



Iowa 4-H After School Program
Woodworking, Lesson Plan
Five, 40- 60 minute sessions

Grades: 9 – 12 (or advanced woodworkers)

Optimum Group Size: 15

Supplies Needed: tools, wood scraps, safety supplies

Advance Preparation Needed:

- Gather tools and safety supplies
- Choose 2 wood projects listed on Pages 10 – 18 for youth to choose from and purchase supplies.

Reference Resources (Available from your local County Extension Office):

4-H Skills for Life Woodworking Series: Group Activity Helper's Guide

4-H Cooperative Curriculum System, 4HCCS 6879

4-H Skills for Life Woodworking Series: Making the Cut, Level 2

4H Cooperative Curriculum System, 4HCCS 6876

4-H Skills for Life Woodworking Series: Nailing It Together, Level 3

4H Cooperative Curriculum System, 4HCCS 6877

Physical Setting:

- A woodworking shop with tools and sturdy tables and storage space will be needed.
- It is recommended to have one adult for every 6 to 8 youth participants.

Life Skills Addressed:

- Communicating with others
- Planning and organizing
- Solving problems
- Learning to learn
- Making decisions
- Gathering Information
- Identifying resources

Indicators:

- Youth should be able to identify basic safety equipment and use them appropriately
- Youth should complete a woodworking project from rough wood to finished product.
- Youth should be able to identify careers that are related to the woodworking skills they have been learning
- Youth should be able to draw angles using a T-bevel

Woodworking Skill Addressed:

- Tool Identification
- Safety Procedures
- Measuring, cutting, drilling, assembling with glue and screws, finishing

Related School Standards and Benchmarks:

Life Work Standards:

- Uses various information sources, including those of a technical nature, to accomplish specific tasks.

Thinking and Reasoning Standards

- Applies basic trouble-shooting and problem-solving techniques.
- Applies decision-making techniques.

Evaluation:

- The Right Tool, pg. 5, Making The Cut, level 2, used as a pre-test and post-test.

Time Allotment	Activity	Supplies
DAY 1		
10 minutes	Making a Mark, pg. 10, Nailing it Together, level 3. <ul style="list-style-type: none"> • This can be used as a pre-test/post-test. As a pre-test, have youth complete before discussing as a group. 	Pencils, protractors, T-bevels, lumber scraps
5 minutes	<ul style="list-style-type: none"> • Review safety equipment, it's uses and the rules and guidelines of safety 	Safety supplies for youth: safety glasses, earplugs, dust mask, storage bin. Poster with safety rules to be posted for each session.
30 minutes	A Future Career, Pages 6-7, Level 3 book: <ul style="list-style-type: none"> • Use these pages to create a game with possible woodworking careers on cards on participant's backs. • Youth ask questions of other youth to find out their career. • Discuss future goals of participants 	
15 minutes	<ul style="list-style-type: none"> • Have youth select a project that they will work on for the next few days, using pages 8 – 9, level 3 book. • If time, they can begin the problem solving process, using pages 10 – 18, level 3 book. 	Woodworking construction materials and tools.
DAY 2		
10 minutes	<ul style="list-style-type: none"> • Review woodworking careers and safety guidelines from the first day. 	
30 - 40 minutes	<ul style="list-style-type: none"> • Using the safety rules, have youth begin working on their choice of the two projects. • Follow the plans as described in the appendix of book 3, and referring to Pages 10 – 18, Nailing It Together as needed. 	Woodworking construction materials, as indicated in plans, and tools.

Time Allotment	Activity	Supplies
DAY 3		
10 minutes	<ul style="list-style-type: none"> Review previous two days. 	
30 - 45 minutes	<ul style="list-style-type: none"> Using the safety rules, have youth continue working on their woodworking projects. Some youth might be ready to start the finishing process discussed earlier in this session. 	Woodworking construction materials and tools
10 minutes	Recreation Idea: <ul style="list-style-type: none"> Prepare for Woodworking Quiz Bowl, Page 28, Group Activity Helper's Guide. Have youth play game using types of tools and/or safety supplies as a topic. 	
DAY 4		
10 minutes	<ul style="list-style-type: none"> Review previous days. 	
35 - 45 minutes	Using the safety rules, Have youth continue working on their woodworking projects.	Woodworking construction materials and tools
5 minutes	Post-Test Option: <ul style="list-style-type: none"> Have youth complete Making the Mark, Page 10, Nailing it together, Level 3 	
DAY 5		
10 minutes	<ul style="list-style-type: none"> Invite parents to come for Show & Tell Time: Have youth show their woodworking project to the group and tell what they learned from building it and what they enjoyed doing the most. 	
45 minutes	<ul style="list-style-type: none"> Youth and families participate in the Woodworking Quiz Bowl, Page 28, Group Activity Helper's Guide with youth serving as the leaders of the event. 	

IOWA STATE UNIVERSITY

Extension and Outreach

Iowa State University Extension programs are available to all without regard to race, color, age, religion, national origin, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Director of Equal Opportunity and Compliance, 3280 Beardshear Hall, (515) 294-7612.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Cathann A. Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.