

Tinker Tank Makerspace Suggested Materials

Heat press:

Canvas bags

Fabric garments made of cotton, polyester, or cotton/poly blends work best

Wood burning pen:

Safe Woods for Burning:

- Basswood
- Birch
- Poplar
- Aspen
- Mahogany
- Maple

Materials to Avoid:

Treated Wood: Wood that has been painted, stained, or finished with chemicals should never be burned.

MDF, Plywood, and Other Wood Composites: These materials contain glues and other chemicals that can release harmful fumes when burned.

Green or Wet Wood: While not toxic, green wood will produce a lot of smoke, making it unsuitable for indoor use.

Pallet Wood: Pallet wood is often treated with chemicals and is not safe for burning.

3D Pen:

- Filaments:
 - PLA (Polylactic Acid)
 - ABS (Acrylonitrile Butadiene Styrene)
 - PETG: A durable, flexible, and impact-resistant filament, also considered food safe
 - TPU (Thermoplastic Polyurethane)
 - Specialty Filaments: wood, nylon, and metal-infused filaments

Animation Studio:

- Software: **Stop Motion Studio** (for newer versions of Windows and macOS) or **HUE Animation** (for older versions)
 - Laptop 3 will have this software pinned to Task Bar



- **Objects to animate:** You can use anything from toys and figurines to everyday objects.
- **Backgrounds:** You can use printed backdrops, or create your own using paper, fabric, or other materials.
- **Stands and Mounts:** While the kit includes a base for the camera, you may need additional stands or mounts to hold your objects in place or to create different camera angles.
- **Pencil and Paper:** For planning your animation, sketching out scenes, and creating storyboards.
- **Lighting:** Adequate lighting is important to ensure good image quality.
- **Audio Recording Equipment:** If you want to add voiceovers or sound effects, you'll need a microphone and audio recording software

Button Maker:

- Sizes: 1", 1.25", and 2.25"
- Clear, round Mylar
- Pins
- Magnets
- Bottle Openers
- Keychains
- Paper: Make sure rounded image is at least .75" for 1", ~1.8" for 1.25", and ~2.8" for 2.25" button

*Can usually get a kit that comes with the mylar, front, and backs of buttons.

Cricut Maker 3:

- *Note: It is important to refer to the Cricut Beginner's Guide to ensure use of correct mat and blade.
 - **Popular Materials:** Vinyl, iron-on, cardstock, fabrics, paper
 - **Other Materials:** Sublimation Paper (for print then cut), Sublimation Ink Sheets (for cut)
 - **Specialized materials:** Leather, matboard, balsa wood, chipboard, aluminum foil, acetate, etc
 - **Smart Materials:** Smart Vinyl (permanent and removable), Smart Iron-on, And Smart Paper
 - For a more comprehensive list go to: <https://tinyurl.com/materialsforcricut>



Cricut Mug Press:

- *Note: Size of cup makes a difference, no bottom cone shaped mugs.
 - **Mugs:** Cricut Mug Blanks or other sublimation-coated ceramic mugs are required.
 - Capacity of 10 – 16 oz (295 – 450 ml)
 - Drinkware with smooth, straight pressing area only; avoid placing design on curves, bevels and textures
 - Diameter between 3.2 in - 3.4 in (82 – 86 mm)
 - Maximum height of 4.72 in (120 mm)
 - **Important:** Mug blanks must be fully inserted into the Mug Press so that they rest on the base heater. Do not allow the mug to hover over the base heater while you close the lever as this may result in damage to the Mug Press.
 - **Infusible Ink Transfer Sheets:** These sheets are specifically designed for the Cricut Mug Press and come in various colors and patterns
 - **Infusible Ink Markers:** These markers can be used to draw designs directly onto the mug.
 - **Heat-Resistant Tape:** This helps secure the design to the mug and ensures a clean transfer.
 - **Butcher Paper (or Wax Paper):** This protects the mug press plate from ink transfer and helps capture excess moisture during pressing.

- **Lint Roller:** This helps remove any loose fibers or lint from the mug before pressing.

Embroidery & Sewing Machine:

- *Note: Our Embroidery Sewing machine can only be used for 4" or smaller designs
- **Machine & Accessories:**
 - **Embroidery Needles:** Specialized needles with larger eyes to accommodate heavier embroidery threads.
 - **Embroidery Hoops:** Used to hold the fabric taut during stitching, often in various sizes (our machine comes with one, must be compatible with the Brother Embroidery Sewing Machine: Model #888-P10)
 - **Bobbins:** Hold the bobbin thread, which is crucial for creating balanced stitches.
 - **Bobbin Thread:** Typically a lighter weight thread used on the bobbin
 - **Computer:** Needed to run embroidery software for design manipulation
 - **USB Drive:** To access patterns saved from computer
 - Ready Made designs can be found and downloaded for purchase on websites such as: embroiderydesigns.com or etsy.com.
- **Threads:**
 - **Machine Embroidery Thread:** Polyester, rayon, metallic, and other specialty threads for various effects (do not go too cheap, the thread will break).
 - **Bobbin Thread:** Typically a lighter weight thread used on the bobbin
- **Stabilizers:**
 - **Cutaway Stabilizer:**
Provides permanent support for the embroidered design, often used for items that will be washed frequently.
 - **Tear-away Stabilizer:** Easily removed after stitching, suitable for designs with less density
 - **Water-soluble Stabilizer:** Dissolves in water, used for delicate fabrics or when a stabilizer needs to be completely removed
 - **Fusible Stabilizer:** Ironed onto the fabric for added stability, useful for applique and other techniques
- **Tools:**
 - **Embroidery Scissors:** Small, sharp scissors for trimming threads
 - **Seam Ripper:** Used to correct mistakes or remove stitches.
 - **Tweezers:** For picking up small pieces of thread or fabric
 - **Nippers:** Small handheld tools for trimming threads
 - **Thread Nippers:** A small tool for trimming threads
- **Fabrics:**
 - Fat Quarters
 - Cotton
 - Canvas
 - Polyester
 - Felt
 - Aida Cloth

Jewelry Making Kit:

- Wire
- Elastic String
- Cords & Strings
- Necklace Chain
- Beads
- Metals
- Gemstones
- Crystals
- Clasps
- Jump Rings
- Ear Wires
- Headpins & Eyepins
- Crimp Beads
- Connectors
- Bail
- End Caps
- Etc.

Sublimation Printer:

- Sublimation Printer Paper for the Heat Press
- Use USB to connect Laptop 2 to the printer.