# Wisconsin Performance Level Descriptors
# Language

| Reporting Category | Developing | Approaching | Meeting | Advanced |
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| | Students at the *Developing* level are working toward being able to demonstrate the skills identified in the *Approaching* level. Students at this level **inconsistently** demonstrate the following skills to scientific scenarios involving data presentations, scientific experiments and investigations, and presentations of conflicting scientific models explaining a phenomenon: | Students at the *Approaching* level are able to **consistently** apply the skills in the Developing level as well as to apply the following skills **consistently** to scientific scenarios involving data presentations, scientific experiments and investigations, and presentations of conflicting scientific models explaining a phenomenon: | Students at the *Meeting* level are able to apply the skills listed in the *Approaching* level as well as to apply the following skills **consistently** to scientific scenarios involving data presentations, scientific experiments and investigations, and presentations of conflicting scientific models explaining a phenomenon: | Students at the *Advanced* level are able to apply the skills listed in the *Meeting* level as well as to apply the following skills **consistently** to scientific scenarios involving data presentations, scientific experiments and investigations, and presentations of conflicting scientific models explaining a phenomenon: |
| **Interpretation of Data (IOD)** | • Select one piece of data from a simple data presentation<br>• Order the data in a simple data presentation<br>• Identify a basic feature of a simple data presentation (e.g., units of measurement) | • Select one piece of data from a simple or moderately complex data presentation<br>• Compare data in a simple data presentation (e.g., order, find highest or lowest values)<br>• Combine data from a single simple data source (e.g., sum data from a table)<br>• Determine how the value of a variable changes in response to another variable in a simple data presentation<br>• Determine or use a mathematical relationship that exists between data in a single simple data presentation (e.g., find an average, make a simple unit conversion) | • Find information in the passage that describes or explains a simple, moderately complex, or complex data presentation<br>• Select two or more pieces of information from a moderately complex or complex data presentation<br>• Identify features of one or more simple data presentations<br>• Translate information from one type of simple or moderately complex graphic to another simple or moderately complex graphic (e.g., convert data from a table to a graph)<br>• Determine or use a mathematical relationship that exists between data in a moderately complex data presentation<br>• Perform a simple extrapolation or interpolation using data in a graph or table<br>• Combine data from two or more simple or moderately complex data presentations (e.g., use data from one graphic to find data in another table or graph)<br>• Analyze presented data when given new information (e.g., reinterpret data in a graphic when new findings are provided) | • Determine how the values of several variables change in response to other variables in a data presentation of any complexity<br>• Compare data from a complex data presentation<br>• Compare data from two or more data presentations in which at least one data presentation is complex<br>• Determine or use a mathematical relationship that exists between data in a complex data presentation |

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| | | • Compare data from two simple data presentations (e.g., compare the value of a variable in two similar graphics) | | |

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| **Scientific Investigation (SIN)** | • Identify the independent or dependent variable in a simple experiment<br>• Identify a tool that would be used in a simple experiment<br>• Find basic information in a passage that describes a simple experiment | • Understand the methods and tools in a simple experiment<br>• Identify independent, dependent, and controlled variables/constants in a simple experiment<br>• Predict the results of another trial in a simple experiment | • Understand the methods, tools, and functions of tools used in a moderately complex experiment<br>• Understand how an experiment controls for scientific phenomena that might affect results in any experiment<br>• Determine a scientific question or hypothesis that is the basis for any experiment<br>• Identify similarities and differences in two moderately complex experiments<br>• Predict the results of another trial in a moderately complex experiment | • Understand the methods, tools, and function of tools in a complex experiment<br>• Understand the experimental design of a complex experiment<br>• Predict the results of another trial in a complex experiment<br>• Determine the experimental conditions that would produce specified results in a complex experiment |

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| | | | • Determine the experimental conditions that would produce specified results in a simple or moderately complex experiment<br>• Predict the effects of modifying the design or methods of a simple or moderately complex experiment | |

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| **Evaluating Scientific Arguments** | • Find basic information in a simple scientific | • Determine which claim is, or is not, consistent with a simple data presentation or experiment (e.g., did a | • Determine which hypothesis, prediction, or claim is, or is not, consistent with information presented in a moderately complex scientific passage (e.g., did a design solution meet | • Determine which hypothesis, prediction, or conclusion is, or is not, consistent with a complex data presentation or experiment (e.g., did a design |

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| **and Models with Evidence (EMI)** | model (e.g., one conflicting viewpoint) | design solution meet certain criteria, or are the data consistent with a presented conclusion?)<br>• Make a prediction and explain why it is consistent with a simple data presentation or experiment<br>• Identify assumptions of a simple scientific model<br>• Identify similarities and differences between two simple scientific models<br>• Use background science knowledge and presented data to evaluate a scientific claim or argument in a simple scientific scenario | certain criteria, or are the data consistent with a presented conclusion?)<br>• Determine which results from a moderately complex experiment support or contradict a hypothesis, prediction, or conclusion<br>• Determine which hypothesis, prediction, or claim is, or is not, consistent with information presented in two or more simple or moderately complex data presentations<br>• Make a prediction and explain why it is consistent with a moderately complex scientific passage<br>• Explain why new information supports or contradicts a hypothesis, prediction, or conclusion based on a simple data presentation<br>• Identify implications and assumptions in a moderately complex scientific model<br>• Determine which moderately complex scientific models present or imply certain information<br>• Identify similarities and differences between two or more moderately complex scientific models<br>• Determine which hypothesis, prediction, or conclusion is, or is not, consistent with a moderately complex scientific model<br>• Determine which simple or moderately complex scientific models are supported or weakened by new information<br>• Determine which moderately complex scientific models support or contradict a hypothesis, prediction, or conclusion<br>• Use new information to make a prediction based on a simple or moderately complex scientific model<br>• Explain why presented information, or new information, supports or weakens a simple or moderately complex scientific model<br>• Make a prediction and explain why it is consistent with a simple or moderately complex scientific model<br>• Use background science knowledge and presented information to evaluate a scientific claim or argument to demonstrate three-dimensional understanding of a moderately complex scientific scenario | solution meet certain criteria, or are the data consistent with a presented conclusion?)<br>• Make a prediction and explain why it is consistent with a complex data presentation or experiment<br>• Explain why new information supports or contradicts a hypothesis, prediction, or conclusion in a moderately complex scientific passage<br>• Determine which complex scientific models present or imply certain information<br>• Identify similarities and differences between complex scientific models<br>• Determine which hypothesis, prediction, or conclusion is, or is not, consistent with a complex scientific model<br>• Determine which complex scientific models support or contradict a hypothesis, prediction, or conclusion<br>• Make a prediction and explain why it is consistent with two or more scientific models with at least one of the models being complex<br>• Use background science knowledge and presented information to evaluate a scientific claim or argument to demonstrate three-dimensional understanding of a complex scientific scenario |

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