

Lesson 5.8: Sewing On a Button

Unit: Unit 5, Make It, Mend It, Wear It (Apparel and Textile Production and Design) **Topic:** 5.2 Hand Sewing Skills **Grade:** 6 to 8 (written at grade 7; see Differentiation for the grade 6 support and grade 8 stretch) **Days:** 1 class period of 40 minutes (day 124 of the year) **Room:** FACS lab, three sewing stations of about seven students (a no-station version is below)

This is a life skill lesson and I say so out loud on the first slide. A button falls off a shirt, a coat, a pair of pants, or a uniform, and the garment goes in a drawer or in the trash for want of four minutes of work. Every student leaves today able to put a button back on, with a portfolio card that proves it.

Standards

- NYS module line: NYS ATPD 2. Production c) Demonstrate basic hand and machine sewing techniques by creating or repairing a textile product
- NYS module line: NYS ATPD 3. Maintenance a) Identify care procedures which may extend the wear of an apparel item
- CTE theme line: CTE HSW 4. Classroom and Workplace Safety c) Apply safety practices when using tools, machines, and equipment
- CTE theme line: CTE SUS 3. Energy Conservation c) Understand and explain how individuals can limit the use of nonrenewable resources by reducing, reusing, and recycling
- 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: Personal Qualities. Students demonstrate an understanding of the relationship between individuals and society and interact with others in a positive manner.
- National FCS 3.0: 16.4.5 Show the basic skills for making, altering, repairing, and recycling textiles and apparel.
- National FCS 3.0: 2.1.4 Use consumer skills when buying and caring for clothing.

Note on the citations: SUS 3. c) is the verbatim reduce, reuse, recycle line and it fits a repair lesson better than any Sustainability line about stewardship, because a button sewn back on is a garment that did not get replaced. ATPD 3. a) is cited because a button is a care procedure that extends the wear of an item, which is that line in plain words.

Enduring understanding and essential question

Big idea: A four-minute repair is the difference between a shirt you still own and a shirt in the trash. A button needs a little slack under it, called a shank, or it will not close. **Essential**

question: What is the cheapest repair that saves the most clothing, and why does a button need room to breathe?

Objectives

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

1. (Low: remember or understand) Name the parts of the task (position, shank, anchor, finish off) and state why a button needs a shank.
2. (Mid: apply or analyze) Sew a two-hole and a four-hole button onto scrap fabric with a shank, anchored and finished off so the button holds a firm tug.
3. (High: evaluate or create) Evaluate a sewn-on button against four checks (in position, holds a tug, has a shank, thread ends hidden and secured) and calculate the cost saved by repairing one garment instead of replacing it.

Vocabulary

Tier 2 (general academic): position, slack, anchor, secure, saved Tier 3 (FACS): shank, two-hole button, four-hole button, shank button, anchor stitch, finish off, buttonhole, placket. See the unit vocabulary list (Vocabulary 05.md) for Turkish, Portuguese, and Spanish.

Materials and setup

Three stations of about seven students, same kits and layout as Lesson 5.5.

Per station:

- The station kit, counted: 10 needles in the cushion, 30 pins
- One spool of contrast thread
- Four needle threaders, out in the open
- The count sheet on the clipboard, the day's row ready
- Two pre-threaded, pre-knotted needles parked in the cushion
- A dish of buttons: 30 mixed buttons, at least ten two-hole and ten four-hole, in a range of sizes, plus two large coat buttons. *[Sal: a bag of mixed buttons is about \$6 for several hundred, or free if you cut them off garments that are going in the rag bin. Cutting buttons off donated garments is also a five-minute job a student can do while you set up.]*
- Toothpicks or extra straight pins, 10, for holding the shank slack
- Scrap fabric squares, about four by four inches, three per student: a medium-weight woven cotton, not felt, because a real button goes on a real shirt

For the whole class:

- Each student's named zip bag with their practice cloth and felt from Lessons 5.6 and 5.7
- Portfolio cards, one per student: card stock about four by six inches with two slits cut in the middle so the finished scrap can be threaded through and displayed. The card is

printed on the second page of Handout 05.08 - Button Steps and Portfolio Card.md.

- The demonstration rig: the large blunt needle, bright yarn, a large button (a coat button or a plastic lid with two holes drilled in it, which is even easier to see), and burlap
- A shirt with a missing button and a matching spare button, as the hook
- Handout, one per student: Handout 05.08 - Button Steps and Portfolio Card.md
- Slides: Slides 05.08 - Sewing On a Button (outline in 05 Materials; the site renders it as a deck)
- Timer visible to the class
- Setup notes: cut the scrap squares ahead. Sort the button dishes so every station has both hole types and a range of sizes. Print the portfolio cards on card stock and cut the two slits before the period, because cutting slits with the fabric shears is not a thing that is going to happen. *[Sal: buy or find one thrifted button-down shirt with a button already missing for the hook. It costs two dollars and it does the whole introduction for you.]*

Pre-assessment

The do now is a hand vote and a short write, and the vote is the number that matters: who has ever had a button come off, and what happened to the garment. In most classes the majority answer is “it is still in a drawer” or “we threw it out,” which is the entire case for the lesson.

Do now and hook (Time: 5 min)

On the board: “Have you ever had a button come off something? Write down what the item was and what happened to it after. If it has never happened to you, write about somebody in your house.”

Debrief: take four answers and write the outcomes in three columns on the board: fixed, still in a drawer, thrown out. Count them. Then the hook: hold up the shirt with the missing button and the spare button in the other hand. “This shirt costs about eighteen dollars to replace. This button costs about four cents. The repair takes four minutes and by the end of today every one of you can do it. This is the most useful forty minutes in this unit.”

Procedure

Step	Teacher will	Students will	Time
1. Direct instruction and demonstration: the seven steps, large	Demonstrate on the yarn rig with the big button, narrating each step, then repeat small under the camera on a real scrap. The seven steps, in this order:	Fill in Part 1 of the handout by numbering the seven steps and writing the shank reason in their own words.	10 min

	(1) Find the position: line the button up with the buttonhole it has to reach, and mark the spot with chalk. On a shirt, the old thread leaves a mark; use it. (2) Knot the thread and come up from underneath at the mark, then take one small stitch there and back to anchor before the button goes on, so the first pull does not yank the knot through. (3) Put the button on the needle and slide it down to the fabric. (4) Lay a toothpick or a pin across the top of the button, between the holes, and sew over it. That is what makes the shank. (5) Sew through the hole pairs five or six times: a two-hole button goes straight across, a four-hole button goes in two parallel bars or a cross, and either is correct as long as it is consistent. (6) Pull the toothpick out, lift the button so the slack shows, and wrap the thread around the loose threads under the		
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	button three or four times to make the shank stand up. (7) Take the needle to the back, make three tiny stitches in one place, and knot; trim the tail close with the snips. Say the reason for the shank once and hard: the button has to sit above the fabric, because the buttonhole side of the garment needs room to slide under it. A button sewn flat will not close.		
2. Practice: two buttons on scrap	Release to the stations. Task: sew one two-hole button, then one four-hole button, on the same scrap square, both with a shank. Circulate and check three things at every student: is there an anchor stitch under the button, is there slack, and are the thread ends on the back. Stop the class once at the four-minute mark to hold up one good shank and one flat button so the difference is visible.	Sew a two-hole button, then a four-hole button, on the practice scrap. Tug each one.	12 min
3. The real one: the portfolio button	Hand out the portfolio cards and a fresh scrap square. Task: one button,	Sew the portfolio button, mount the scrap on the card, fill in the label and	8 min

	done well, on a clean scrap, sewn the way it would be sewn on a real shirt, then threaded through the card's slits and labeled with name, date, and the four checks self-scored. This is the piece that goes in the FACS folder and onto the sampler card in Lesson 5.11. Circulate with the clipboard and score Objective 2 as it happens.	the four checks.	
4. Cost math, count in, and closure	Put the money on the slide: a shirt at 18 dollars, a pair of pants at 25, a winter coat at 60, against a button at 4 cents and thread at about a cent. Ask each student to compute the money saved on one repair and the money saved if every person in the room repaired one garment instead of replacing it. Then call the five-minute warning, run the count out loud, initial the rows, and take the closure lines.	Do the two cost lines in Part 3. Return the needle and pins, run the count, and answer the closure.	5 min

Day total: 5 (the do now) plus 10 plus 12 plus 8 plus 5 = 40 minutes. The closure runs inside Step 4, with the count.

The four steps total 35 minutes. With the 5-minute do now that is the full 40, and the closure runs inside Step 4.

Questions to ask

Monitor understanding:

- What is the toothpick for?
- Show me your anchor stitch. Where is it?
- Lift your button. Is there slack under it?
- Where are your thread ends, front or back? Where should they be?
- Two-hole or four-hole, does the number of passes change?

Deepen learning:

- Why does the buttonhole side need the button to sit up off the fabric? Try closing one sewn flat and tell me what happens.
- A coat button takes more force than a shirt button. What would you do differently on a coat?
- Your family throws out a garment because of a button. What is really being thrown away: the fabric, the labor of the person who sewed it, or the money?
- Fast fashion makes a shirt cheap enough that repairing it feels silly. Is it silly? What is the argument on the other side?
- A four-hole button can be sewn as two bars or as a cross. Does it matter? What does a cross do that two bars does not?

Check for understanding

Clipboard with four boxes per student, checked during Steps 2 and 3: anchor stitch under the button, shank present (the button lifts), five or six passes through the holes, thread ends on the back and knotted. The tug test is the fast version: I tug every portfolio button myself as I circulate, and a button that comes off gets re-sewn on the spot, which takes three minutes and teaches more than any comment.

Closure (Time: inside Step 4)

Out loud, whip around the room, one sentence each, no cards today: “One thing I could fix at home now.” Then the exit line on the portfolio card: name, date, four checks self-scored, and one sentence on what the repair saved. Cards go in the FACS folder in the room, not home; they come back out in Lesson 5.11 for the sampler.

Differentiation and supports

- ELL: the seven steps are demonstrated twice, large then small, before the words carry any weight, and the handout is a numbered step card with a picture described for each step so a student can work alone from the sheet. Word bank with Turkish, Portuguese, and Spanish for button, hole, thread, under, tight, loose, fix (see Vocabulary 05.md). The tug test is a physical pass or fail that needs no language.
- IEP and 504 (general): pre-threaded, pre-knotted needles taken freely from the cushion; large coat buttons with big holes for anyone who needs a bigger target, and

they are not a lesser task; a pin instead of a toothpick if the toothpick is hard to hold; the portfolio button may be sewn with the scrap clipped flat to a small clipboard so the fabric does not move; extended time means the portfolio button can be finished at the start of Lesson 5.9; a student may state the seven steps orally rather than writing them.

- Grade 6 support: two-hole button only for the practice, and the shank slack is held by me with a toothpick while the student sews the first two passes.
- Grade 8 stretch: sew a shank button (the kind with a loop on the back and no holes through the face) and explain why that button needs no toothpick; then sew a four-hole button on a doubled fabric with a small reinforcing square underneath, the way a coat button is done, and say what the reinforcement is for.
- UDL checkpoint used: multiple means of representation (yarn rig, real-size demonstration, printed picture-step card) and multiple means of action and expression (the portfolio card is a physical product, so a student proves the skill without writing).
- No-kitchen or no-machine alternative: no machine is used. Reduced-dexterity alternative: large coat buttons with wide holes, a yarn needle and yarn or perle cotton instead of thread, and a scrap of binca or loosely woven fabric where the needle goes through easily; the shank is held with a folded piece of card stock instead of a toothpick, which is easier to grip. A student who cannot manage the shank wrap finishes with the anchor and the passes and is scored Meets if the button holds a tug, with the wrap noted as the stretch.

Assessment

Objective	Standards met	Learning task	Assessment (formative or summative; tool)
1. Name the parts of the task and state why a button needs a shank	ATPD 2. c); National FCS 16.4.5	Handout Part 1, Step 1	Formative; the numbered steps and the shank reason checked; oral check during Step 2
2. Sew a two-hole and a four-hole button with a shank that holds a tug	ATPD 2. c), 3. a); HSW 4. c); Std 2 PI C; National FCS 16.4.5, 2.1.4	Steps 2 and 3, the portfolio button	Formative today; summative on the button row of Assessment 05.2 - Stitch Sampler Performance Check.md, where the portfolio card is the evidence
3. Evaluate a button against four checks and calculate the	SUS 3. c); CDOS 3a Personal Qualities; National FCS 2.1.4	The four checks on the card, Step 3; the cost lines, Step 4	Formative; the card's self-score compared to my tug

cost saved			test; the cost math scored complete, partial, or missing for daily work
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Homework

None. Optional, and this is the one I actually push: put a button back on something at your house this week. If there is no loose button, teach somebody the seven steps. Be ready to say what happened.

Connections

Mathematics: the cost-saved calculation is multiplication and comparison and it previews the cost-per-wear math in Lesson 5.13. Family and community: this is the single most transferable skill in Unit 5 and it belongs in anything the school sends home about life skills; the counselor or the family liaison may want the step card as a handout. Community: a clothing pantry, a shelter, or a thrift shop that sorts donations will usually have a bin of garments rejected for a missing button, and a class that can sew buttons can fix twenty of them in a period. That is a real service project and it is the CCO community-agency activity the ATPD module itself suggests. *[Sal: call the clothing pantry before Lesson 5.9 and ask if they have a reject bin.]*

Sources

- NYS Middle Level CTE FACS Content Module 03, Apparel and Textile Production and Design (nyctecenter.org, June 2018), lines 2. c) and 3. a); the community-agency repair idea comes from that module's own Career and Community Connections illustrative activity. Copy in 02 Standards/NYS Module PDFs/.
- NYS Middle Level CTE Theme Module 04, Health, Safety, and Wellness, line 4. c); Theme Module, Sustainability, line 3. c). 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 16.4.5 and 2.1.4, per 02 Standards/STANDARDS SOURCES - web research.md.
- The button steps, including the toothpick shank method, are standard hand sewing practice. Written new for this course.

Teacher notes

- Say "this is a life skill lesson" on slide 1 and mean it. Middle schoolers can tell the difference between a task that is school and a task that is real, and this one is real.

- The toothpick is the trick that makes the whole thing work. Without it, half the class sews the button flat and then cannot close it. Put toothpicks on every table before the bell.
- Common mistake: no anchor stitch, so the knot pops through on the first tug. Check underneath.
- Common mistake: the thread ends get trimmed on the front. It looks fine for a day and then it unravels. Say “ends on the back” every time you pass a table.
- Common mistake: fifteen passes through the holes, because more feels stronger. Five or six is plenty and more makes a lumpy mess that fills the buttonhole.
- Tug every portfolio button yourself. It is the fastest assessment in the unit and students take it seriously because it is a real test with a real result.
- Keep the portfolio cards in the room. They are the evidence for the sampler check and they get mounted on the sampler card in Lesson 5.11.
- *[Sal: your prices on the cost slide. If you have the thrifted shirt with the missing button, sew the button on in front of the class at the end of Step 1, in about ninety seconds, and hold up the closed shirt. That is the moment the lesson lands.]*