Criterion A: Knowing and understanding

Achievement level	Grade 6 (MYP 1)	Grade 7 (MYP 2) / Grade 8 (MYP 3)	Grade 9 (MYP 4) / Grade 10 (MYP 5)
	Level descriptor	Level descriptor	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i) **select** scientific knowledge ii) **select** scientific knowledge and understanding to **suggest solutions** to problems set in **familiar situations** iii) **apply** information to **make judgments, with limited success**	The student is able to: i) **recall** scientific knowledge ii) apply scientific knowledge and understanding to **suggest solutions** to problems set in **familiar situations** iii) **apply** information to make **judgments**	The student is able to: i) **state** scientific knowledge ii) apply scientific knowledge and understanding to **suggest solutions** to problems set in **familiar situations** iii) **interpret** information to make **judgments**
3-4	The student is able to: i) **recall** scientific knowledge ii) **apply** scientific knowledge and understanding to **suggest solutions** to problems set in **familiar situations** iii) **apply** information to **make judgments**	The student is able to: i) **state** scientific knowledge ii) apply scientific knowledge and understanding to **solve problems** set in **familiar situations** iii) **apply** information to make **scientifically supported judgments**	The student is able to: i) **outline** scientific knowledge ii) apply scientific knowledge and understanding to **solve problems** set in **familiar situations** iii) **interpret** information to make **scientifically supported judgments**
5-6	The student is able to: i) **state** scientific knowledge ii) **apply** scientific knowledge and understanding to **solve problems** set in **familiar situations** iii) **apply** information to **make scientifically supported judgments**	The student is able to: i) **outline** scientific knowledge ii) apply scientific knowledge and understanding to **solve problems** set in **familiar situations** and **suggest solutions** to problems set in **unfamiliar situations** iii) **interpret** information to make **scientifically supported judgments**	The student is able to: i) **describe** scientific knowledge ii) apply scientific knowledge and understanding to **solve problems** set in **familiar situations** and **suggest solutions** to problems set in **unfamiliar situations** iii) **analyse** information to make **scientifically supported judgments**
7-8	The student is able to: i) **outline** scientific knowledge ii) **apply** scientific knowledge and understanding to **solve problems** set in **familiar situations and suggest solutions** to problems set in **unfamiliar situations** iii) **interpret** information to **make scientifically supported judgments**	The student is able to: i) **describe** scientific knowledge ii) apply scientific knowledge and understanding to **solve problems** set in **familiar and unfamiliar situations** iii) **analyse** information to make **scientifically supported judgments**	The student is able to: i) **explain** scientific knowledge ii) apply scientific knowledge and understanding to **solve problems** set in **familiar and unfamiliar situations** iii) **analyse** and **evaluate** information to make **scientifically supported judgments**

Criterion B: Inquiring and designing

Achievement level	Grade 6 (MYP 1)	Grade 7 (MYP 2) / Grade 8 (MYP 3)	Grade 9 (MYP 4) / Grade 10 (MYP 5)
	Level descriptor	Level descriptor	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i) **select** a problem or question to be tested by a scientific investigation ii) **select** a testable prediction iii) **state** a variable iv) design a **method with limited success**	The student is able to: i) **state** a problem or question to be tested by a scientific investigation**, with limited success** ii) **state** a testable hypothesis iii) **state** the variables iv) design a method, **with limited success**	The student is able to: i) **state** a problem or question to be tested by a scientific investigation ii) **outline** a testable hypothesis iii) **outline** the variables iv) **design** a method, **with limited success**
3-4	The student is able to: i) **state** a problem or question to be tested by a scientific investigation ii) **state** a testable prediction iii) **state** how to manipulate the variables, and **state** how **data** will be collected iv) design a **safe method** in which he or she **selects materials and equipment**	The student is able to: i) **state** a problem or question to be tested by a scientific investigation ii) **outline** a testable hypothesis **using scientific reasoning** iii) **outline** how to manipulate the variables, and **state** how **relevant data** will be collected iv) design **safe** method in which he or she **selects materials and equipment**	The student is able to: i) **outline** a problem or question to be tested by a scientific investigation ii) **formulate** a testable hypothesis **using scientific reasoning** iii) **outline** how to manipulate the variables, and **outline** how **relevant data** will be collected iv) design **safe** method in which he or she **selects materials and equipment**
5-6	The student is able to: i) **state** a problem or question to be tested by a scientific investigation ii) **outline** a testable prediction iii) **outline** how to manipulate the variables, and **state** how **relevant data** will be collected iv) design a **complete and safe method** in which he or she **selects appropriate materials and equipment**	The student is able to: i) **outline** a problem or question to be tested by a scientific investigation ii) **outline and explain** a testable hypothesis **using scientific reasoning** iii) **outline** how to manipulate the variables, and **outline** how **sufficient**, **relevant data** will be collected iv) design a **complete and safe** method in which he or she **selects appropriate materials and equipment**	The student is able to: i) **describe** a problem or question to be tested by a scientific investigation ii) **formulate and explain** a testable hypothesis **using scientific reasoning** iii) **describe** how to manipulate the variables, and **describe** how **sufficient, relevant data** will be collected iv) design a **complete and safe** method in which he or she **selects appropriate materials and equipment**
7-8	The student is able to: i) **outline** a problem or question to be tested by a scientific investigation ii) **outline** a testable prediction **using scientific reasoning** iii) **outline** how to manipulate the variables, and **outline** how **sufficient, relevant data** will be collected iv) design a **logical, complete and safe method** in which he or she **selects appropriate materials and equipment**	The student is able to: i) **describe** a problem or question to be tested by a scientific investigation ii) **outline and explain** a testable hypothesis **using correct scientific reasoning** iii) **describe** how to manipulate the variables, and **describe** how **sufficient, relevant data** will be collected iv) design a **complete and safe** method in which he or she **selects appropriate materials and equipment**	The student is able to: i) **explain** a problem or question to be tested by a scientific investigation ii) **formulate and explain** a testable hypothesis **using correct scientific reasoning** iii) **explain** how to manipulate the variables, and **explain** how **sufficient, relevant data** will be collected iv) **design** a **logical, complete and safe method** in which he or she **selects appropriate materials and equipment**

Criterion C: Processing and evaluating

Achievement level	Grade 6 (MYP 1)	Grade 7 (MYP 2) / Grade 8 (MYP 3)	Grade 9 (MYP 4) / Grade 10 (MYP 5)
	Level descriptor	Level descriptor	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i) **collect and present** data in numerical and/or visual forms ii) **interpret** data iii) **state** the validity of a prediction based on the outcome of a scientific investigation, **with limited success** iv) **state** the validity of the method based on the outcome of a scientific investigation, **with limited success** v) **state** improvements or extensions to the method that would benefit the scientific investigation, **with limited success**	The student is able to: i) **collect and present** data in numerical and/or visual forms ii) **accurately interpret** data iii) **state** the validity of a hypothesis with **limited reference** to a scientific investigation iv) **state** the validity of the method with **limited reference** to a scientific investigation v) **state limited** improvements or extensions to the method	The student is able to: i) **collect and present** data in numerical and/or visual forms ii) **interpret** data iii) **state** the validity of a hypothesis based on the outcome of a scientific investigation iv) **state** the validity of the method based on the outcome of a scientific investigation v) **state** improvements or extensions to the method
3-4	The student is able to: i) **correctly collect and present** data in numerical and/or visual forms ii) **accurately interpret** data and **outline** results iii) **state** the validity of a prediction based on the outcome of a scientific investigation iv) **state** the validity of the method based on the outcome of a scientific investigation v) **state** improvements or extensions to the method that would benefit the scientific investigation	The student is able to: i) **correctly collect and present** data in numerical and/or visual forms ii) **accurately interpret** data and **describe** results iii) **state** the validity of a hypothesis based on the outcome of a scientific investigation iv) **state** the validity of the method based on the outcome of a scientific investigation v) **state** improvements or extensions to the method that would benefit the scientific investigation	The student is able to: i) **correctly collect and present** data in numerical and/or visual forms ii) **accurately interpret** data and **explain** results iii) **outline** the validity of a hypothesis based on the outcome of a scientific investigation iv) **outline** the validity of the method based on the outcome of a scientific investigation v) **outline** improvements or extensions to the method that would benefit the scientific investigation
5-6	The student is able to: i) **correctly collect, organize, and present** data in numerical and/or visual forms ii) **accurately interpret** data and **outline** results **using scientific reasoning** iii) **outline** the validity of a prediction based on the outcome of a scientific investigation iv) **outline** the validity of the method based on the outcome of a scientific investigation v) **outline** improvements or extensions to the method that would benefit the scientific investigation	The student is able to: i) **correctly collect, organize, and present** data in numerical and/or visual forms ii) **accurately interpret** data and **describe** results **using scientific reasoning** iii) **outline** the validity of a hypothesis based on the outcome of a scientific investigation iv) **outline** the validity of the method based on the outcome of a scientific investigation v) **outline** improvements or extensions to the method that would benefit the scientific investigation	The student is able to: i) **correctly collect, organize and present** data in numerical and/or visual forms ii) **accurately interpret** data and **explain** results **using scientific reasoning** iii) **discuss** the validity of a hypothesis based on the outcome of a scientific investigation iv) **discuss** the validity of the method based on the outcome of a scientific investigation v) **describe** improvements or extensions to the method that would benefit the scientific investigation
7-8	The student is able to: i) **correctly collect, organize, transform and present** data in numerical and/or visual forms ii) **accurately interpret** data and **outline** results **using correct scientific reasoning** iii) **discuss** the validity of a prediction based on the outcome of a scientific investigation iv) **discuss** the validity of the method based on the outcome of a scientific investigation v) **describe** improvements or extensions to the method that would benefit the scientific investigation	The student is able to: i) **correctly collect, organize, transform and present** data in numerical and/or visual forms ii) **accurately interpret** data and **describe** results **using correct scientific reasoning** iii) **discuss** the validity of a hypothesis based on the outcome of a scientific investigation iv) **discuss** the validity of the method based on the outcome of a scientific investigation v) **describe** improvements or extensions to the method that would benefit the scientific investigation	The student is able to: i) **correctly collect, organize, transform and present** data in numerical and/or visual forms ii) **accurately interpret** data and **explain** results **using correct scientific reasoning** iii) **evaluate** the validity of a hypothesis based on the outcome of a scientific investigation iv) **evaluate** the validity of the method based on the outcome of a scientific investigation v) **explain** improvements or extensions to the method that would benefit the scientific investigation

Beijing BISS International School
北京BISS国际学校

Criterion D: Reflecting on the impacts of science

Achievement level	Grade 6 (MYP 1)	Grade 7 (MYP 2) / Grade 8 (MYP 3)	Grade 9 (MYP 4) / Grade 10 (MYP 5)
	Level descriptor	Level descriptor	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i) **state** the ways in which science is used to address a specific problem or issue, **with limited success** ii) **state** the implications of using science to solve a specific problem or issue, interacting with a factor, **with limited success** iii) **apply** scientific language to communicate understanding, **with limited success** iv) document sources, **with limited success**	The student is able to: i) **state** the ways in which science is used to address a specific problem or issue ii) **state** the implications of using science **t**o solve a specific problem or issue, interacting with a factor iii) **apply** scientific language to communicate understanding, but does so **with limited success** iv) document sources, **with limited success**	The student is able to: i) **outline** the ways in which science is used to address a specific problem or issue ii) **outline** the ways in which science is used to address a specific problem or issue iii) **sometimes apply** scientific language to communicate understanding but does so **with limited success** iv) document sources**, with limited success**
3-4	The student is able to: i) **state** the ways in which science is used to address a specific problem or issue ii) **state** the implications of using science to solve a specific problem or issue, interacting with a factor iii) **sometimes apply** scientific language to communicate understanding iv) **sometimes** document sources correctly	The student is able to: i) **outline** the ways in which science is used to address a specific problem or issue ii) **outline** the implications of using science to solve a specific problem or issue, interacting with a factor iii) **sometimes apply** scientific language to communicate understanding iv) **sometimes** document sources **correctly**	The student is able to: i) **summarize** the ways in which science is applied and used to address a specific problem or issue ii) **describe** the implications of using science and its application to solve a specific problem or issue, interacting with a factor iii) **apply** scientific language to communicate understanding iv) **sometimes** document sources correctly
5-6	The student is able to: i) **outline** the ways in which science is used to address a specific problem or issue ii) **outline** the implications of using science to solve a specific problem or issue, interacting with a factor iii) **usually apply** scientific language to communicate understanding **clearly and precisely** iv) **usually** document sources correctly	The student is able to: i) **summarize** the ways in which science is **applied and** used to address a specific problem or issue ii) **describe** the implications of using science **and its application** to solve a specific problem or issue, interacting with a factor iii) **usually apply** scientific language to communicate understanding **clearly and precisely** iv) **usually** document sources **correctly**	The student is able to: i) **describe** the ways in which science is applied and used to address a specific problem or issue ii) **discuss** the implications of using science and its application to solve a specific problem or issue, interacting with a factor iii) **usually apply** scientific language to communicate understanding **clearly and precisely** iv) **usually** document sources correctly
7-8	The student is able to: i) **summarize** the ways in which science is **applied** and used to address a specific problem or issue ii) **describe and summarize** the implications of using science and its **application** to solve a specific problem or issue, interacting with a factor iii) **consistently apply** scientific language to communicate understanding **clearly and precisely** iv) document sources **completely**	The student is able to: i) **describe** the ways in which science is **applied** and used to address a specific problem or issue ii) **discuss and analyze** the implications of using science **and its application** to solve a specific problem or issue, interacting with a factor iii) **consistently apply** scientific language to communicate understanding **clearly and precisely** iv) document sources **completely**	The student is able to: i) **explain** the ways in which science is applied and used to address a specific problem or issue ii) **discuss and evaluate** the implications of using science and its application to solve a specific problem or issue, interacting with a factor iii) **consistently apply** scientific language to communicate understanding **clearly and precisely** iv) document sources **completely**