical of the student population eligible to participate in the modified test. Although the modifications reduce the cognitive load on test-takers, it should not be assumed that the expectations are based on below-grade-level content. Examples of reading passages and associated test items (Modified Item Samplers) are posted on the PDE website.

The PSSA-M contains embedded supports that may include fewer items, reading passage segmentation, positioning of particular test items with associated text, increased white space and larger font, simplified wording and elimination of extraneous language in test questions and answer choices, addition of definitions and hints for terminology and complex vocabulary, and scaffolding of open-ended prompt and response formats when appropriate for the item.

#### **Below Basic-M Level**

When given modifications, a student scoring at the Below Basic-M Level:

demonstrates limited use of reading strategies to comprehend grade-level fiction and nonfiction text in the two Pennsylvania Reading Reporting Categories.

#### Basic-M Level

When given modifications, a student scoring at the Basic-M Level generally utilizes some reading strategies to comprehend grade-level fiction and nonfiction text.

A student performing at the Basic-M Level:

- A. identifies some word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; identifies details in support of a given conclusion; identifies stated main ideas and relevant details; partially summarizes text, using some key points or details; identifies and describes author's purpose (e.g., explain, inform, entertain, persuade) within narrative, poetic, informational, biographical, and persuasive text.
- **B.** identifies literary elements (character, plot, setting, and point of view); makes connections within or between texts; identifies explicitly stated figurative language and distinguishes the difference between literal and figurative language (e.g., simile, metaphor); identifies factual statements and explicitly stated opinions in nonfiction; identifies some examples of bias in nonfiction; identifies or describes text organization (e.g., sequencing, comparison/contrast, problem/solution, cause/effect); identifies information in graphics, charts, and headings; identifies and/or explains sequence of steps.

#### **Proficient-M Level**

When given modifications, a student scoring at the Proficient-M Level can do everything at the Basic-M Level and routinely utilizes a variety of reading strategies to comprehend and interpret grade-level appropriate fiction and nonfiction.

A student performing at the *Proficient-M Level*:

- A. applies a variety of word recognition skills to identify word meanings, including synonyms and antonyms, using context clues and word parts, including affixes; makes inferences, generalizations, and draws conclusions, using textual support; explains stated or implied main ideas; summarizes text, including key details and major events; describes and explains author's purpose (e.g., explain, inform, entertain, persuade) and explains and describes examples of support within narrative, poetic, informational, biographical, and persuasive text.
- **B.** explains and interprets literary elements (character, setting, plot, theme, tone, style, mood, symbolism, and point of view); makes connections within and between texts; explains use of figurative language (e.g., personification, simile, alliteration, metaphor); explains or interprets the use of fact and opinion to support arguments in nonfiction; explains the use of bias and propaganda in nonfiction; explains and/or interprets text organization (e.g., sequencing, comparison/contrast, problem/solution, cause/effect); interprets and/or explains information in graphics, charts, and headings; compares and explains sequence of steps.

#### Advanced-M Level

When given modifications, a student scoring at the Advanced-M Level can do everything at the Basic-M and Proficient-M Levels and consistently utilizes a variety of reading strategies to comprehend and interpret grade-level fiction and nonfiction text.

A student performing at the *Advanced-M Level*:

- A. explains and applies word meanings and multiple meaning words in context; explains inferences, generalizations, and draws conclusions, using textual support; explains stated and implied main ideas and relevant details; summarizes effectively all ideas within text; analyzes author's purpose (e.g., explain, inform, entertain, persuade) and explains and analyzes examples of support within narrative, poetic, informational, biographical, and persuasive text.
- **B.** interprets and/or analyzes relationships among literary elements (character, setting, plot, theme, tone, style, mood, symbolism, and point of view); explains connections within and between texts; interprets and/or analyzes figurative language (e.g., personification, simile, alliteration, metaphor, hyperbole, satire, and imagery); interprets and/or analyzes use of fact and opinion to support arguments in nonfiction; analyzes the use of bias and propaganda in nonfiction; interprets and/or analyzes text organization (e.g., sequencing, problem/solution, comparison/contrast, cause/effect); explains and/or analyzes information in graphics, charts, and headings; explains and analyzes sequence of steps.

## Pennsylvania Department of Education Grade 8 Science Modified Performance Level Descriptors

#### **Below Basic-M**

Even with given modifications,\* an eighth-grade student performing at Below Basic-M Level demonstrates a limited conceptual understanding of science content and an ineffective application of processes in the four Pennsylvania Science Reporting Categories.

An eighth-grade student performing at the Basic-M Level demonstrates partial conceptual understanding of science content and the application of processes in the four Pennsylvania Science Reporting Categories given the Basic Mte modifications.\*

A student performing at the Basic-M Level

A. identifies scientific theory and opinion; identifies appropriate measurements and tools to solve problems; identifies parts of a basic experiment; recognizes parts of a system; and identifies technological devices and instruments.

- B. recognizes structural functions of organisms; identifies levels of organization; recognizes adaptations, mutations, and biotechnology; identifies inherited or acquired traits; identifies major biomes; and identifies environmental impacts.
- C. identifies elements, compounds, and mixtures; identifies properties of matter; recognizes forms of kinetic and potential energy; distinguishes between balanced and unbalanced forces on objects; and recognizes renewable and nonrenewable energy sources.

An eighth-grade student performing at the Proficient-M Level demonstrates a general conceptual understanding of science content and the application of processes in the four Pennsylvania Science Reporting Categories given the appropriate modifications.\*

A student performing at the Proficient-M Level

- A. distinguishes between scientific theory and opinion; recognizes simple examples of descriptions, explanations, predictions, results, and models; describes appropriate measurements and tools to solve problems; recognizes patterns and processes; describes a simple experiment that solves a basic problem; describes parts of a system; and describes uses for technological devices and instruments.
- B. describes structural functions of organisms; sequences levels of organization; describes adaptations, mutations, and biotechnology; describes inherited and acquired traits; compares characteristics of major biomes; and recognizes the effects humans can have on the environment.
- C. describes elements, compounds, and mixtures; distinguishes between properties of matter; describes forms of kinetic and potential energy; identifies components of simple chemical reactions; identifies heat transfers and conversions; describes the effect of balanced, unbalanced, frictional, and gravitational forces on objects; identifies simple machines; and distinguishes between forms and sources of energy.

An eighth-grade student performing at the Advanced-M Level demonstrates a thorough conceptual understanding of science content and the application of processes in the four Pennsylvania Science Reporting Categories given the appropriate modifications.\*

A student performing at the Advanced-M Level

- A. compares and contrasts scientific theory and opinion; applies evidence to make simple inferences, descriptions, explanations, predictions, results, and models; applies appropriate measurements and tools to solve problems; describes patterns and processes; designs a simple experiment to solve a basic problem; evaluates system changes; and explains the impact of technological knowledge in addressing practical problems.
- B. compares and contrasts the structural functions of organisms; differentiates among levels of organization; compares adaptations, mutations, and biotechnology; compares and contrasts inherited and acquired traits; compares characteristics of major biomes and their related components; and explains the effects humans can have on the environment.
- C. compares elements, compounds, and mixtures; explains various properties of matter; describes the relationship between various forms of energy; describes components of simple chemical reactions; explains heat transfers and conversions; explains the forces acting on objects; describes the functions of simple machines and recognizes the mechanical advantage of simple machines; and compares and contrasts forms and sources of energy.

- D. recognizes basic rock types; identifies changes to Earth's surface; identifies processes of the water cycle; identifies various water systems; identifies basic meteorological terms; and identifies major components of our solar system.
- D. describes basic rock types; describes changes to Earth's surface; describes processes of the water cycle; describes various water systems; recognizes basic weather patterns and climate types; and describes characteristics of objects of our solar system.
- D. classifies common rocks by type; describes natural processes that change Earth's surface; compares processes of the water cycle and/or physical characteristics of water resources; compares water systems and/or their impact; describes regional factors affecting weather or climate; and describes relationships between and among the objects of our solar system.

\*Modifications may include but are not limited to the following:

- fewer items
- positioning of particular test items with associated text
- increased white space and larger font
- simplified wording and elimination of extraneous language in test questions and answer choices
- addition of definitions and hints for terminology and complex vocabulary
- scaffolding of open-ended prompt and response formats

## Pennsylvania Department of Education Grade 11 Science Modified Performance Level Descriptors

#### Below Basic-M

Even given appropriate modifications,\* an eleventh-grade student performing at Below Basic-M Level demonstrates a limited conceptual understanding of science content and an ineffective application of processes in the four Pennsylvania Science Reporting Categories.

#### Basic-M

An eleventh-grade student performing at the Basic-M Level demonstrates partial conceptual understanding of science content and the application of processes in the four Pennsylvania Science Reporting Categories given appropriate modifications.\*

A student performing at the Basic-M Level

- A. identifies basic technologies; identifies simple real-world technological problems; identifies parts of a simple system; describes models; and recognizes patterns and processes.
- B. identifies structure and function at multiple levels of organization; recognizes genetic information; recognizes the characteristics of and interactions within ecosystems; recognizes patterns of change; and identifies the impact of human-made systems.
- C. recognizes structures and properties of matter; identifies energy sources, transfer, and conversion; recognizes environmental impacts of energy use; and identifies basic principles of force and motion.
- D. identifies forces in the lithosphere; identifies functions and factors relating to water resources; describes weather data used to make predictions; and identifies the composition and structure of the universe.

#### Proficient-M

An eleventh-grade student performing at the Proficient-M Level demonstrates a general conceptual understanding of science content and the application of processes in the four Pennsylvania Science Reporting Categories given appropriate modifications.\*

A student performing at the Proficient-M Level

- A. describes one way technology can be used to understand our world; describes possible solutions to real-world technological problems; explains how parts of simple systems work together; compares models to the real world; and describes patterns and processes.
- B. describes structure and function at multiple levels of organization; recognizes the mechanisms of evolution; identifies basic expression and inheritance of genetic information; explains the characteristics of and interactions within ecosystems; describes patterns of change; and explains the impact of human-made systems.
- C. recognizes the relationships between structures and properties of matter; describes energy sources, transfer, and conversion; explains environmental impacts of energy use; and describes principles of force and motion.
- D. describes forces in the lithosphere; describes significance and contributions of water resources; describes weather and climate data used to make predictions; and describes the composition and structure of the universe.

#### Advanced-M

An eleventh-grade student performing at the Advanced-M Level demonstrates a thorough conceptual understanding of science content and the application of processes in the four Pennsylvania Science Reporting Categories given appropriate modifications.\*

A student performing at the Advanced-M Level

- A. explains how technology and/or scientific method can be used to understand our world; describes technological problems and implications of possible solutions; analyzes parts of simple systems within the whole; evaluates the use of models relative to the real world; and analyzes and predicts patterns and processes.
- B. compares structure and function at multiple levels of organization; explains the mechanisms of evolution; describes the expression and inheritance of genetic information; evaluates the characteristics of and interactions within ecosystems; interprets patterns of change; and evaluates the impact of human-made systems.
- C. explains the relationships between structures and properties of matter; analyzes energy sources, transfer, and conversion; analyzes environmental impacts of energy use; and uses principles of force and motion to solve problems.
- D. compares forces in the lithosphere; explains water resources and/or their impacts; uses weather and climate data to make predictions; and describes the evolution of the universe.

\*Modifications may include but are not limited to the following:

- fewer items
- positioning of particular test items with associated text
- increased white space and larger font simplified wording and elimination of extraneous language in test questions and answer choices
- addition of definitions and hints for terminology and complex vocabulary
- scaffolding of open-ended prompt and response formats