The kindergarten began the new year with an in depth exploration into the world of textiles. Textiles surround us from the moment of birth to the day that we die. Throughout history, textiles have been worn, lived in, walked on and slept under. Textiles help decorate our homes and adorn our bodies. Clothing allows us to create our own identities and plays an important role in cultural rituals and celebrations. Every culture in the world makes use of textiles.

The word textiles originally meant woven fabric. Today it means any material that is manufactured from fibers or yarns. The techniques of producing textiles involve felting which is compressing and rubbing fibers together to create a mat, spinning which is drawing fibers out and winding them together to create yarn or string, and weaving which is interlocking fibers to form a mesh.

Our first week of activities focused on understanding what a textile is and identifying textiles in our classroom. We explored a variety of textiles by sorting fabric swatches by color and texture. We used colorful yarn to create a textile alphabet mobile. We drew our monthly self portraits and used a variety of textiles as a background. The children also learned how to use a needle and thread to sew a simple stitch as a border for their portrait.

**Ruby and Rhiannon stitching a border with yarn and needle.**

---

**Important Notes**

- It is that time of year! We go outside as often as the weather permits. Please send snow pants, boots, mittens and hats that are labeled with your child's name.
- Please remember to send shoes with your children if they wear boots to school.
- Our classroom can be hot; dress your child in layers.
TEXTILES: HOW THEY ARE MADE
There are many different ways of producing a textile from the simple fibers.

Insects: Silk is produced from a silkworm. The worm builds a cocoon of mucous around itself. These cocoons are boiled and the silk is spun into threads.

Plants: Cotton is made from the feathery fibers found in the seed heads of a plant. The fibers are spun together to make a thread, which in turn is woven into cloth. Bamboo, flax and hemp are also used to make fibers.

Animals: Wool comes mainly from sheep. The sheep are sheared and their soft fleece is spun into thread for knitting and weaving, or pressed together to make felt. Wool can also come from goats, llamas, rabbits, alpacas and camels.

Man Made: Most synthetic fabrics, like nylon and polyester, are made from petrochemicals. The chemicals are extracted from crude oil. The thread is spun from a type of liquid plastic.

The children used pieces of fabric from each of the above groups to create a fabric collage. Large pieces of fabric were arranged onto a background. The children used a sewing machine to fasten the fabric pieces onto the background. Ribbon pieces were decoratively hot glued onto the collage.

Lola adding ribbon to the top layer of her collage.

SORTING AND PATTERNING
The children practiced their math skills of sorting and patterning using fabric in variety of ways.

All year we have been discovering patterns in our environment. Textiles are often decorated with patterns to give them meaning and color. Using fabric squares the children built a variety of complex patterns such as ABCC, ABBC, AABC, etc.

On Pajama Day, each child brought in a favorite stuffed animal. As a large group, we discussed different ways in which we could group these animals. The children identified an assortment of characteristics to use to sort. Each time we regrouped the animals and sorted according to their ideas. Finally, we laid them out in order according to height.

The children looked through a box of fabric scraps and came up with their own ideas on how to sort, (patterns with blue vs. plain blue, stripes vs. dots, rough vs. smooth, etc.). After deciding on the characteristic to use, we glued the scraps onto a divided sheet of paper.

Lena’s sorting page Patterned blue vs plain blue
TEXTILES IN OUR EVERYDAY LIFE

Once we learned what a textile is and were able to identify them in our environment, we began to notice them everywhere! The children’s focus immediately went to their clothing. Textiles are such an integral part of our life.

We began our second week practicing the basic skills of buttoning, zipping, snapping, buckling and tying the textiles that we wear each day. We were so proud of ourselves when we all learned how to zip our winter jackets!

We extended our basic buttoning skill and learned how to sew a button onto a piece of fabric. The children made colorful fabric pins using a variety of fabric pieces that they adorned with buttons and gems.

Felicity, Sasha and Jane in Little Red Riding Hood.

TEXTILES IN LITERATURE

After reading several stories that have an emphasis on textiles, such as The Hat, The Mitten, Little Red Riding Hood, and The Princess and the Pea, we turned our dramatic play area into a stage. The children enjoyed performing these stories using puppets or simple costumes.

After reading several versions of these tales, we used a Venn diagram to compare the story characters. The children also listened and noted differences in plot and setting.

Our weekly challenge also incorporated textiles. The children matched alphabet letters on clothespins and clipped them to coordinating felt pieces. The letters then had to be placed in alphabetical order.

Mrs. Armbruster paired observational skills with writing adjectives to describe textiles. The children were given five different pieces of fabric and asked to use their senses and come up with three words that describe their piece. Their words were attached to the fabric square and the five squares were attached together to make a tactile texture book.
EXPLORING CHARACTERISTICS OF FABRIC

After identifying several types of fabric and discussing the various purposes, we were curious to find out which fabric would be best for the specific classroom tasks of cleaning up spills and blocking the light from the windows. The children used the scientific process of trial and error with colored water and eye droppers to test a variety of material to discover which ones absorbed liquid best. We then used a flashlight to test which materials were translucent and which were opaque.

Lela testing translucency

FABRIC SCIENCE EXPERIMENTS

People use fabric to help them meet many needs in their jobs and their homes. Scientists analyze fabrics to test their suitability in meeting those needs. Products are developed to treat fabric to help them stand up to extreme conditions, thus making our lives safer and easier.

Testing insulating fabric:

I wonder...which type of fabric provides the best insulation for the ice cube.

I think...that the ice cube will melt in all of the fabric because it is warm in the room.

I learned...that the silk and the felt insulated the ice cube the best; it had not melted. The cotton and wool absorbed the water, the lace did nothing but let all the water drip into the jar.

Testing Dye Fast:

I wonder...which type of fabric will hold the color of dye.

I think...the cotton and wool will hold the color because they absorbed the best.

I learned...that the cotton did hold the color best. Although the wool carpet piece soaked up the dye, it was easily washed off. (We think that the carpet had a Stainmaster spray on it.)

Testing flame retardant:

I wonder...which type of fabric will burn the slowest, natural vs man made.

I think...the all the fabric pieces will burn.

I learned...that the man made, treated fabrics burned the slowest. Cotton burned very quickly while some synthetic pieces did not burn but melted.
TEXTILES: HOW ARE THEY DECORATED

Throughout time, textile designers from all over the world have been inspired to decorate their fabrics by looking at many things. Favorite subjects have been animals, nature and geometric shapes, which are often repeated to complete a pattern.

Pattern and color can be added to a textile in a number of ways such as dyeing, embroidery, printing and appliqué. We appliquéd our fabric collages and used embroidery techniques in our string art designs.

We experimented with several ways to print on fabric. First, we used roller stamps to roll a pattern onto the material with white paint. Second, we used multiple block stamps and different paint colors to manually stamp a print onto the fabric. Last, we used spray dye and a stencil to place an image onto the fabric. We used these dyed pieces to create individual pillows for the children. The children used the sewing machine to sew on a back and then stuffed their pillows with stuffing.

SERVICE PROJECTS

The children enjoyed working with fabric and were excited to use the sewing machine to turn their work into a usable product. Mrs. Blizman tapped into that industrial spirit and headed a service project for a children’s center in Homewood that serves families that may be less fortunate than ourselves. The children each made a fleece scarf with pocketed ends to send over for the cold winter months.

After discussing how textiles make a space feel cozy and homey, the children noticed that our hallway was not as cozy as it could be. We decided to use some left over fabric to make pillows for on top of the low library cabinets. The children sewed and stuffed the leopard printed fabric to make beautiful seat cushions for the library.

Felicity, Sally and Elena working on the library pillows.

Asya, Ruby, Vivian and Arnav modeling the scarves.

Cecilia stenciling the fabric with spray dye. Asya and Julia stuffing their pillows.
PROJECT RUNWAY
We ended the unit by designing unique outfits for cardboard paper dolls. The children worked with a variety of textile scraps and created beautiful clothing for their dolls. After writing a detailed description of the outfits they designed, the dolls walked the red carpet proudly showing off the creativity of their designer!

THANK YOU!
We had the pleasure of hosting Yeonsoo Kim, a practicum student from Duksung Women’s University in Korea, this month. Although this was Ms. Kim’s first time working with children in a formal school setting, she quickly proved that she was a natural! We shared many American favorites with her, such as playing Candyland. Ms. Kim was very impressed with the level of independence that the children displayed in the classroom and with their vocabulary usage.

During her visit, Ms. Kim facilitated activities that we had set up in the classroom, as well as bringing her own. One project that she shared with us was the creating of Janseung, which are Korean totem poles. After reading a story about the origin of the Janseung, the children used paper cups and stickers to build their own.

ANOTHER BIG THANK YOU!
A HUGE thank you to Tobi Grill for spending the morning teaching us how to crochet on our fingers. Tobi also spent a month crocheting every child a beautiful hat.

Emma finger crocheting.