

Make with Sam: Complete Program Catalog & Descriptions

(Note: Material pricing reflects current rate structures for Spring thru Summer 2027)

3D Design & Engineering (Print IT)

TinkerCAD 101: Foundations & Forms

- **Description:** Explore the fundamentals of 3D design using TinkerCAD. This introductory session covers basic workspace navigation, manipulating primitive geometric shapes, scaling, and grouping objects to build simple, functional prints like keychains or bag tags.
- **Literacy Component:** *Spatial Vocabulary*—Students define and utilize terms such as *axis*, *scale*, *void*, and *grouping* in a short digital notebook entry.
- **Equipment:** Computers or Chromebooks with internet access, mice.
- **Supplies:** Free TinkerCAD accounts.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	Free (Digital)

TinkerCAD Basics: Design & Simulate

- **Description:** Navigate the TinkerCAD workspace to build, modify, and simulate 3D models. Test designs digitally for real-world stress and movement before exporting for manufacturing. Participants gain hands-on practice converting 2D concepts into 3D spatial geometry through intuitive shape grouping.
- **Literacy Component:** *Technical Vocabulary & Schematics*—Students read 3D spatial diagrams (*X/Y/Z axes*, *Boolean grouping*, *infill density*) and draft a 2-sentence "Design Spec" explaining their model's function.
- **Equipment:** Computers or Chromebooks with internet access, 3D printer (optional).
- **Supplies:** Free TinkerCAD accounts.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	Free (Digital)

Digital Zen Gardens: Low-Poly Landscapes

- **Description:** Reframe 3D modeling as a meditative art form. Arrange geometric shapes, manipulate lighting, and experiment with color palettes to construct peaceful 3D environments. Makers explore spatial balance and minimalist low-poly aesthetics without the pressure of physical fabrication.
- **Literacy Component:** *Descriptive Flash Fiction*—Participants write a short setting description or poem depicting the atmosphere of their low-poly world.
- **Equipment:** Computers or Chromebooks with internet access.
- **Supplies:** Free TinkerCAD accounts.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	Free (Digital)

Bloom & Print: 3D Self-Watering Planters

- **Description:** Learn functional 3D engineering by modeling a custom two-part, sub-irrigated planter designed to sustain spring seedlings. Students apply geometric wall thickness calculations and water reservoir drainage channels in CAD.
- **Literacy Component:** *Instructional Writing & Botany*—Makers write a 2-sentence "Plant Care Tag" outlining water reservoir maintenance for the planter's recipient.
- **Equipment:** Computers or Chromebooks with internet access, 3D printer.
- **Supplies:** Free TinkerCAD accounts, PLA 3D printing filament.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	Free (Digital)

Fix It Lab: Intro to Repair & Design

- **Description:** Practice reverse engineering by taking physical measurements of worn or broken household items and modeling 3D replacement parts. Students develop a circular economy mindset by repairing rather than discarding broken goods.
- **Literacy Component:** *Technical Repair Logging*—Students read digital calipers and log

precise dimensional changes in a step-by-step repair sheet.

- **Equipment:** Computers or Chromebooks with internet access, digital calipers, 3D printer.
- **Supplies:** Free TinkerCAD accounts, PLA printing filament.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	Free (Digital)

Dungeon Master's Workshop

- **Description:** Master 3D slicing, support structures, and post-processing techniques engineered for tabletop gaming miniatures and custom dice sets. Participants learn to source, modify, and pose digital character models for precise additive manufacturing.
- **Literacy Component:** *Worldbuilding & Lore*—Participants write a short character backstory card for their custom 3D figure.
- **Equipment:** Computers or Chromebooks with internet access, 3D printer, slicing software.
- **Supplies:** Free TinkerCAD accounts, 3D printing filament, support removal flush cutters.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	Free (Digital)

Hygge Home: 3D Printed Lithophanes

- **Description:** Convert personal photographs into 3D-textured panels that reveal detailed imagery when backlit by candle or LED light. Learners master image grayscale conversion to create subtle relief depths that control light transmission.
- **Literacy Component:** *Visual Storytelling*—Participants draft written dedication cards or photo captions to accompany their illuminated artwork.
- **Equipment:** Computers or Chromebooks with internet access, 3D printer (optional).
- **Supplies:** Free conversion software access, LED tea lights, 3D printing filament / delivery service.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	\$120

Fiber Arts & Textiles (Knot IT & Sew IT)

Macramé for Beginners: Keychains & Bag Charms

- **Description:** Learn foundational knotting techniques (*Lark's Head, Square Knot, Spiral*) to construct durable, stylish bag accessories. Students build muscle memory through tactile repetition while exploring cord varieties and hardware attachments.
- **Literacy Component:** *Tactile Vocabulary*—Table cards define knotting terms (*sinnet, working cord, anchor line*); makers burnish a custom tagline on a wooden accent charm.
- **Equipment:** Scissors, measuring tape.
- **Supplies:** Premium macramé cord, keychain clasps/lobster claws, wooden accent charms, take-home kit.

Duration	Capacity	Base Rate	Materials
2.0 Hours	Up to 15 Students	\$475	\$60

Macramé Botanical Hangers

- **Description:** Master intermediate knotting patterns to craft pastel-cord hanging planters engineered to support spring herbs and indoor greenery. Makers learn structural weight distribution and pattern sequencing to create balanced wall or ceiling displays.
- **Literacy Component:** *Pattern Sequence Decoding*—Students follow structured knotting diagrams and step-by-step pattern keys.
- **Equipment:** Scissors, measuring tape.
- **Supplies:** Pastel cotton macramé cord, wooden rings/hoops, accent beads, planter pots.

Duration	Capacity	Base Rate	Materials
2.0 Hours	Up to 15 Students	\$475	\$75

Sew Fun: Scrunchies, Pouches & Patches

- **Description:** Intro-level machine sewing covering thread setup, straight/zigzag stitching, elastic insertion, and zipper installation. Beginners gain instant gratification by building usable accessories without facing complex paper patterns.
- **Literacy Component:** *Pattern Literacy*—Students practice reading seam allowance indicators, thread paths, and fabric grainline keys.
- **Equipment:** Sewing machines, fabric scissors, pins, measuring tape, seam ripper.
- **Supplies:** Pre-cut fabrics, thread, bobbins, elastic, zippers, embroidered patches.

Duration	Capacity	Base Rate	Materials
2.0 Hours	Up to 10 Students	\$475	\$80

Upcycled Totes & Bucket Hats

- **Description:** Transform discarded denim, canvas, and upholstery remnants into heavy-duty market totes or bucket hats using industrial seam construction. Participants learn heavy-duty sewing methods, corner boxing, and strap anchoring.
- **Literacy Component:** *Eco-Label Copywriting*—Makers author a "Material Journey" label detailing the source textiles and ecological footprint of their build.
- **Equipment:** Heavy-duty sewing machines, fabric shears, rotary cutters, cutting mats, iron.
- **Supplies:** Upcycled denim/canvas/upholstery, heavy-duty thread, webbing straps, hardware buckles/D-rings.

Duration	Capacity	Base Rate	Materials
2.0 Hours	Up to 10 Students	\$475	\$35–\$100

The Cozy Comfort Set: Self-Care Sewing

- **Description:** Intermediate machine skills focused on curved seams and topstitching to construct scented eye masks and microwaveable heat packs. Learners practice working with delicate patterned fabrics and filling materials like flaxseed and organic lavender.
- **Literacy Component:** *Product Care Copy*—Participants draft written maintenance labels detailing heating time limits and spot-cleaning directions.

- **Equipment:** Sewing machines, fabric scissors, pins, iron.
- **Supplies:** Assorted cotton fabrics, thread, organic flaxseed, dried lavender.

Duration	Capacity	Base Rate	Materials
2.0 Hours	Up to 10 Students	\$475	\$90

Nature & Sustainability (Grow IT)

Air Plant Magic: Floating Gardens

- **Description:** Construct gravity-defying botanical displays using *Tillandsias*, glass vessels, natural driftwood, sea shells, and preserved moss. Participants explore biophilic design and the unique biological adaptations of soil-free epiphytes.
- **Literacy Component:** *Botanical Taxonomy*—Students fill out a "Care & Keeping Certificate" using formal botanical nomenclature and lighting guides.
- **Equipment:** Scissors, crafting tweezers/tongs.
- **Supplies:** Glass terrarium vessels, healthy air plants, preserved moss, river stones, driftwood, shells.

Duration	Capacity	Base Rate	Materials
1.0 Hour	Up to 15 Students	\$355	\$230

Desert Dreamscapes: Succulent Sanctuaries

- **Description:** Master soil stratification by layering drainage rock, activated charcoal, and specialized soil to build healthy terrarium ecosystems. Makers explore desert botany, root aeration requirements, and water management in enclosed glass containers.
- **Literacy Component:** *Geological & Biological Terms*—Table tent cards introduce concepts like *capillary action*, *root aeration*, and *soil filtration*.
- **Equipment:** Planting spoons, mini landscaping tools.
- **Supplies:** Glass terrarium containers, succulents/cacti, potting mix, activated charcoal, drainage stone, decorative sand/pebbles.

Duration	Capacity	Base Rate	Materials
1.0 Hour	Up to 12 Students	\$355	\$245

Green Thumb Growers: Seed to Sprout & Transplanting

- **Description:** Comprehensive horticulture covering seed selection, soil prep, germination triggers, and safe seedling transplanting. Students learn how to maintain light, moisture, and temperature to prevent common indoor seedling issues.
- **Literacy Component:** *Seed Packet Decoding*—Participants learn to read seed packet data, frost zone maps, and planting depth scales.
- **Equipment:** Gardening trowels, gloves, watering cans, grow light setups.
- **Supplies:** Seed varieties, seed-starting mix, germination trays, humidity domes, potting soil, larger containers, organic fertilizer.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	\$75

Propagate & Prosper

- **Description:** A fast-paced exploration of houseplant reproduction covering stem cuttings, node identification, and rooting hormones. Learners demystify plant biology by practicing water and soil propagation techniques.
- **Literacy Component:** *Anatomical Labeling*—Makers tag plant cuttings using precise botanical terms (*internode*, *petiole*, *apical meristem*).
- **Equipment:** Trimming/shearing tools, glass bottles/vessels.
- **Supplies:** Plant cuttings, take-home containers, rooting hormone powder.

Duration	Capacity	Base Rate	Materials
1.0 Hour	Up to 12 Students	\$355	\$50

Solar Cyanotype & Sun-Catcher Art

- **Description:** Utilize UV light-sensitive paper and botanical specimens to compose Prussian-blue solar prints and framed window art. Students arrange natural flora to explore contrast, silhouette, and composition in photographic art.
- **Literacy Component:** *Poetic Captions*—Students write a short, original nature poem or haiku to pair with their sun-print.
- **Equipment:** UV exposure lamp or natural sunlight, water rinse trays, acrylic contact sheets.
- **Supplies:** Pre-treated cyanotype paper, botanical specimens, pressed leaves, picture frames.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	\$75

Digital Literacy, AI & Design (Explore IT & Design IT)

AI Artistry: Next-Gen Digital Design

- **Description:** Master prompt engineering in Ideogram for clean text/graphic generation and Gemini for style transfers and photo transformation. Learners explore how generative AI models interpret vocabulary, modifiers, and artistic parameters.
- **Literacy Component:** *Prompt Engineering Syntax*—Focuses on vocabulary expansion, modifier placement, and word choice to control generative AI output.
- **Equipment:** Computers or tablets with internet access.
- **Supplies:** Free digital access to Ideogram and Google Gemini platforms.

Duration	Capacity	Base Rate	Materials
1.0 Hour	Up to 15 Students	\$355	Free

AI Summer Swag Studio

- **Description:** Prompt generative AI tools to create crisp summer vector graphics, then cut custom vinyl decals for stainless steel water bottles. Makers convert AI concepts into cuttable vector layers using Silhouette software, gaining hands-on experience weeding

vinyl.

- **Literacy Component:** *Slogan Writing*—Makers write and refine short promotional catchphrases to integrate into their vector art.
- **Equipment:** Computers or Chromebooks, Silhouette Cameo cutting machine, heat press, weeding picks.
- **Supplies:** Permanent adhesive vinyl, transfer tape, stainless steel water bottles.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	\$50

Future Beats: The AI Music Studio

- **Description:** Compose original music tracks using Suno AI and ElevenLabs, controlling genre, tempo, instrumentation, and vocal styles. Students guide generative audio models to arrange full song structures without needing traditional music theory background.
- **Literacy Component:** *Songwriting & Structure*—Participants draft original song lyrics and learn formal arrangement terms (*verse*, *chorus*, *bridge*).
- **Equipment:** Computers or tablets with internet access, headphones.
- **Supplies:** Digital accounts for Suno AI and ElevenLabs.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	Free

Brand Boss: Launch Your Label with AI

- **Description:** Act as creative director for a startup brand: use Ideogram to design logos, then manufacture custom merchandise with a Silhouette Cameo and heat press. Makers transition digital vector art onto physical products while exploring brand identity principles.
- **Literacy Component:** *Brand Mission Statements*—Students write a concise 3-sentence brand statement and product tagline.
- **Equipment:** Computer lab, Silhouette Cameo cutting machine, heat press, irons.
- **Supplies:** Heat transfer vinyl, blank t-shirts or tote bags, brand design worksheets.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 12 Students	\$415	\$70

Culinary Arts & Edible Science (Cook IT)

Waffle-ize It! (Seasonal Editions)

- **Description:** Explore appliance versatility by cooking sweet and savory batters, hash browns, and desserts directly inside waffle irons. Students learn culinary heat distribution, batter ratios, and safe appliance handling.
- **Literacy Component:** *Procedural Reading & Recipes*—Makers decode culinary verbs (*whisk, fold, caramelize, leaven*) and write customized recipe variations.
- **Equipment:** Waffle irons, mixing bowls, measuring tools, spatulas, whisks.
- **Supplies:** Waffle batter ingredients, seasonal fruit, chocolate chips, cheese, pre-cut vegetables, cooking spray.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 12 Students	\$415	\$120

Perfectly Parfait Studio

- **Description:** A culinary science exploration into layering ratios, texture pairing, and natural sweeteners. Students build custom breakfast or dessert parfaits using scratch-made granolas, fruit reductions, and yogurt or plant-based bases, examining density stratification.
- **Literacy Component:** *Sensory & Ingredient Profiling*—Participants complete a "Flavor Matrix" card, writing descriptive taste notes (*tart, floral, toasted, creamy*) to catalog their custom layered creation.
- **Equipment:** Parfait cups/glassware, mixing bowls, prep spoons, portable hot plates/saucepans.
- **Supplies:** Yogurt or plant-based bases, scratch-made granola ingredients, fresh fruit, natural sweeteners, fruit reductions.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	\$130

Juices, Sorbets & Smoothies

- **Description:** Practice knife skills and food science through cold-pressing juices, blending frozen fruit sorbets, and layering nutrient-dense smoothies. Participants explore fiber extraction, emulsion chemistry, and natural fruit flavor pairings.
- **Literacy Component:** *Nutritional Analysis*—Makers read ingredient labels and write procedural steps for replicating recipes at home.
- **Equipment:** Cold-press juicers, high-speed blenders, cutting boards, safety knives.
- **Supplies:** Fresh produce (apples, ginger, kale), frozen berries, fruit bases.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 12 Students	\$415	\$130

Mocktail Mixology (Spring / Summer)

- **Description:** Craft non-alcoholic beverages using muddling, simple syrups, sparkling bases, and garnishes. Participants learn professional barware techniques to release essential oils from herbs and citrus without adding bitterness.
- **Literacy Component:** *Sensory Description & Naming*—Participants write evocative menu descriptions and name their custom beverages.
- **Equipment:** Cutting boards, safety knives, mixing bowls, blenders, shaker cups, muddlers.
- **Supplies:** Seasonal juice bases, sparkling waters, simple syrups, fresh fruit/herbs, ice, partyware.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 15 Students	\$415	\$125

Harvest to Table

- **Description:** Scratch baking and stovetop reductions, teaching dough scoring, fruit processing, and knife safety. Makers explore farm-to-table culinary traditions by converting raw produce into finished artisanal dishes.
- **Literacy Component:** *Recipe Authoring*—Students complete "Flavor Lab" index cards documenting precise measurements and sequence steps.
- **Equipment:** Cutting boards, safety knives, portable cooktops/hot plates, pans, mixing bowls.
- **Supplies:** Fresh local produce, artisanal baking ingredients, seasonal fruit, butter, spices.

Duration	Capacity	Base Rate	Materials
1.5 Hours	Up to 12 Students	\$415	\$125

Entrepreneurship & Business (Launch IT)

Entrepreneur Bites (3-Part Series or Standalone)

- **Description:** A fast-paced, practical incubator series that guides participants from raw product ideas to physical prototypes. Bite 1 (Problem Solver): Spot frustrations and map solutions. Bite 2 (The Storyteller): Build visual brand identities using Canva. Bite 3 (The Maker Pitch): Produce physical prototypes and deliver 60-second pitches.
- **Literacy Component:** *Persuasive Writing & Value Propositions*—Students draft structured, 60-second sales pitches focusing on problem/solution statements.
- **Equipment:** Computers or Chromebooks with internet access, optional 3D printer or vinyl cutter.
- **Supplies:** Prototyping materials (cardstock, filament, vinyl, adhesives, design worksheets).

Duration	Capacity	Base Rate	Materials
1.0 Hour / session	Up to 12 Students	\$355 / bite	\$90 full series (\$40 single)

High-Capacity Drop-In Programs (Make IT Now)

Snap, Press & Stick: Custom Badge & Magnet Lab

- **Description:** Transform hand-drawn 2.25" designs into pin-back buttons or locker magnets using manual lever presses. Patrons experiment with layout design, color contrast, and micro-illustrations. This station provides instant gratification while promoting self-expression and mental wellness.
- **Literacy Component:** *Typography & Micro-Mottoes*—Patrons design layouts with custom affirmations, slogans, or personal mantras.
- **Equipment:** 2-3 Button/Magnet Presses, tables, chairs.
- **Supplies:** 2.25" button and magnet components, paint markers, pre-cut design paper circles.

Duration	Capacity	Base Rate	Materials
2.0 or 3.0 Hours	Up to 70–100 Participants	\$580 / \$685	Supplies Included

Custom Shrink Art Studio

- **Description:** Draw and color custom illustrations onto specialized shrink plastic using paint markers and colored pencils. Heat stations shrink designs down to 20% of their size into durable keychains, pins, or charms. Patrons explore scale conversion and thermal material reactions.
- **Literacy Component:** *Scale & Storytelling*—Participants write micro-stories or character names that condense alongside their visual art during heat curing.
- **Equipment:** Heat curing guns/ovens, silicone craft mats, safety tongs, tables, chairs.
- **Supplies:** Specialized shrink plastic sheets, paint markers, colored pencils, keychain/pin hardware.

Duration	Capacity	Base Rate	Materials
2.0 or 3.0 Hours	Up to 70–100 Participants	\$580 / \$685	Supplies Included

Zine Scene: Mini-Magazine Publishing

- **Description:** Single-sheet paper folding techniques that produce 8-page or 16-page self-published mini-magazines. Patrons combine collage, illustration, and creative writing

to share personal stories or interest guides, democratizing self-publishing.

- **Literacy Component:** *Self-Publishing & Visual Narrative*—Direct engagement in comic writing, poetry, editing, and layout assembly.
- **Equipment:** Scissors, bone folders, long-arm staplers, tables, chairs.
- **Supplies:** Paper stock, markers, colored pencils, pens, glue sticks, double-sided tape, magazine collage materials.

Duration	Capacity	Base Rate	Materials
2.0 or 3.0 Hours	Up to 70–100 Participants	\$580 / \$685	Supplies Included

Time to Shine: Design Your Own Clock

- **Description:** Decorate laser-cut wooden clock faces with markers and paint before installing battery-operated quartz movements. Creators translate abstract artistic themes into functional home decor pieces while building fine motor assembly skills.
- **Literacy Component:** *Numeral Systems & Time Idioms*—Incorporate calligraphic fonts, time-related quotes, or custom numbering into the layout.
- **Equipment:** Tables, chairs.
- **Supplies:** Laser-cut wood clock faces, quartz clock mechanisms, clock hands, AA batteries, paint markers, acrylic paints.

Duration	Capacity	Base Rate	Materials
2.0 or 3.0 Hours	Up to 70–100 Participants	\$580 / \$685	Supplies Included

Squish, Stamp, and De-Stress: 3D Printed Rollers & Clay Tiles

- **Description:** Stamp intricate textures into air-dry clay tiles using custom 3D-printed rollers and pattern stamps. Patrons experience a sensory-rich tactile activity while discovering practical applications of 3D printing tools to produce detailed relief tiles or ornaments.
- **Literacy Component:** *Pattern Descriptors*—Participants use vocabulary cards to identify geometric versus organic design structures.
- **Equipment:** Clay sculpting tools, tables, chairs.

- **Supplies:** High-quality air-dry foam clay, custom 3D-printed texture rollers, pattern stamps.

Duration	Capacity	Base Rate	Materials
2.0 or 3.0 Hours	Up to 70–100 Participants	\$580 / \$685	Supplies Included

Rock Your Vibe: Kindness Stones

- **Description:** Paint smooth river rocks with mandalas, symbols, or positive quotes to share or keep. Creators practice mindfulness through art while designing positive community talismans in a low-stress format suitable for all ages.
- **Literacy Component:** *Affirmation Writing*—Makers write inspirational words and mantras onto natural stone surfaces.
- **Equipment:** Paintbrushes, tables, chairs.
- **Supplies:** Smooth river rocks, acrylic paints, sealant spray, permanent paint markers.

Duration	Capacity	Base Rate	Materials
2.0 or 3.0 Hours	Up to 70–100 Participants	\$580 / \$685	Supplies Included

Paint Pour Marbled Coasters (Spring & Summer Edition)

- **Description:** Capture the vibrant energy of spring and summer with this mesmerizing acrylic pouring workshop. Using a lively seasonal palette of sunny yellows, floral pinks, lush greens, and ocean blues, patrons explore fluid dynamics and color theory using "dirty pour" and "flip cup" techniques to create a set of unique marbled ceramic coasters.
- **Literacy Component:** *Process Documentation*—Makers write a short step-by-step "How-To" guide detailing their specific color mixing and pouring process.
- **Equipment:** Tables, chairs, drying racks, paper plates, box trays.
- **Supplies:** Blank ceramic tiles/coasters, acrylic paints (spring & summer palette), pouring medium, metallic accents, sealant spray, cork backing pads.

Duration	Capacity	Base Rate	Materials
2.0 or 3.0 Hours	Up to 70–100 Participants	\$580 / \$685	Supplies Included