6th Grade Benchmarks **Science**

Level 5 – Student performance exceeds year-end standard

Level 4 – Student performance meets year-end standard

Level 3 – Student performance approaches year-end standard

Level 2 – Student demonstrates limited performance to year-end standard

Level 1 – Student does not yet evidence understanding or application of skills related to year-end standard NOTE: MPI and MPII performance levels are determined based on performance expectations at the time of reporting

Student	Level 1	Level 2	Level 3	Level 4	Level 5
Performance	Below	Limited	Approaches	Meets	Exceeds
Standard -					
Student					
Plans and carries out investigations.	Plans and carries out investigations with adult guidance.	Plans an investigation by identifying some tools needed for gathering and how some measurements will be recorded; investigation design may be limited or incomplete.	Plans an investigation either individually or collaboratively; design includes requisite components but may lack sufficient details.	Plans an investigation individually and collaboratively, and in the design, identifies what tools are needed to go the gathering, how measurements will be recorded, and how many data are needed to support a claim.	In addition to Level 4 performance, supports peers by critiquing their designs and making specific recommendations for meaningful improvements.
Constructs scientific explanations and arguments.	Constructs scientific explanations and arguments with adult guidance.	Applies specific ideas or principles when either designing, constructing or testing a design; selected models or representations may be limited or minimally related to design; arguments may lack claims, evidence or both.	Applies some scientific ideas or principles when designing, constructing and testing a design; uses models or representations to construct some explanations; arguments include claims and some evidence; reasoning may not be fully explained.	Applies scientific ideas or principles to design, construct, and/or test a design of an object, tool, process or system; uses models or representations to construct an explanation; arguments include a claim and at least two pieces of evidence; evidence supports claim with reasoned explanations.	In addition to Level 4 performance, extends application of scientific ideas and principles by conducting additional research and/or developing multiple designs that differ in meaningful ways.

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Develops solutions to real-world problems.	Constructs an explanation to describe or model a phenomenon or a solution to a problem.	Constructs an explanation to describe or model a phenomenon or a solution to a problem; explanation may lack reasoned evidence.	Constructs an explanation to describe or model a phenomenon or a solution to a problem; explanation includes some reasoned evidence.	Constructs an explanation supported by evidence and scientific reasoning to describe or model a phenomenon or a solution to a problem.	In addition to Level 4 performance, constructs explanations that demonstrate application of additional research including conducting multiple trials, developing several iterations of models, or reaching a final solution after refining multiple preceding versions.
Evidences understanding of content and concepts.	Demonstrates understanding of specific content and concepts with adult support.	Demonstrates understanding of some content and concepts; understanding may be limited or confused.	Demonstrates understanding of most content and concepts based on unit rubrics and assessments.	Demonstrates understanding of content and concepts based on unit rubrics and assessments.	In addition to Level 4 performance, evidences understanding that exceeds grade level content and concepts.

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