



# Royal Rangers

Merit Requirements: Silver-Bordered Merit

## WOODWORKING MERIT

**Requirement #1** - Display at least six different types of wood used in construction and explain how each can be used.

- a. Choose one type of wood that is easier to work with from the display and explain why.
- b. Choose from the display at least one type of wood that is harder to work with but would have aesthetic value in making furniture. Explain why it would be harder to work with.

**Requirement #2** - Explain in writing the steps in preparing lumber for use—how it is cured, seasoned, graded, and sized.

**Requirement #3** - List the hand and power tools used in woodworking. Indicate the proper care for the hand tools listed. Demonstrate the proper sharpening techniques for at least two different tools.

**Requirement #4** - Draw a plan of a woodworking project you wish to build. Include an isometric drawing showing three views—front, side, and top—along with the dimensions of each part. List the materials needed. Calculate and show your calculations of how many board feet of lumber you will use and how you will cut each board.

**Requirement #5** - List the power tools you will use for the project in Requirement 4. Demonstrate your safety knowledge associated with each power tool to a shop teacher, a parent, or your commander. Never use any woodworking tools or power tools without adult supervision.

**Requirement #6** - Build your wood project. The project should require enough skill and challenge to be a learning experience. Sand and finish your project.

**Requirement #7** - Explain in writing the joints used in the project and why you used each type. List at least four joints that you used or could have used. Note which joints are strong and explain why they are stronger than other types.

**Requirement #8** - List professions that are available in woodworking. Explain which profession you might be interested in and why. Interview a woodworking professional (e.g., carpenter or cabinetmaker) and describe how someone enters the field, the training required, and the opportunities for employment in that field.