

Lesson 5.4: Care Labels and Laundry, and the Fibers and Care Quiz

Unit: Unit 5, Make It, Mend It, Wear It (Apparel and Textile Production and Design) **Topic:** 5.1 What We Wear and Why **Grade:** 6 to 8 (written at grade 7; see Differentiation for the grade 6 support and grade 8 stretch) **Days:** 2 class periods of 40 minutes (days 119 and 120 of the year) **Room:** FACS lab, three stations, water access on Day 2 (a no-water version is below)

This lesson is the one students will use the most in their actual lives. It closes Topic 5.1 and holds the topic's formal check: the Fibers and Care Quiz runs in the last 15 minutes of Day 2, starting at minute 25.

Standards

- NYS module line: NYS ATPD 3. Maintenance b) Use care label information to select appropriate procedures for care of clothing and accessories
- NYS module line: NYS ATPD 3. Maintenance a) Identify care procedures which may extend the wear of an apparel item
- NYS module line: NYS ATPD 3. Maintenance c) Identify daily, weekly, and seasonal care of clothing and accessories
- CTE theme line: CTE SUS 1. Resources e) Investigate practices that promote stewardship of environmental resources
- CTE theme line: CTE FCL 4. Buying Goods and Services h) Analyze consumer rights, responsibilities, and protections provided by local, state, federal, and global laws and policies
- NYS FACS Learning Standard 2 (Intermediate), Key Idea: Students will know the basic principles of home and community safety. They can demonstrate the skills necessary to maintain their homes and workplaces in a safe and comfortable condition. They can provide a safe and nurturing environment for themselves and others.; Performance Indicator: Students use age-appropriate techniques to select and maintain clothing.
- CDOS Standard 3a Universal Foundation Skills: Basic Skills. Students listen to and read the ideas of others and analyze what they hear and read; acquire and use information from a variety of sources; and apply a combination of mathematical operations to solve problems in oral or written form.
- National FCS 3.0: 16.2.5 Show the right way to care for textile products and to dispose of or recycle them, keeping local and global needs in mind.
- National FCS 3.0: 16.2.3 Examine textile laws, standards, and labeling in a global economy.
- National FCS 3.0: 16.4.3 Use the right industry products and materials to clean, press, and finish textiles and apparel.

Note on the citations: the SUS line the task asked for, one on extending the life of things, does not exist in those words in the Sustainability module. The closest verbatim line is SUS 1. e) on practices that promote stewardship of environmental resources, so that is cited;

SUS 3. c) on reducing, reusing, and recycling is the alternate and is cited in Lesson 5.9. FCL 4. h) is cited because care labels are a legal requirement, which is the consumer protection angle and the reason the tag is in the garment at all. The NYS FACS PI that fits is PI C, quoted above.

Enduring understanding and essential question

Big idea: The tag inside a garment is the manufacturer telling you exactly how to keep it alive. Reading it takes four seconds. Ignoring it is how a forty-dollar sweater becomes a rag in one wash. **Essential question:** What does this garment need from me, and what does it cost me when I get it wrong?

Objectives

By the end of this lesson, students will be able to:

1. (Low: remember or understand) Given a care label, identify the five symbol families (wash, bleach, dry, iron, professional care) and state what the dots, bars, and X marks mean.
2. (Mid: apply or analyze) Sort a basket of garments into correct care groups and state the laundry sequence in order from sort to fold, naming the step where each ruined-garment scenario went wrong.
3. (High: evaluate or create) At the stain station, compare three treatments on one stain, evaluate which worked best, and calculate the cost of replacing the garment against the cost of the treatment.

Vocabulary

Tier 2 (general academic): sequence, sort, compare, treatment, replace, consequence Tier 3 (FACS): care label, care symbol, pretreat, agitate, delicate cycle, line dry, tumble dry, shrink, felt (as a verb, what hot water does to wool), colorfast, bleach, detergent, stain. See the unit vocabulary list (Vocabulary 05.md) for Turkish, Portuguese, and Spanish.

Materials and setup

Day 1, per station (three stations of about seven):

- A laundry basket with eight to ten real garments with their care labels still in them. The set must include: a wool sweater, something with spandex (leggings), a white cotton T-shirt, a colored cotton T-shirt, a dress shirt that says iron, something that says dry clean only, a pair of jeans, and one towel. Thrifted is fine and cheaper. *[Sal: your basket. Real garments with real tags beat any worksheet. One thrift trip of ten items at about \$2 each is about \$20 for three stations if you split the set.]*
- Three sorting signs per station, printed: “Hot or warm wash,” “Cold wash,” “Hand wash, line dry, or professional care”
- One magnifier, because care symbols are printed small

Day 2, per station:

- Six scrap fabric squares, white cotton, about four inches: three for the stains, three spares
- Three stains, made the day before so they are set: cooking oil (grease), grape juice (a drink), and a ballpoint pen scribble (ink)
- Three treatment cups labeled: 1 cold water only, 2 a drop of dish soap in cold water, 3 the home remedy for that stain (baking soda paste for grease, white vinegar and water for the juice, rubbing alcohol for the ink)
- Three cotton swabs, one old toothbrush, one small bowl of clean water, paper towels
- Gloves, one pair per student who wants them
- A clothesline and clips strung across one corner of the room, or a drying rack

Both days:

- Handouts, one per student each: Handout 05.04 - Care Symbol Guide and Laundry Sequence.md (Day 1) and Handout 05.04 - Stain Station Record.md (Day 2)
- Slides: Slides 05.04 - Care Labels and Laundry and the Fibers and Care Quiz (Day 1 and Day 2 labeled)
- Assessment 05.1 - Fibers and Care Quiz.md, printed, one per student, for the last 15 minutes of Day 2
- The six labeled swatches from Lesson 5.3, kept for the Day 1 sort
- Index cards for the Day 1 closure
- Timer visible to the class
- Setup notes: make the stains on Day 1 after the last period and leave them to dry, or the treatments all “work” because the stain is still wet and that is not what happens at home. Rubbing alcohol and vinegar are the only two things in this lesson with a Safety Data Sheet; pull both sheets and know where they are, because a student will ask and it is the one chance all unit to use HSW 4. f) honestly. No open cups of anything near the quiz.

Pre-assessment

Day 1 do now is the pre-assessment for care labels: a hand vote on who does their own laundry, who has ruined something, and who has ever read a tag before washing. The ruined-something count is usually high and it is the hook. Day 2's do now checks whether the sequence stuck overnight.

Do now and hook (Time: 5 min Day 1, 4 min Day 2)

Day 1. On the board: “Write down one piece of clothing that got ruined in the wash, yours or somebody's in your house. What happened to it? Do you know why?”

Debrief, then the hand vote: who does their own laundry, who has ruined something, who reads the tag first. Then the hook: hold up a wool sweater that has been washed hot, so it is child sized and stiff. “This was a men's large. One wash. Forty dollars. There was a tag

inside that told us exactly how to not do that, and nobody read it.” *[Sal: ruin one thrifted sweater on purpose for this. It is the best two dollars in the unit.]*

Day 2. On the board: “Put these in order and number them 1 to 7: dry or hang, fold or hang up, load the machine, sort, treat a stain, add detergent, wash.” Then one line: “Which step do people skip most?”

Debrief in one minute with the class calling the order. The skipped step is almost always treating the stain, which is the hook into today’s station work.

Procedure

Day 1

Step	Teacher will	Students will	Time
1. Direct instruction: the five symbol families	Teach the symbols in family order, one slide each, saying the shape out loud every time because students will meet these as shapes, not words. (a) Washtub is washing: dots inside mean temperature, one dot cold, two warm, three hot; bars under the tub mean be gentle, one bar permanent press, two bars delicate; a hand in the tub means hand wash only; an X over the tub means do not wash in water at all. (b) Triangle is bleach: empty triangle means any bleach, diagonal lines inside mean non-chlorine only, an X means no bleach. (c) Square is drying: a circle inside the square	Fill in Part 1 of the handout: draw each symbol family and write what the dots, bars, and X mean.	10 min

	means tumble dry, dots inside the circle are heat, a line inside the square means line dry, an X over it means do not tumble dry. (d) Iron is ironing: dots are heat, an X over it means do not iron, an X through the steam lines means no steam. (e) Circle is professional care: a P or an F inside means a specific dry cleaning solvent, an X over it means do not dry clean. Then the law in one sentence: in the United States a permanent care label is required in most garments, which is why the tag exists whether the manufacturer wants it there or not.		
2. Learning activity: sort the basket	Send students to the three stations with the baskets. Task: read every tag, then put each garment under the right sorting sign, and write the garment and the reason on the handout. Then the second pass: within the cold pile, separate whites from colors and say why. Circulate and ask for the symbol,	Sort all eight to ten garments, record each one with the symbol that decided it, and do the second pass on whites and colors.	12 min

	not the guess: “Show me the symbol that told you that.”		
3. Direct instruction and discussion: what ruins clothes, and what it costs	Four ruin cases on four slides, each with the fiber reason from Lesson 5.3. (a) Hot water and a hot dryer on wool: the scales on wool fiber lock together, the sweater felts and shrinks, and it never comes back. (b) A hot dryer on spandex: heat breaks the stretch fiber, the leggings go baggy at the knees and stay that way. (c) Chlorine bleach on a color: it strips the dye in patches, and there is no undo. (d) A hot iron on polyester: it melts, and the shine or the hole is permanent. For each, ask which symbol on the tag would have prevented it. Then the money: put four replacement prices on the slide (a wool sweater, leggings, a colored T-shirt, a polyester dress shirt) and total the damage from one bad load.	Fill in Part 3: four rows of what happened, why the fiber did that, which symbol would have stopped it, and what the replacement costs.	9 min
4. Closure, Day 1	Exit card (see	Write the exit card.	4 min

	Closure). Collect. Set up tomorrow in one sentence: the stains you will treat tomorrow were made yesterday on purpose, because a set stain is the real problem.		
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Day 1 total: 5 (the do now) plus 10 plus 12 plus 9 plus 4 = 40 minutes. Step 4 is the closure.

Day 2

Step	Teacher will	Students will	Time
1. Direct instruction: the laundry sequence, start to finish	Walk the seven steps with the slide and the props, in order, saying the reason for each. (1) Sort: by color and by care symbol, and check pockets. (2) Treat a stain before it goes in, because a wash sets it and a dryer bakes it in. (3) Load: loose, not packed, because clothes need room to move or they do not get clean. (4) Detergent: the amount on the cap for the load size, and more is not better, because extra detergent stays in the fabric and holds dirt. (5) Wash: the temperature and cycle the tag says. (6) Dry or hang: the square symbol decides; hang anything with	Fill in Part 4 of the Day 1 handout: the seven steps with the reason for each, plus the daily, weekly, seasonal box.	9 min

	spandex, wool, or a print. (7) Fold or hang right away, because a wrinkle set in a hot pile is an iron you did not have to do. Say the daily, weekly, and seasonal frame too: daily is hang it up or put it in the hamper and check for a stain; weekly is the wash; seasonal is store it clean, never dirty, because dirt attracts insects.		
2. Practice: the stain station	Send students to the three stations. Each station has the three set stains and the three treatment cups. Rules: gloves if you want them, no treatment goes near a face, the alcohol cup stays on the tray, and the swab goes in the trash not the bowl. Method for every test: name the stain, put the treatment on with a swab or the toothbrush, work it 30 seconds, rinse in the clean water bowl, blot with a paper towel, then rate the result 0 to 3 (0 no change, 1 lighter, 2 mostly gone, 3 gone). Hang the swatches on the line with a clip and	For each of the three stains, run all three treatments on three parts of the swatch, rate each, and write which treatment won. Then the cost line: what the garment would cost to replace, what the treatment cost, and the difference.	9 min

	the label showing. Circulate and push the comparison, not the scrubbing.		
3. Debrief: which treatment won, and the cost math	Take one station's results for each stain, write the winning treatment on the board, and compare across the three stations. Name the pattern: grease needs something that breaks up oil (dish soap), a sugary drink needs an acid or plain cold water fast, ink needs alcohol. Then the money in one line: a bottle of dish soap costs about four dollars and does two hundred stains; a replacement shirt costs twelve. Say the sustainability line in plain words: every garment you save from the trash is one you did not have to buy and one that did not go to a landfill, and that is what the state means by stewardship of resources.	Report the station's winner, record the class pattern, and finish the cost line.	3 min
4. Fibers and Care Quiz	Clear the stations to the sides. Hand out Assessment 05.1 - Fibers and Care Quiz.md. Read the directions out loud. Twelve items, 15 minutes, starting at	Take the quiz.	15 min

	minute 25 of the period. Collect at the bell. Students with extended time finish in the first five minutes of Lesson 5.5, where the do now is a tool sort and nothing is missed.		
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Day 2 total: 4 (the do now) plus 9 plus 9 plus 3 plus 15 = 40 minutes. The quiz has to start at minute 25, which is what Assessment 05.1 says, so Steps 1 to 3 are nine, nine, and three. The quiz is the closure.

The Day 2 rows total 40 minutes with the 4-minute do now counted inside Step 1's block. Steps 1 to 3 take 25 minutes, so the quiz starts at minute 25 and occupies the last 15 minutes of the period, including the hand-out and the read-aloud of the directions, as the Scope and Sequence requires for Topic 5.1's formal check.

Questions to ask

Monitor understanding:

- What shape is the washing symbol? What do two dots mean?
- This tag has a hand in the tub. What are you allowed to do and what are you not?
- Which pile does the wool sweater go in, and which symbol told you?
- You treated the grease with plain cold water. What did it do? Why not?

Deepen learning:

- Why does the law require a care label at all? Who is that protecting?
- The tag says dry clean only. Dry cleaning costs eight dollars and the shirt cost twelve. What would you do, and what is the risk?
- A cold wash uses much less energy than a hot one. If cold gets it clean, why do people still use hot?
- Your family does one big load with everything in it because time and quarters are real. What is the one split that saves the most clothing for the least trouble?
- Storing a sweater dirty over the summer is worse than storing it clean. Why would that be?

Check for understanding

Day 1, Step 2: circulate with the clipboard and ask each student to show the symbol that decided one garment. Three boxes: named the family, read the dots or bars, sorted correctly. Day 2, Step 2: the ratings column on the record. A student who rates all nine cells

and picks a winner per stain has Objective 3. The quiz is the summative check for the whole topic.

Closure (Time: 4 min Day 1; the quiz closes Day 2)

Day 1. Exit card, three lines: one care symbol you will look for tonight, one thing that ruins clothes and the fiber reason, one question. Three students read line 1. Sort into “got it” and “needs more”; the “needs more” pile decides whether Day 2’s Step 1 opens with a 90-second symbol review.

Day 2. The quiz is the closure. As students hand it in, each says one thing out loud on the way to the bin: the treatment that won for one stain. No card.

Differentiation and supports

- ELL: the symbols are pictures, which makes this the most accessible lesson in the topic; the handout’s symbol guide is a picture key with the Turkish, Portuguese, and Spanish word for wash, bleach, dry, iron, and dry clean beside each (see Vocabulary 05.md). The quiz describes every symbol in words as well as showing it, so nothing hangs on reading English alone. The sort is physical: a garment goes under a sign.
- IEP and 504 (general): extended time on the quiz is finished in the first five minutes of Lesson 5.5, planned into that lesson’s do now; the quiz may be read aloud to any student who has that accommodation, at a desk at the front; the stain station requires no fine motor precision and the swab can be held any way; gloves are available with no reason required; the sequence task can be done by ordering seven printed cards instead of writing; a magnifier sits at every station because the symbols are genuinely small.
- Grade 6 support: the sort uses six garments instead of ten and the three obvious signs; the ruin cases are two, not four; on the quiz, the two-point cost item gives the multiplication set up.
- Grade 8 stretch: find the care label requirement in the actual federal rule (the Federal Trade Commission’s Care Labeling Rule) and write two sentences on what a manufacturer has to prove before it prints “dry clean only”; also compute the cost per wash of a garment cared for correctly versus one replaced twice, which previews the cost-per-wear work in Lesson 5.13.
- UDL checkpoint used: multiple means of representation (symbols as pictures, as shapes said out loud, and as real tags in real garments) and multiple means of action and expression (sorting physically, rating with numbers, or writing).
- No-kitchen or no-machine alternative: no machine is needed; a washing machine is never used in this lesson, only described. No-water version of Day 2: pre-treat the stains yourself the day before, photograph the results at 0, 30 seconds, and rinsed, and run Step 2 as a photo comparison where students rate the images and write the same cost line. The sort in Day 1 needs nothing but garments and tags.

Assessment

Objective	Standards met	Learning task	Assessment (formative or
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			summative; tool)
1. Identify the five symbol families and what dots, bars, and X mean	ATPD 3. b); FCL 4. h); National FCS 16.2.3	Handout Part 1, Day 1 Step 1	Formative; symbol drawings checked during Step 2; summative on Assessment 05.1 items 6 and 7
2. Sort garments by care and state the laundry sequence in order, naming where each ruin happened	ATPD 3. a), 3. b), 3. c); Std 2 PI C; National FCS 16.2.5	The basket sort, Day 1 Step 2; the sequence, Day 2 Step 1	Formative; clipboard check on the symbol that decided each garment; summative on Assessment 05.1 items 8, 9, and 10
3. Compare three stain treatments and calculate replacement against treatment cost	ATPD 3. a); SUS 1. e); CDOS 3a Basic Skills; National FCS 16.4.3	The stain station, Day 2 Step 2	Formative; the station record's nine ratings and the cost line; summative on Assessment 05.1 item 12

Topic 5.1 is assessed summatively on the Fibers and Care Quiz, Day 2, last 15 minutes.

Homework

None. Optional, and worth doing: read the tag on one thing before it goes in the wash at your house this week, and tell whoever does the laundry one thing the tag says. Be ready to say what happened.

Connections

Math: the cost math in Day 2 Step 3 is unit cost and percent change, which the math teacher can take as a warm-up with the same numbers. Science: the stain station is a fair test with a control, so the science teacher's variables vocabulary fits it exactly; use their words for independent and dependent variable if the class has had them. Family and community: the laundry sequence is the single most transferable thing in Unit 5, and it belongs in whatever the school sends home about life skills. Community: a laundromat near the school will often give a stack of their posted instruction cards, which are written for real machines. *[Sal: name the laundromat or the building's own machines.]*

Sources

- NYS Middle Level CTE FACS Content Module 03, Apparel and Textile Production and Design (nyctecenter.org, June 2018), lines 3. a), 3. b), and 3. c). Copy in 02 Standards/NYS Module PDFs/.

- NYS Middle Level CTE Theme Module, Sustainability, line 1. e); Theme Module 03, Financial and Consumer Literacy, line 4. h). Text per 02 Standards/NYS ML CTE FACS Modules - verbatim extract of all twelve.md.
- NYS Learning Standards for Health, Physical Education, and Family and Consumer Sciences (1996), Standard 2, Intermediate, Key Idea and PI C. Wording per the crosswalk, Part A.6.
- National Standards for Family and Consumer Sciences Education 3.0 (LEAD FCS Education, 2018), competencies 16.2.3, 16.2.5, and 16.4.3, per 02 Standards/STANDARDS SOURCES - web research.md, section 4.16.
- Care symbol meanings follow the ASTM care symbol system used on United States care labels; the labeling requirement itself is the Federal Trade Commission's Care Labeling Rule, 16 CFR Part 423. *[Sal: put the FTC page on the slide and check it before the site goes public; the agency reviews this rule periodically.]*
- The stain comparison design is built from the Sustainability module's own illustrative activity for this content module, "Stain Removal Comparison," which asks students to compare commercial and home-prepared stain removal and to consider the environmental cost of discarding textiles.

Teacher notes

- The single most important setup step is making the stains a day early. A fresh stain comes out with water and the whole comparison collapses.
- If Day 1 runs short, cut the ruin cases to two (wool and spandex) and keep the cost slide. If Day 2 runs short, cut the class comparison in Step 3 to one stain. Never cut into the quiz's 15 minutes.
- Common mistake: students scrub hard and rate the result by how tired their arm is. Set the rule: 30 seconds, same pressure, then rinse. Otherwise there is no comparison.
- Common mistake: students think dry clean only means "this is fancy." It usually means the fiber or the construction will not survive water. Say that.
- Do not put the rubbing alcohol at a station with no adult in sight. Keep it on a tray, one cup per station, and count the cups back in at the end, the same way needles get counted starting next period. That is a good place to preview the count routine.
- The ruined wool sweater is a permanent prop. Keep it in the Unit 5 bin with the swatches; it opens this lesson every year.
- *[Sal: your prices for the ruin slide and the stain math. At 2027 prices a thrifted basket of ten garments runs about \$20, the treatment supplies about \$12 for the year (dish soap, baking soda, white vinegar, one bottle of rubbing alcohol, swabs), and the clothesline and clips about \$8. That is the whole Topic 5.1 consumable budget besides the swatches.]*