# FABRICS

# Fabrics

- •Look at:
  - Fibre content
  - •Construction



#### Fibres

- Broken into 4 main categories:
  - Natural
  - Man-made
  - Synthetic
  - •Blends

# Natural Fibres

- •Come from natural plant or animal sources:
  - •Cotton, bamboo, linen, hemp, silk, wool, camel hair, alpaca, etc.

# Man-made Fibres

- •Are manufactured by humans but use natural materials (ex: cellulose) as their base:
  - Acrylic, rayon, acetate

# Synthetic Fibres

- •Made completely nonorganic sources (ex: oilbased):
  - •Polyester, nylon, spandex

# Blended Fibres

 Often fabrics are made with a blend of man-made and natural fibres to give the strength of the synthetic fibre while having the feel of the natural one

# FIBRES IN DETAIL

# Cotton

- Made from the cotton plant
- Hypoallergenic, durable, soft, breathes well, dustmite resistant, easy to clean
- Burns easily, creases, weakens with exposure to light
- Will likely shrink when washed so it is a good idea to wash them before starting a sewing project
- One of the most versatile fabrics for sewing
  - Can be used for so many projects, especially clothing



#### Wool

- Made from sheep or goat hair
- Good at temperature regulating, breathable, moisture-wicking, odour-resistant, resistant to tearing and fire resistant
- Pills easily, can weaken when wet, can be itchy, can get mold/mildew
- Often used for outerwear like jackets, hats and tuques as well as socks, sweaters and blankets



#### Silk

Made from the Chinese silkworm cocoon

•Hypoallergenic, very soft, shiny, breathable, very

absorbent, light-weight

•Expensive, typically not machine-washable (needs dry-cleaning), stains easily

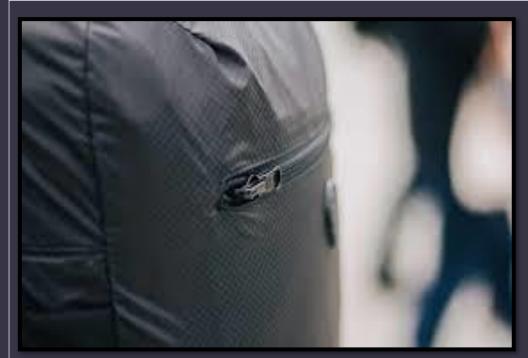
 Used in many fashion projects, robes

# Linen

- Made from flax fibres
- •Strong, lint-free, absorbent and machine-washable or dry-clean, resistant to dirt and stains, very breathable
- Wrinkles easily, can be expensive, affected by mildew and perspiration, shrinks
- Used in clothing and hats especially in warm climates;
  also often for table cloths and other home fabrics

# Polyester

- Very durable and lightweight and resistant to shrinking, mildew and creasing, flexible and quick-drying
- Does not breathe well, is not very
   environmentally friendly and stains in polyester
   can be more difficult to remove
- Often used in clothing, activewear and backpacks





# Acrylic

- Man-made fibre designed to imitate wool
- Wool-like feel, durable and soft (not itchy like wool can be)
- Not as warm as wool, can irritate the skin, not breathable
- Used in sweaters, gloves, hats but also many housewares like rugs, curtains and upholstery







# Viscose or rayon

- Man-made fibre made from cellulose
- Can have a silky appearance and feel, breathable, usually inexpensive
- Creases easily and not environmentally friendly
- Used for clothing items such as blouses, dresses, and jackets, and around the home in carpets, curtains and upholstery.





# Nylon

- Man-made fibre that is very lightweight yet durable
- Often used to imitate silk
- Easy to care for, resistant to insects, fungi and mildew, water proof, can be UV-protected, doesn't shrink, is tough
- Not absorbent, not environmentally friendly, can be difficult to clean
- Used for outerwear like rain jackets, windbreakers, backpacks, tents, etc.





# Spandex

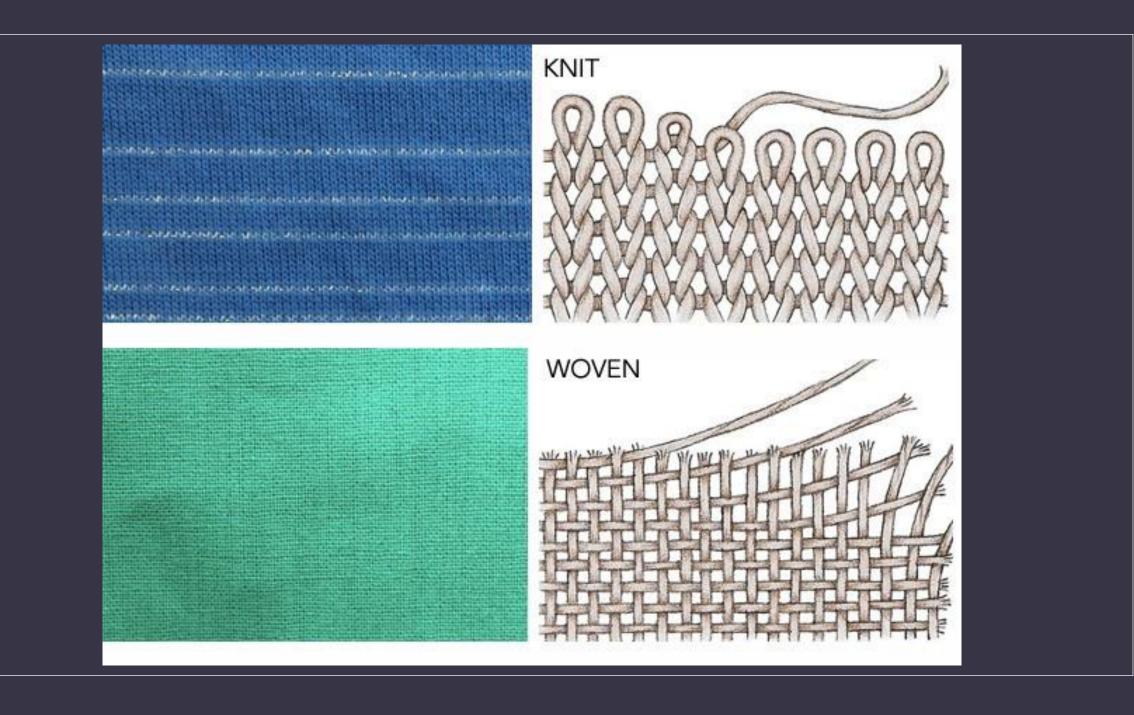
- •Super stretchy in all directions, moisture-wicking, resistant to oils, lotions and perspiration, soft, durable and easy to care for
- Sensitive to heat, does not breathe well
- Often used for high-stretch garments like activewear and bathing suits





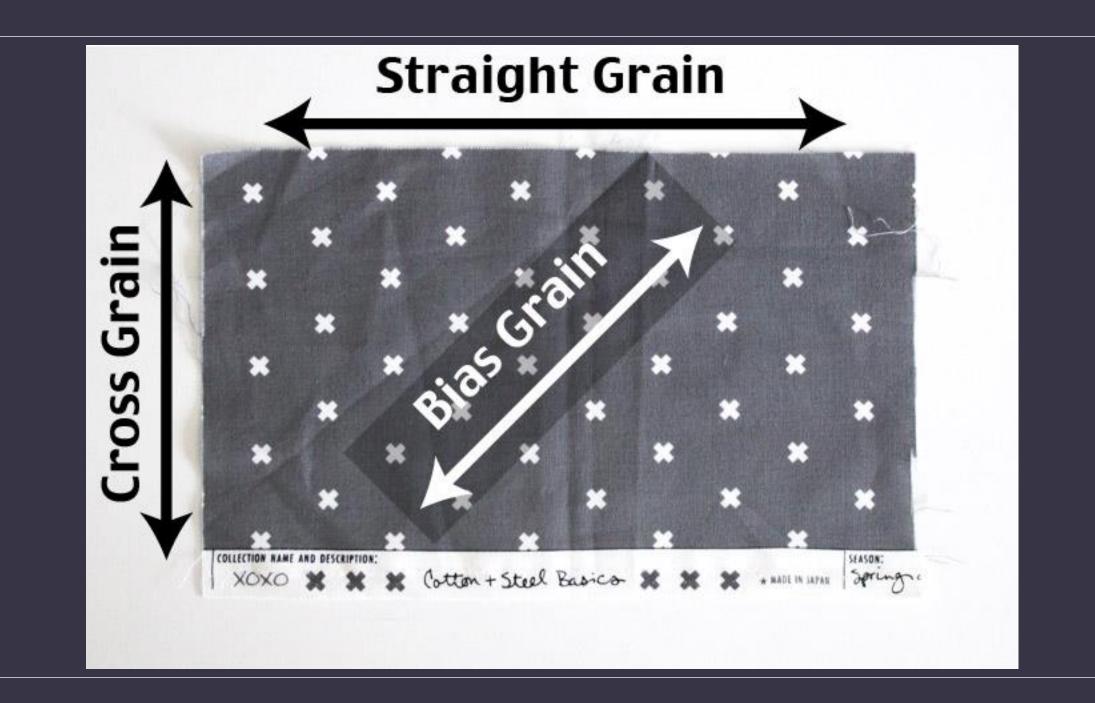
# Construction

- Looks at how the fabric is put together.
- Most fabrics are either woven or knit
- •The way the fibres are then put together is what will determine the fabrics texture:
  - Denim, flannel, terry cloth, voile and poplin are all made from woven cotton but have very different textures



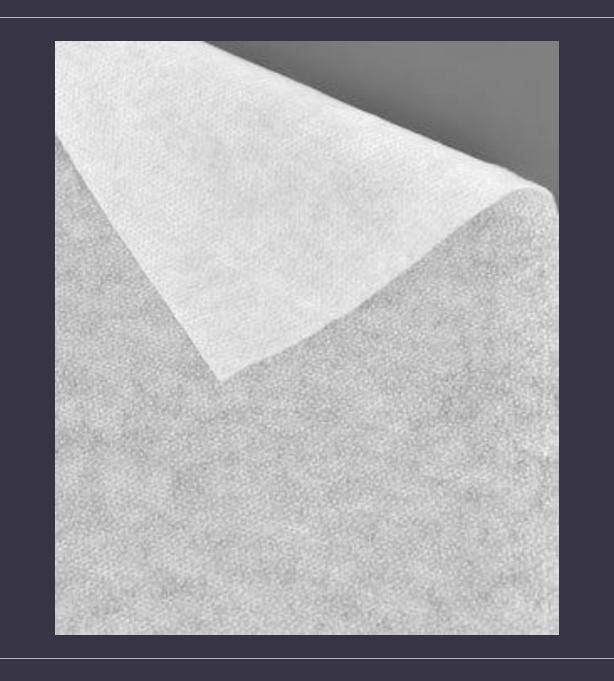
# Construction

- •When working with fabric it is important to find the grain
  - Sewing patterns will instruct you on how to line up your pattern pieces according to the grain



# Note: interfacing

- This is a stiffening agent
  - Basically has glue on one side and you iron it onto the wrong side of your fabric
  - Solidifies projects like collars or the button-hole area of shirt/dress/jacket



# CHOOSING FABRICS

# Patterns

•The sewing pattern will typically indicate the type of fabric to use – it is best to stick to what is suggested to get the look and feel desired; this will depend on the project type

# Project Type

- Different projects require different types of fabric:
  - Ex:
    - Fabrics used for every day clothing should be machine washable, breathable, light-weight
    - Fabrics used for home décor need to be sturdy, maybe stain-water resistant, etc.

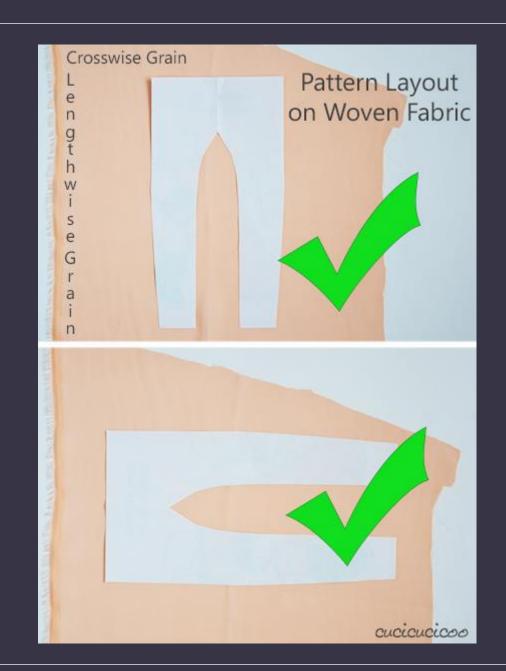
# Fabric Pattern

•Some fabrics have patterns that work from any direction but others can only be used one way



# Grain

- The grain is the direction that fibres are placed
  - There is a lengthwise grain and a crosswise grain
- •In woven fabrics both grains are typically similar
- •In knit fabrics the crosswise grain typically offers stretch whereas the lengthwise does not

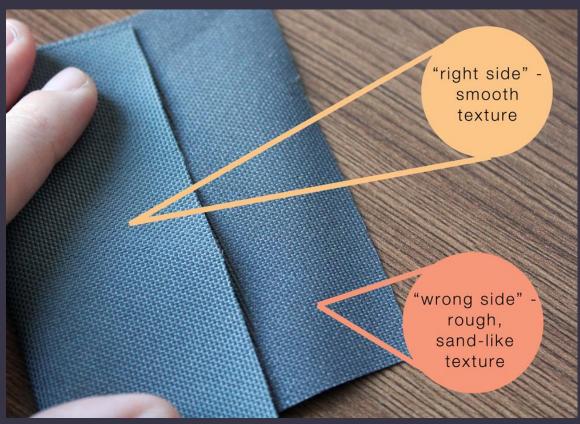




# Right and Wrong Side of Fabric

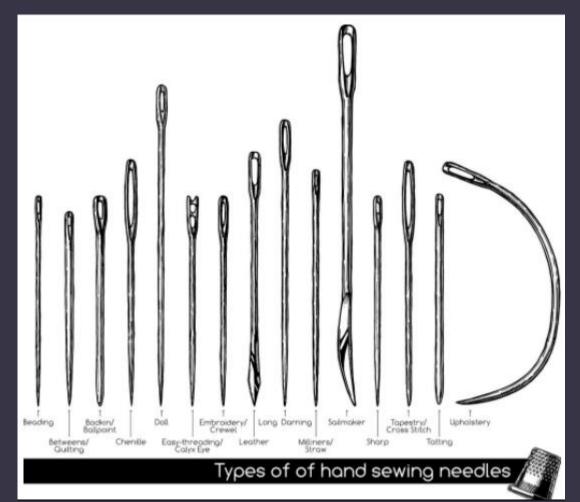
- When starting a sewing project it is important to determine the right and wrong side of the fabric (outside and inside) to make sure you are using the fabric properly
  - Many times the wrong side does not show the pattern of the fabric, etc

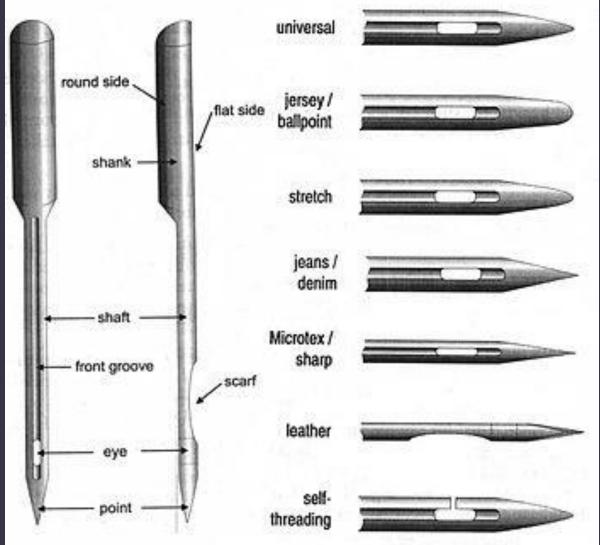




# Needle

- Whether sewing by hand or with a machine you must pick the right needle for the project:
  - Lighter more delicate fabrics require thinner needles
  - Heavier fabrics will require sturdier needles





#### Thread

- Just like fabric, thread is available in different fibres; you need to match the thread with the type of fabric you are using to ensure matching characteristics
- Some threads are thicker and better for embroidery and embellishments whereas others might offer stretch
- Polyester and cotton are the most "all-purpose" threads



#### Sources

- <a href="https://www.myhaikuclass.com/olszew46/sewing101/cms\_page/view/10468933">https://www.myhaikuclass.com/olszew46/sewing101/cms\_page/view/10468933</a>
- <a href="https://nicolesclasses.com/sewing-101-choosing-fabric/">https://nicolesclasses.com/sewing-101-choosing-fabric/</a>
- <a href="https://www.cucicucicoo.com/2014/06/fabric-must-have-sewing-notions/">https://www.cucicucicoo.com/2014/06/fabric-must-have-sewing-notions/</a>
- <a href="https://crazylittleprojects.com/understanding-different-types-of-fabric/">https://crazylittleprojects.com/understanding-different-types-of-fabric/</a>
- <a href="https://www.merchology.com/pages/fabric-guide">https://www.merchology.com/pages/fabric-guide</a>
- <a href="https://www.youtube.com/watch?v=-B4tfduOQ7w&ab\_channel=ZoeHong">https://www.youtube.com/watch?v=-B4tfduOQ7w&ab\_channel=ZoeHong</a>