

## 2-point Holistic Rubric

Points	Description
2 Points	<p><b>There is evidence in this response that the student has a complete understanding of the solution to a problem or constructs a complete explanation of the question.</b></p> <ul style="list-style-type: none"> <li>• Demonstrates complete integration of the use of science and engineering practices such as, modeling, engaging in argument from evidence, obtaining, evaluating, and communicating information, etc.</li> <li>• Provides a solution or explanation that is coherent and based on disciplinary core ideas.</li> <li>• Reflects synthesis of understanding of complex ideas and crosscutting concepts.</li> <li>• Includes an effective application of the 3 dimensions (SEP, DCI, and CCC) to a practical problem or real-world situation which demonstrates an understanding of the 3 dimensions.</li> </ul>
1 Point	<p><b>There is evidence in this response that the student has a minimal understanding of the solution to a problem or constructs an explanation of the question.</b></p> <ul style="list-style-type: none"> <li>• Demonstrates little or no integration of the use of science and engineering practices such as, modeling, engaging in argument from evidence, obtaining, evaluating, and communicating information, etc.</li> <li>• Provides a solution or explanation that is minimally based on disciplinary core ideas.</li> <li>• Reflects little or no synthesis of understanding of complex ideas and crosscutting concepts.</li> <li>• Includes an application of the 3 dimensions to a practical problem or real-world situation which demonstrates a minimal understanding of the 3 dimensions.</li> </ul>
0 Point	<p><b>There is evidence that the student has no understanding of the solution to a problem or the question.</b></p> <ul style="list-style-type: none"> <li>• The response is completely incorrect, too vague, or irrelevant to the solution or question.</li> </ul>

## 3-point Holistic Rubric

Points	Description
3 Points	<p><b>There is evidence in this response that the student has a full and complete understanding of the solution to a problem or constructs a complete explanation of the question.</b></p> <ul style="list-style-type: none"><li>• Demonstrates complete integration of the use of science and engineering practices such as, modeling, engaging in argument from evidence, obtaining, evaluating, and communicating information, etc.</li><li>• Provides a solution or explanation that is coherent and based on disciplinary core ideas.</li><li>• Reflects a complete synthesis of understanding of complex ideas and crosscutting concepts.</li><li>• Includes an effective application of the 3 dimensions (SEP, DCI, and CCC) to a practical problem or real-world situation which demonstrates a complete understanding of the 3 dimensions.</li></ul>
2 Points	<p><b>There is evidence in this response that the student has a general understanding of the solution to a problem or constructs a general explanation of the question.</b></p> <ul style="list-style-type: none"><li>• Demonstrates some integration of the use of science and engineering practices such as, modeling, engaging in argument from evidence, obtaining, evaluating, and communicating information, etc.</li><li>• Provides a solution or explanation that is mostly coherent and based on disciplinary core ideas.</li><li>• Reflects some synthesis of understanding of complex ideas and crosscutting concepts.</li><li>• Includes an application of the 3 dimensions to a practical problem or real-world situation which demonstrates a partial understanding of the 3 dimensions.</li></ul>

Points	Description
1 Point	<p data-bbox="440 239 1273 338"><b>There is evidence in this response that the student has a minimal understanding of the solution to a problem or constructs a minimal explanation of the question.</b></p> <ul data-bbox="488 373 1414 793" style="list-style-type: none"><li data-bbox="488 373 1370 472">• Demonstrates little or no integration of the use of science and engineering practices such as, modeling, engaging in argument from evidence, obtaining, evaluating, and communicating information, etc.</li><li data-bbox="488 506 1406 569">• Provides a solution or explanation that is minimally based on disciplinary core ideas.</li><li data-bbox="488 602 1349 665">• Reflects little or no synthesis of understanding of complex ideas and crosscutting concepts.</li><li data-bbox="488 699 1414 793">• Includes an application of the 3 dimensions to a practical problem or real-world situation which demonstrates a minimal understanding of the 3 dimensions.</li></ul>
0 Point	<p data-bbox="440 846 1382 909"><b>There is evidence that the student has no understanding of the solution to a problem or the question.</b></p> <ul data-bbox="488 945 1338 1008" style="list-style-type: none"><li data-bbox="488 945 1338 1008">• The response is completely incorrect, too vague, or irrelevant to the solution or question.</li></ul>

## 4-point Holistic Rubric

Points	Description
4 Points	<p><b>There is evidence in this response that the student has a full and complete understanding of the solution to a problem or constructs a full and complete explanation of the question.</b></p> <ul style="list-style-type: none"><li>• Demonstrates complete integration of the use of science and engineering practices such as, modeling, engaging in argument from evidence, obtaining, evaluating, and communicating information, etc.</li><li>• Provides a solution or explanation that is coherent and based on disciplinary core ideas.</li><li>• Reflects a complete synthesis of understanding of complex ideas and crosscutting concepts.</li><li>• Includes an effective application of the 3 dimensions (SEP, DCI, and CCC) to a practical problem or real-world situation which demonstrates a complete understanding of the 3 dimensions.</li></ul>
3 Points	<p><b>There is evidence in this response that the student has a general understanding of the solution to a problem or constructs a complete explanation of the question.</b></p> <ul style="list-style-type: none"><li>• Demonstrates integration of the use of science and engineering practices such as, modeling, engaging in argument from evidence, obtaining, evaluating, and communicating information, etc.</li><li>• Provides a solution or explanation that is mostly coherent and based on disciplinary core ideas.</li><li>• Reflects a synthesis of understanding of complex ideas and crosscutting concepts.</li><li>• Includes an effective application of the 3 dimensions to a practical problem or real-world situation which demonstrates an understanding of the 3 dimensions.</li></ul>

Points	Description
2 Points	<p><b>There is evidence in this response that the student has a partial understanding of the solution to a problem or constructs an explanation of the question.</b></p> <ul style="list-style-type: none"><li>• Demonstrates some integration of the use of science and engineering practices such as, modeling, engaging in argument from evidence, obtaining, evaluating, and communicating information, etc.</li><li>• Provides a solution or explanation that is adequately coherent and based on disciplinary core ideas.</li><li>• Reflects some synthesis of understanding of complex ideas and crosscutting concepts.</li><li>• Includes an application of the 3 dimensions to a practical problem or real-world situation which demonstrates a partial understanding of the 3 dimensions.</li></ul>
1 Point	<p><b>There is evidence in this response that the student has a minimal understanding of the solution to a problem or constructs a minimal explanation of the question.</b></p> <ul style="list-style-type: none"><li>• Demonstrates little or no integration of the use of science and engineering practices such as, modeling, engaging in argument from evidence, obtaining, evaluating, and communicating information, etc.</li><li>• Provides a solution or explanation that is minimally based on disciplinary core ideas.</li><li>• Reflects little or no synthesis of understanding of complex ideas and crosscutting concepts..</li><li>• Includes an application of the 3 dimensions to a practical problem or real-world situation which demonstrates a minimal understanding of the 3 dimensions.</li></ul>
0 Point	<p><b>There is evidence that the student has no understanding of the solution to a problem or the question.</b></p> <ul style="list-style-type: none"><li>• The response is completely incorrect, too vague, or irrelevant to the solution or question.</li></ul>