Author Names _____

Reviewer Name _____

Peer Review Scoring Guide for Writing #1

Directions: Scientists rely on peers and colleagues to offer critical feedback so that they may strengthen their work. The scrutiny provided by the scientific community during the peer review process is essential to scientific investigations. This tool will assist you in helping your classmates strengthen the writing for their final posters before the Poster Fair. By providing detailed responses to the questions below and assigning a score, you can provide valuable feedback to your classmates.

1. Are there any guiding questions that were left unanswered or were only partially answered? Explain.

2. Based on what you studied, is there anything missing? Is there any information you would suggest including?

3. Is the conclusion well supported?

4. What scores do you think this writing should earn? Write in or circle the scores for each criterion. Also, circle comments on the rubric that you feel are particularly relevant.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)	
Understanding of Content/Research				
*	Use of Product: Explanations identify uses of product based on research.			
Detailed and	Complete explanations.	Basic explanations are	Missing important	
demonstrating a	No clear inaccuracies or	inaccurate or	information and/or	
sophisticated	misconceptions. Solid	incomplete. Average	inaccuracies. Little	
understanding. No	research.	research.	research.	
inaccuracies.				
Extensive research.				
Physical and Chemical C	Characteristics: Explanation	ns identify the physical a	nd chemical	
characteristics.				
Clearly identifies both	Clearly identifies both	Some inaccurate or	Not able to	
physical and chemical	physical and chemical	incomplete physical	distinguish between	
characteristics in	characteristics.	and chemical	physical and chemical	
detail.		characteristics.	characteristics.	
Nano vs. Macro Charact	Nano vs. Macro Characteristics: Explanations identify characteristics and differences between the			
nanoproduct and macro	o-scale. Explanations give u	nderlying reasons for th	e differences.	
Clearly identifies Nano	Clearly identifies Nano	Some inaccurate or	Not able to	
and Macro	and Macro characteristics	incomplete	distinguish between	
characteristics and	and reasons for the	identification of Nano	Nano and Macro	
reasons for the	difference.	and Macro	characteristics.	
difference in detail.		characteristics.		
Thinking and Reasoning: Safety, social, and ethical issues resulting from production or product use.				
Valid and thoughtful	Valid but little	Does not fully	No supporting	
with scientific and	supporting logic or	support thinking with	evidence provided.	
logical supporting	scientific evidence.	specific evidence.	_	
evidence.				

5. Are there any parts that are confusing to read? Which parts could use some clarification?

6. Are there any parts that don't sound like the authors' own words? Explain what needs to be paraphrased better.

7. What score do you think this writing should earn? Circle the score for the criterion. Also, circle comments on the rubric that you feel are particularly relevant.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)
Writing Style and Mech	anics: Brief summary parag	raphs, bulleted lists, text b	ooxes, and tables that
highlight key information			
Concise, clear, and	Concise and clear	Appropriate writing.	Little attention to the
engaging	explanations.	Paraphrases some.	writing format.
explanations.	Paraphrases.	Many errors with	Poor paraphrase.
Paraphrases. Flawless	Minor errors with	spelling and grammar.	Many errors with
spelling and grammar.	spelling and grammar.		spelling and grammar.

Author Names _____

Reviewer Name _____

Peer Review Scoring Guide for Writing #2

Directions: Scientists rely on peers and colleagues to offer critical feedback so that they may strengthen their work. The scrutiny provided by the scientific community during the peer review process is essential to scientific investigations. This tool will assist you in helping your classmates strengthen the writing for their final posters before the Poster Fair. By providing detailed responses to the questions below and assigning a score, you can provide valuable feedback to your classmates.

1. Are there any guiding questions that were left unanswered or were only partially answered? Explain.

2. Based on what you studied, is there anything missing? Is there any information you would suggest including?

3. Is the conclusion well supported?

4. What scores do you think this writing should earn? Write in or circle the scores for each criterion. Also, circle comments on the rubric that you feel are particularly relevant.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)	
Understanding of Content/Research				
	Use of Product: Explanations identify uses of product based on research.			
Detailed and	Complete explanations.	Basic explanations are	Missing important	
demonstrating a	No clear inaccuracies or	inaccurate or	information and/or	
sophisticated	misconceptions. Solid	incomplete. Average	inaccuracies. Little	
understanding. No	research.	research.	research.	
inaccuracies.				
Extensive research.				
	Characteristics: Explanation	ns identify the physical a	nd chemical	
characteristics.				
Clearly identifies both	Clearly identifies both	Some inaccurate or	Not able to	
physical and chemical	physical and chemical	incomplete physical	distinguish between	
characteristics in	characteristics.	and chemical	physical and chemical	
detail.		characteristics.	characteristics.	
Nano vs. Macro Characteristics: Explanations identify characteristics and differences between the				
nanoproduct and macro	o-scale. Explanations give u	nderlying reasons for th	e differences.	
Clearly identifies Nano	Clearly identifies Nano	Some inaccurate or	Not able to	
and Macro	and Macro characteristics	incomplete	distinguish between	
characteristics and	and reasons for the	identification of Nano	Nano and Macro	
reasons for the	difference.	and Macro	characteristics.	
difference in detail.		characteristics.		
Thinking and Reasoning: Safety, social, and ethical issues resulting from production or product use.				
Valid and thoughtful	Valid but little	Does not fully	No supporting	
with scientific and	supporting logic or	support thinking with	evidence provided.	
logical supporting	scientific evidence.	specific evidence.		
evidence.				

5. Are there any parts that are confusing to read? Which parts could use some clarification?

6. Are there any parts that don't sound like the authors' own words? Explain what needs to be paraphrased better.

7. What score do you think this writing should earn? Circle the score for the criterion. Also, circle comments on the rubric that you feel are particularly relevant.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)	
Writing Style and Mech highlight <i>key</i> information	Writing Style and Mechanics: Brief summary paragraphs, bulleted lists, text boxes, and tables that			
Concise, clear, and	Concise and clear	Appropriate writing.	Little attention to the	
engaging explanations.	explanations. Paraphrases.	Paraphrases some. Many errors with	writing format. Poor paraphrase.	
Paraphrases. Flawless	Minor errors with	spelling and grammar.	Many errors with	
spelling and grammar.	spelling and grammar.		spelling and grammar.	

Author Names _____

Reviewer Name _____

Peer Review Scoring Guide for Visual Layout #1

Directions: In this final project, the visual arrangement is as important as the writing in getting your point across. This tool will assist you in helping your classmates strengthen the layout and organization for their final posters before the Poster Fair. By providing detailed responses to the questions below and assigning a score, you can provide valuable feedback to your classmates.

- 1. Are the images effective in communicating and illustrating key points? Offer an example to support your opinion.
- 2. What score would you assign this criterion? Circle the score and provide a rationale.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)
Graphic Explanations /	Fraphic Explanations / Images: Images communicate and reinforce concepts.		
Reinforcing important	Captures most important	Captures few	Graphics do not
concepts accurately	concepts. Shows no	important concepts/	capture important
and creatively.	misunderstanding.	reflect inaccuracies.	concepts.

3. Is there a logical flow of text, graphics, and images? Explain.

- 4. Is there an appropriate balance of text, graphics, and images? Too much text is not appropriate for a poster. However, too many pictures and not enough text may indicate a lack of information.
- 5. Is there an appropriate amount of margins and space between sections? Too little space may make the poster look messy. Too much space may indicate a lack of information.

6. What score would you assign this criterion? Circle the score and provide a rationale.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)
Organization and Poste	r components: Gives title, s	ubheadings, writing, and	graphic images. Has a
flow of information, space	ing, balance between text an	d graphics/images	
Sophisticated	Solid organization with	Somewhat organized.	Messy design.
organized, neat,	good design, layout, and	Some imbalance	Significant
balance of text and	neatness. Appropriate	between text and	imbalance between
graphics. Contains all	balance of text and	images. Contains all	text and images.
poster components.	images and spacing.	poster components.	Missing some poster
	Contains all poster		components.
	components.		

- 7. Do images include a source citation (e.g., Internet site, author, or title)?
- 8. Are the text citations in APA style? (e.g., author's last name or title)?
- 9. Is there a separate Works Cited section in APA style?

10. What score would you assign this criterion? Circle the score and provide a rationale.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)
Citations: Citations on a	all sources including text and images		
All text and images.	All but one or two text and images.	More than two graphic text or images.	Provides minimal citations.

Author Names _____

Reviewer Name _____

Peer Review Scoring Guide for Visual Layout #2

Directions: In this final project, the visual arrangement is as important as the writing in getting your point across. This tool will assist you in helping your classmates strengthen the layout and organization for their final posters before the Poster Fair. By providing detailed responses to the questions below and assigning a score, you can provide valuable feedback to your classmates.

- 1. Are the images effective in communicating and illustrating key points? Offer an example to support your opinion.
- 2. What score would you assign this criterion? Circle the score and provide a rationale.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)
Graphic Explanations /	Fraphic Explanations / Images: Images communicate and reinforce concepts.		
Reinforcing important	Captures most important	Captures few	Graphics do not
concepts accurately	concepts. Shows no	important concepts/	capture important
and creatively.	misunderstanding.	reflect inaccuracies.	concepts.

3. Is there a logical flow of text, graphics, and images? Explain.

- 4. Is there an appropriate balance of text, graphics, and images? Too much text is not appropriate for a poster. However, too many pictures and not enough text may indicate a lack of information.
- 5. Is there an appropriate amount of margins and space between sections? Too little space may make the poster look messy. Too much space may indicate a lack of information.

6. What score would you assign this criterion? Circle the score and provide a rationale.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)
Organization and Poste	r components: Gives title, s	ubheadings, writing, and	graphic images. Has a
flow of information, space	ing, balance between text an	d graphics/images	
Sophisticated	Solid organization with	Somewhat organized.	Messy design.
organized, neat,	good design, layout, and	Some imbalance	Significant
balance of text and	neatness. Appropriate	between text and	imbalance between
graphics. Contains all	balance of text and	images. Contains all	text and images.
poster components.	images and spacing.	poster components.	Missing some poster
	Contains all poster		components.
	components.		_

- 7. Do images include a source citation (e.g., Internet site, author, or title)?
- 8. Are the text citations in APA style? (e.g., author's last name or title)?
- 9. Is there a separate Works Cited section in APA style?

10. What score would you assign this criterion? Circle the score and provide a rationale.

Advanced (4)	Proficient (3)	Developing (2)	Novice (1)
Citations: Citations on a	all sources including text and images		
All text and images.	All but one or two text and images.	More than two graphic text or images.	Provides minimal citations.

Poster Fair Impressions

Directions: After the Poster Fair, you and your classmates will engage in a discussion about: 1) why nanoscience research and technology is important, and 2) whether or not further nanoscale research and technology is important for the public good. You will use information that you gather during the Poster Fair about three different nano products (other than your own) as evidence to support your position. To prepare for this class discussion, use the table below to jot down notes for three nanoproducts you learned about at the Poster Fair.

 Nanoproduct What is it? What does it do? How is it used? How is it produced? 	 For the Public Good What benefits does it offer? What problems does it help to solve? Why is it in the public's best interest to support/use this nanoproduct? 	 Concerns about the Nanoproduct Are there any safety concerns, economic setbacks, ethical, or social implications resulting from the product, its use, or production process? What are they? What additional information/research is needed to determine if these concerns may outweigh the product's potential benefits to the public?
1.		

Nanoproduct	For the Public Good	Concerns about the Nanoproduct
2.		
3.		