

Name: \_\_\_\_\_

Score: \_\_\_\_\_

### Learning Sequence Scoring Rubric

<b>Dimension</b>	<b>Excellent (4)</b>	<b>Good (3)</b>	<b>Fair (2)</b>	<b>Poor/Unacceptable (1/0)</b>	<b>Score</b>
Subject Matter	Topic is from a single area and, while very narrow, allows a single concept to be addressed in multiple ways.	Topic a bit broad, requiring one activity to deviate markedly from the central concept being developed.	Topic is too broad, requiring two activities to deviate markedly from the central concept being developed.	Topic is so broad that there is no central conceptual theme. Activities are rather unrelated or discordant.	
Locus of Control	Control of learning processes clearly and systematically shifts from teacher to students across the sequence. The trend is consistent throughout.	Control of learning processes generally trends from teacher to students across the sequence, but there are some clear irregularities.	It is unclear that the control of learning processes is systematically being shifted from teacher to student across the sequence.	It is obvious that the control of learning processes is systematically being shifted from teacher to student across the sequence.	
Intellectual Sophistication	Teacher focus on the development of students' intellectual process skills clearly shifts from rudimentary to advanced across the sequence.	Teacher focus on the development of students' intellectual process skills generally trends from rudimentary to advanced across the sequence.	It is unclear that the teacher's focus on the development of students' intellectual process skills is shifting appropriately across the sequence.	It is obvious that the teacher's focus on the development of students' intellectual process skills is shifting appropriately across the sequence.	
Inquiry Orientation	All activities are clearly inquiry oriented. That is, students will collect information and construct understanding from an analysis of that data.	Most activities are clearly inquiry oriented. That is, students will collect information and construct understanding from an analysis of that data.	Some activities are clearly inquiry oriented. That is, students will collect information and construct understanding from an analysis of that data.	Few if any activities are clearly inquiry oriented. That is, students will collect information and construct understanding from an analysis of that data.	
Clarity	All descriptions are very clear and an informed reader could clearly conduct the activities indicated.	Most descriptions are very clear and an informed reader could clearly conduct the activities indicated.	Some descriptions are very clear and an informed reader could clearly conduct the activities indicated.	Few if any descriptions are clear enough that an informed reader could clearly conduct the activities indicated.	
Explicit	Student explicitly states intellectual process skills across the sequence, using words from rubric.	Student explicitly states majority of intellectual process skills, but infers a minority.	Student explicitly states a minority of intellectual process skills, and infers a majority.	Student leaves it to the scorer to infer the presence of nearly all intellectual process skills.	
Feasibility	All activities can easily be completed with number and type of materials indicated.	Most activities can easily be completed with number and type of materials indicated.	Some activities can easily be completed with number and type of materials indicated.	Few if any activities can easily be completed with number and type of materials indicated.	

**Intellectual Process Skills of Discovery Learning:**

	<b>Excellent (4)</b>	<b>Good (3)</b>	<b>Fair (2)</b>	<b>Poor/Unacceptable (1/0)</b>	<b>Score</b>
Students employ <b>rudimentary</b> intellectual process skills: observing, formulating concepts, estimating, drawing conclusions, communicating results, and classifying results.	Most of the rudimentary intellectual process skills are evident. Basic skills are still emphasized but none of the more sophisticated intellectual process skills are emphasized.	About half of the rudimentary intellectual process skills are evident. Basic skills somewhat emphasized, and very few of the more sophisticated intellectual process skills are emphasized.	Less than half of the rudimentary intellectual process skills are evident. Basic skills somewhat emphasized. Several of the more sophisticated intellectual process skills are emphasized.	Few if any of the rudimentary intellectual process skills are evident. Basic skills are deemphasized. The more sophisticated intellectual process skills are emphasized.	

**Intellectual Process Skills of Interactive Demonstration:**

Students employ <b>basic</b> intellectual process skills, as well as others that they demonstrated in the first phase of the learning sequence. These more sophisticated intellectual processes include: predicting, explaining, estimating, acquiring and processing data, formulating and revising scientific explanations using logic and evidence, and recognizing and analyzing alternative explanations and models	Most of the lower intellectual process skills are still being emphasized. None of the more sophisticated intellectual process skills are emphasized.	About half of the lower intellectual process skills are evident. Some of the more sophisticated intellectual process skills are emphasized.	Less than half of the lower intellectual process skills are evident. Many of the more sophisticated intellectual process skills are emphasized.	Few if any of the lower intellectual process skills are evident. The more sophisticated intellectual process skills are emphasized.	
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**Intellectual Process Skills of Inquiry Lesson:**

Students employ <b>intermediate</b> intellectual process skills, as well as others that they demonstrated in earlier phases of the learning sequence. These more sophisticated intellectual processes include the following: measuring, collecting and recording data, constructing a table of data, designing and conducting scientific investigations, using technology and math during investigations, and describing relationships.	Most of the intermediate intellectual process skills are evident. Some of the lower intellectual process skills are still emphasized. None of the more sophisticated intellectual process skills are emphasized.	About half of the intermediate intellectual process skills are evident. Some of the lower intellectual process skills are still emphasized. A few of the more sophisticated intellectual process skills are emphasized.	Less than half of the intermediate intellectual process skills are evident. Many of the lower intellectual process skills are still being emphasized. Several of the more sophisticated intellectual process skills are emphasized.	Few if any of the intermediate intellectual process skills are evident. Many of the lower intellectual process skills are still being emphasized. Many of the more sophisticated intellectual process skills are emphasized.	
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**Intellectual Process Skills of Inquiry Laboratory:**

	<b>Excellent (4)</b>	<b>Good (3)</b>	<b>Fair (2)</b>	<b>Poor/Unacc (1/0)</b>	<b>Score</b>
Students employ <b>integrated</b> intellectual process skills, as well as others that they demonstrated in earlier phases of the learning sequence. Typical of this aspect of the sequence, students will commonly utilize the following intellectual process skills: measuring metrically, establishing empirical laws on the basis of evidence and logic, designing and conducting scientific investigations, and using technology and math during investigations.	Most of the integrated intellectual process skills are evident. None of the lowest intellectual process skills are being emphasized. None of the more sophisticated intellectual process skills are emphasized.	About half of the integrated intellectual process skills are evident. Some of the lowest intellectual process skills are being emphasized. None of the more sophisticated intellectual process skills are emphasized.	Less than half of the integrated intellectual process skills are evident. Many of the lowest intellectual process skills are being emphasized. Some of the more sophisticated intellectual process skills are emphasized.	Few if any of the integrated intellectual process skills are evident. Most of the lowest intellectual process skills are being emphasized. Many of the more sophisticated intellectual process skills are emphasized.	

**Intellectual Process Skills of Hypothetical Inquiry: (EXTRA CREDIT)**

Students employ <b>advanced</b> intellectual process skills, as well as others that they demonstrated in earlier phases of the learning sequence. These more sophisticated intellectual processes include the following: synthesizing complex hypothetical explanations, analyzing and evaluating scientific arguments, generating predictions through the process of deduction, revising hypotheses and predictions in light of new evidence, and solving complex real-world problems.	Most of the advanced intellectual process skills are evident. None of the low or intermediate intellectual process skills are being emphasized.	About half of the advanced intellectual process skills are evident. Some of the low or intermediate intellectual process skills are being emphasized.	Less than half of the advanced intellectual process skills are evident. Many of the low or intermediate intellectual process skills are being emphasized.	Few if any of the advanced intellectual process skills are evident. Most of the low or intermediate intellectual process skills are being emphasized.	
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**Total Score:**

**Scorer Comments:**