



THE LAUNDRY PROJECT



I pledge
My head to clearer thinking,
My heart to greater loyalty,
My hands to larger service, and
My health to better living,
For my club, my community,
my country, and my world.

Name _____

Age (as of January 1 of current year) _____

County _____

Club name _____

Advisor _____

ohio4h.org

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 **THE OHIO STATE UNIVERSITY**
COLLEGE OF FOOD, AGRICULTURAL,
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NOTE TO THE PROJECT HELPER

Congratulations! A 4-H member has asked you to serve as a project helper. You may be a parent, relative, project leader, friend, club advisor, or another individual important in the 4-H member's life. Your duties begin with helping the youth create and carry out a project plan, as outlined in the Member Project Guide. This is followed by helping the youth focus on each activity, providing support and feedback, and determining what was done well, what could have been done differently, and where to go next.

As a project helper, it is up to you to encourage, guide, and assist the 4-H member. How you choose to be involved helps to shape the 4-H member's life skills and knowledge of the importance of developing laundry skills.

Your Role as Project Helper

Your contributions are critical to delivery of the 4-H program. It is essential that your interactions support positive youth development within the framework of these Eight Key Elements:

1. Positive relationship with a caring adult
2. Safe environment, emotional and physical
3. Opportunity for mastery
4. Opportunity for value and practice service
5. Opportunity for self-determination
6. Welcoming environment
7. To be an active participant in the future
8. Engagement in learning

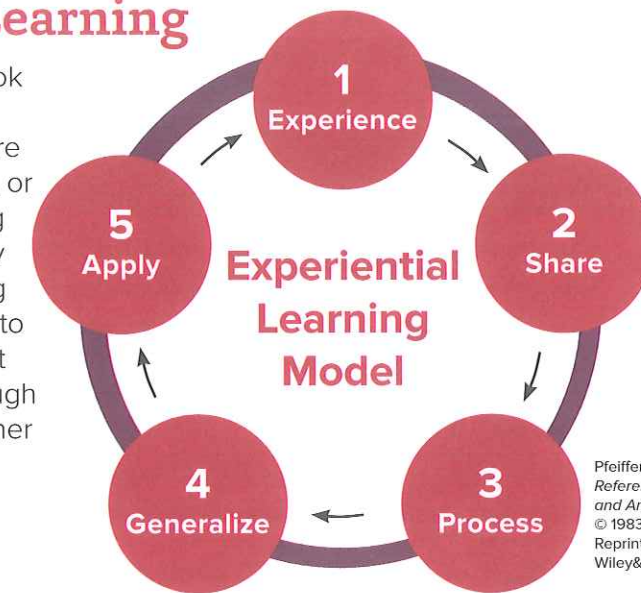
For more information on the Eight Key Elements, please refer to the Advisor Handbook available online at ohio4h.org. In addition, on a practical level, your role as a project helper means you will . . .

- Guide the youth and provide support in setting goals and completing this project.
- Encourage the youth to apply knowledge from this project book.
- Serve as a resource person.
- Encourage the youth to go beyond the scope of this 4-H project book to learn more about laundry.



What You Should Know About Experiential Learning

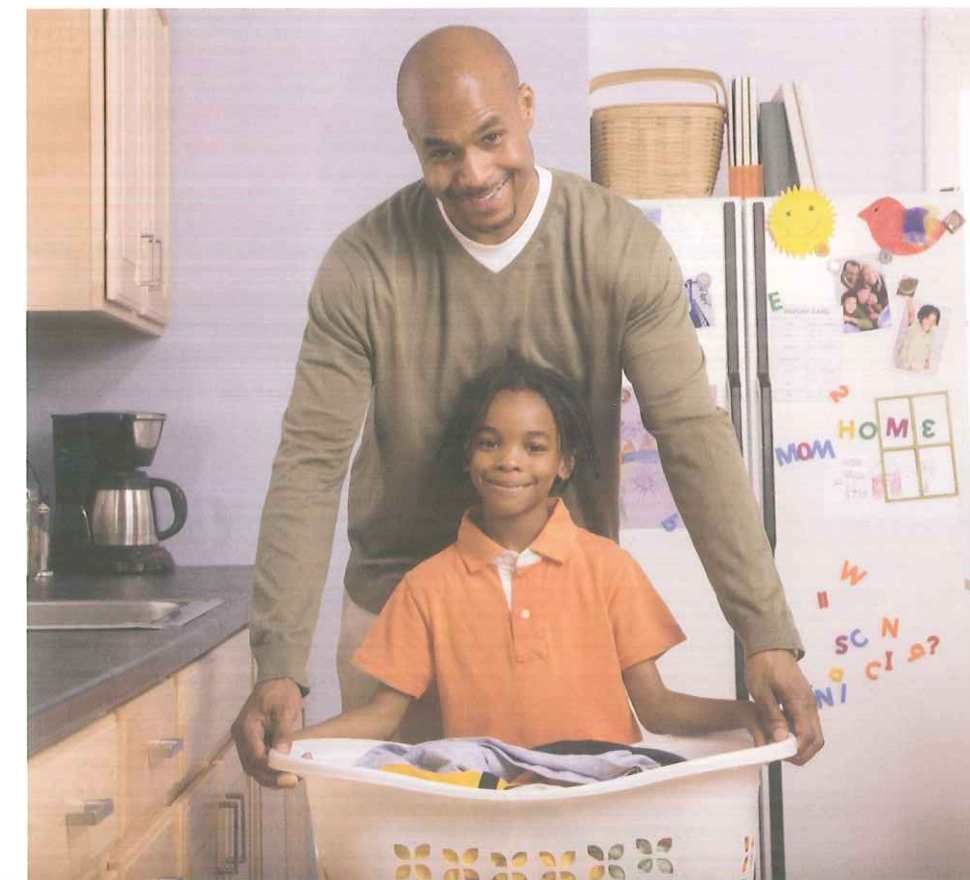
The information and activities in this book are arranged in a unique, experiential fashion (see model). In this way, youth are introduced to a particular practice, idea, or piece of information through an opening (1) **experience**. The results of the activity are then recorded on the accompanying pages. Youth then take the opportunity to (2) **share** what they did with their project helper, (3) **process** the experience through a series of questions that allow the learner to (4) **generalize** and (5) **apply** the new knowledge and skill.



Pfeiffer, J.W., and Jones, J.E.,
*Reference Guide to Handbooks
and Annuals.*
© 1983 John Wiley & Sons, Inc.
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Wiley & Sons, Inc.

What You Can Do

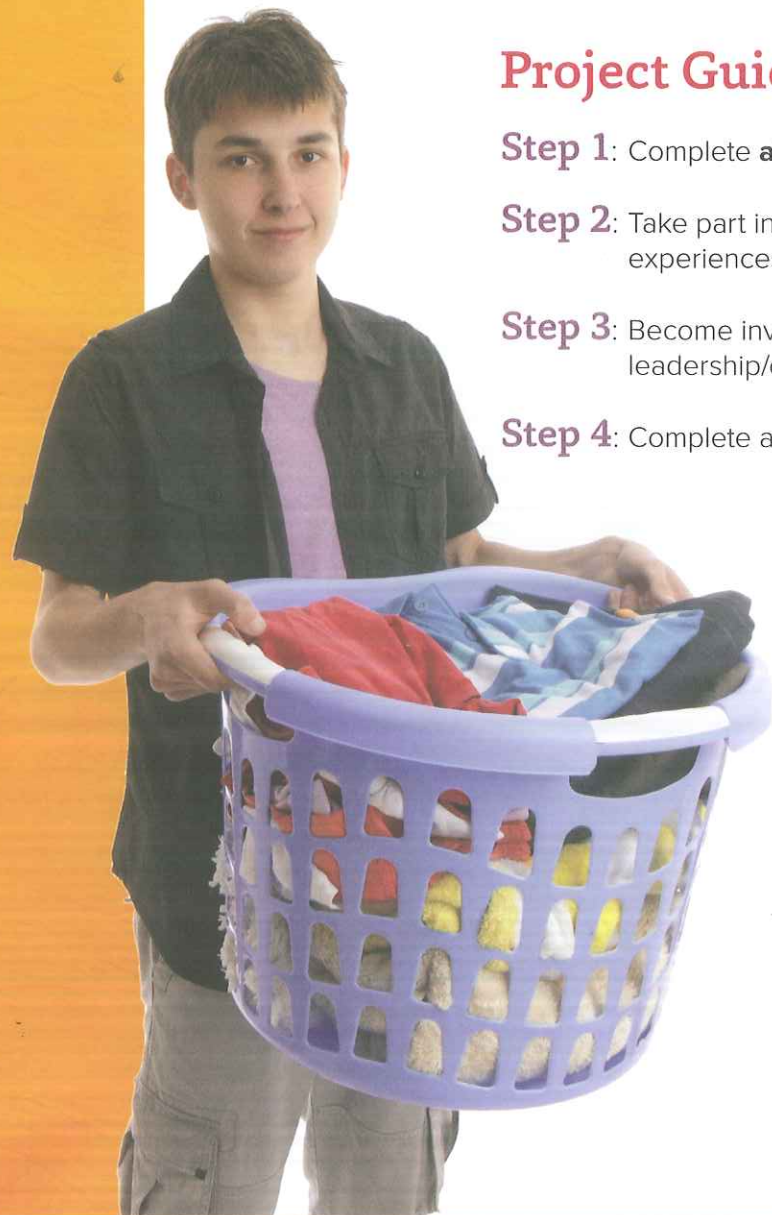
- Review the Learning Outcomes (project skill, life skill, educational standard, and success indicator) for each activity to understand the learning taking place. See page 44 for a Summary of Learning Outcomes.
- Become familiar with each activity and the related background information. Stay ahead of the learner by trying out activities beforehand.
- Begin the project by helping the learner establish a plan for the project. This is accomplished by reviewing the Member Project Guide.
- After each activity, conduct a debriefing session that allows the learner to answer the review questions and share results. This important step improves understanding from an experiential learning perspective.
- Help the learner celebrate what was done well and to see what could be done differently. Allow the learner to become better at assessing his or her own work.
- In the Member Project Guide, date and initial the activities that have been completed.



MEMBER PROJECT GUIDE

Thank you for taking *The Laundry Project!* This project book is designed for 4-H members of all ages with no experience in doing laundry. The activities within help you become familiar with laundry machines and their products, the simple steps to doing laundry, and learning laundry techniques to keep your clothes and laundry items always looking great. The skills learned in this project will last a lifetime!

Check your county's project guidelines (if any) for completion requirements in addition to the ones below, especially if you plan to prepare an exhibit for the fair.



Project Guidelines

Step 1: Complete **all 11** activities.

Step 2: Take part in **at least two** learning experiences.

Step 3: Become involved in **at least two** leadership/citizenship activities.

Step 4: Complete a project review.

Step 1: Project Activities

Complete **all 11** activities. The More Challenges activities are optional. When you finish an activity, review your work with your project helper. Then ask your project helper to initial and date your accomplishment.

| Activity | Date Completed | Project Helper Initials |
|---------------------------------------|----------------|-------------------------|
| Getting Started | | |
| 1. Meet Your Mechanical Helpers | | |
| 2. Go Green in the Laundry Room | | |
| 3. Keep Safety in Mind | | |
| Testing Products | | |
| 4. Laundry Detergent Duel | | |
| 5. Fabric Softener Challenge | | |
| 6. Putting Stain Removers to the Test | | |
| Taking Care of Business | | |
| 7. Decoding Care Labels | | |
| 8. Sorting It Out | | |
| 9. Coming Clean | | |
| 10. Be a Fiber Detective | | |
| 11. The Big Finish | | |

Step 2: Learning Experiences

Learning experiences are meant to complement project activities, providing the opportunity for you to do more in subject areas that interest you. What are some learning experiences you could do to show the interesting things you are learning about? Here are some ideas:

- Attend a clinic, workshop, demonstration, or speech related to laundry.
- Help organize a club meeting based on this project.
- Take a tour of a local dry cleaners to see how non-washable items are cleaned, and explore the costs of dry cleaning clothing.
- Prepare your own demonstration, illustrated talk, or project exhibit.
- Participate in county judging.

Once you have a few ideas, record them here. Complete **at least two** learning experiences. Then, describe what you did in more detail. Ask your project helper to date and initial in the appropriate spaces below.

| Plan to Do | What I Did | Date Completed | Project Helper Initials |
|----------------------|---|----------------|-------------------------|
| <i>Demonstration</i> | <i>Shared some laundry safety tips with club members.</i> | <i>5/5/YR</i> | <i>M.T.</i> |
| | | | |
| | | | |
| | | | |
| | | | |

Step 3: Leadership and Citizenship Activities

Choose **at least two** leadership/citizenship activities from the list below (or create your own) and write them in the table below. Record your progress by asking your project helper to initial next to the date each one is completed. You may add to or change these activities at any time. Here are some examples of leadership/citizenship activities:

- Help another member prepare for his or her project judging.
- Host a workshop to share tips about laundry, laundry products, Going Green with laundry, or how to sort laundry before washing.
- Encourage someone to enroll in the laundry project.
- Plan a club tour of a local appliance store. Have a salesperson show members the different models of washers and dryers.
- Do some laundry for an elderly or differently abled person.
- Create your own leadership/citizenship activity.

| Leadership/Citizenship Activity | Date Completed | Project Helper Initials |
|---|----------------|-------------------------|
| <i>Organized a club field trip to our appliance store to learn the differences between the various brands of washers and of dryers.</i> | <i>5/12/YR</i> | <i>M.T.</i> |
| | | |
| | | |
| | | |
| | | |

Step 4: Project Review

All finished? Congratulations! After you've completed the activities in this book you are ready for a project review. This process will help assess your personal growth and evaluate what you have learned.

Use this space to write a brief summary of your project experience. Be sure to include a statement about the skills you have learned and how they may be valuable to you in the future.

Now, set up a project evaluation. You can do this with your project helper, club leader, or another knowledgeable adult. It can be part of a club evaluation or it can be part of your county's project judging.

MEET YOUR MECHANICAL HELPERS

Have you ever done your own laundry or helped with laundry? Washers and dryers have many settings so you can wash and dry your laundry items just the way they are meant to be handled. Once you learn your way around all the features they offer, doing laundry will be a breeze!

What to Do

Investigate washers and dryers by going to an appliance store or going online to an appliance store. Fill in the chart below with information about at least a traditional washer, a high-efficiency (HE) washer, and two different dryers.

| Model name of washer or dryer and price? | How much does it hold? (cubic feet) | Does it have an Energy Star designation? | Cost to operate per year? | Does it have recommendations or consumer rankings? |
|--|-------------------------------------|--|---------------------------|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Learning Outcomes

Project Skill: Comparing clothes washers and dryers using selected criteria

Life Skill: Processing information

Educational Standard: Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark C: Advocate consumer rights and responsibilities

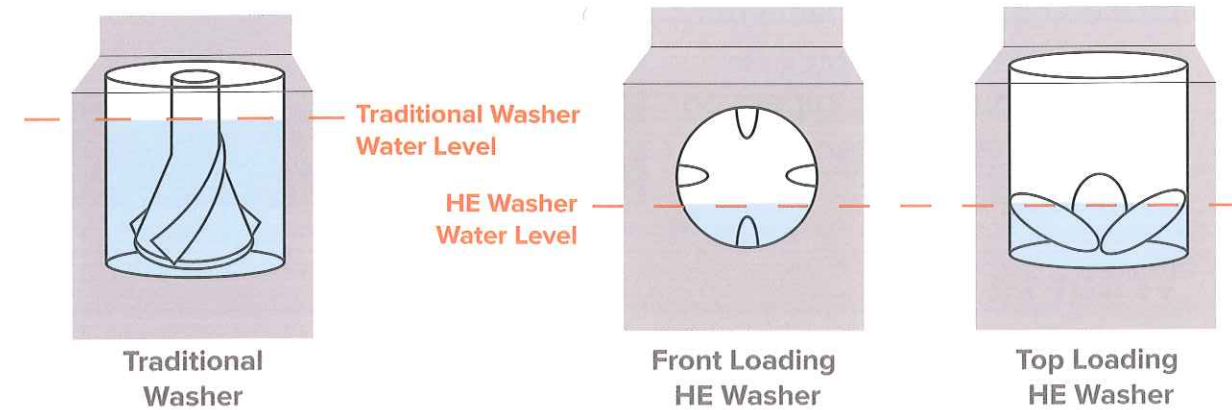
Success Indicator: Understands the different features for clothes washers and dryers

Background

Clothes washers today come in two basic categories—traditional and high-efficiency (HE). They also come in front-loading or top-loading styles. Front loading is more common in HE models.

Traditional washers have an agitator which moves back and forth or up and down. Clothing in the washer will be completely submerged in water. As the agitator moves the laundry in the washer, the soils are loosened.

High-efficiency washers use a tumbler system with low-water wash and rinse cycles. They do not have an agitator. These washers also use about 50 percent less water and 20–50 percent less energy than traditional models.



Clothes dryers also come in two categories—electric and gas powered. Electric is the most common and gas is powered by a gas burner and is often more energy efficient. Clothes dryers also differ in the way they are programmed to shut off. They use either a thermostat or a moisture sensor. Moisture sensor dryers have been found to be easier on fabrics because they shut off when the load is dry, which results in less energy use as well.

Did you know?

Washing the family laundry used to take all day for our ancestors. Water had to be boiled, lye soap was homemade, laundry was then scrubbed on a board with ridges on it, followed by rinsing and wringing by hand, next it was hung on a line to dry, and finally you would iron almost every piece of clothing. Don't forget they didn't have electricity for the stove to heat the water or for the iron!

More Challenges

Investigate the laundry apps that are available online for smart phones or tablets. They can remind you when you need to move a load to the dryer, give stain removal tips, and even identify care instructions for specialty items. Share tips you find with club members.

Sources

energystar.gov
cleaninginstitute.org



GO GREEN IN THE LAUNDRY ROOM

Most of us are looking for ways to be kinder to the planet by recycling our trash when we can and not letting the water run while we brush our teeth. But have you ever thought about how doing laundry affects our **environment**? Let's explore ways to reduce your impact on the environment when you're in the laundry room.

Did you know?

The first Earth Day was celebrated on April 22, 1970. Later that year the United States Environmental Protection Agency was established and Congress passed the Clean Air Act.

What to Do

Start simple and **recycle**. Maybe you are already recycling aluminum cans and cardboard cereal boxes. Let's continue this way of thinking and visit your laundry room. Look at the packaging of your laundry products. Do you see any plastic or cardboard containers? Begin recycling those products. Keep track of what you recycle from the laundry room for one month.

| Date | Item(s) Recycled | Type of Material | Recycle Location |
|-------------------------|--------------------------|------------------|---------------------------|
| <i>Example: 4/17/YR</i> | jug of laundry detergent | plastic | grocery store parking lot |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Learning Outcomes

Project Skill: Identifying items that can be recycled in laundry room

Life Skill: Managing resources

Educational Standard: Ohio FCS, Standard 5, Become Consumer Savvy, Intermediate Benchmark D: Evaluate impact of consumer choices on renewable and nonrenewable resources

Success Indicator: Recycles items from laundry room for one month

Background

Being stingy with our resources, such as gas and electrical energy, reduces our impact on the environment. Encourage your family to try as many of the following environmentally friendly actions as possible.

| Ways to Go Green in the Laundry Room | |
|--|---|
| Action | Result |
| Reduce the amount of packaging that comes in the home and recycle everything possible* | Saves from filling up landfills needlessly |
| Use as cool a water temperature as possible | Saves energy |
| Purchase concentrated products** | Reduces packaging and saves transportation energy costs |
| Hang clothes on a line | Saves gas or electrical energy used by a dryer |
| Use recommended amount of detergent (throwing in "a little extra" isn't beneficial) | Saves buying detergent sooner than needed Cuts down on transportation energy costs |
| Use the right amount of water | Saves water |
| Wait until you have a full load | Saves water and gas or electrical energy |

* Be sure to rinse or empty all laundry containers, then recycle them.

** Products with "concentrated" on the label have had excess water removed. This means the container can be smaller. A smaller container cuts down on the weight of the item, makes it less expensive to transport and leaves us with less to recycle. Small changes make a big difference!

More Challenges

Think about other ways you can treat the environment with care. Maybe you could set up a clothesline outside, or a drying rack indoors to air dry your clothes. Buying a detergent meant for cold water would save you from using warm or hot water for your laundry loads. See what you come up with and share your ideas with your project helper.



Resource

earthday.org

Sources

Cheryl Mendelson, *Laundry: The Home Comforts* (New York: Scribner, 2009).
cleaninginstitute.org/clean_living/going_beyond_green.aspx



KEEP SAFETY IN MIND

What do you think might be dangerous about laundry products? Let's take a closer look at the laundry room with safety in mind.

Did you know?

National Hanging Out Day is held every April 19 to promote how hanging laundry on the line can save money and energy.

What to Do

Go to your laundry room or the area where laundry products are stored and answer the following questions.

- Are laundry products stored out of reach of small children or pets?

- If they are not stored safely, what could you do to move them out of reach?

- Is the dryer filter cleaned of lint after every use?

- Look at laundry product bottles or packages. Can you find safety symbols or statements like "danger," "handle with care," "warning," or "caution"? Which product had which safety symbol or statement?

Learning Outcomes

Project Skill: Learning safe practices while doing laundry

Life Skill: Preventing personal injury

Educational Standard: Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark C: Promote consumer rights and responsibilities

Success Indicator: Takes precautions to keep the laundry room safe for all family members



Background

Preventing injury or accidents in the laundry room can be as simple as reading product labels and putting cleaners away properly. Get in the habit of following these guidelines so all family members stay safe and accident free when doing laundry.

- Use care with the newer laundry packets or pods. They are filled with concentrated cleaner that quickly dissolves when it comes in contact with water, wet hands, or saliva.
- Do not let younger siblings handle laundry products. If they want to help with laundry, ask them to sort or help fold.
- Be very careful with spray laundry products and store them with the nozzle set on "closed" or "off." They can harm eyes and skin.
- Store laundry products in their original container.
- Read and follow the recommended directions on laundry product labels and never combine laundry products with other cleaners.
- Clean up spills promptly and wash your hands after handling laundry products.
- Always close the laundry product container, box, bottle, or pouch after each use.
- If you have younger siblings, close the door to the laundry area, when possible. Always close the doors of washers and dryers.



Always keep detergent containers closed, sealed, and stored out of reach of children and pets.

More Challenges
Visit the National Fire Protection Association's website to view their one-minute video on Clothes Dryer Safety at go.osu.edu/laundrysafety. Share important tips with your club.

Sources

healthychildren.org
laundrylist.org

Safety Alert

Never combine cleaning products that contain ammonia with any form of bleach. Irritating and deadly gases, or both, can be released when combining these products.

In case of emergency, call the U.S. Poison Control Center hotline at 1-800-222-1222.



TALKING IT OVER

SHARE Does your family use a traditional washer or a high-efficiency washer?

REFLECT What is one thing that you can do to be environmentally responsible when you do laundry?

GENERALIZE Were you able to use "green" products in your laundry room?

APPLY What safety tip did you learn about laundry products that you can also apply to cleaning products used in your home?

LAUNDRY DETERGENT DUEL

Grocery store shelves offer a wide variety of laundry products. Detergents are available in powder, liquid, packets, capsules, and sheets. Other options include high-efficiency (HE) and concentrated products. Some contain a single product such as detergent only. Others combine detergents with a fabric softener, or detergents with **bleach**. With so many choices how will you decide which one to use?



Learning Outcomes

Project Skill: Comparing two laundry detergents

Life Skill: Making decisions

Educational Standard: Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends

Success Indicator: Learns differences between various laundry detergents



What to Do

In the chart below, write in the name of the laundry detergent your family uses for Product 1 and answer the questions. Then, go to the grocery store and compare a second product in a different form from what you have at home.

| Laundry Detergent Comparison | | |
|---|-----------|-----------|
| | Product 1 | Product 2 |
| In what form is this product? <i>(powder, tablet, liquid, sheet, pod, other)</i> | | |
| Is it a single or combination product? | | |
| Is it recommended for use in all washers or only in high-efficiency washers? | | |
| How many loads will the package wash? | | |
| How much does a package cost? | | |
| What is the cost per load? <i>(cost ÷ number of loads = cost per load)</i> | | |

Which product would you use if the choice were up to you? _____



More Challenges

Ask the parents of your friends how they select laundry products. What influences their choice? Share your findings with your club members.



Background

Laundry detergents are designed to clean many kinds of fabrics at different temperatures and water conditions (soft or hard water). The main ingredients in detergents are **surfactants** and **builder agents**. Surfactants are cleaning agents that loosen and remove soils. This helps keep soils from re-depositing on the clothes. Builders increase or “build” on the cleaning power of the surfactant by reducing water hardness.

How much laundry product you use depends on several factors. Use more detergent for heavily soiled, harder water, cooler water temperature, and larger loads. Less detergent can be used in lightly soiled, softer water, warmer water temperature, and smaller loads. Experiment with the amount of detergent until you feel you are using the least amount while still getting the clothes clean. Measuring carefully is easier on the environment and saves money.

Laundry Detergent Differences

| | |
|---|--|
| High-Efficiency (HE) Detergents | Detergents (both liquid and powder forms) designed for use in both front and top-loading HE washers. These products are formulated for use in low-water volume. |
| Liquid Detergents | Especially effective on food and greasy, oily soils. They are also good for pre-treating spots and stains prior to washing. |
| Powder Detergents | Ideal for general wash loads. Powders are especially effective at lifting clay and ground-in dirt, making them ideal for children’s play clothes. |
| Ultra Detergents | Concentrated detergents are available in liquid or powder forms. They come in smaller packages, yet are designed to offer the same cleaning power as similar products in larger packages. You’ll need less ultra detergent than with an unconcentrated product. Follow label instructions and use the measuring cap or scoop that comes with it. |
| Single-Use Detergents | Compacted or concentrated powder, liquid, or tablet detergents that come in unit-dose sizes for measuring accuracy and convenience. |
| Fragrance or Dye-Free Detergents | Many laundry products are now fragrance-free or dye-free, or both. |
| Combination Detergents | One detergent formulated to do two jobs. Look for liquid or powder detergents with built-in fabric softeners, detergents, and/or color-safe bleach. |



A Bit about Bleach

The bleaches you are likely to see on the market are liquid chlorine and oxygen bleach. Liquid chlorine is the most powerful. When not used correctly, liquid chlorine can damage fabric and change its color permanently. Liquid bleach has a limited shelf life. If it is more than six months old and has no effect on stains, replace it with fresh bleach.

Oxygen bleach is milder and is color-safe, meaning it won’t turn your clothes white. It maintains color and whiteness and can be used on all fabrics.

Bleach is used to help remove color from some stains, clean whites and bleach-safe colors, and deodorize and disinfect your laundry.

Before using any bleach, always check the item’s care label to be sure it is allowed for that fabric. When used correctly, bleach does not weaken fibers, fade colors, or break down fabric finishes on today’s fabrics.



Did you know?

About 90 percent of the energy used in the washing process is used to heat the water. Many people think that warm water always gets the clothes cleaner, but some detergents are specifically made to work with cold water, and can be just as effective. Using cold water instead of warm water is a great way to save money in the laundry room.

Resources

Laundry Detergent Fact Sheet: cleaninginstitute.org/assets/1/AssetManager/LaundryFS%202010.pdf

High-Efficiency Washers and Detergents: cleaninginstitute.org/sustainability/sustainability_resources.aspx



FABRIC SOFTENER CHALLENGE

Fabric softeners come in several forms—liquid to add to wash water, liquid to add to rinse water, and disposable fabric sheets or packets to add to the dryer. What’s the difference? Let’s find out!

What to Do

Select two different fabric softeners to compare. If you don’t have two different softeners at home, borrow one from a neighbor or friend, or pick one up at the store. Once you have your two items, complete the chart below. You may need to visit the store or explore online to find the prices.

| Comparing Fabric Softeners | | |
|--|-----------|-----------|
| | Product 1 | Product 2 |
| Is this softener a liquid or a sheet? | | |
| Do you put it in the washer or dryer? | | |
| If it’s used in the washer, is it safe to use in both traditional and high-efficiency washers? | | |
| How many loads can be treated with this softener? | | |
| How much does it cost? | | |
| What is the cost per load? <i>(cost ÷ number of loads = cost per load)</i> | | |
| List any warnings or cautions on the package. | | |

Learning Outcomes

Project Skill: Comparing two fabric softeners

Life Skill: Making decisions

Educational Standard: Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends

Success Indicator: Learns differences between various fabric softeners



Background

Many people use fabric softeners because of their many advantages. They can reduce static cling, wrinkling, and drying time by helping fabrics shed water. They also make ironing easier, keep fabrics softer and fluffier, and add a pleasant scent.

Fabric softeners come in a few forms. Some liquid softeners are poured into the softener dispenser and are released during the rinse cycle. Other liquids are poured into a plastic ball that opens with the force of the first spin cycle. Fabric softener sheets go in the dryer with wet clothes, one sheet per load. Packet-type softeners attach to the fin of the dryer drum (inside the dryer). Softeners added to water are more effective than the ones used in the dryer.

Fabric softeners are easy to use and provide plenty of perks. Just be sure to read and follow the label directions for any softener you use.

Did you know?

Blue fabric softener can stain your white or light clothing. Be careful when using fabric softeners that have dyes. Some people choose clear or white fabric softeners to eliminate this potential problem.

Safety Alert

Children’s sleepwear has a flame retardant added to the fabric to keep it from burning. Using fabric softeners may reduce the fabric’s flame retardancy.



More Challenges

Dingy whites, exploding pens, and suddenly small sweaters? Do an Internet search for the most common laundry mistakes. Make your own top ten list and share it with club members.

Source

cleaninginstitute.org/clean_living/sorting_it_out.aspx#FabricSoftener



PUTTING STAIN REMOVERS TO THE TEST

Have you ever had a favorite top with a stain that wouldn't come out? Did you have to throw it out? This activity may help you avoid this scenario as we experiment with different stain removal treatments.

What to Do

Let's test different stains to explore the effectiveness of water temperature and stain removers. First, find two light-colored pieces of cotton, or two pillowcases, or a sheet you can cut into two smaller pieces. One piece is for the cold water experiment and the other is for the warm water one. Material that is the size of a pillowcase works well for this.

Learning Outcomes

Project Skill: Using different methods to get a set of stains removed from fabric

Life Skill: Using scientific methods

Educational Standard: Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends

Success Indicator: Evaluates various stain removal techniques



Step 1

Draw a grid on the piece of fabric with five squares so you can stain the fabric. Label the squares with the name of the stains you plan to make in each one. Stains you can try include: catsup, chocolate, grass stain, ink, lipstick, makeup, mud, or mustard. Fill in the blanks on the table below with the stains you choose to use.

Fabric 1—Stains Treated in Cold Water

| | | | | | |
|---|-----------|-------------|-------|-------|---------|
| <i>Example:</i> No Treatment Cold Water | Chocolate | Grass Stain | Ink | Mud | Mustard |
| No Treatment Cold Water | _____ | _____ | _____ | _____ | _____ |
| Name of Product/ Treatment 1: _____ | _____ | _____ | _____ | _____ | _____ |
| Cold Water | | | | | |
| Name of Treatment 2: _____ | _____ | _____ | _____ | _____ | _____ |
| Cold Water | | | | | |

Step 2

Draw the same grid on the second piece of fabric, and label each square as you did on the first test fabric. Use the same stains and write them in the blanks of the table below.

Fabric 2—Stains Treated in Warm Water

| | | | | | |
|---|-----------|-------------|-------|-------|---------|
| <i>Example:</i> No Treatment Warm Water | Chocolate | Grass Stain | Ink | Mud | Mustard |
| No Treatment Warm Water | _____ | _____ | _____ | _____ | _____ |
| Name of Product/ Treatment 1: _____ | _____ | _____ | _____ | _____ | _____ |
| Warm Water | | | | | |
| Name of Treatment 2: _____ | _____ | _____ | _____ | _____ | _____ |
| Warm Water | | | | | |



Step 3

1. Once you have drawn your grid on the fabric, stain each section to match your table. Rub the stain into the fabric. Let your fabric set for one day.
2. Remove the stains using the following methods. Select **two treatment options** and record the name of the product in the tables on the previous page.

Fabric 1—Stain, set, treat, and wash in cold water.

- a) Cold water and soap
- b) Cold water, soap, and stain removing agent
- c) Cold water, soap, and bleach

Fabric 2—Stain, set, treat, and wash in warm water.

- a) Warm water and soap
- b) Warm water, soap, and stain removing agent
- c) Warm water, soap, and bleach

3. Record your observations below.

Observations

1. Did the water temperature affect stain removal? Did the cold water wash remove the stain? Warm water?

2. Which stain was easiest to remove?

3. Which stain was hardest to remove?

4. Did the stain removers that you selected work on all stains?

5. Which technique removed the stain?

More Challenges

Before using a stain remover, always test for colorfastness. Colorfast means the fabric color won't fade or run when it's washed. Apply the stain remover to a hidden spot, such as an inside seam. Wait 5–10 minutes. Rinse with water. The stain remover is safe for the garment if the fabric color doesn't fade or bleed. Share your results with your project helper.



Background

Acting quickly and using the right treatment can make your favorite top or pants look like new again. Always treat and wash stains promptly. Typically the longer a stain sits on a fabric, the more difficult it is to remove.

One way to remove a stain is to pre-treat it before laundering. Use a presoak stain remover by following the directions on the product label. Using more than needed generally does not work better. They work especially well on tough oily stains, but they do not remove all soiled and stained areas, especially ones that contain protein, such as an egg or ice cream stain. Presoak stain removers come in pump sprays, liquid soaps, or bars and work well on new stains and are often effective on old stains that have "set." Another pre-treatment alternative is to rub in a liquid detergent, or make a paste of water and granular detergent and apply it to the stain. Sometimes an item of clothing will have to be washed more than once before the stain is removed.



Another method is to simply soak an item with a stain. Sometimes this will lift a stain enough to then use a prewash stain remover on it just before laundering.

Soaking a garment with a blood stain, for instance, in cool water for several minutes is sometimes all that is needed, if you take action immediately.

Some stains are stubborn and nearly impossible to remove. Take difficult clothing stains to a professional dry cleaner if you are unable to get them out. It helps if you can share what caused the stain.

Resource

Visit go.osu.edu/stainremoval for a great stain removal chart that lists specific stains and how to treat them.

Sources

- Betty Faust and Maria Rodale, *Betty's Book of Laundry Secrets* (Rodale Press: Emmaus, PA, 2001).
web.extension.illinois.edu/stain/general_fabrics_supplies.cfm
cleaninginstitute.org/assets/1/Page/soilandstainremovers.pdf

Did you know?

Cold water or ice can be used to remove gum from your clothing. Apply either to harden the gum. Scrape with a dull knife or spoon. Spray with a prewash stain remover, then wash as usual.



TALKING IT OVER

SHARE What was your least favorite thing about testing laundry products? What was your favorite part?

REFLECT What did you learn while comparing laundry products at the store?

GENERALIZE How is the life skill of doing laundry important to you?

APPLY How will making comparisons of laundry products help you compare other types of products in the future?

DECODING CARE LABELS

Clothing garments come with **care labels** that tell you how to care for the item so it looks as good as possible and lasts a long time. Learning the symbols on the label and understanding the care suggested is the best way to get the most wear out of an item. Let's start figuring out what these symbols mean!

What to Do

Go on a scavenger hunt in your house to find six different clothing items. Select garments of all types—shirts, pants, jackets, dresses, jeans, and materials—cotton, rayon, wool, silk.



Learning Outcomes

Project Skill: Reading care labels

Life Skill: Processing information

Educational Standard: Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends

Success Indicator: Uses care labels to launder items correctly



Fill out the chart below using the clothing you have selected, checking the labels in the item for material content and suggested care. On the care label you may see written instructions or triangles and circles with dots, lines, and other symbols. Check the inside back cover for "Your Guide to Fabric Care Symbols" if you see symbols you don't understand.

| Item | | Materials | Care Label Instructions | Care Label Symbols |
|------|-------------|-------------|---|--------------------|
| Ex. | Denim shirt | 100% cotton | Wash in warm water Tumble dry on medium and remove promptly Wash dark colors separately | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |

More Challenges

Find a garment with a label that states "Hand wash only." Describe the garment and list any materials in the garment. Discuss with your project helper how you would wash this item and what product you would use.

Did you know?

Even if an item's care label says it is safe to put it in the dryer, you might consider air-drying it anyway. High heat and constant tumbling can cause wear on even some more durable fabrics. Another option is to partially dry a garment in the dryer, then finish by hanging it up to dry. This reduces the time it spends in high heat and it skips the tumbling action.

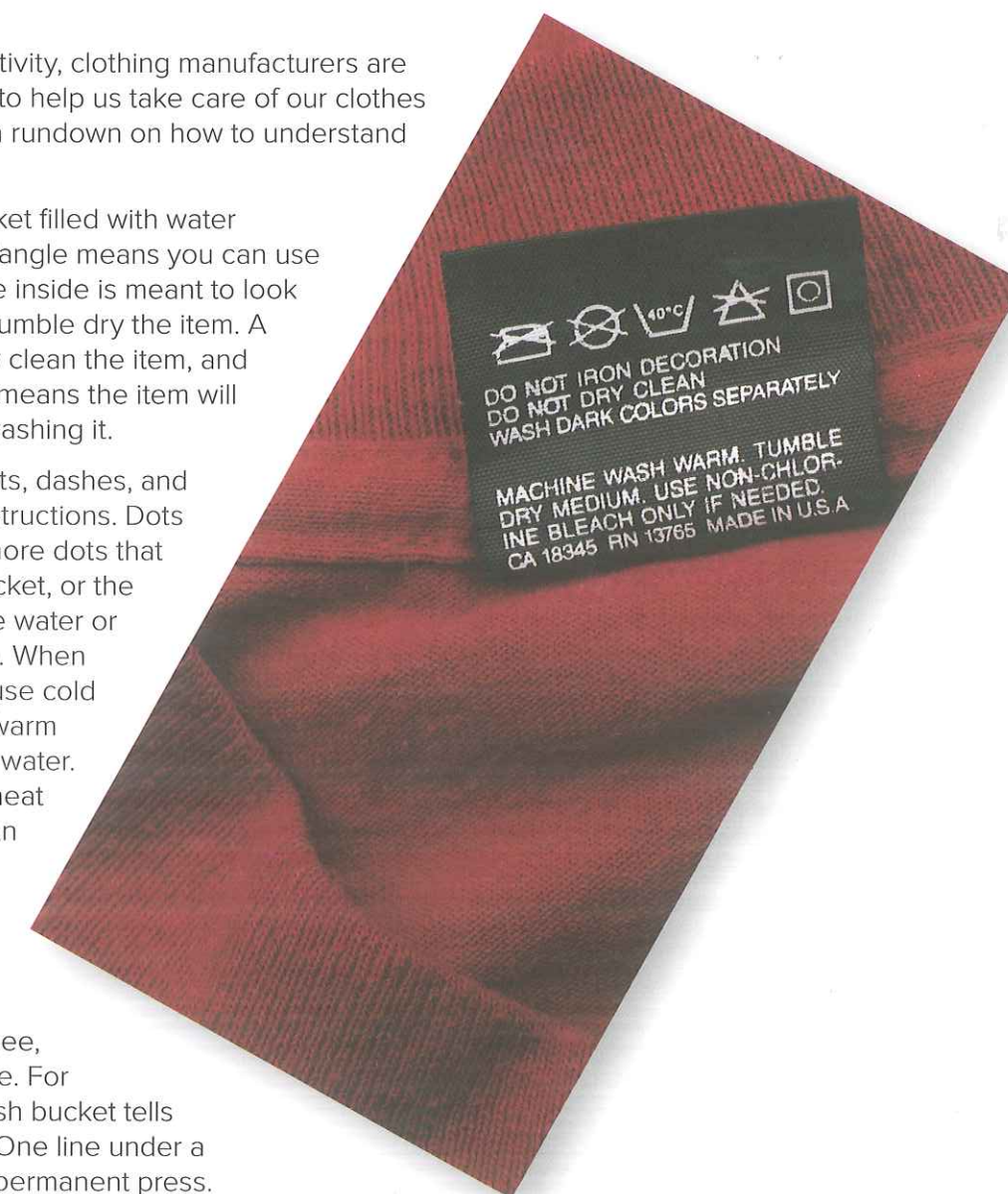
Background

As you discovered during this activity, clothing manufacturers are doing their best with care labels to help us take care of our clothes after we purchase them. Here's a rundown on how to understand all those crazy symbols.

The symbol that looks like a bucket filled with water symbolizes "machine wash." A triangle means you can use bleach, and a square with a circle inside is meant to look like a dryer and means you can tumble dry the item. A circle means you will need to dry clean the item, and a symbol that resembles an iron means the item will benefit from being ironed after washing it.

Those are the basic symbols. Dots, dashes, and Xs are added to fine-tune the instructions. Dots represent temperature. So, the more dots that appear on the machine wash bucket, or the tumble dry symbol, the hotter the water or dryer setting can be for that item. When you see one dot on the bucket, use cold water. Two dots tells you to use warm water, and three dots means hot water. The same system works for the heat level for the dryer and the iron. An "X" over the top of the symbol means "do not," so an "X" over the iron symbol would mean "Do Not Iron." There are also lines that may accompany a symbol, and the more lines you see, the gentler the process should be. For example, two lines under the wash bucket tells you to machine wash on gentle. One line under a wash bucket can be washed on permanent press.

See the inside back cover for a more detailed chart of care label symbols.





SORTING IT OUT

Doing laundry is a part of life for most of us. Learning the basics helps you take charge of this task for life. Let's learn to sort your items before laundering so they come out of the wash the same color as when you put them in!

What to Do

Start with a basket full of dirty laundry. Find and read the care labels on each garment or item. If you have clothes that need to be hand washed or dry cleaned, set them aside. Everyone has his or her own way to sort dirty laundry. Try sorting it by whites, darks, bright colors, and towels for this activity. Then, experiment with other ways to sort based on what works best for your family.



How dirty are your clothes or the items you are washing? Once you've sorted by color, look for heavily soiled items. Consider washing these items in their own load, even if it's a small load. Lightly soiled items can pick up the extra soil from the wash water. Because of this, whites slowly get grayer or yellowed and colors become duller.

Sort your family's laundry on three different occasions and fill out the log on the next page as you go.

More Challenges

Detergents for delicates can be used in the gentle cycle of your washing machine or used to hand wash items. Wash delicates on the gentle or delicate cycle of your washing machine. You can always wash them by hand in a sink too. Let your club members know about this method if it works well for you.

Learning Outcomes

Project Skill: Evaluating dirty laundry so similar items are washed together

Life Skill: Thinking critically

Educational Standard: Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends

Success Indicator: Sorts loads of dirty laundry correctly

Sorting Laundry Activity Log

| Date | Number of Loads/Type | Soil Level (pick one) | Observations |
|---------------------|--|--|---|
| Example: 4/14/YR | Sorted dirty laundry into four loads. Whites, darks, bright colors, and towels. | Lightly soiled <u>Normally soiled</u> Heavily soiled | I sorted our red bath towels by themselves so their dye wouldn't come off on other items. |
| | | Lightly soiled Normally soiled Heavily soiled | |
| | | Lightly soiled Normally soiled Heavily soiled | |
| | | Lightly soiled Normally soiled Heavily soiled | |

Background

Knowing how to sort and do your own laundry can help your family stay ahead on the chores around the house. Suppose your uniform needs to be cleaned for the game tomorrow and it's in the dirty clothes pile. Being able to tackle this task yourself helps you and your parents.

Sorting laundry into loads of similar clothes and washing them together helps keep them looking new longer. Read the care label in each garment to find out how to launder it. Clothes made of different fabrics may need to be laundered differently. Most garments are machine washable, but some may need to be dry cleaned or washed by hand. Heavily soiled items may need to be pre-treated and washed separately from your normal laundry.

Sorting clothes and washing them in similar loads also keeps you from ruining an article of clothing, or the whole load. If you skipped this step and a white T-shirt, a pair of khaki pants, and a new red sweatshirt were washed together, the red dye in the sweatshirt might "bleed" in the wash water and ruin the T-shirt and pants by turning them pink. A little know-how in the laundry room goes a long way!

Did you know?

Fluorescent colors—hot pinks, bright greens, and electric blues are often much less colorfast than other fabrics. Wash them separately or test them first before washing with other colors. Be careful using stain removers on these bright fabrics. The American Cleaning Institute warns that these products can change the fabric's color.

Source

lancaster.unl.edu/home/articles/2007/laundrysort.shtml



COMING CLEAN

Now that your clothes are sorted, you need to know what to do with each pile. Thanks to washing machines with a variety of settings and a wide selection of laundry products, you have many options for keeping your clothes looking great. Gather your sorted laundry and let's learn all about doing laundry!

What to Do

1. Load your first sorted pile into the tub of the washing machine.
 - Do not overload the machine. There might be a line in the tub indicating that it should not be filled beyond that point. If you have a large pile of clothing after sorting, you may need to divide it into two loads. Washing a load that is small is better than washing one that is too large.
 - Balance the clothes evenly around the washer. Doing so allows the load to wash evenly and keeps from throwing your washer off balance during the spin cycles.
2. Add the products to the machine.
 - Use the amount of detergent indicated on the box or bottle. Use a measuring cup to ensure that you are using the appropriate amount. If you use too little detergent, your clothes will not be clean. If you use too much, the excess soap may leave a film on your clothes.
 - Adjust the amount accordingly, if necessary. For instance, if the bottle says to use ½ cup per load, and you have a very small load, use less. If your clothes are very dirty, use a little more than the instructions state.
 - Bleach can aid in the cleaning process and work with your detergent to make your clothes even cleaner. Non-chlorine bleach is safe on all colors of fabric, but chlorine bleach should only be used on whites.
3. Select your water setting.
4. Once your load is washed, answer the questions on the next page.



Learning Outcomes

Project Skill: Following a set of instructions to wash a load of laundry

Life Skill: Making decisions

Educational Standard: Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends

Success Indicator: Washes a load of laundry correctly

What type of load did you wash? (Colors, darks, whites, delicates, permanent press?)

Explain your process for doing this load.

How do you think the clothes turned out? Do they seem clean?

What would you do differently next time?

More Challenges

Find two similar items and wash one of them using the washing machine, and wash the other by hand. Use the same drying method for both. Compare the two washing methods and show your project helper your results.



Background

The different settings you select on your washing machine may have different effects on your clothes. There are pros and cons for each of the temperature settings.

Using hot water removes dirt from heavily soiled items, and it typically kills more germs than colder water. However, hot water can fade the dye in dark colored clothing, and it may cause wrinkling in some fabrics.

Warm water is a good selection for lightly soiled clothes because it will get them clean, but it will not kill germs unless you add a **disinfectant**. Typically, warm water is safe for most colored clothes.

Cold water requires a cold water detergent to get clothes clean. Cold water is the best choice for more delicate fabrics, although it will not kill germs unless you add a disinfectant (see below).

Adding liquid chlorine bleach to a load of laundry kills most of the germs. But remember, it is safe for white clothes only. All-purpose household disinfectants are occasionally used as laundry additives. Disinfectant products contain ingredients to kill germs. When added to the wash water, they help reduce the amount of germs, but not all of them. Hot water will kill more germs but may cause dark colors to fade. Cold water can be used with a disinfectant instead. (Color water will not affect colors.) Just check to make sure your detergent can be used with cold water.

Resource

Consumer Choices: Getting better laundry results—
store.extension.iastate.edu/Product/pm1664-pdf

Did you know?

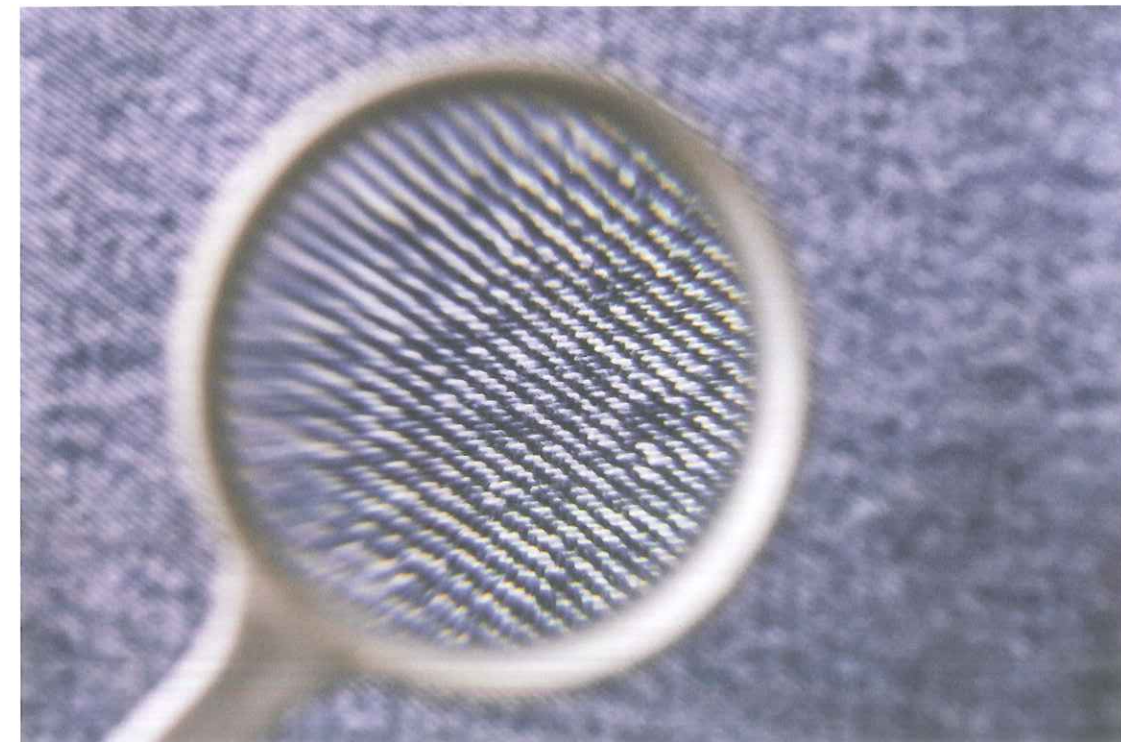
Pack it tight, right? No! Fill the washing machine tub loosely, not all the way to the top. When there is enough water in the tub, soils are carried away more easily.

Sources

aces.nmsu.edu/pubs/_c/c-503.html
 ccetompkins.org/save-money-wash-clothes-cold-water

BE A FIBER DETECTIVE

Have you wondered why the recommended temperatures for washing and drying clothes differ? The type of **fiber** used to make the garment can make a difference, but why? Let's investigate!



What to Do

Safety Alert

This activity involves burning pieces of fabric so adult supervision is necessary.

Gather the following supplies:

- Candle holder, candle, and matches
- Scrap pieces of 3 different types of fabrics (worn-out clothes, old socks or scraps of fabric)
- Tweezers
- A small glass plate or aluminum pie plate



1. Read over the Observations List below so you know which burn reactions to expect.
2. Prepare the fibers for the experiment. Pull or unravel a few yarn strands from one direction of the test fabric. Try to choose fabrics that you know the fiber content and are 100% of the same type of fiber.
3. Twist yarns loosely into a small yarn ball.
4. Place candle in holder and put on top of a glass or aluminum plate. Light candle.
5. Using extreme caution, hold yarn ball with tweezers near the flame, paying attention to any reaction in the fiber. Then, move it over the flame. Let the residue cool prior to feeling its texture. Record your observations on the Burn Test Chart below. Repeat the test if necessary to see reactions.

Observations List

- a. Observe reactions as it *approaches* the flame (but is not actually in the flame)
 - Shrinks, curls or fuses away from flame
 - Scorches
 - Melts (drips if melting takes place)
 - No reaction
- b. Observe the *over-the-flame* burning behavior
 - Rate of burning: fast, slow, moderate, doesn't burn
 - Flame: bright, large, small
 - Irregular burning (burns fast then slow)
 - Melting: little, excessive
- c. Observe residue
 - Soft, light, feathery ash
 - Hard mass, but crisp and crushable
 - Hard bead, not crushable
 - Color: light, dark, other

Did you know?

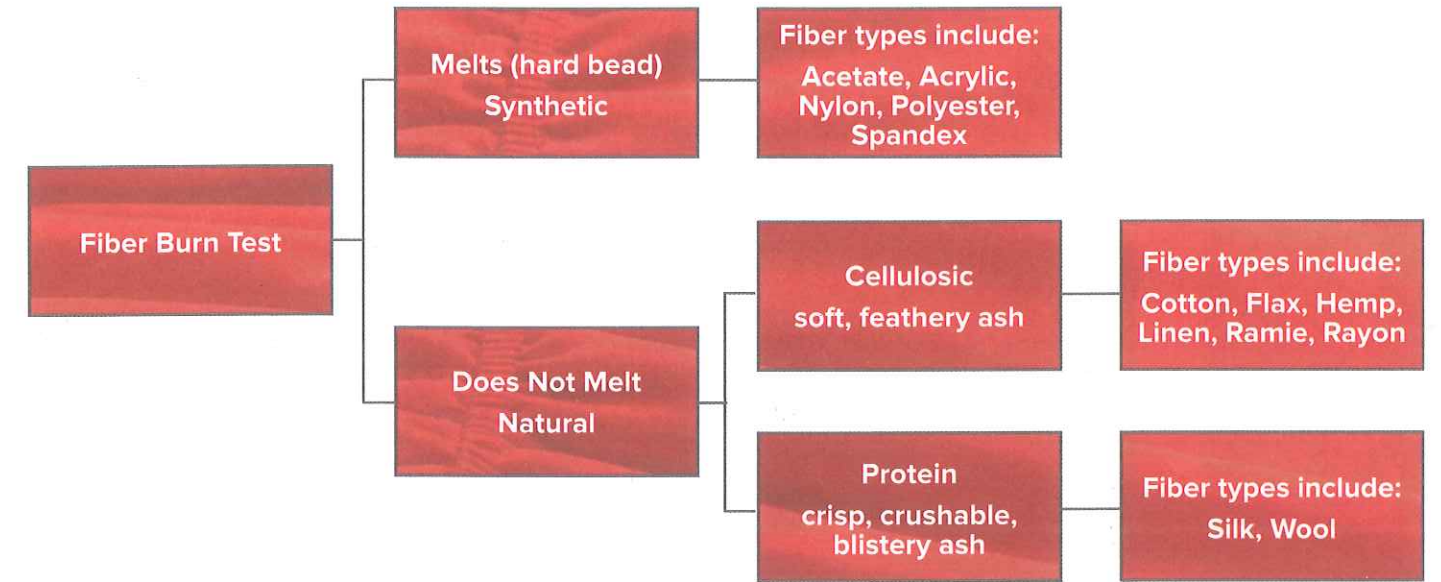
Silk and wool are animal-based protein fibers. Silk is made from the cocoon of the silk worm. Wool comes from the fiber of sheep and other animals.

Burn Test Chart

| Type of Fabric/ Fiber | Approaching Flame | Over the Flame | Residue |
|--------------------------|-------------------|----------------|---------|
| | | | |
| | | | |
| | | | |

Background

The fibers used to make our clothing come from many different sources. Some fibers are from natural sources and some are human-made. The components of fibers cause them to react in predictable ways when exposed to heat. Natural fibers are composed of protein or **cellulose** (plant-based) materials. Human-made materials are made chemically and are called **synthetics**. The chart below categorizes burn reactions.



Resources

threadsmagazine.com/item/31497/how-to-identify-fabrics-with-a-burn-test

pacificfabrics.com/media/uploads/2011/03/17/files/The_Burn_Test_to_Identify_Textile_Fibers.pdf

More Challenges

Fiber science is a field of research and has many career options. If you like finding out how fibers react to heat and would like to learn about apparel design, fabric materials, and biology, search the Internet for colleges and universities that offer Fiber Science courses and degrees.

Source

Scruggs, Barbara. *Textiles and Clothing 371, Textiles I: Laboratory Work Sheets*, The Ohio State University, College of Home Economics, Department of Textiles and Clothing, Spring 1988.



THE BIG FINISH

Once your clothes are washed and clean, the last step is drying them. Knowing how to properly dry garments can save you time and money. Have you ever had to throw out a sweater because it shrank? Or maybe your clothes were so wrinkled when they came out of the dryer that you had to launder them again. Good news—this is all preventable!



What to Do

Look through your clothes or those of your family members. Read care labels for drying information. Three drying methods are listed below—line drying, tumble drying, and drying a garment on a flat surface. For each method below, find three articles of clothing. If you need help figuring out the symbols on the labels, check “Your Guide to Fabric Care Symbols” on the inside back cover.

Line Dry

For the three articles that recommend line dry, describe the article of clothing and record the fiber content.

| | | |
|-------------------------|-------------------------|-------------------------|
| Item Description | Item Description | Item Description |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| Fiber Content | Fiber Content | Fiber Content |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Tumble Dry

For the three articles that recommend tumble dry, describe the article of clothing. Record the fiber content and the suggested heat setting, if listed.

| | | |
|-------------------------|-------------------------|-------------------------|
| Heat Setting | Heat Setting | Heat Setting |
| _____ | _____ | _____ |
| Item Description | Item Description | Item Description |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| Fiber Content | Fiber Content | Fiber Content |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Dry Flat

For the three articles that recommend laying flat to dry, describe the article of clothing. Record the fiber content.

| Item Description | Item Description | Item Description |
|------------------|------------------|------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| Fiber Content | Fiber Content | Fiber Content |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Background

Following recommended drying methods on the care label is just as important as the washing instructions. Clothes that are properly dried look newer longer and require less ironing.

Whether you dry laundry outdoors or in the house, hanging clothes to dry can save energy and lower gas or electric bills. Here are some tips to help.

- Hang sheets on a clothes line with hems together. Position pillow cases, towels, and tablecloths with a six- to eight-inch turn over the line. Pin large pieces at sides and middle; pin small ones at both sides. Avoid hanging sheets or towels by their corners so they are not “dog-eared” when dry.
- Attach clothes pins to strongest parts of the garment, such as at seams.
- Hang shirts by the tail with a turnover of six to eight inches. Pin at side seam and at center to hold fronts together. Straighten collars and cuffs.
- Hang pants and shorts from the waistbands.
- Place heavy articles such as blankets, bedspreads, and quilts over two parallel lines to distribute weight evenly and dry more quickly.

Did you know?

If you have allergies, avoid drying your clothes outside. Pollen in the air lands on the clothes. Use an indoor drying rack or clothes line in this case.

Hanging laundry items to dry saves energy. Using a clothes dryer is more convenient and saves time. If you decide to use a dryer, check care labels carefully for recommended heat settings. Certain fabrics dried for too long or at too high a temperature may shrink or become permanently wrinkled. Some fibers and materials are actually damaged by heat.

Common dryer settings are Regular/Heavy, Permanent Press, Delicate/Knits and Air/Fluff. The Regular/Heavy setting is the highest heat and works best for sturdy cottons such as jeans and towels. Permanent Press is a medium heat setting and works well for cotton/polyester blends and has a cool down cycle to prevent wrinkling. The Delicate/Knit setting is a low-heat setting designed for delicates, and items with elastic or spandex. The Air/Fluff setting uses no heat and can be used for items with rubber or plastics. With an adult’s help, get to know the settings on your dryer and refer to your owner’s manual if you are unsure of any of the dryer’s features.

General Dryer Tips

- Do not overfill the dryer. Overfilling can result in wrinkles and longer drying times.
- Avoid over drying. It is better to remove articles when they are still slightly damp than to over dry them.
- Clean the **lint** filter **each time** you use the dryer. Clogged lint screens make for longer drying times and are a fire hazard.
- Be near when the drying cycle is finished so you can remove the articles immediately to fold or hang to prevent wrinkling.

Lay Flat Drying

Some items can get stretched out when tumble dried or hung to dry. Articles such as sweaters should be laid flat to dry. There are a variety products and screens available, or you can use clean towels spread on a flat surface to dry these items.

More Challenges

Keep your laundered clothes looking sharp by folding them correctly. Check out how to do it at ehow.com/info_8496198_proper-laundry-folding-techniques.html. Do a demonstration for your club!

Resources

Check here for energy-saving tips: www.extension.org/pages/25766/energy-efficient-home-clothes-dryers#.U07IsE3jIU

Source

www.extension.org/pages/26856/everyday-household-laundry-tips-for-saving-money-and-home-energy#.U07Ij03jIU



TALKING IT OVER

SHARE What did you learn as you explored care labels on clothing garments?

REFLECT Sorting clothes into piles for wash can cut down on laundry errors. What might happen if you wash a bright red shirt with a light yellow top?

GENERALIZE How did the results of the burn test compare to the information on the wash water temperature and clothes dryer heat settings on the care label?

APPLY When drying your laundry, what might happen if you use a different drying method than the one recommended on the care label?



Glossary

bleaches.

- a. Hydrogen Peroxide is the mildest bleach. Can discolor fabric, so test it in an inside seam before using.
- b. Liquid Chlorine Bleach is common household liquid bleach, made of "sodium hypochlorite." The most effective bleach for stain removal and whitening. This is the only bleach that disinfects.
- c. Liquid all-fabric bleaches can be used on laundry items other than white. Read product label to see about the use on fabric type.

builder agents. Enhance or "build" the cleaning ability of the **surfactant** by inactivating water hardness minerals.

care label. A label attached to a garment or fabric giving the manufacturer's instructions for its care and cleaning.

cellulosic. Made or derived from cellulose.

cellulose. The main material of plant cell walls. Used in making cotton, paper, and rayon.

disinfectant. A product designed to kill germs.

ENERGY STAR. A designation used by the U.S. Environmental Protection Agency program to help consumers save money and protect our climate with products identified as being energy efficient.



environment. The surroundings or conditions in which a person, animal, or plant lives. The natural world, as a whole or in a particular geographical area, especially the affect that humans have on it.

fiber. A fine, single piece of fabric such as a cotton or woolen thread.

fragrance- or dye-free detergents. Many laundry products are now fragrance free or dye free, or both. Read the labels for details.

high-efficiency (HE) detergents. Detergents (both liquid and powder forms) designed for use in both front- and top-loading HE washers. These products are formulated for machines that use less water than usual.

laundry detergents. Products containing a **surfactant** and other ingredients to clean fabrics in the wash.

lint. Fuzz made up of ravelings and short fibers of yarn and fabric.

recycle. To convert waste into reusable material.

surfactant. Short for *surf(ace)-act(ive) a(ge)nt*. Improves the wetting ability of water, loosens and removes soil as clothes move in the washer, then suspends soils in the wash solution until soils are washed away. Also known as a cleaning agent.

synthetic. Compounds formed through a chemical process by humans, as opposed to materials of natural origin.



Summary of Learning Outcomes

| Activity | Project Skill | Life Skill | Educational Standard* | Success Indicator |
|---------------------------------------|--|----------------------------|---|--|
| 1. Meet Your Mechanical Helpers | Comparing clothes washers and dryers using selected criteria | Processing information | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark C: Advocate consumer rights and responsibilities | Understands the different features for clothes washers and dryers |
| 2. Go Green in the Laundry Room | Identifying items that can be recycled in laundry room | Managing resources | Ohio FCS, Standard 5, Become Consumer Savvy, Intermediate Benchmark D: Evaluate impact of consumer choices on renewable and nonrenewable resources | Recycles items from laundry room for one month |
| 3. Keep Safety in Mind | Learning safe practices while doing laundry | Preventing personal injury | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends | Takes precautions to keep the laundry room safe for all family members |
| 4. Laundry Detergent Duel | Comparing two laundry detergents | Making decisions | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends | Learns differences between various laundry detergents |
| 5. Fabric Softener Challenge | Comparing two fabric softeners | Making decisions | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends | Learns differences between various fabric softeners |
| 6. Putting Stain Removers to the Test | Using different methods to get a set of stains removed from fabric | Using scientific methods | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends | Evaluates various stain removal techniques |
| 7. Decoding Care Labels | Reading care labels | Processing information | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends | Uses care labels to launder items correctly |
| 8. Sorting It Out | Evaluating dirty laundry so similar items are washed together | Thinking critically | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends | Sorts loads of dirty laundry correctly |
| 9. Coming Clean | Following a set of instructions to wash a load of laundry | Making decisions | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends | Washes a load of laundry correctly |
| 10. Be a Fiber Detective | Understanding how heat affects different types of fibers | Using scientific methods | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends | Uses proper washing and drying heat settings based on fiber content |
| 11. The Big Finish | Using care labels to guide drying and finishing of laundry items | Critical thinking | Ohio FCS, Standard 5, Become Consumer Savvy, Introductory Benchmark B: Recognize strategies, products, and service decisions that meet individual needs and valued ends | Dries and finishes a load of laundry items correctly |

* The educational standards cited here are from the Ohio Department of Education Family and Consumer Sciences. These are available in their entirety by visiting education.ohio.gov.



Your Guide to Fabric Care Symbols

| MACHINE WASH | BLEACH | TUMBLE DRY | DRY | IRON | DRY CLEAN |
|--------------------|--|---------------------|----------------------|-----------------------|------------------|
| TEMPERATURE | | HEAT SETTING | | TEMPERATURE | |
| Cool/Cold | Any Bleach (when needed) | No Heat | Line Dry/Hang to Dry | (Dry or Steam) Low | Dry Clean |
| Warm | Only Non-chlorine Bleach (when needed) | Low | Drip Dry | Medium | Do Not Dry Clean |
| Hot | Do Not Bleach | Medium | Dry Flat | High | |
| CYCLE | | CYCLE | | OTHER | |
| Normal | | Any Heat | Dry in the Shade | No Steam | |
| Permanent Press | | CYCLE | Do Not Dry | Do Not Iron | |
| Delicate/Gentle | | Normal | Do Not Wring | | |
| OTHER | | Permanent Press | | | |
| Do Not Wash | | CYCLE | | | |
| Hand Wash | | Delicate/Gentle | | | |
| | | OTHER | | | |
| | | Do Not Tumble Dry | | | |

Courtesy of: American Cleaning InstituteSM

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