UC
CE

Welding

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This We Believe:

- The boy and girl are more important than the projects.
- The member should be their own best product.
- No award is worth sacrificing the reputation of a member or leader.
- Competition is a natural human trait and should be recognized as such. It should be given no more emphasis than other fundamentals.
- Learning how to do the project is more important than the project itself.
- Many things are caught rather than taught.
- A blue ribbon member with a red ribbon project is more desirable than a red ribbon member with a blue ribbon project.
- To learn by doing is fundamental in any sound educational program.
- Generally speaking, there is more than one good way of doing most things.
- Every member needs to be noticed, to feel important, to win, and to be praised.
- Our job is to teach members *how* to think, not what to think.

WELDING

Sonoma County 4-H

Name: _____ Date: _____

Guidelines for Project Proficiency Award
Beginner:

	Date Completed	Leader's Initials
1. Complete safety test, missing no more than 8. Then correct the wrong ones and write them on the back of the paper.	_____	_____
2. Turn on oxyacetylene torch and adjust.	_____	_____
3. What is proper procedure for hooking up tanks?	_____	_____
4. Cut out material for welding.	_____	_____
5. Explain the proper clothing for a welding student.	_____	_____
6. Explain the different tips for cutting different metals.	_____	_____
7. Make cuts on steel, aluminum, and mild-steel.	_____	_____
8. Strike and maintain an arc, and pad a plate.	_____	_____
9. Explain the name filet-weld.	_____	_____
10. What are some factors in making a good weld?	_____	_____
11. Name 5 weld joints.		
a)		
b)		
c)	_____	_____
d)		
e)		

Project Leader's Signature of Completion: _____ Date: _____

Club Leader's Signature of Completion: _____ Date: _____

4-H WELDING GUIDELINES

The 4-H welding project is intended to give 4-H members a fundamental background in the major aspects of arc welding and oxy-acetylene welding. The emphasis is for each member to master hand manipulative skills, develop successful welding techniques and to also gain an understanding of the equipment and specialized tools being used in the welding field. Each member progresses at his/her own rate as demonstrated by his/her ability and application. It is inherent in this type of instruction that a great deal of emphasis is put on safety, individual instruction, demonstration and application.

PROJECT OBJECTIVES

First Year:

1. To acquaint the 4-H member with the skills and knowledge of basic welding.
2. To acquire a working knowledge of the machines and equipment used in the welding trade.
3. To know the safety procedures and practices.

Second Year:

1. To understand the proper care and maintenance of welding equipment and accessories.
2. To obtain a basic knowledge of the correct practices and usages of equipment and accessories.
3. To acquire a knowledge of the techniques involved in arc and gas welding and oxygen cutting.

Third Year & Up:

1. To understand the proper care and maintenance of welding equipment and accessories.
2. To be familiar with the terms and definitions of welding.
3. To acquire a knowledge of the techniques involved in arc and gas welding and oxygen cutting.

TECHNIQUES TO BE TAUGHT

First Year:

1. Learn the safety procedures and practices in welding (clothing, gloves, shoes, helmet, safety glasses, etc.)
2. To acquaint the 4-H member with basic skills and knowledge of welding (striking and arc, running a straight weld, setting heat range, learning electrodes, and current flow, etc.)
3. Some 4-H members will need extra help in the use of measurement tools used in welding.
4. If a mig welder is available, the beginning 4-H member will learn how the arc feels easier than with an electrode.
5. Learn joint preparation (running grinder).
6. Projects should be easy and preferably done in the flat position (car stand, steel saw horses).
7. Best electrodes to use: AC Welders --

E6011
E6012 - straight polarity
E6013
DC Welders --
E7018

8. Books recommended for all three years -- "Arc Welding Basic Fundamentals", by John R. Walker (available or may be ordered from most bookstores. Check your local library as well.)

Second Year:

1. Review first year - run some rod to get used to welding again.
2. Start working with multiple past fillet welds.
3. Flame cutting (if available), learn parts, safety, starting and stopping torch.
4. Start out-of-position welding single beads. Use E6010 DC reverse or E6011 AC electrodes.
5. Projects should be slightly harder than first year with some out-of-position welds.

Third Year and Up:

1. 4-H member should be doing some out-of-position welding, flame cutting and fitting for project.
2. Projects should have some degree of difficulty (cutting, grinding weld).
3. Blue print and list of materials for project should be made before starting.
4. The leader is not trying to prepare the 4-H member for a job, only introduce him to basic welding and shop use.

Science, Engineering and Technology

4-H Welding

North Dakota 4-H Project Sheet

Explore several techniques and methods for joining metal together by welding. Use your new skills and the techniques to construct or repair items you use.

- Practice safety guidelines.
- Learn skills and techniques to construct or repair needed items.
- Create art from welding materials.
- Job shadow at a welding shop.

Here's what you can do all year!

Unit 1

- Identify equipment.
- Learn safety precautions.
- Learn the role of electrodes in welding.
- Identify the meaning of electrode markings and select the proper electrode.
- Strike an arc and run beads.
- Join two pieces of metal: butt joints welded with groove welds and T, and lap joints welded with fillet welds.
- Follow welding procedures.
- Welding project ideas include:
  - * Boot scrapers
  - * Chipping hammer
  - * Christmas tree stand
  - * Post driver
  - * Brackets with hooks and eyes
  - * Electrode holder
  - * Pedestal (fixed and movable)
  - * Welding table with positioner

Unit 2

- Make welds in the horizontal position.
- Weld in the vertical position.
- Weld in the overhead position.
- Weld high carbon, spring steel and alloy steels.
- Weld with low-hydrogen electrodes.
- Cut with an oxyacetylene torch.
- Weld with an oxyacetylene torch.
- Welding project ideas include:
  - * Adjustable work stand
  - * Welder's position clamp
  - * Welding table
  - * Hand cart
  - * Log splitter
  - * Grain auger dolly
  - * 3-point hitch tractor hoist

Pass it on!
Now that you know how, share it with others. Here are ideas to get you started.

Communication

- Host a safe welding demonstration.
- Give a presentation on different types of welding and how they are used.
- Teach others different types of beads using aerosol cheese and crackers.

Citizenship

- Set up a welding workshop and create simple projects to learn to weld with your club.
- Volunteer to put your welding skills to work and fix something for a neighbor.

Leadership

- Promote the safe use of welding equipment in your community.
- Organize a tour or presentation with a company that does a large amount of welding in your area.

Entrepreneurship

- Weld and sell lawn ornaments.

NDSU EXTENSION SERVICE

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Learn more at www.ndsu.edu/4h/ or contact your county NDSU Extension office.

Updated 1-2017

Science, Engineering and Technology

4-H Welding

North Dakota 4-H Project Sheet

Opportunities to explore the 4-H welding project:

- Search your home and make a list of items that have been made by welding.
- Demonstrate the proper procedure for setting up welding equipment at your 4-H club or communications art contest.
- Visit a welding shop. Talk to the welders about how they learned to weld. Discuss the type of welds they make.
- Visit an architectural or mechanical design firm that uses structural steel.
- Visit a steel plant or local steel business.
- Write and present a speech to a local community organization, your 4-H club or communications arts contest on careers in welding, changing technologies, the history of welding or the economic impact of the welding industry.
- Interested in a college education in mechanical engineering or other fields related to welding? Schedule a visit with North Dakota State University, www.ndsu.edu.

Exhibit Ideas

- Make a display of fillet welds vs. electrode.
- Prepare an educational exhibit on welding safety.
- Prepare samples of different beads to teach the different techniques and how each is used.
- Create an exhibit using all used items such as scrap metal and horse shoes.
- Make a display of careers related to welding.

4-H Resources

- Arcs & Sparks: Shield Metal Arc Welding, Unit 1
- Arc Welding, Unit 2

Publications available for purchase from your local Extension office.

Other Resources

- JF Lincoln Foundation
- Welding.com
- thefabricator.com
- American Welding Society

Recordkeeping

- Planning for My Project Adventure *(Ages 8-10)* (PA093)
- ND 4-H Project Plan (PA095)
- ND 4-H Plan of Action *(Ages 11-18) (PA096)*
- ND 4-H Participation Summary for 11- to 19-year-olds (PA098)

Learn more at www.ndsu.edu/4h/ or contact your county NDSU Extension office.

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Updated 1-2017

Planning Arc Welding Projects

Missouri 4-H Youth Development Programs

The arc (electric) welder is a valuable addition to the home shop, even though it is somewhat expensive compared with other shop equipment and requires a little more skill for its operation. The Arc Welding Project is designed so that members can enroll for several years in the project, advancing as their interest develops and changes. This planning guide should be used with members' manual Y 8460, *Arcs and Sparks.*

To help the leader organize meetings, this publication is divided into two levels with four sections per level. Members can become better prepared for the future by the experience of keeping records, preparing and giving demonstrations, and building projects for home and exhibition.

Objectives of the project

The Arc Welding Project helps youths to:

- learn major uses of an arc welder;
- learn to adjust current, strike an arc and run a bead;
- understand and practice rules for safe operation of welding equipment;
- develop personal leadership, decision-making, communication and other important life skills; and
- acquire an understanding of the vocational opportunities in the welding field.

Becoming an Arc Welding Project leader

The most important prerequisite for becoming a successful 4-H project leader is a liking for working with young people. Your basic role as an Arc Welding Project leader will be to help your members acquire the knowledge, skills and experience necessary to do arc welding.

You are not expected to be able to answer all questions! Materials and training from University Outreach and Extension specialists will be helpful. Resource people such as community leaders, vocational teachers and owners of welding shops and industrial equipment stores are often willing to help you.

Challenge

An effective 4-H leader facilitates group learning. In a group setting, 4-H members can learn things that they would not learn alone. Rather than dictate, a good leader guides members as they determine their goals for the project. Flexibility is important in your planning because individual 4-H members learn at different rates.

Learning by doing is the 4-H teaching philosophy. Help your members get actively involved in learning by using techniques such as judging, demonstrating, exhibiting and field trips.

Your challenge is to help youths develop basic life skills that will allow them to become happy and productive adults. These life skills include:

- a healthy self-concept and feelings of self-worth;
- ability to interact effectively with others;
- decision-making, thinking and reasoning abilities;
- sound physical development; and
- practical skills for living.

Excellent resources on teaching techniques, life skills and other aspects of 4-H are available at your local University Outreach and Extension center.

Specific arc welding teaching techniques

You can include the following things to make, exhibit or demonstrate.

- Demonstrate the proper use of clothing.
- Demonstrate several beads showing low, high and correct temperature settings.
- Cut designs in sheet metal.
- Make butt welds and fillet welds.
- Repair items by soldering.
- Make practical items needed for home use and exhibition. (for example: foot scraper, tree stand, chipping hammer, saw horse, portable dollies).

Possible tours

Tours can help 4-H members in your project learn by seeing. Try to arrange visits to a:

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- welding shop;
- welding supplier;
- hardware store; and
- welding department.

Arc welding safety precautions

When teaching or actually arc welding, be careful! As a project leader you should teach your members to observe the following safety precautions.

- Never look at welding arc with the naked eye.
- Always use a helmet or face shield that is in good condition.
- Replace any cracked or poor-fitting lenses in the helmet or shield.
- Wear suitable clothing to protect all parts of the body from spatter and arc burns, which can be more painful than a sunburn.
- Do not strike an arc or weld until you are sure those in the vicinity have protective equipment or will look in the other direction.
- Do not weld around combustible materials.
- Do not pick up hot metal.
- Do not weld in confined spaces without adequate ventilation.
- Change the welding current adjustment only when the welding circuit is open.
- Do not work on live circuits. Always open the main switch when checking over the machine.
- Do not leave the electrode holder on the welding table or in contact with a grounded metal surface.
- Do not use worn or frayed cables.
- Make sure the ground clamp has a strong spring and that it is fastened securely to the welding table or part being welded.

The family in 4-H

The 4-H member's family, defined in its broadest terms, is important to his or her success. Young people grow and develop as part of a family. More than anything else, family influences what a young person learns and it helps to build the values that will guide the young person's life. Make an effort to ensure that the 4-H member's family is aware of what he or she is learning in arc welding projects.

The teen leader

Older 4-H members (ages 13-19) can be helpful as teen leaders, either as assistants to you or as leaders in their own right (age 16 and older.) Take advantage of their knowledge and willingness to help. Work with the teen leaders prior to the project so you can discuss the role they will play in project activities.

Meeting outline

No set number of meetings is required to qualify a member for completion in your project. A member, however, is required to attend a majority of the instruction hours offered. Most project leaders find that a minimum of 6 to 10 hours of instruction is necessary in order for members to accomplish project goals.

The meetings outlined are intended for intermediate and advanced 4-H members. The series of meetings should acquaint them with various skills necessary to satisfactorily weld joints or repair broken parts. A variety of *Things to Learn* and *Things to Do* are also listed. You may choose those most appropriate for the age level enrolled in your project group. Some subjects may require more than one meeting for completion.

Each project member's manual contains subject matter content on the *what* of the project. Your leader's guide contains more of the *how*.

Orientation meeting

A family member should accompany the 4-H member to the first meeting to discuss what will be taught, requirements of members, project goals, costs and other concerns.

Discuss the tours and field trips that will be a part of the project meetings. Set a time and place for meetings. Elect a junior project chairman to help conduct business and report to the club. Announce plans for the next meeting and make assignments if necessary.

Arc Welding — Level 1

Things to learn	Things to do
1. Organizational meeting • Purpose of the 4-H project • Project needs and requirements • Suggested individual goals • Parts of an arc welder and accessory equipment • Important safety precautions • How to give demonstrations • Major uses of arc welder • Common patterns for weaving or oscillating the electrode	• Hand out Y 620, *Project Record.* • Have members introduce themselves and talk about their welder and welding experiences. • Set up a schedule for the project meetings (time, place, etc.). • Tour workshops and examine welding equipment. • Demonstrate proper adjustment of welding helmet. • Have members make a list of welding equipment considered adequate and necessary for good welding safety. • Have members practice common bead patterns using pliers, pencil and a sheet of paper. • Have members talk to an experienced welder about clothing and safety.
2. Adjusting current, striking an arc and running a bead • Rod size and function • Methods of striking an arc • Proper length of arc and speed	• Review safety rules. • Review equipment. • Ask members to demonstrate adjustment of helmet. • Show kinds of electrodes available and the purpose for each. • Demonstrate striking an arc and proper length. • Have members practice striking an arc and running a bead. • Demonstration effects of proper low and high current settings. • Conduct a practice period for members on running a bead, using crescent, figure 8 and circular weave. • Demonstrate and practice safety in removing slag. • Have members evaluate the work of others. Discuss merits of each and ways to improve beads.
3. Welding joints • Types of weld joints: butt, lap, tee and corner • Welds classified as bead, groove and fillet	• Review safety rules. • Review information learned in Meeting 2. • Have members demonstrate practices learned at last meeting. • Have members practice beads at various temperatures and speeds. Evaluate and suggest improvements. • Place a butt weld in a vice and hit with a hammer to see if weld or metal gives first. • Assign members to give demonstrations for next meeting. • Select projects that members might wish to make for home or farm. Assist members in obtaining materials.
4. Cutting and soldering • Principles of use for cutting metal and soldering • How to judge a class of welding beads	• Discuss and prepare the proper cleaning of work to be welded. • Discuss when edges should be beveled. • Demonstrate how to cut metal and pierce holes. Discuss purpose of a catch bucket. • Have members practice cutting and piercing metal. • Demonstrate principles of soldering with an arc welder. • Demonstrate proper cleaning and flux techniques. • Have members clean a tin strip for soldering. After inspection have members solder two pieces together. • Discuss the different types of solder and function of each. • Have a class of four beads or solder joints to judge. Ask one or more members to explain how they placed the class and why. • Encourage safety procedures around hot tin.

Arc Welding — Level 2

Things to learn	Things to do
1. Organizational meeting • Purpose of the project • Project needs and requirements • Suggest individual goals • How to sharpen welding skills	• Hand out Y 620, *Project Record.* • Set a schedule for project meetings (time, place, etc.). • Ask members to establish their goals for the year. • Have members practice flat bead, butt weld and fillet weld. • Review safety rules and regulations. Practice safe operations.
2. Welding equipment • Welding equipment and electrical supply	• Tour a welding supply store or shop. Review various welders, their function and cost. Compare welders and value. • Examine various welding rods. Compare use and cost. • Survey welding equipment and accessories. Discuss the purpose of each and which should be part of a welding shop. • Have each member explore a career using welding skills for a report to other members.
3. Welding skills • Correct position, including angles for various welds	• Review amperage and travel speed. • Practice striking an arc using scratch method and tapping method. • Practice running several beads at various temperatures, speeds and weave patterns. • Practice fillet welds in lap joint, tee joint and corner joint. • Discuss correct angle positions for welding various joints and inspect each weld. Critique for speed, amperage and correctness of angles.
4. Construction and repair • How to plan a bill of materials and construction blueprints or plans • How to develop a repair plan on equipment which needs repair	• Develop a plan for a welding project, including construction plan, materials needed and cost of materials and welding supplies. • Prepare material for construction making sure joints fit properly. • Construct or repair one or more items for use or exhibition. • Complete work by removing slag and polishing. Finish by painting if appropriate. • Complete Y 620, *Project Record.*
5. Additional skills • How to weld overhead • How to weld metals of various thicknesses • Safety precautions for welding galvanized and painted surfaces • How to weld metals other than steel (aluminum, alloy, etc.)	

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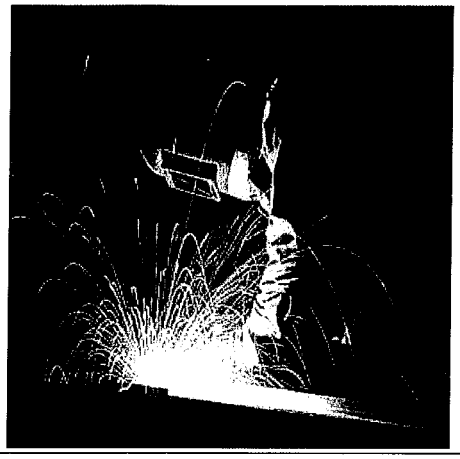


Skill-a-Thon

Welding Techniques

Supplies Needed

Welds poster, different welds (too fast, too slow, too hot, too cold, etc.)

Situation

You are working on a welding project and you want to make sure your welds on the project look the best and hold the parts together.

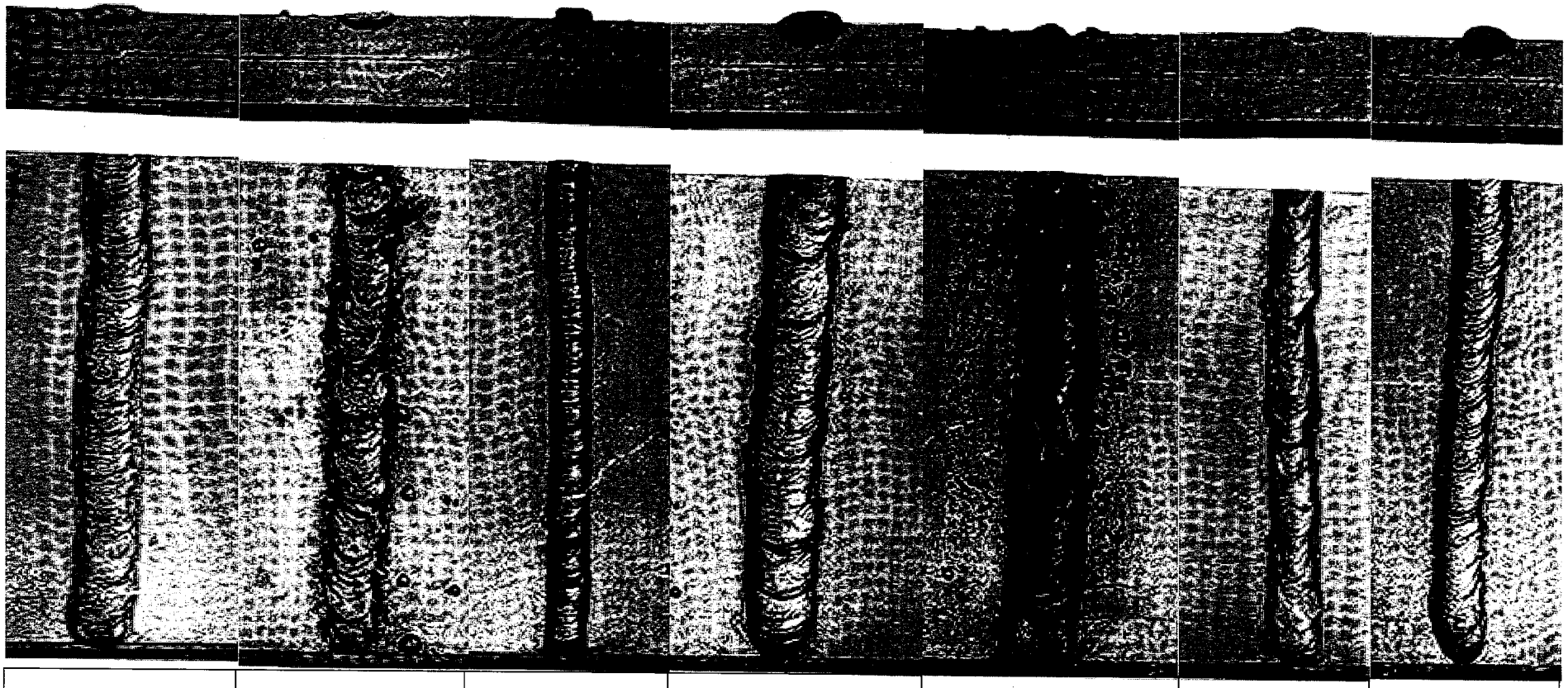
Task

Match up the situation with the proper weld.

Directions

Match the poor welding outcomes with the reason for making them poor welds.

Welding Techniques Poster



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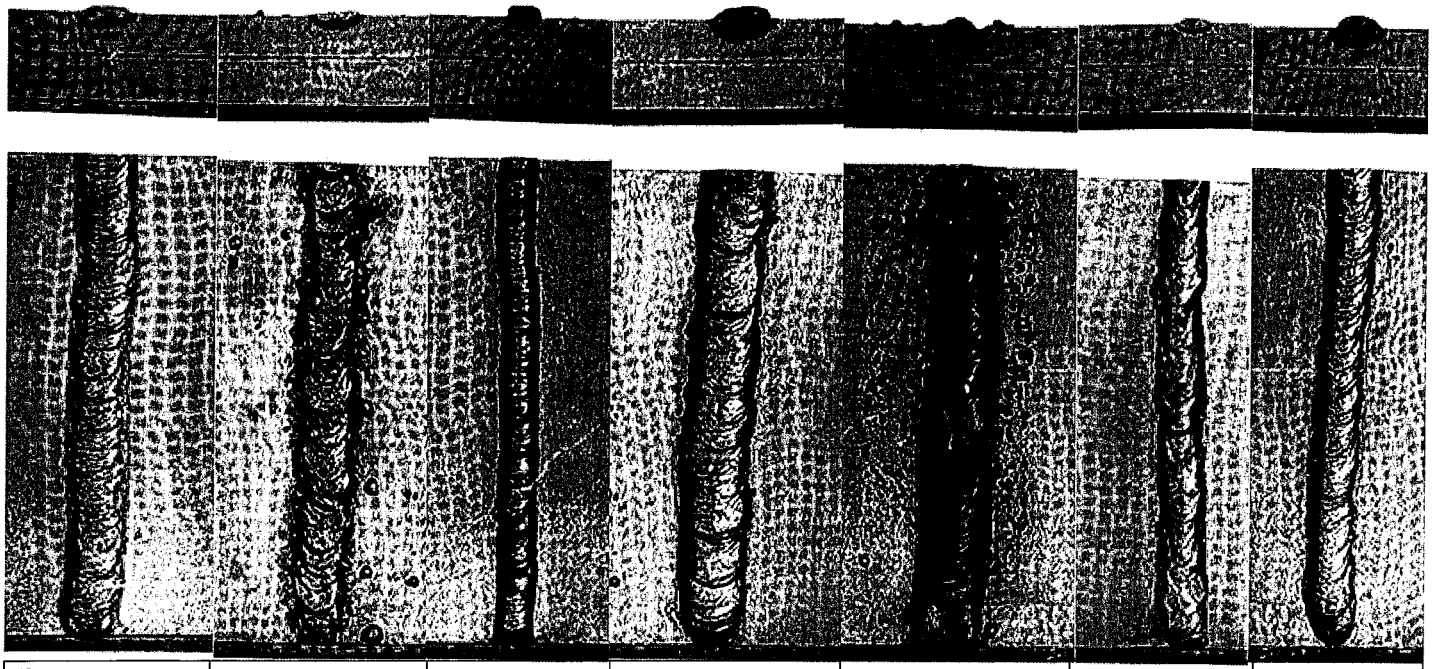
Flash Cards

Proper current, travel speed &arc length	Current too low
Current too high	Arc length too short
Arc length too long	Travel speed too slow
Travel speed too fast	

Answer Key



Proper Current, travel speed & arc length	Arc length too long	Current too low	Travel Speed too slow	Current too high	Travel speed too fast	Arc length too short

Missouri 4-H
University of Missouri
4-H Center for Youth Development

Welding Project Brief

Learning Objectives

- Identify welding equipment
- Strike various beads and make simple welds
- Learn how to adjust current, strike an arc and run a bead
- Understand how heat impacts the welding process
- Practice safety
- Choose the right welding method to match the material
- Learn the different types of power sources
- Understand the purpose of welding tools
- Examine electrodes and understand the classification system
- Identify the different parameters of a weld

Fair Projects

- Shelf
- Window flower box
- Build a go-cart
- Boot scraper from a disk
- Decorative horseshoes
- Jewelry holder
- Sheppard's hook for flowers
- Samples of weld beads
- Samples of different welded joints
- Educational display for welding safety

Demonstration Ideas

- Differences in welding - arc, mig, tig
- Consistency in a good bead
- Demonstrating arc, mig, tig, oxy-acetylene
- How to make sure welding is safe
- Demonstrate the proper procedure for setting up welding equipment

Field Trips

- Visit steel plant
- Visit a local steel business
- Visit a local welder
- Visit a local body shop

Ideas for Speech Topics

- Types and uses of different welding - arc, mig, tig
- Changing technologies
- Careers in welding
- History of welding
- Economic impact of welding industry

Critical Thinking

- How has participation in the welding project helped you learn responsibility?
- What are some careers that you are interested in exploring in welding?
- What effect does the price of iron have on our economy?
- How can you turn your project into a money maker?

Community Service

- Building shepherd hooks for community
- Build gates for the fairgrounds
- Build table racks for the local park board
- Arrange for your club to tour a welding shop
- Promote safe use of welding equipment in your community

Science & Technology

How have you used science and technology in this project area?
Examples:

- Construct a welding project
- Evaluate your welds
- Demonstrate safety techniques when welding
- Classify different electrodes

Show Me Character

Trustworthiness - includes honesty, promise keeping and loyalty.

- Be dependable when working with dangerous equipment
- Be honest with your project leader and your teammates
- Only use equipment you have been trained to use
- Show off your talents-choose to build from scratch not using kits or pre-assembled projects

Respect - includes courtesy and proper treatment of people and things.

- Don't judge people based on the quality of their projects remember that everyone has tried their best
- Show care and respect for everyone's projects
- Treat others' projects the way you want- your project treated

Responsibility - includes the pursuit of excellence, accountability and perseverance.

- Learn safety procedures for all equipment you use
- Be prepared with the materials you need to complete your projects
- Listen carefully to the instructions of your leaders
- Do your part when working in groups

Fairness - involves consistently applying rules and standards appropriately for different age groups and ability levels.

- Take turns using the equipment so everyone has equal time building and constructing
- Follow specifications and guidelines for your project
- Allow everyone access to the same materials

Caring - promoting the well being of people and things in a young person's world. It denotes action and not just feelings.

- Be willing to help friends even if you are competing against them
- Thank leaders and facilitators that help you with your project
- Share your tools and supplies if someone else runs low or is having trouble

Citizenship - includes making the home community and county a better place to live for themselves and others.

- Always clean up your workspaces and messes left behind by others
- Share your talents by building something that you can donate or give as a gift
- Don't use any supplies that are not allowed
- Create waste free environments and think of ways to better your community and environment by using your skills

Show Me Standards

Missouri 4-H members will acquire the knowledge and skills to gather, analyze and apply information and ideas, communicate effectively, recognize and solve problems, make decisions and act as responsible members of society.

4-H members will acquire a solid foundation which includes knowledge of:

- **Communication Arts** - participating in formal and informal presentation and discussions of issues and ideas
- **Mathematics** - geometric and spatial sense involving measurement, trigonometry, and similarity and transformations of shapes
- **Science** - properties and principles of matter and energy

Resources

846 Welding

Y620 4-H Project Record
Y8460 Arcs and Sparks
LG8400 Planning Arc Welding Projects

To Order

Extension Publications online at http://extension.missouri.edu/explore/shop/or by phone 1-800-292-0969
For additional resources check with your local University of Missouri Extension Center or the 4-H Source Book at http://www.4-hmall.org/educationalresources.aspx.

I'm a 4-H Project Leader: Now What Do I Do?

How do I know who is in my project?

- Your club organizational leader will provide you with the names, addresses and phone numbers of the members enrolled in the project for which you are the leader.
- If you are working on the county level, contact the UCCE for the list of project members.
- The organizational leader may indicate to you if any of the youth have special needs. At your first project meeting, note any other youth that may have special needs.
- You may wish to consult with the parent or your 4-H Youth Development Agent as to how to work with a special needs child.

How often should I hold project meetings?

It is recommended you hold 4-6 meetings that each last 1½ to 2 hours in length. Some projects require more meetings or a longer meeting time to accomplish your goals. Some projects, such as leathercraft, may lend themselves to individual project work as members progress on their projects. In this case, you should hold several introductory meetings for all members and then set up a schedule of time for them to sign up for individual help.

When do I start?

Get started as soon as possible! Members' interest in a project is most keen when they are signing up for a project and when they get their project books.

How do I cover the cost of project meetings?

- There is a wide variety of means for covering the cost of project meetings. Some methods used include:
- Each member pays for their share of the expenses or provides a portion of the supplies.
- The club agrees to cover expenses using funds from their treasury. Approval in advance is needed for this.
- Members and leaders can solicit donations/supplies from area businesses.
- Sometimes funds from sources outside your club may be available to cover your project meeting costs.

How do I establish a project meeting schedule?

First, determine when you are available to work with project members. Then determine an initial project meeting date by consulting with your project members.

Thanks to 4-H Youth Development Programs, UW-Extension, Cooperative Extension for use of these materials.

Publicize the date using one of the following means:

- County and/or club newsletter
- Club meeting or leader association meetings
- Postcards or phone calls to project members

You may not be able to schedule an initial meeting that everyone can attend. Establish a time to meet with those unable to attend before you hold your second project meeting.

Where do I hold project meetings?

Typically project meetings are held at project leader homes, schools, or community buildings. For more information on facility adaptability and liability concerns contact your 4-H Youth Development Agent.

What safety precautions do we need to consider?

Consider the type of safety issues your particular project involves. Request and secure necessary safety items such as ear protection, eye protection and head protection.

How do I let others in my club or other clubs know I am a project leader?

Prior to enrollment ask for time on your club's meeting agenda to let families in your club know you're a project leader and to share some things the kids could do in the project if they enrolled in it. When the project materials are handed out, take the opportunity to inform or remind members that you are their project leader and set an initial meeting date with the group. If no one in your club is in your project, you may wish to offer your services to a neighboring club. Talk to your club organizational leader or county 4-H Youth Development agent about this opportunity.

How do I prepare for the first meeting?

You may want to establish a 4-H resource box where you keep your project materials and any additional resources you will be using. Take time to become familiar with your project literature and talk to others who were project leaders for this project to find out what activities the members enjoyed.

What should I do at the initial project meeting?

- At the initial project meeting, here are some ideas of what you might want to cover:
- Find out what the members want to learn and accomplish in the project. The project literature is an excellent source of ideas.
- Review the safety practices that members will need to follow.

Thanks to 4-H Youth Development Programs, UW-Extension, Cooperative Extension for use of these materials.

- Do an introductory activity related to the project so the members get to know one another
- Have a small project the members can complete and take home
- Talk about how the project meeting supplies will be paid for. Experienced leaders have found it easiest to charge a small fee to cover the cost of the expenses.
- Assess when members are available for additional meetings. You may wish to ask the parents or members to bring along their calendars of family activities.
- Encourage parents to participate in project meetings, especially the initial meeting.

What does a typical project meeting look like after the initial orientation?

Use the experiential learning model (found in the introductory pages of your Helper's Guide) to plan your project meeting. The project helper's guide will provide suggestions for designing a project meeting. Here are some suggestions for each section of the model:

Do

- Plan an activity to focus the project members on what they'll be doing today. Work on the project for that meeting.

Reflect

- Review the process completed
- Discuss what worked and didn't work.
- Talk about how any problems that arose were solved.
- Assist members in documenting their project work for inclusion in their record books/portfolios.

Apply

- Ask the project member the following questions:
- What else have you seen that is similar to this?
- How can you apply what you learned today to other situations?

What resources are available to help me?

- 4-H Project Literature – You will receive project literature through your 4-H club or the UW-Extension office. Typically there is a helper's guide and member literature for three to four levels.
- Other People in my Club & County – There are a number of people in your county who would be willing to share project ideas and tips with you.

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These include:

- Project leaders in other clubs
- County Staff
- Older youth who have been involved in the project

- Media Collection & Public Libraries – Additional resources can be obtained from the Cooperative Extension Media Collection. They have videos, skillathons, displays and resource packages available to support a variety of projects. There is a user fee per item you or your club will be responsible for. You can view their catalog at their website http://www.uwex.edu/ces/media/. Check with your local public library to find out what resources they may have or that you can obtain through inter-library loan.
- 4-H Website – Wisconsin 4-H is continually adding more information and activities to their website. Visit this site at www.uwex.edu/ces/4h/onlinepro/. You may wish to check out websites from other state 4-H programs also.
- Volunteer Leaders Conferences – Review each issue of your county's newsletter to learn about training sessions for project leaders offered by your county, district or at statewide events. Sessions focusing on new project literature are typically offered at the State 4-H Volunteer Leader Conference held every other year. Periodically statewide conferences focusing on specific project areas are offered in addition to sessions at the volunteer conferences. You can also exchange ideas with other leaders at statewide Field Day.
- Field Trips – Youth always enjoy the opportunity to see firsthand how things are done and how they work. Consider taking your project group on a field trip or tour of a local business or company to enhance their project experience. An example would be taking your dairy members to a cheese factory or your foods group to a local bakery.
- Local Experts – Bring in a local "expert" to share their ideas and experiences with your group. One example would be asking a Master Gardener to share information on choosing perennial or trimming shrubs at one of your project meetings.
- Magazines – Many leaders have found creative ideas to supplement those in the project literature in magazines they have or those at the public library.

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How can I incorporate activities not included in the project guide?

We encourage you to use the ideas in the project literature as they have been successfully used with youth. If you have some additional activities you would like to incorporate, consider the following criteria:

- Of interest to kids
- Developmentally appropriate
- Incorporate the experiential learning model
- Youth and adults are involved in determining what will be done
- Enhances the development of member life and project skills
- Research based source of content utilized

What is the relationship between project work and the county fair?

The County Fair is an opportunity for an independent evaluation of life and project skills a member learned through completing a project. County fair entries typically match the activities included in the project literature and may include other activities that are being emphasized in your county. One of your roles is to help maintain the focus of members and parents on the goal of 4-H, which is to develop blue ribbon kids. Talk with members about what they learned about each of their fair entries from the judging process. Help members celebrate their accomplishments regardless of the color of ribbon each project member received at the fair. This may be done through individual encouragement or at a meeting following the fair. While entering and displaying a project at the County Fair is the traditional method of public affirmation, there may be other means of exhibition such as a club tour, open house, community celebrations or others.

Who can I go to if I need someone to help me during the project meetings?

If you are leading beginning level project meetings, ask older members in the project to help you. This is a great leadership experience for them! Parents are another excellent source of help. Don't hesitate to ask them to stay for the meeting and be actively involved in their child's project work.

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