

Junior Bladesmithing Competition Rubric

Technical Report: 100 points

Report Content (15 pts)	Score	Comments
<p>Considerations for report content include:</p> <ul style="list-style-type: none"> • Historical background • Discussion of safety procedures • Blade images • Acknowledgements if applicable (blacksmith shop, materials donation etc.) 		
Scientific Merit (30 pts)	Score	Comments
<p>Considerations for scientific/engineering merit include:</p> <ul style="list-style-type: none"> • Blade material: source and choice of material clearly stated • Metal working concepts used: forging, pattern-welding, forge welding, etc. • Explanation of other Metallurgy concepts used • Blade characterization and performance evaluation 		
Technical Communication (25 pts)	Score	Comments
<p>Considerations for technical communications include:</p> <ul style="list-style-type: none"> • Aesthetics and layout • Correct spelling, fonts, units, formatting • Report structure, abstract/introduction/experiments/conclusions • Easy to read and understand (clear sentences, use of proper technical terms) • Proper referencing 		
Creativity/Originality (15 pts)	Score	Comments
<p>Considerations for creativity/originality include:</p> <ul style="list-style-type: none"> • Blade design • Workmanship • Blade accoutrements (handle, pommel, guard etc.) • Additional metallurgical external effects (etching etc.) 		
Effort/Difficulty Level (15 pts)	Score	Comments
<p>Considerations for effort/difficulty include:</p> <ul style="list-style-type: none"> • Difficulty level of process attempted: steel making from ore versus use of existing materials and construction of specialized equipment or device to enable bladesmithing 		