Name: _____
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Year 1 Criterion A: Knowing and Understanding

Achievement level	Achievement level descriptor
0	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.**
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**.
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**.
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**.

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IB Grade: _____ **Conversion:** _____

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Year 1 Criterion A: Knowing and Understanding

Achievement level	Achievement level descriptor
0	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.**
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**.
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**.
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**.

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Year 1 Criterion B: Inquiring and Designing

Achievement level	Achievement level descriptor
0	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**.
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**.
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**.
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**.

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IB Grade: _____ **Conversion:** _____

Name: _____
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Year 1 Criterion B: Inquiring and Designing

Achievement level	Achievement level descriptor
0	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**.
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**.
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**.
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**.

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IB Grade: _____ **Conversion:** _____

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Date: _____

Year 1 Criterion C: Processing and Evaluating

Achievement level	Achievement level descriptor
0	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**.
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.
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.
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.

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IB Grade: _____ **Conversion:** _____

Name: _____
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Year 1 Criterion C: Processing and Evaluating

Achievement level	Achievement level descriptor
0	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**.
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.
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.
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.

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IB Grade: _____ **Conversion:** _____

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Year 1 Criterion D: Reflecting on the Impacts of Science

Achievement level	Achievement level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student is able to, **with limited success**: 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. **apply** scientific language to communicate understanding iv. document sources.
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.
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.
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**.

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IB Grade: _____ **Conversion:** _____

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Year 1 Criterion D: Reflecting on the Impacts of Science

Achievement level	Achievement level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student is able to, **with limited success**: 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. **apply** scientific language to communicate understanding iv. document sources.
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.
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.
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**.

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