

Objective A: Knowing and understanding

- 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.

Objective B: Inquiring and designing

- i. describe a problem or question to be tested by a scientific investigation
- ii. outline a testable hypothesis and explain it using scientific reasoning
- iii. describe how to manipulate the variables, and describe how data will be collected
- iv. design scientific investigations.

Objective C: Processing and evaluating

- i. present collected and transformed data
- ii. interpret data and describe results using scientific reasoning
- iii. discuss the validity of a hypothesis based on the outcome of the scientific investigation
- iv. discuss the validity of the method
- v. describe improvements or extensions to the method.

Objective D: Reflecting on the impacts of science

- i. describe the ways in which science is applied and used to address a specific problem or issue
- ii. discuss and analyse the various implications of using science and its application in solving a specific problem or issue
- iii. apply scientific language effectively
- iv. document the work of others and sources of information used.

Science Year 3 Summative Assessment Criteria Rubric

Level	Criteria A: Knowing and Understanding	Criteria B: Inquiring and Designing	Criteria C: Processing and Evaluating	Criteria D: Reflecting on the Impacts of Science
1-2	<ul style="list-style-type: none"> i. recall scientific knowledge ii. apply scientific knowledge and understanding to suggest solutions to problems set in familiar situations iii. apply information to make judgements 	<ul style="list-style-type: none"> i. select a problem or question to be tested by scientific investigation, with limited success ii. select a testable hypothesis iii. state the variables iv. design a method, with limited success 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> i. state the ways in which science is used to address a specific problem or issue ii. state the implications of the use of science to solve a specific problem or issue interacting with factor iii. apply scientific language to communicate understanding but does so with limited resources iv. document sources, with limited success
3-4	<ul style="list-style-type: none"> i. state scientific knowledge ii. apply scientific knowledge and understanding to solve problems set in familiar situations iii. apply information to make scientifically supported judgements 	<ul style="list-style-type: none"> i. state a problem or question to be tested by scientific investigation ii. outline a testable hypothesis using scientific reasoning iii. outline how to manipulate variables, and outline how relevant data will be collected iv. design a safe method in which he or she selects appropriate materials and equipment 	<ul style="list-style-type: none"> 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 the 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 	<ul style="list-style-type: none"> i. outlines 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 factor iii. sometimes apply scientific language to communicate understanding iv. sometimes document sources correctly
5-6	<ul style="list-style-type: none"> i. outline scientific knowledge ii. apply scientific knowledge and understanding to solve 	<ul style="list-style-type: none"> i. outline a problem or question to be tested by scientific investigation 	<ul style="list-style-type: none"> i. correctly collect, organize and present data in numerical and/or visual forms 	<ul style="list-style-type: none"> i. summarize the ways in which science is used to address a specific problem or issue iii. describe the implications of using science to solve a specific problem or issue interacting with factor

	<p>problems set in familiar situations and suggest solutions to problems set in unfamiliar situations</p> <p>iii. analyse information to make scientifically supported judgements</p>	<p>ii. outline and explain a testable hypothesis using scientific reasoning</p> <p>iii. outline how to manipulate variables, and outline how sufficient, relevant data will be collected</p> <p>iv. design a complete and safe method in which he or she selects appropriate materials and equipment</p>	<p>ii. accurately interpret data and describe results using scientific reasoning</p> <p>iii. outline the validity of a hypothesis based on the outcome of the scientific investigation</p> <p>iv. outline the validity of the method based on the outcome of a scientific investigation</p> <p>v. outline improvements or extensions to the method that would benefit the scientific investigation</p>	<p>iii. usually apply scientific language to communicate understanding clearly and precisely</p> <p>iv. usually document sources correctly</p>
<p>7-8</p>	<p>i. describe scientific knowledge</p> <p>ii. apply scientific knowledge and understanding to solve problems set in familiar and unfamiliar situations</p> <p>iii. analyse information to make scientifically supported judgements</p>	<p>i. describe a problem or question to be tested by scientific investigation</p> <p>ii. outline and explain a testable hypothesis using correct scientific reasoning</p> <p>iii. describe how to manipulate variables, and describe how sufficient, relevant data will be collected</p> <p>iv. design a logical, complete and safe method in which he or she selects appropriate materials and equipment</p>	<p>i. correctly collect, organize, transform and present data in numerical and/or visual forms</p> <p>ii. accurately interpret data and describe results using correct scientific reasoning</p> <p>iii. discuss the validity of a hypothesis based on the outcome of the scientific investigation</p> <p>iv. discuss the validity of the method based on the outcome of a scientific investigation</p> <p>v. describes improvements or extensions to the method that would benefit the scientific investigation</p>	<p>i. describe the ways in which science is used to address a specific problem or issue</p> <p>ii. discuss and analyse the implications of using science to solve a specific problem or issue interacting with factor</p> <p>iii. consistently apply scientific language to communicate understanding clearly and precisely</p> <p>iv. document sources completely</p>