

**No Points** Requirements Poor-Fair missing.

1 Poor quality. Fulfills at least 20% of requirements.

2 Fair Fair-Average quality. Fulfills at least 50% of requirements.

3 Good Average quality. of requirements.

**Very Good** Above average Fulfills at least 85% quality. Fulfills 95% of requirements.

5 Excellent Excellent quality. Fulfills 100% of requirements. Additional distinctive features.

Appendix: Rubrics

I. City Design (20 Points)	0	1	2	3	4	5
City representation     Includes all zones:     residential, commercial,     industrial     Clearly recognizable     elements, identifiable     structures, zones	No evidence of zoning. No variety of structures.	Zoning unclear. Little variety of structures.	At least one zone; small variety of structures.	1–2 zones, some variety of structures.	2 or more zones and some variety of struc- tures. Could be more compre- hensive.	All 3 zones; excellent variety of recognizable structures.
2. City infrastructure and services  Includes essential infrastructure (water, roadways, power, utilities, etc.)  Includes variety of essential city services (public safety, health, education, etc.)	No infrastruc- ture or services.	Shows very little infra- structure and services.	Few infra- structure or service components.	Some infra- structure and services. Not all essential to city operation.	Several infra- structure and services. Not all essential to city operation.	Several comprehensive infrastructure and services essential to city operation.
3. Interconnectivity within city  • Interconnectivity of zones and infrastructure  • Transportation modes: pedestrian, public, goods and services	No intercon- nectivity.	Little interconnec- tivity.	Some inter- connectivity, but some awk- ward design. Few transpor- tation modes shown.	Adequate intercon-nectivity and transportation modes.	Very good intercon-nectivity and illustration of transportation modes.	Excellent interconnectivity of zones and illustration of transportation modes.
4. Model demonstrates theme: The Power of Public Space  • Essay topic/theme incorporated into model  • Shows solution for theme	No illustration of problem or solution.	Little illustra- tion of problem or solution.	Some illustration of problem and attempt at solution.	Fairly good illustration of solution for theme topic.	Good overall illustration of the theme solution. Could be more comprehensive.	Excellent illustration and overall solution for problem presented by theme.
II. Build It: Quality & Scale (15 Points)	0	1	2	3	4	5
5. Quality workmanship and age appropriateness  • Age appropriate for 6th, 7th, 8th grades  • Quality construction  • Reasonably durable	Poor quality.	Mediocre quality.	Fair to good quality.	Good quality. Age appropriate.	Very good quality. Age appropriate.	Excellent quality. Age appropriate.



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II. Build It: Quality & Scale (15 Points) (Continued)	0	1	2	3	4	5
6. Appearance Use of color, graphics, shapes, etc. Realistic elements (flora, fauna, landscapes) Good use of available space	No aes- thetics.	Poor aesthetics.	Fair aesthetics.	Good aesthetics, enhance the model.	Very good aesthetics, enhance the model.	Excellent and realistic aesthetics, enhance the model.
7. Model scale:  Appropriate scale chosen to create a good city model  Consistent scale throughout model  Applied horizontally and vertically	Scale not used.	Inconsistent scale for majority of model.	Fair scale choice. Some scale inconsisten- cies.	Good scale choice; city el- ements easy to identify. Scale consistently applied over majority of model.	Very good scale choice; city elements easy to identify. Consistent application.	Excellent scale choice; city elements very easy to identify. Consistent application of scale across entire model.
III. Build It: Materials and Moving Parts (15 Points)	0	1	2	3	4	5
8. Innovative construction materials, techniques  • Variety of materials, imaginative or unusual materials  • Creative modification and application of recycled materials  • Building materials primarily recyclables to comply with \$100 budget	No creativity or innova- tion.	Few recycled materials. Not within budget. Very few creative materials or modifications.	Recycled materials. Little creativity, variety. Little attempt to modify.	Recycled materials. Some variety of innovative materials. Some creatively modified recycled materials.	Recycled materials. Good variety of innovative materials. Many creative modi- fications and applications.	Recycled materials. Exceptionally varied and innovative. Most creatively modified and applied.
9. Moving part innovation and quality  • At least one moving part  • Quality workmanship, durability  • Repeatability of movement  • Innovative execution	No moving part.	One moving part. Fair qual- ity. One time movement.	One moving part. Good quality. Little innovation.	At least one moving part. Good quality. Repeatable movement. Somewhat innovative.	At least one moving part. Very good quality. Repeatable movement. Innovative.	More than one moving part. Ex- cellent quality. Repeatable movement. Highly innova- tive.

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III. Build It (Continued)	0	1	2	3	4	5
10. Moving part     At least one moving part     Related to design or function of city	No moving part.	Moving part cosmetic; not relevant to city function.	Moving part not relevant to city function.	At least one moving part somewhat related to city function.	At least one moving part intrinsic to city function.	More than one moving part essential to city function.
IV. Judge Assessment of Model (20 Points)	0	1	2	3	4	5
11. City Design  Well planned. Considers livability concepts:  Neighborhoods, green spaces, mixed use zones  Interconnectivity  Sustainability and environmental elements  Accessibility	No planning.	Little planning. Little consideration of livability concepts.	Some planning is obvious. A few livability elements included.	Planned design. Incorporates some livability concepts.	Well-planned design. Incor- porates several livability ele- ments.	Excellent planning. Excellent design Highly livable.
<ul> <li>12. Innovative solutions</li> <li>innovative solutions to problems (power, environment services, transportation)</li> <li>Technologically plausible</li> </ul>	No solutions.	One solution, not innovative.	One solution. Somewhat innovative.	More than one solution. Somewhat innovative and plausible.	More than one solution that is innovative.	Several innova- tive and plau- sible solutions.
13. Application of futuristic, advanced technologies  • Includes futuristic technologies, components, infrastructure  • Plausible extrapolations of technological/scientific advancements	No futuristic examples.	1–2 futuristic examples. Artistic, but not technologically or scientifically sound.	Few futuristic examples. At least 1 tech- nologically or scientifically sound.	Some futuristic examples, most of which are technologically and scientifically sound.	Several futuristic examples, many of which are technologically and scientifically sound.	Highly futuristic and based on sound technological and scientific principles.
<ul> <li>14. Model effectiveness</li> <li>Functions as standalone representation of city design</li> <li>Function and purpose of model elements and relationship to each other is evident on visual examination</li> </ul>	No effective representation.	Fair representation of a city. But for many elements, one asks "What is this and why is it here?"	Good representation of a city, however the function and purpose of many of the elements is not evident.	Good visual representation of a city, but purpose/function of some elements not evident.	Very good visual representation of a city. A few elements not obvious.	Extremely ef- fective visual representation of a future city. Function and purpose of ele- ments easy to understand.



Appendix: Rubrics