



Blacksmith Basics

Merit Requirements Checklist

Name of Boy: _____

The following merit requirements must be successfully completed for a boy to be awarded the official Royal Rangers Blacksmith Basics merit award. Each requirement must be approved by the boy's group leader or his designee. Content relating to each requirement may be found in the resources identified in the Learning about Blacksmithing section of this Merit Activity Guide.

#	Requirement	Leader's Initials
1.	Describe two types of fires used in blacksmithing.	
2.	Describe the different types of coal and which one is best to use for blacksmithing.	
3.	Explain or demonstrate how to start a fire using coal.	
4.	Explain or demonstrate how and why you use water to steam the coal after it has been started.	
5.	Explain what is meant by "clinkers" and demonstrate how to tend the fire to keep it clear of them.	
6.	Explain the significance of the different colors visible in metal as it is being heated or cooled.	
7.	Describe the different hammers that are used in blacksmithing and the purpose for each.	
8.	Describe or demonstrate the use of different tongs (pliers) and which ones you would use to make a project.	
9.	Explain the different parts of an anvil and what they are used for.	
10.	Explain or demonstrate the difference between annealing, or tempering, your project if needed.	
11.	Make at least one item in a blacksmith forge demonstrating each of the following techniques: <ol style="list-style-type: none"> Demonstrate upsetting or drawing out to reduce the size of part of the item. Demonstrate curling and bending to shape the item into the predetermined shape. Demonstrate twisting (single or double) to decorate the item. Demonstrate the proper use of a wire brush to remove slag from your project. Demonstrate final cooling of your project with oil or water. 	
12.	Explain or demonstrate various finishing methods such as oiling or waxing that could be used to seal your project.	
	MERIT COMPLETED —Date: _____	

The Blacksmith Basics merit patch, representing the completion of this merit, may be purchased from MyHealthyChurch.com and worn on the official Royal Rangers awards vest. Visit RoyalRangers.com/uniforms for details.