



Textile Artist



How will this Virtual Troop Meeting Work?

- On the right side of your screen, there is a control panel. You should see a microphone, a video camera and a chat bubble.
- When we sing together, you will want to click on your microphone, so it is green. Then everyone will be able to hear you.
- If you have a webcam, clicking on it will let everyone else in the meeting see you too.
- The Chat Log looks like a cartoon thought bubble...see it underlined in red? You can type questions or comments into the chat log, and everyone will be able to see what you write!



Girl Scout Promise & Law

<u>Girl Scout Promise</u>

On my honor, I will try, to serve God, and my country, to help people at all times, and to live by the Girl Scout Law.



Girl Scout Law

I will do my best, to be honest and fair, friendly and helpful, considerate and caring, courageous and strong, responsible for what I say and do, to respect myself and others, respect authority, use resources wisely, make the world a better place and be a sister to every Girl Scout.

Collage Artist

Today we will be working on steps 1,2 and 5 of the 5 badge requirements.

Step 1. Choose your textile ArtStep 2. Find your tools and materialsStep 5. Create a gift or item for a special occasion

To receive the badge you will be required to complete two additional steps. The details will be provided in the post workshop email.

Step 1 Choose your textile art.

• **Textile art** is the process of creating something using fibers gained from sources like plants, animals, insects or synthetic materials.





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• Textile fragments have been found dating back 400,000 years to the Neanderthals. They used the inner bark from conifer trees to make yarn. People used textiles to keep warm, to protect surfaces and to insulate dwellings. And we still do today!



Neanderthal Yarn

Egyptian Cloth

Chinese Fabric

• Examples of textile arts include tapestries, rugs, quilts, and of course clothing.









Sewing Arts

Sewing

Sewing uses a single needle and thread to stitch pieces of cloth together. It is also used to add a surface ornament.



Embroidery

• Embroidery, is covering the surface of a textile with decorative pictures and colorful patterns using stitches.





Needlepoint

• Needlepoint, is a type of canvas work. A form of counted thread embroidery in which yarn is stitched through a stiff open weave canvas. Traditionally needlepoint designs completely cover the canvas.







Appliqué







• Appliqué, is ornamental needlework in which pieces of fabric are sewn or stuck onto a large piece of fabric to form pictures or patterns.

Quilting









 Quilting, is the process of sewing two or more layers of fabric together to make a thicker padded material. There are typically three layers: the top fabric or quilt top, batting or insulating material and backing material.

Knotting Arts

Lace

Lace is patterned openwork fabric made by plaiting, knotting, looping, or twisting.





















Tatting, is a technique for handcrafting a particularly durable lace from a series of knots and loops.

Crochet









Crocheting, is needlework done with a needle having a small hook at one end for drawing the thread or yarn through intertwined loops.





Knitting











Knitting, is a process of using two long needles to interlink or knot a series of loops made by one continuous thread. Each loop or knot connects to another one.

Weaving











 Weaving, is the production of fabric by interlacing two sets of yarns so that they cross each other, normally at right angles. Tapestries and rugs are usually created through weaving.

Macramé













Macramé is a type of textile created using knotting techniques. The knots are square and form fullhitch and double half-hitches.

Felting













Felting involves matting, condensing, and pressing woolen fibers together. The technique involves moving the **felt** fibers back and forth using the many sharp barbs on a needle, pulling the fibers in and locking them into place. Find your tools and materials.
 Now we are going to explore the types of textiles and the equipment for the different arts.

Flax

Flax, also known as common flax or linseed, is a member of the genus Linum in the family Linaceae. It is a food and fiber crop cultivated in cooler regions of the world. Linen Textiles made from flax are traditionally used for bed sheets, underclothes, and table linen.





Hemp

- Hemp is a strain of the Cannabis sativa plant species that is grown specifically for the industrial uses of its derived products.
- It is one of the fastest growing plants and was one of the first plants to be spun into usable fiber 50,000 years ago.
- Hemp fiber is one of the strongest and most durable of all natural textile fibers.
- It is naturally resistant to mold and ultraviolet light.
- Hemp is porous and very water absorbent. It will dye and retain its color better than any fabric including cotton.
- Hemp has a similar texture to cotton but also feels somewhat like canvas.
- Hemp fabric is not susceptible to shrinkage, and it is highly resistant to pilling.
- Fibers from this plant are long and sturdy, but very soft, and highly durable; while a typical cotton T-shirt lasts 10 years at the most, a hemp T-shirt may last double or triple that time. Some estimates suggest that hemp fabric is three times stronger than cotton fabric.







Nettle

- Nettle is a strong fabric derived from the nettle plant. When you touch a "stinging nettle" it causes a painful, itchy rash!
- Nettle fabric is perfectly safe to wear because the fabric is made from the fibers within the stalks of the plant, not the silky barbs on the outer surface.
- Nettle fibers and yarns have been found as old as 2,000 years with earliest traces being found from the late Bronze Age in Denmark. It has also been found in Scandinavia, Poland, Germany, Russia, Scotland, China and Japan.
- During the First World War, nettle clothing was used by the German army soldiers' uniforms due to a shortage of cotton. As did the French army under Napoleon. And they may have been more comfortable than soldiers today as similar to hemp, nettle fibres provide natural air conditioning. How? Well, nettle fibres are hollow, which means they are filled with air inside, which creates a natural insulation.



Cotton

- Cotton is a natural, soft fiber that grows with the seeds of the cotton plant. The fiber is long and thin, like hair.
- There are different types of cotton plants. Some cotton plants grow wild in tropical and subtropical areas of the world.
- Cotton soaks up to 24-27 of its own weight in water (very absorbent). All parts of cotton plants are useful.
- Cotton is in the mallow family and produces delicate, lovely flowers. Other members of the mallow family include hollyhocks and hibiscus.
- The cotton fiber forms around the seeds of the cotton plant. It helps carry the seeds long distances on the wind so the plant can grow up far away.
- Cotton is one of the oldest fibers under human cultivation, with traces of cotton over 7,000 years old recovered from archaeological sites. Cotton is also one of the most used natural fibers in existence today, with consumers everywhere wearing and using cotton for various purposes.
- After harvesting, cotton must be combed to remove the seeds. This
 was a laborious process until the industrial revolution and invention
 of the cotton gin, which quickly separates the seeds from the fiber
 and combs them for spinning.
- While a single cotton fiber is not terribly strong, when multiple curling fibers are straightened and twisted together, they form a strong, smooth thread that can be knitted or woven, as well as dyed.





Wool

- Wool is the textile fiber obtained from sheep, camels and other animals.
- Cashmere and mohair from goats
- Qiviut from muskoxen, (kiv-ee-ute in the Eskimo language)
- And Angora from rabbits.
- As wool grows out from the sheep's skin, it forms groups of wavy fibers called staples. This natural wave gives wool its elasticity
- Shearers remove the wool from sheep using specially–designed clipper. This is called shearing.
- Sheep can be shorn each year and their wool keeps growing back, just like our hair grows between haircuts.
- After shearing, wool is processed by cleaning and scouring, grading and sorting, carding, spinning, weaving, and finishing.









Silk

- Comprised of a natural protein fiber, silk mainly consists of fibroin, which is a protein that certain types of insect larvae secrete to make cocoons.
- Other insects also produce silk-like substances, most of the world's silk is derived from Bombyx mori larvae, which are worms that only live on mulberry trees.
- it takes the deaths of about 2500 caterpillars to make a single pound of raw silk. In many places the leftover dead silkworms are seasoned, boiled, fried and eaten.
- China still leads the world in silk production, responsible for about 58,000 tons each year or about 74% of the world's supply of raw silk.
- After the caterpillars are removed, individual long fibers are extracted and fed into the spinning reel then made into thread.















Man made fibers used In textiles

- Man-made fibers (MMF) can be organic or inorganic. Organic MMF can be made from natural materials like wood. Inorganic are made from synthetic polymers.
- Viscose is a typical example and an important MMF, made from wood pulp, a cellulose material.
- Some MMF are petroleum based synthetic fibers such as polyamide, polyester, acrylic, aramids, etc.
- Other examples of MMF are Nylon, Rayon, Kevlar, Spandex.

Lets talk about one MMF



- Nylon is a plastic that can be molded into products or drawn into fibers for fabrics.
- Nylon is a polymer, a plastic with super-long, heavy molecules built up of short, endlessly repeating sections of atoms.
- Nylon thread is made by melting nylon chips and drawing them through a spinneret, a wheel or plate with lots of tiny holes in it. Fibers of different length and thickness are made by drawing them out at different speeds through different holes sizes.
- Strands are used by themselves (for making stockings) or tens, hundreds, or even thousands are wrapped together to make thicker and stronger yarns.
- Nylon is a thermoplastic (it melts at around 500°F) The normal temperature for a campfire ranges at about 2,012 °F. And yes, that's why we say no nylon in the fire circle.
- It's strong, tough, durable, water-proof, wind-proof, resists sunlight and weathering. It's highly resistant to attack from such natural nasties as molds, insects, and fungi.



Sewing Art Tools









Knot Art Tools









Step 5 Create a gift of item for a special occasion Now it is your turn.

With all of the chaos in today's world what relevant topic can we address with a textile art?

- At the time of writing this program the Corona virus Covid19 is at a pandemic level and our first responders and health care workers are in need of a little help from us. We are going to discuss a few designs for face masks.
- The CDC (Center for Disease Control) has posted some easy designs that anyone can make. (A link is included in the post email)
- There are thousands of videos and websites dedicated to making masks.

What can you use to make a mask?

- Anything really. Material (even scraps), old clothing, vacuum cleaner bags, furnace filters.
- The goal is to protect someone from inhaling droplets from another person that could be infected.
- Some materials are for superficial or basic protection only. They will not have a strong enough barrier to keep out the tiny particles.
- N95 filters and respirators are the safest way to keep Covid19 out. But they should be saved for the ones that need it the most. Doctors, nurses, police, firefighters and paramedics. If they get sick, who will take care of us if we get sick?



How to Wear a Cloth Face Covering

Cloth face coverings should—

•fit snugly but comfortably against the side of the face •be secured with ties or ear loops •include multiple layers of fabric •allow for breathing without restriction •be able to be laundered and machine dried without damage or change to shape

CDC on Homemade Cloth Face Coverings

- CDC recommends wearing cloth face coverings in public settings where other social distancing measures are difficult to maintain (e.g., grocery stores and pharmacies), especially in areas of significant community-based transmission.
- CDC also advises the use of simple cloth face coverings to slow the spread of the virus and help people who may have the virus and do not know it from transmitting it to others. Cloth face coverings fashioned from household items or made at home from common materials at low cost can be used as an additional, voluntary public health measure.
- Cloth face coverings should not be placed on young children under age 2, anyone who has trouble breathing, or is unconscious, incapacitated or otherwise unable to remove the mask without assistance.
- The cloth face coverings recommended are not surgical masks or N-95 respirators. Those are critical supplies that must continue to be reserved for healthcare workers and other medical first responders, as recommended by current CDC guidance.

Should cloth face coverings be washed or otherwise cleaned regularly? How regularly?

• Yes. They should be routinely washed depending on the frequency of use.

How does one safely sterilize/clean a cloth face covering?

• A washing machine should suffice in properly washing a face covering.

How does one safely remove a used cloth face covering?

 Individuals should be careful not to touch their eyes, nose, and mouth when removing their face covering and wash hands immediately after removing.

Sewn Cloth Face Covering

- Two 10"x6" rectangles of cotton fabric
- Two 6" pieces of elastic (or rubber bands, string, cloth strips, or hair ties)

- Needle and thread (or bobby pin)
- Scissors
- Sewing machine



Tutorial

 Cut out two 10-by-6-inch rectangles of cotton fabric. Use tightly woven cotton, such as quilting fabric or cotton sheets. T-shirt fabric will work in a pinch. Stack the two rectangles; you will sew the cloth face covering as if it was a single piece of fabric.



 Fold over the long sides ¼ inch and hem. Then fold the double layer of fabric over ½ inch along the short sides and stitch down.



 Run a 6-inch length of 1/8-inch wide elastic through the wider hem on each side of the cloth face covering. These will be the ear loops. Use a large needle or a bobby pin to thread it through. Tie the ends tight.

Don't have elastic? Use hair ties or elastic head bands. If you only have string, you can make the ties longer and tie the cloth face covering behind your head.



 Gently pull on the elastic so that the knots are tucked inside the hem.
 Gather the sides of the cloth face covering on the elastic and adjust so the mask fits your face. Then securely stitch the elastic in place to keep it from slipping.



Quick Cut T-shirt Cloth Face Covering (no sew method) Materials

- T-shirt
- Scissors

Tutorial



Bandana Cloth Face Covering (no sew method)

Materials

- Bandana (or square cotton cloth approximately 20"x20")
- Rubber bands (or hair ties)

Scissors (if you are cutting your own cloth)



Now show us your textiles!

The information for steps 3 and 4 needed to finish this badge will be included in your post-workshop email.

Thank you for sharing your time with us today!

Keep creating and make the World a Better Place!