Let’s Learn About **FABRIC**

**Quick View**

**What Are the Characteristics of Fabric? How Does That Affect What Fabric Is Used to Make?**

Explore where fabric comes from and how fabric can be made. Learn how versatile fabric is.

**Materials**

Fabric scraps in various colors and textures, glue, paper, scissors, plastic tubs.

*A more detailed list can be found on Page 2.*

**Standards**

NCECDTL, ELOF: Goal IT-ALT 3, 4, 5, 6, 7, 8, 9; Goal P-ATL 6, 7, 8, 9, 10, 11, 12, 13; Goal P-LC 1, 2, 3, 4, 5, 6, 7; Goal P-LIT 4, 5; Goal IT-C 1, 2, 3, 4, 5, 6, 7, 9, 10, 12; Goal P-MATH 7, 8, 10; Goal P-SCI 1, 2, 4, 5, 6; Goal IT-PMP 1, 2, 3, 4, 5, 6, 7, 8; Goal P-PMP 2, 3; MI Standards SS 1, 3.

**Model i Innovation Learning Framework**

Throughout this lesson, there will be opportunities to bring in Model i’s Habits of an Innovator and Actions of Innovation.

*More information on Model i can be found at: [https://www.thehenryford.org/education/teaching-innovation/modeli/](https://www.thehenryford.org/education/teaching-innovation/modeli/)*

**Lesson Overview**

<table>
<thead>
<tr>
<th>STEAM</th>
<th>ELA/LIT</th>
<th>SS/HST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explore</strong></td>
<td><strong>Discover</strong></td>
<td><strong>Create</strong></td>
</tr>
<tr>
<td>Explore sources of fabrics: natural and man-made.</td>
<td>Compare and contrast the various uses of fabric around your classroom.</td>
<td>Sort fabric scraps according to color or texture.</td>
</tr>
<tr>
<td>Explore the durability of fabrics and think about how that affects what it is used for.</td>
<td>Design, Learn from Failure</td>
<td>Make a fabric version of the first letter of first name.</td>
</tr>
<tr>
<td>Stay Curious, Collaborate, Uncover</td>
<td>Design, Learn from Failure</td>
<td>Make a fabric rainbow.</td>
</tr>
<tr>
<td>Stay Curious, Collaborate</td>
<td>Stay Curious, Be Empathetic</td>
<td>Show images of girls dresses, boys hat and cloth dolls from history.</td>
</tr>
<tr>
<td><strong>Inspiring Stories</strong></td>
<td><strong>Artifact of the Day</strong></td>
<td><strong>Review &amp; Extend</strong></td>
</tr>
<tr>
<td>Read stories related to the learning: Where Did My Clothes Come From by Chris Butterworth, From Cotton to T-Shirt by Carl Meister and/or From Sheep to Sweater by Robin Nelson, or What We Wear: Dressing Up Around the World by Maya Ajmera.</td>
<td>Show students the Hanks Silk Mill building, and explain about silk coming from silkworms.</td>
<td>Ask students specific and open-ended questions. Family Connection worksheet to send home. Coloring sheet to send home or work on in class.</td>
</tr>
<tr>
<td><strong>Review &amp; Extend</strong></td>
<td><strong>Stay Curious, Be Empathetic</strong></td>
<td><strong>Stay Curious, Collaborate</strong></td>
</tr>
</tbody>
</table>
Let’s Learn About FABRIC

Materials

Explore

Activity — Touch Exploration
- Raw cotton/cotton balls
- Raw wool/wool yarn
- Flax
- Scraps of cotton, linen, wool and polyester
- Any other natural or man-made fabrics

Create

Project One — Sorting Fabric
- Cloth scraps, various colors and textures
- Tubs for sorting

Create

Project Two — Fabric Letter
- Paper for letters
- Fabric scraps
- White glue

Create

Project Three — Fabric Rainbow
- Fabric scraps in reds, oranges, yellows, greens, blues and purples separated by color
- Paper
- White glue
Let’s Learn About FABRIC

Lesson Guide

Explore

Stay Curious, Collaborate

How Is Fabric Made?

How Durable Is Fabric? .......... Page 4

Activity: Touch Exploration ....... Page 4

Discover

Stay Curious, Collaborate Uncover

Activity: How Versatile

Is This Fabric ............................... Page 5

Artifact of the Day

Stay Curious, Be Empathetic

Hanks Silk Mill ......................... Page 6

Links & Photos ......................... Pages 7-9

Create

Design, Learn from Failure

How Do We Sort Fabric?

Project 1: Sort Fabric ............... Page 10

What Can We Make with Fabric?

Project 2: Fabric Letters .......... Page 11

Project 3: Fabric Rainbow ......... Page 12

Inspiring Stories

Collaborate, Be Empathetic

Read Stories to Inspire

Your Students ......................... Page 13

Review & Extend

Stay Curious, Collaborate

Ask Students Specific and

Open-Ended Questions .......... Page 14

Family Connection ................. Page 15

Coloring Sheet ....................... Page 16
Let’s Learn About
FABRIC

Explore

How Is Fabric Made?
Teachers can explain that fabric can come from plants, animals, chemicals and combinations of all of these.

How Durable Is Fabric?
Teachers can have students think and talk about how durability affects use for fabrics. Asking questions like: Would we wear carpet? Why not? Would your shirt be strong enough to be walked on a lot? Why not? Would jeans be good to walk on or could they be slippery? Do they wear out? Explain that what a fabric is made from and how it is made can determine what it can be used for.

Activity

Touch Exploration
Let students feel and talk about the different ways the samples feel.

• Raw cotton/cotton balls
• Raw wool/wool yarn
• Flax
• Scraps of cotton, linen, wool and polyester
• Any other natural or man-made fabrics

Model i Innovation Learning Framework

Stay Curious, Collaborate

• Ask questions like what, why, how.
• Talk about helping, working together.
Activity

How Versatile Is This Fabric?

Explore the different ways fabric is used by having students look at the different materials used in their clothing, coats, shoes and by looking around the classroom for fabric items.

Students should discover fabric used in toys and books, for carpets and rugs and other items such as: lampshades, curtains, backpacks, book bags, canvas totes, mittens or scarves, etc.

Model i Innovation Learning Framework

Stay Curious, Collaborate, Uncover

- Ask questions like what, why, how.
- Talk about helping, working together.
- What do you see (characteristics, properties)? What problems does this material help us solve?
Let’s Learn About FABRIC

Artifact of the Day

What Is Hanks Silk Mill?

Teachers can show students Hanks Silk Mill. In 1810, two brothers established the first silk mill in America when they began operating Hanks Silk Mill in Mansfield, Connecticut.

This mill produced silk thread by unwinding the cocoons of silkworms. Silkworms feed on the leaves of the mulberry tree. Teachers can also share pictures of silkworms and cocoons.

Teachers can show students other examples of cloth artifacts from history, including girls’ dresses, boys’ caps and cloth dolls.

Have students tell each other what they would think about having to wear those clothes or what they think of those dolls. Do they have any cloth toys? What might be the source of the fabric — natural or man-made?

Additional Presentation

Teachers may invite a guest who crafts with fabric or a seamstress/tailor who can share their craft with the students.

Links and photos for this section are on Pages 7-9.

Model i Innovation Learning Framework

Stay Curious, Be Empathetic

- Ask questions like what, why, how.
- How would you feel if you wore clothes like these? How might others feel in clothes like these?
Let’s Learn About
FABRIC

Artifact of the Day — Links

**Girl’s Dress, 1840-1850 (left)**
https://www.thehenryford.org/collections-and-research/digital-collections/artifact/320974

**Girl’s Dress, 1900-1915 (right)**
https://www.thehenryford.org/collections-and-research/digital-collections/artifact/151915
Let’s Learn About FABRIC

Artifact of the Day — Links

**Boy’s Cap with Earflaps, 1880-1920**

Let’s Learn About
FABRIC

Artifact of the Day — Links

Spanish Dancer Cloth Doll, 1920-1935 (left)
https://www.thehenryford.org/collections-and-research/digital-collections/artifact/296529

Cloth Doll, 1940-1960 (right)
https://www.thehenryford.org/collections-and-research/digital-collections/artifact/152392
Let’s Learn About FABRIC

Create — How Do We Sort Different Fabrics?

Project 1: Sorting Fabric
Mix a variety of fabric scraps together in a tote and have students sort according to colors or textures. This provides fine motor skill practice.

Materials
• Cloth scraps, various colors and textures
• Tubs for sorting

Instructions
1. Mix fabric scraps together in a large tub.
2. Give tots tubs to sort fabric into. Number of tubs needed will depend on sorting criteria.
3. Have tots sort fabric scraps according to color or texture to practice fine motor skills.

Model i Innovation Learning Framework
Design, Learn from Failure
• Make, build and create.
• Talk about “trying again,” what’s another way to...

Create — How Do We Sort Different Fabrics?
Let’s Learn About

FABRIC

Create — What Can We Make with Fabric?

Project 2: Fabric Letters

Cut out the letter of each student’s first name and have them glue fabric scraps to the letter.

Materials

• Paper for letters
• Fabric scraps
• White glue

Instructions

1. Cut out first letter of students’ names or, alternately, write large first letter of students’ names on paper.
2. Give students fabric scraps to cover letter cutout or to cover the lines of the large first letter of their first names.
3. Assist students in using white glue to attach fabric to paper.

Model i Innovation Learning Framework

Design, Learn from Failure

• Make, build and create.
• Talk about “trying again,” what’s another way to...

Create — What Can We Make with Fabric?
Let’s Learn About FABRIC

Create — What Can We Make with Fabric?

Project 3: Fabric Rainbow

Give students a variety of fabric scraps in the colors of the rainbow and have them arrange the colors to create a rainbow on paper.

Materials

- Fabric scraps in reds, oranges, yellows, greens, blues and purples separated by color
- Paper
- White glue

Instructions

1. Give students a blank sheet of paper.
2. Allow students to sort out enough scraps of each color to make an arch like a rainbow shape. More scraps will be needed as the colors move from purple to red.
3. Once students have enough scraps to create an arch, assist them in gluing scraps to paper in an arch shape, starting with purple and then adding blue, green, yellow, orange and red.

Model i Innovation Learning Framework

Design, Learn from Failure

- Make, build and create.
- Talk about “trying again,” what’s another way to...

Create — What Can We Make with Fabric?
Let's Learn About FABRIC

Inspiring Stories

Read Stories to Inspire Your Students

**From Sheep to Sweater**
by Robin Nelson and/or
**From Cotton to T-Shirt**
by Cari Meister

**Where Did My Clothes Come From**
by Chris Butterworth

**What We Wear: Dressing Up Around the World**
by Maya Ajmera

---

Model i Innovation Learning Framework

Collaborate, Be Empathetic

- Talk about helping, working together.
- How did the characters in the stories feel? How might it make others feel?
Let’s Learn About FABRIC

Review & Extend

Ask Students Specific and Open-Ended Questions

• What do you think is the best thing about fabric?
• What would you like to make with fabric?
• What do you have at your house that is made with fabric?

Model i Innovation Learning Framework

Stay Curious, Collaborate

• Ask questions like what, why, how.
• Talk about helping, working together.

Family Connection

Send the worksheet on Page 15 home with students to be completed at the end of the lesson.

Coloring Sheet

Have students color the picture on Page 16 as a part of the lesson, or send it home to be colored.
Let's Learn About
FABRIC

Review & Extend — Family Connection

Take the Learning Home

We are learning about fabric and the way it is used in many items we use every day.

Please take your student on an "I Spy" adventure through your home and neighborhood to see what fabric items you can find. What are some of these things? Have them draw what they find.

These are some of the stories related to our learning. You might enjoy reading them with your student.

The Weaver
by Thacher Hurd

The Kindness Quilt
by Nancy Elizabeth Wallace

Ella Sarah Gets Dressed
by Margaret Chodos-Irvine
Let’s Learn About FABRIC

Coloring Sheet

Hanks Silk Mill