The Kindergarten unit for November was 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 a variety of textiles to create our self portrait. The children used the sewing machine to create a textile collage and fabric puppet. The children also learned how to use a needle and thread to sew a button.

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.
- 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. Smaller pieces of fabric and colorful ribbon were added. The children used a sewing machine to fasten the fabric pieces onto the background.

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, ABBBC, AABC, etc. The children used the fabric squares and ribbon pieces to build a radial design. Working from the center, they built their design outwards along radial lines. They embellished the design with buttons and gems.
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 continued the discussion about textiles in our environment by brainstorming other places where we find textiles. We realized that textiles are found EVERYWHERE.

We set up a Clothing Store in our Dramatic Play Center. Dresses, suit jackets, ties, shoes, and purses were all textiles that we added to the space. The children were able to “shop” for a favorite outfit, try on their selection and then pay for the items at the cashier. It was fun to see the children’s sense of style.

TEXTILES IN OCCUPATIONS AND SPECIAL EVENTS

We ended the unit by discussing the importance of textiles in certain occupations. A uniform can tell others who you are so that you are easily identified such as a police officer. Textiles can keep people safe. Firefighters wear fire and heat protective clothing. Doctors wear lab coats to protect them from germs. Welders wear special protective clothing and equipment in order to stay safe while doing their job. The children were able to try on the personal protective equipment that a welder would wear.

Textiles also play an important role in cultural rituals and celebrations. Special outfits are worn in every culture for ceremonial dress. Weddings usually have a special type of dress. Wedding gowns and tuxedos are have been traditionally worn here in America. Every culture in the world makes use of textiles.
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 materials to discover which ones absorbed liquid best. We then used a flashlight to test which materials were translucent and which were opaque.

Wilder testing absorption.

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 fabric durability:
I wonder...which type of fabric is the most durable.
I think...polyester because it is not as soft.
I learned...that the denim was very durable. The man made fabrics held up really well. The wool and felt snagged on the sand paper.

Testing flame retardant:
I wonder...which type of fabric will burn the slowest, natural vs man made.
I think...that 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.

Insulating Fabric

Durability Experiment

Flame Retardant
WEAVING TEXTILES

Flax weavings have been found in Egypt as far back as 5000 BC. Weaving is a technique of fabric production. It consists of intertwining two separate yarns or threads at right angles to form fabric or cloth. The two threads are called the warp and the weft.

Weaving is beneficial for young children. Weaving builds fine motor skill, strengthening the muscles in the pincer grasp. Weaving aids visual tracking and builds eye/hand coordination. Weaving helps with the physical experience of spatial concepts of up, over, and under. Weaving uses both the dominant and non-dominant hands at the same time and involves crossing the midline.

The children used various types of yarn and fabric strips to create beautiful, woven wall hangings.

TEXTILES IN OUR HOMES

Our homes are filled with textiles too. The children used a shoebox to construct a diorama of a room filled with textiles.

Each room reflected the personality of the creator.

Emmy, Ayumu, Isaac and Ruthie on Pajama Day.

PAJAMA DAY

Our favorite day this month was Pajama Day. We wore pajamas and brought a favorite stuffed animal to school. We competed in a Textile Relay Race. Teams had to dress in a variety of items, run down the hall and then “undress”. We had fun while practicing our dressing skills.

THANK YOU TO MARLEY FOR SHARING HER LOVE OF SEWING WITH THE CLASS!