HAND DYEING YARN BASICS

ANIMAL/PROTEIN FIBER EDITION

DYE

- Acid dyes are required for fibers that have protein (like wool, silk, other animal fibers)
- Common brands: Dharma Trading Co., Jacquard
- WARNING: Powder form dyes need to be handled carefully, wear a mask and/or respirator when handling the powder form directly

ACID

- We're using citric acid, but you can also use regular, distilled white vinegar.
- Applying acid at different stages of the dyeing process can support different ways the dye will stick to your yarn.
- Applying acid solution earlier in the process = dye will stick faster to yarn + bleed less into other colors (good for speckling or creating defined stripes of color)
- Apply acid solution later in the process = dye will stick more evenly to yarn before "fixing" it with acid solution (good for dyeing tonal, more solid colors)
- Tip: Sparkly yarn is good with vinegar while citric acid can eat away at the metal in sparkly yarns (i.e. Stellina yarn)

HEAT

- Heat can be applied in many ways:
 - Stovetop, microwave, oven, steamer basket, crock pot lol (I've watched videos of ppl doing everything listed, such a fun world)
- NOTE: Whatever method of heating you use, the main thing to watch out for is boiling/bubbling water. We need to avoid agitating the yarn at higher temperatures, so it doesn't felt!
- NOTE: Let yarn come back down to room temp at a gradual pace, do not shock the yarn with a different temperature water! This will also cause felting/shrinking!

DYE STOCK RATIO

1 teaspoon dye powder for every 1 cup hot/warm water (very concentrated). These dye stocks can last a long time.

Mix dye stocks + dilute with water to get desired color. Test color by dipping a piece of paper towel into dye stock concoction.

ACID SOLUTION

2 tablespoons citric acid for every 1 cup hot/warm water

MICROWAVE HEAT

2-4 minute intervals in the microwave, at 50% power (cover w/ lid to set after)

YOUTUBE CHANNELS TO REFER TO:

Essence of Autumn Yarn From the Cauldron ChemKnits Tutorials KnottyWood Yarn Work Play Knit

NOTES

TONALS VS. SPECKLES VS. MULTICOLOR

Tonals:

- Add dye stock into water to make your dye bath
- Add yarn all at once, make sure it's fully submerged in the dye bath, once you feel the yarn is fully submerged + coated with dye, proceed with next step
- Add acid solution + gently stir to incorporate
- Heat yarn on low for 20-30 minutes in dye bath
- Check water to see how much dye has been absorbed (Goal is to have water as clear as possible)
 - Colors containing turquoise + red may leave the water tinted (those colors tend to be hard to "exhaust" fully from the dye bath)
- Let cool completely before washing yarn

Speckles:

- Submerge yarn in water + acid solution at low immersion
 - (low immersion >> water should not be covering your yarn, but when pressing down on yarn with light pressure, water should pool around your yarn)
- Put on mask + gloves, use finger tips or fine mesh sieve to apply powder dye overtop yarn
- Allow some time to fully let the speckles disperse + soak into the yarn to see where your color "strikes"
- Repeat sprinkling method with as many colors as you want to reach desired effect on one side
- Heat yarn via preferred method (stove top, microwave, steam basket)
- Gently flip yarn over and repeat speckling method to reach desired effect on other side of yarn
- Heat yarn accordingly
- Let cool completely before washing yarn

Multicolored yarn dyeing (idk if there's a name for this?):

- Submerge yarn in water at low immersion
- Apply acid solution if desired (more acid if you want defined blocks of color, less acid if you want more bleeding/mixing between colors)
- Mix desired dye stocks into the colors you want, apply the dye however you want by pouring/spooning over the yarn. Repeat this step with more or less colors to achieve desired effect.
- Heat yarn via preferred method (stove top, microwave, steam basket)
- Gently flip yarn over and repeat same pouring method to reach desired effect on other side of yarn
- Heat yarn accordingly
- Let cool completely before washing yarn

RANDOM DYEING TIPS + FUN FACTS

- When applying the dye stock, make sure to move the yarn around with a spoon or utensil to make sure that the color is penetrating all parts of the yarn
- Don't forget to flip over your yarn!
- You can combine multiple methods of dyeing. You could start with speckling and then overdye it in a dye bath.
- Speckles don't come out well in non-superwash yarn while on the other hand, superwash yarn can have good speckle definition
- Colors on silk/plant-fiber mixed protein yarns will not be as vibrant, they'll be more muted
- Mohair yarn: Not much definition with speckles either
- Have fun! Hand dyeing by nature is a creative way to experiment with different methods of dyeing and discover new things along the way.