

## Oral Presentation Rubric

	<b>Limited (0–7 pts.)</b>	<b>Emerging (8–15 pts.)</b>	<b>Consistent (16–20 pts.)</b>	<b>Points possible</b>	<b>Points earned</b>
<b>Eye contact</b>	Eye contact is rare or limited to part of the audience.	Eye contact is occasional or includes only part of the audience.	Eye contact is frequent and includes most of audience.	20	
<b>Voice</b>	Words are not pronounced clearly. Mostly, voice is monotone with little or no vocal inflection. Fillers such as “ah” or “um” are used frequently.	Occasionally, words are not pronounced clearly. Occasionally, voice is monotone with little or no vocal inflection. Occasionally, fillers may be used.	Words are pronounced clearly and are easily understood. Consistently, vocal inflection is used. Fillers are used rarely or not at all.	20	
<b>Volume</b>	Mostly, volume is too soft to be heard, or volume is uncomfortably loud.	Occasionally, volume is too soft to be heard, or volume is uncomfortably loud. At times, the listener strains to hear what is being said.	Volume is consistently loud enough to be heard easily by the listener.	20	
<b>Pacing</b>	Often, pace of speaking may be rushed, too slow, or both. Speaking may include frequent awkward pauses. Often, pace of speaking is inconsistent, distracting, or ineffective.	Occasionally, pace of speaking is rushed, too slow, or both. Speaking may include some awkward pauses or some effective pauses. Occasionally, pace of speaking may be inconsistent, distracting, or ineffective.	Pace of speaking is slightly slower than used in normal conversation. Occasional pauses are used effectively.	20	
<b>Posture and gestures</b>	Body movements or gestures detract from the presentation. Stance may include slouching, swaying, leaning, or fidgeting. Shoulders may be directed away from audience. Gestures are awkward or absent.	Body movements or gestures are inconsistent in support of the presentation. Stance may include occasional slouching, swaying, leaning, or fidgeting. Gestures used are mostly appropriate and effective but occasionally may be awkward.	Body movements or gestures support or enhance the presentation. Stance includes steady, straight posture with shoulders directed toward the audience. Gestures are appropriate and effective.	20	
<b>TOTAL</b>				100	

Teacher project-scoring rubric (intentionally detailed to help determine one top group for each class)

<b>Design prospectus</b>				
A printed document that advertises or describes a school, commercial enterprise, forthcoming book, etc.,	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

in order to attract or inform clients, members, buyers, or investors.				
<b>Attractiveness and organization</b>	The prospectus has exceptionally attractive formatting and well-organized information.	The prospectus has attractive formatting and well-organized information.	The prospectus has well-organized information.	The prospectus's formatting and organization of material are confusing to the reader.
<b>Writing - Grammar</b>	There are no grammatical mistakes in the brochure.	There are one or two grammatical mistakes in the brochure.	There are three to five grammatical mistakes in the brochure.	There are several grammatical mistakes in the brochure.
<b>Content - Accuracy</b>	All facts in the brochure are accurate.	90–99% of the facts in the brochure are accurate.	80–89% of the facts in the brochure are accurate.	Fewer than 80% of the facts in the brochure are accurate.
<b>Intended clientele and human use</b>	The intended human use is exceptionally creative and supported by the design.	The intended human clientele is clearly detailed and supported by the design.	The intended human clientele is not specified but made clear by the design.	The intended human clientele is not specified or clear from the design.
<b>Natural use and impact</b>	The needs and impact on three or more native species are accurately explained.	The needs and impact on two or fewer native species are accurately explained.	The needs do not accurately support the native species or the impact is not accurately explained.	Needs of native species are not supported and impact not correctly explained.
<b>Seagulls</b>	Two or more, realistic methods for discouraging the seagulls are given, using humane means.	One realistic method for discouraging the seagulls is given, using humane means.	Method given for discouraging seagulls is unrealistic or inhumane.	Method for discouraging seagulls is not given.
<b>Calculation</b>	Accurate and detailed calculations are given for determining the percentage of human and natural use.	Accurate calculations are given for determining percentages, but the work is not shown.	Inaccurate calculations are given for determining percentages, but all work is shown.	Inaccurate percentages are given with no work shown.
<b>Scale model of proposed plan</b>				
A physical representation of an object, which maintains accurate relationships	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

between all important aspects of the model.				
<b>Scientific knowledge</b>	Explanations by all group members indicate a clear and accurate understanding of scientific principles underlying the proposed design	Explanations by all group members indicate a relatively accurate understanding of scientific principles underlying the proposed design	Explanations by most group members indicate relatively accurate understanding of scientific principles underlying the proposed design	Explanations by several members of the group do not illustrate much understanding of scientific principles underlying the proposed design.
<b>Scale plan</b>	Plan is neat with clear measurements and labeling for all components.	Plan is neat with clear measurements and labeling for most components.	Plan provides clear measurements and labeling for most components.	Plan does not show measurements clearly or is otherwise inadequately labeled.
<b>Construction - Materials</b>	Appropriate materials were selected, including reused/upcycled objects, and creatively modified in ways that made them even better.	Appropriate materials were selected and there was an attempt at creative modification to make them even better.	Appropriate materials were selected.	Inappropriate materials were selected and contributed to a product that did not accurately represent the objects
<b>Construction - Care Taken</b>	Great care taken in construction process so that the structure is neat, attractive and follows plans accurately.	Construction was careful and accurate for the most part, but 1-2 details could have been refined for a more attractive product.	Construction accurately followed the plans, but 3-4 details could have been refined for a more attractive product.	Construction appears careless or haphazard. Many details need refinement for a strong or attractive product.
<b>Construction - Scale</b>	1cm=10m scale used throughout and accurate percentage for human use has been depicted	Some items are not made to scale, or inaccurate percentage is depicted	Some items are not made to scale, AND inaccurate percentage is depicted	Scale is not adhered to and percentage not accurate
<b>Oral presentation</b>		<b>3</b>	<b>2</b>	<b>1</b>
	<b>Eye contact</b>	Eye contact is frequent and includes most of audience.	Eye contact is occasional or includes only part of the audience.	Eye contact is rare or limited to part of the audience.
	<b>Voice</b>	Words are pronounced clearly and are easily understood. Consistently, vocal inflection is used. Fillers are used rarely or not at all.	Occasionally, words are not pronounced clearly. Occasionally, voice is monotone with little or no vocal inflection. Occasionally, fillers may be used.	Words are not pronounced clearly. Mostly, voice is monotone with little or no vocal inflection. Fillers such as "ah" or "um" are used frequently.
	<b>Volume</b>	Volume is consistently loud enough to be heard easily by the	Occasionally, volume is too soft to be heard, or volume is uncomfortably	Mostly, volume is too soft to be heard, or volume is uncomfortably

		listener.	loud. At times, the listener strains to hear what is being said.	loud.
	<b>Pacing</b>	Pace of speaking is slightly slower than used in normal conversation. Occasional pauses are effectively used.	Occasionally, pace of speaking is rushed, too slow, or both. Speaking may include some awkward pauses or some effective pauses. Occasionally, pace of speaking may be inconsistent, distracting, or ineffective.	Often, pace of speaking may be rushed, too slow, or both. Speaking may include frequent awkward pauses. Often, pace of speaking is inconsistent, distracting, or ineffective.
	<b>Posture and gestures</b>	Body movements or gestures support or enhance the presentation. Stance includes steady, straight posture with shoulders directed toward the audience. Gestures are appropriate and effective.	Body movements or gestures are inconsistent in support of the presentation. Stance may include occasional slouching, swaying, leaning, or fidgeting. Gestures used are mostly appropriate and effective, but occasionally may be awkward.	Body movements or gestures detract from the presentation. Stance may include slouching, swaying, leaning, or fidgeting. Shoulders may be directed away from audience. Gestures are awkward or absent.
<b>Creativity</b>				
The use of the imagination or original ideas, especially in the production of an artistic work.	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Proposed use</b>	The project demonstrated understanding problem-solving skills by trying new ideas and making connections to scientific knowledge.	The project was original but did not make connections to scientific knowledge.	The project lacked originality.	The project gave no evidence of trying anything not limited to ideas of others.
<b>Scale model</b>	Scale model is exceptionally creative.	Scale model is creative, attractive, and draws attention.	Scale model is attractive or creative.	Scale model is not attractive or creative.
<b>Prospectus</b>	Prospectus is exceptionally	Prospectus is creative, attractive,	Prospectus is attractive or	Prospectus is not attractive or

	creative and well put together.	and draws attention.	creative.	creative.
<b>Presentation</b>	Presentation was dynamic, exciting, and informative.	Presentation was well put together and informative.	Presentation was not well done or not very informative.	Presentation was not well done or informative.

STEM exhibition: Judges scoring rubric

<b>Design prospectus</b>				
A printed document that advertises or describes a school, commercial enterprise, forthcoming book, etc., in order to attract or inform clients, members, buyers, or investors.	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Attractiveness and organization</b>	The prospectus has exceptionally attractive formatting and well-organized information.	The prospectus has attractive formatting and well-organized information.	The prospectus has well-organized information.	The prospectus's formatting and organization of material are confusing to the reader.
<b>Intended clientele and human use</b>	The intended human use is exceptionally creative and supported by the design.	The intended human clientele is clearly detailed and supported by the design.	The intended human clientele is not specified but made clear by the design.	The intended human clientele is not specified or clear from the design.
<b>Natural use and impact</b>	The needs and impact on three or more native species are accurately explained.	The needs and impact on two or fewer native species are accurately explained.	The needs do not accurately support the native species or the impact is not accurately explained.	Needs of native species are not supported and impact not correctly explained.
<b>Seagulls</b>	Two or more realistic methods for discouraging the seagulls are given, using humane means.	One realistic method for discouraging the seagulls is given, using humane means.	Method given for discouraging seagulls is unrealistic or inhumane.	Method for discouraging seagulls is not given.
<b>Scale model of proposed plan</b>				
A physical representation of an object, which maintains accurate relationships between all important aspects of the model.	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Scale plan</b>	Plan is neat with clear measurements and labeling for all components.	Plan is neat with clear measurements and labeling for most components.	Plan provides clear measurements and labeling for most components.	Plan does not show measurements clearly or is otherwise inadequately labeled.

<b>Construction - Materials</b>	Appropriate materials were selected, including reused/upcycled objects, and creatively modified in ways that made them even better.	Appropriate materials were selected and there was an attempt at creative modification to make them even better.	Appropriate materials were selected.	Inappropriate materials were selected and contributed to a product that did not accurately represent the objects.
<b>Construction - Care taken</b>	Great care taken in construction process so that the structure is neat, attractive, and accurately follows plans.	Construction was careful and accurate for the most part, but one or two details could have been refined for a more attractive product.	Construction accurately followed the plans, but three or four details could have been refined for a more attractive product.	Construction appears careless or haphazard. Many details need refinement for a strong or attractive product.
<b>Creativity</b>				
The use of the imagination or original ideas, especially in the production of an artistic work.	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Proposed use</b>	The project demonstrated understanding of problem-solving skills by trying new ideas and making connections to scientific knowledge.	The project was original but did not make connections to scientific knowledge.	The project lacked originality.	The project gave no evidence of trying anything not limited to ideas of others.
<b>Scale model</b>	Scale model is exceptionally creative.	Scale model is creative, attractive, and draws attention.	Scale model is attractive or creative.	Scale model is not attractive or creative.
<b>Prospectus</b>	Prospectus is exceptionally creative and well put together.	Prospectus is creative, attractive, and draws attention.	Prospectus is attractive or creative.	Prospectus is not attractive or creative.
<b>Presentation</b>	Presentation appeared dynamic, exciting, and informative.	Presentation appeared well put together and informative.	Presentation did not appear well done or not very informative.	Presentation did not appear well done or informative.
<b>Vote</b>	<b>5</b>		<b>0</b>	
Do you vote for this project for the TOP 3—please choose only 3!	<b>YES</b>		<b>NO</b>	

Peer presentation input

Group name	How much do you like this idea?	How much did you enjoy the presentation?	How much did you like the scale model?	Would you vote to do this?
	1 - not at all	1 - not at all	2 - not at all	Yes
	2 - somewhat	3 - somewhat	4 - somewhat	No
	3 - a lot	4 - a lot	5 - a lot	
	4 - best idea ever	5 - best idea ever	6 - best idea ever	

STEM visitor voting

<b>Welcome to the STEM Exhibition!</b>	
<p>Students first learned about the problem of the seagulls attracted to the nearby landfill in September. They also discovered the old dump is a <i>brownfield</i>—an unused former industrial site. They have been learning about waste management, ecology, and important mathematical calculations. Now they are applying all this knowledge to redesign the brownfield to attract native organisms, let humans use the space, and discourage seagulls. As you look through the projects, please put the NUMBER of your favorite project for each category. The top projects in each category will win awards.</p>	
<p>Favorite use for the brownfield (you really want to see this happen!)</p>	
<p>Most creative scale model (the entire model looks great and is quite unique)</p>	
<p>Best way to discourage the seagulls (you never would have thought of that!)</p>	
<p>"Greenest" scale model (most creative use of eco-friendly, reused, and upcycled items to make the model)</p>	
<p>Best prospectus (the paper "brochures" accompanying each project)</p>	
<p>Best overall (king of the hill, top of the heap, this is the best everything)</p>	

Sample schedule from the STEM field trip to the brownfield

Time	Group A	Group B	Group C	Group D
7:50 AM	Announcements	Announcements	Announcements	Announcements
8:00 AM	Small-group get-to-know-you activity			
8:10 AM				
8:20 AM	Load buses	Load buses	City engineer	City engineer
8:30 AM	Arrive at site	Arrive at site		
8:40 AM	Unload buses	Unload buses	Geometry activity	Research activity
8:50 AM	Transect	Water quality		
9:00 AM				
9:10 AM				
9:20 AM	Switch activity	Switch activity		
9:30 AM				
9:40 AM	Water quality	Transect	Switch activity	Switch activity
9:50 AM				
10:00 AM			Research activity	Geometry activity
10:10 AM				
10:20 AM	Load buses	Load buses		
10:30 AM	Arrive at school	Arrive at school		
10:40 AM	Unload buses	Unload buses		
10:50 AM	Lunch	Lunch	Lunch	Lunch
11:00 AM				
11:10 AM	City engineer	City engineer	Load buses	Load buses
11:20 AM				
11:30 AM			Arrive at site	Arrive at site
11:40 AM			Unload buses	Unload buses
11:50 AM	Geometry activity	Research activity	Transect	Water quality
12:00 PM				
12:10 PM				
12:20 PM				
12:30 PM	Switch activity	Switch activity		
12:40 PM	Switch activity	Switch activity	Water quality	Transect
12:50 PM				
1:00 PM	Research activity	Geometry activity		
1:10 PM				
1:20 PM			Load buses	Load buses
1:30 PM			Arrive at site	Arrive at site
1:40 PM	Unload buses	Unload buses		
1:50 PM	Human Footprint highlights in classrooms			
2:00 PM				
2:10 PM				
2:20 PM				
2:30 PM				

