1. Determine the surface area of a 3-dimensional figure.	2. Determine the volume of a 3-dimensional figure.
3. Make a scale model of a 3-dimensional figure.	4. Demonstrate understanding of the effect of scale on area volume, and weight.

	10-9	8	7	6	5-0
Surface Area	Calculations are carefully explained, correctly computed, and properly labeled	Calculations are explained well and are reasonable. Most are labeled correctly.	Most calculations are reasonable. Explanations are understandable. Some are labeled correctly.	Some calculations are reasonable. Some explanations are understandable.	Answers are unreasonable or not given.
Volume	Calculations are carefully explained, correctly computed, and properly labeled	Calculations are explained well and are reasonable. Most are labeled correctly.	Most calculations are reasonable. Explanations are understandable. Some are labeled correctly.	Some calculations are reasonable. Some explanations are understandable.	Answers are unreasonable or not given.
Weight	For each object, weight given is reasonable and clearly shows the relationship to volume.	For each object, weight given is reasonable, but it is unclear how weight was calculated. Or one object has an unreasonable weight, but other explanations clearly show the relationship to volume.	One object has an unreasonable weight, but the rest are reasonable. Or all objects have reasonable weights, but explanations are unclear.	More than one object has an unreasonable weight but explanations show some understanding of the relationship to volume	Answers are unreasonable or not given. Explanations are unclear or omitted.
Scale Model	Every model is recognizable and correctly proportioned.	Both models are recognizable. One model is correctly proportioned. Every model is reasonable.	Only one model is recognizable. One model is reasonably proportioned. The other is not.	Neither model is correctly proportioned, but at least one is recognizable.	Neither model is recognizable.