Kellogg School Sciences Rubric MYP Year 1 and Year 2 Semester 1 2016-2017

	A: Knowing and Understanding	B: Inquiring and designing	C: Processing and evaluating	D: Reflecting on the impacts of science
0	The student does not reach a standard described by any of the descriptors below			
1-2	i. **select** scientific knowledge i. **select** scientific knowledge and understanding to **suggest solutions** to problems set in **familiar situations** i. **apply** information to **make judgments**, with limited success	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/she **selects materials and**	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 what would benefit the scientific investigation, **with limited success**	i. **state** the ways in which science is used to address a specific problem or issue ii. **state** the implications using science to solve a specific problem or issue, interacting with a factor iii. **apply** scientific language to communicate understanding iv. document sources
3-4	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**	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/she **selects appropriate materials and equipment**	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 predication 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	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
5-6	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**	i. **outline** a problem or question to be tested by a scientific investigation ii. **outline** a testable predication **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/she **selects appropriate materials and equipment.**	i. **correctly collect, organize and present** data in numerical and/or visual form ii. **accurately interpret** data and **outline** results using scientific reasoning iii. **outline** the validity of the method 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	i. **outline** the ways in which science is used to address a specific ii. **outline** the implications of using science to solve a specific problem or issue, interaction with a factor iii. **usually apply** scientific language to communicate understanding **clearly and precisely** iv. **usually** document sources correctly
7-8	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**	i. **select** a problem or question to be tested by a scientific investigation ii. **select** a testable predication iii. **state** a variable iv. design a **method with limited success**	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 predication 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	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**

Kellogg School Sciences Rubric MYP Year 2 Semester 2 and Year 3 2016-2017

	A: Knowing and Understanding	B: Inquiring and Designing	C: Processing and Evaluating	D: Reflecting on the Impacts of Science
0	The student does not reach a standard described by any of the descriptors below			
1-2	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**	v. **State** a problem or question to be tested by a scientific investigation, with **limited success** vi. **State** a testable hypothesis vii. **State** the variables viii. Design **a method, with limited success**	vi. **Collect and present** data in numerical and/or visual forms vii. **Accurately interpret** data viii. **State** the validity of a hypothesis **with limited reference** to a scientific investigation ix. **State** the validity of the method **with limited reference** to a scientific investigation x. **State limited** improvements or extensions to the method	v. **State** the ways in which science is used to address a specific problem or issue vi. **State** the implications of the use of science to solve a specific problem or issue, interacting with a factor vii. **Apply** scientific language to communicate understanding but does so with limited success viii. Document sources, **with limited access**
3-4	iv. **State** scientific knowledge v. Apply scientific knowledge and understanding to **solve problems** set in **familiar situations** vi. **Apply** information to make **scientifically supported judgments**	v. **State** a problem or question to be tested by a scientific investigation vi. **Outline** a testable hypothesis **using scientific reasoning** vii. **Outline** how to manipulate the variables, and **state** how **relevant data** will be collected viii. Design a **safe method** in which he or she **selects materials and equipment**	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	v. **Outline** the ways in which science is used to address a specific problem or issue vi. **Outline** the implications of using science to solve a specific problem or issue vii. **Sometimes apply** scientific language to communicate understanding viii. **Sometimes** document sources **correctly**
5-6	iv. **Outline scientific knowledge** v. Apply scientific knowledge and understanding to **solve problems** set in **familiar situations** and **suggest solutions** to problems set in **unfamiliar situations**. vi. **Interpret** information to make **scientifically supported judgments**	v. **Outline** a problem or question to be tested by a scientific investigation vi. **Outline and explain** a testable hypothesis **using scientific reasoning** vii. **Outline** how to manipulate the variables, and **outline** how **sufficient, relevant data** will be collected viii. Design **a safe method** in which he or she **selects materials and equipment**	vi. **Correctly collect, organize and present** data in numerical and/or visual forms vii. **Accurately interpret** data and **describe** results **using scientific reasoning** viii. **Outline** the validity of a hypothesis based on the outcome of a scientific investigation ix. **Outline** the validity of the method based on the outcome of a scientific investigation x. **Outline** improvements or extensions to the method that would benefit the scientific investigation	v. **Summarize** the ways in which science is applied and used to address a specific problem or issue vi. **Describe** the implications of using science and its application to solve a specific problem or issue, interacting with a factor vii. **Usually apply** scientific language to communicate understanding **clearly and precisely** viii. **Usually** document sources **correctly**
7-8	iv. **Describe** scientific knowledge v. Apply scientific knowledge and understanding to **solve problems** set in **familiar and unfamiliar situations**. vi. **Analyze** information to make **scientifically supported judgments**	v. **Describe** a problem or question to be tested by a scientific investigation vi. **Outline and explain** a testable hypothesis **using correct scientific reasoning** vii. **Describe** how to manipulate the variables, and **describe** how **sufficient, relevant** data will be collected viii. Design a **logical, complete and safe method** in which he or she **selects appropriate materials and equipment**	vi. **Correctly collect, organize, transform and present** data in numerical and/or visual forms vii. **Accurately interpret data** and **describe** results **using correct scientific reasoning** viii. **Discuss** the validity of a hypothesis based on the outcome of a scientific investigation ix. **Discuss** the validity of the method based on the outcome of a scientific investigation x. **Describe** improvements or extensions to the method that would benefit the scientific investigation	v. **Describe** the ways in which science is applied and used to address a specific problem or issue vi. **Discuss and analyze** the implications of using science and its application to solve a specific problem or issue, interacting with a factor vii. **Consistently apply** scientific language to communicate understanding **clearly and precisely** viii. Document sources **completely**