

2009 Science Grades 5, 8, and 10 Performance Level Descriptors (PLD)

Science, Grade 5

| PL Label | PL Text |
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| Inconclusive | The Inconclusive student's responses are not evident or are inconsistent when presented with a variety of scientific materials and concepts. |
| Exploring | The Exploring student is beginning to use his/her senses to observe living and non-living things in the environment. The student is beginning to ask simple questions to gain information. The Exploring student can identify some objects in the environment, and is beginning to identify simple collections. The student is beginning to identify the observable parts of the human body. |
| Emerging | The Emerging student uses his/her senses (smell, touch, sight, sound) to describe living and non-living things in the environment. The student identifies tools used for observation. The Emerging student asks questions to gain information. The student recognizes collections of objects. The Emerging student recognizes that objects can move at different speeds. The student identifies the observable parts of the human body. The Emerging student identifies common types of weather. The student identifies common landforms (mountains, rivers, deserts). The Emerging student is beginning to identify some uses of water. The student is beginning to identify the sun, moon, and stars. |
| Developing | The Developing student identifies differences in the environment. The student identifies scientific tools and their use. The Developing student is beginning to recognize different forms of data (tables, graphs, charts, etc.). The student understands that force moves objects. The Developing student identifies the basic needs of living things and understands that food comes from the environment. The student recognizes the basic life stages of humans and some common animals and plants. The Developing student identifies the seasons and weather related to those seasons. The student identifies basic earth materials. The Developing student identifies uses of water. The student identifies the sun, moon, and stars. |
| Novice | The Novice student uses his/her senses and scientific tools to describe and label characteristics (shape, texture, size, etc.). The student recognizes different forms of data (tables, graphs, charts, etc.). The Novice student recognizes collections and objects to add to collections. The student understands that energy is required to make objects move. The Novice student identifies living and non-living things and their basic needs. The student recognizes basic life stages of plants and animals. The Novice student identifies different types of weather, the seasons, and makes observations about both. The student identifies basic earth materials, landforms, and natural events (floods, blizzards, etc.). The Novice student identifies sources of water. The student is beginning to identify objects in space. |

Science, Grade 8

| PL Label | PL Text |
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| Inconclusive | The Inconclusive student's responses are not evident or are inconsistent when presented with a variety of scientific materials and concepts. |
| Exploring | The Exploring student is beginning to use his/her senses to explore living and non-living things in the environment. The student is beginning to ask simple questions to gain information. The Exploring student can identify some objects in the environment and is beginning to describe some properties of objects. The student is demonstrating an awareness of different earth features. The Exploring student can identify observable human body parts. |
| Emerging | The Emerging student demonstrates an awareness of the environment. The student identifies tools used for observation. The student recognizes some forms of data (tables, graphs, charts, etc.). The Emerging |

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| | student is beginning to understand that force moves objects. The student distinguishes between living and non-living things and their basic needs. The student identifies the observable parts of the human body. The Emerging student recognizes the basic life stages of plants and animals. The student identifies the seasons and weather related to those seasons. The Emerging student identifies and makes simple observations of temperature. The Emerging student identifies basic earth materials and common landforms. The student identifies uses of water. The Emerging student identifies the sun, moon, and stars. |
| Developing | The Developing student selects and uses tools to gain information. The student identifies some physical properties of objects. The Developing student recognizes different forms of data (tables, graphs, charts). The student begins to recognize a simple scientific sequence of events and identifies the cause/effect of an event. The Developing student uses appropriate units of measurement and sorts objects. The student understands that energy makes objects move. The Developing student describes the characteristics of living and non-living things. The student identifies the main internal parts of the human body. The Developing student recognizes differences between landforms and earth materials and identifies sources of water. The student recognizes that the sun is a source of heat and light. |
| Novice | The Novice student classifies objects based on their physical properties. The student uses different forms of data and recognizes simple patterns. The Novice student makes simple predictions and observations based on data. The student recognizes the sequence of scientific events. The Novice student differentiates between cause/effect of events. The student understands that a change in force causes a change in motion (speed, direction). The Novice student understands that living and non-living things interact within the environment. The student understands and can describe the basic elements of the food chain. The Novice student identifies the function of internal and external human body parts. The student demonstrates an awareness of changes in weather and seasons and can distinguish between catastrophic events (floods, blizzards, etc.). |

Science Grade 10

| PL Label | PL Text |
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| Inconclusive | The Inconclusive student's responses are not evident or are inconsistent when presented with a variety of scientific materials and concepts. |
| Exploring | The Exploring student is beginning to use his/her senses to identify living and non-living things in the environment. The student is able to ask simple questions, and collect data to gain information. The Exploring student can identify some objects in the environment, and is beginning to describe characteristics of living and non-living things. The student is beginning to identify Earth features, seasons and weather. The Exploring student identifies the moon and sun. |
| Emerging | The Emerging student selects and uses the appropriate tool to gain information and identifies physical properties of objects. The student describes the characteristics of living/non-living things. The Emerging student recognizes forms of data. The student begins to recognize a simple scientific sequence of events and identifies the cause/effect of an event. The Emerging student collects information using appropriate units of measure and sorts objects. The student understands that energy makes objects move. The Emerging student recognizes some characteristics of plants and animals. The student identifies the main parts of the human body. The Emerging student distinguishes between different Earth materials and landforms and identifies different sources of water. The student recognizes that the sun is a source of heat and light. |
| Developing | The Developing student uses the appropriate tools to collect scientific information and classifies living and non-living objects based on physical characteristics. The student uses data in different formats and recognizes simple patterns. The Developing student recognizes the sequence of scientific events and differentiates between cause/effect of events. The student describes observations, draws conclusions, and poses questions. The Developing student understands that a change in force causes a change in |

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| | <p>motion. The student understands that living and non-living things interact within the environment. The Developing student identifies the function of human body parts. The student understands changes in weather and seasons and distinguishes between catastrophic events. The Developing student is beginning to identify objects in space.</p> |
| Novice | <p>The Novice student arranges information about scientific events to communicate observations. The student interprets data, explains simple patterns, and draws conclusions. The Novice student makes simple predictions based on observations and data, and applies scientific results to different situations. The student understands that objects can move at different speeds and directions based on the amount and type of force applied. The Novice student understands that living things are dependent on the non-living environment, and that changes in the environment affect the entire system. The student recognizes that some parts of the human body work together as a system. The Novice student recognizes that Earth's surface changes through natural processes and events. The student recognizes the states of water.</p> |