

Project Examples by Grade JEFH

WOODSHOP

- **Kindergarten to 3rd Grade: Foundations of Woodworking - Available with additional teacher or as a parent/child workshop**
 - **Simple Birdhouses:** Introduces basic construction and encourages an interest in wildlife.
 - **Wooden Block Stamps:** Carving shapes into blocks for stamping, integrating art and woodworking.
 - **Name Plates:** Children spell their names by gluing wooden letters onto a base, blending literacy with woodworking.
 - **Simple Puzzles:** Creating basic shape puzzles, promoting problem-solving skills.
 - **Toolboxes:** A simple box project that introduces tool use and storage, fostering responsibility.
 - **Plant Markers:** Designing and creating markers for garden plants, linking to lessons on plant life cycles.
 - **Small Picture Frames:** Introduces more precise measuring and cutting, integrating personal art.
 - **Wind Chimes:** Using wood and metal pieces, children explore sound and design.
 - **Bug Hotels:** Assembling small structures for insects, encouraging ecological exploration.
 - **Treasure Chests:** Building small boxes with lids, promoting design and organizational skills.
 - **Balancing Games:** Creating games that require balancing pieces of wood, enhancing understanding of physics.
 - **Bird Feeders:** More complex designs than birdhouses, introducing functional design.
 - **Simple Boats:** Crafting boats that can float, exploring principles of buoyancy.
 - **Puppet Theaters:** Building a small stage for puppet shows, encouraging storytelling.
 - **Garden Beds:** Small, raised beds for planting, integrating with studies on ecosystems.
 - **Catapults:** Introducing simple machines and physics through playful projects.
 - **Musical Instruments:** Crafting simple instruments, exploring sound and music.

- **Desk Organizers:** More complex measuring and cutting, introducing personal workspace management.
- **4th to 5th Grade: Expanding Skills and Creativity**
 - **Small Bridges:** Wooden models of bridges, exploring engineering concepts.
 - **Shelf Units:** Simple shelving units for books or display, introducing concepts of weight distribution.
 - **Maze Games:** Creating wooden mazes with obstacles, promoting logic and planning.
 - **Clocks:** Assembling a working clock into a wooden frame, linking to math (telling time) and craftsmanship.
 - **Complex Birdhouses:** Advanced birdhouse designs focused on appropriateness for particular species.
 - **Model Vehicles:** Crafting cars or planes, introducing aerodynamics and propulsion.
 - **Architectural Models:** Creating scale models of buildings or structures, exploring design and history.
 - **Landscape Features:** Designing and constructing elements like benches or archways for school grounds, emphasizing community contribution.
 - **Mechanical Toys:** Building toys with moving parts, exploring mechanics.
 - **Community Project:** A group project to create something beneficial for the school or local community, emphasizing collaboration, planning, and execution.
- **6th to 8th Grade: Advanced Projects and Concepts**
 - **Custom Skateboards/Surfboards:** Designing and crafting skateboard decks or surfboards, introducing aerodynamics and personal expression.
 - **Weather Vane:** Creating a functional weather vane, integrating meteorological studies.
 - **Interactive Game Boards:** Constructing boards for chess or other games, encouraging strategic thinking.
 - **Garden Planters:** Building planters emphasizing sustainability and biology.
 - **Architectural Birdhouses:** Designing birdhouses that mimic architectural styles, linking to art and history.
 - **Automata Toys:** Creating mechanical toys that move, exploring simple mechanical principles.
 - **Community Library Boxes:** Building small, free libraries for the community, promoting literacy and community service.
 - **Acoustic Amplifiers:** Building wooden amplifiers for smartphones, exploring sound engineering.
- **9th to 12th Grade: Specialization and Career Prep**
 - **Custom Furniture Pieces:** Designing and building furniture, such as chairs or tables, highlighting design and functionality.

- **Kinetic Sculptures:** Crafting sculptures with moving parts, combining art and mechanical engineering.
- **Interactive Installations:** Building installations for school or community spaces, encouraging interactive art and technology.
- **Tiny Houses Models:** Creating scale models of tiny houses, exploring architectural design and space optimization.
- **Entrepreneurial Projects:** Designing and producing items for sale, fostering business and marketing skills.
- **Furniture Restoration:** Learning techniques to restore old furniture, emphasizing sustainability and history.
- **Advanced Carpentry Projects:** Complex construction projects like gazebos or pergolas, applying engineering and design.
- **Instrument Making:** Crafting simple musical instruments, merging music theory and woodworking.
- **Sustainable Design Projects:** Projects focusing on sustainability and eco-friendly materials.
- **Heritage Craftsmanship:** Exploring traditional woodworking techniques, connecting to cultural heritage.
- **Architectural Models:** Detailed models of buildings or urban landscapes, supporting studies in urban planning and architecture.
- **Robotic Arms:** Constructing wooden robotic arms, introducing basics of robotics and programming.
- **Custom Workstations:** Designing and building personalized workstations or desks, focusing on ergonomics and productivity.
- **Art Installation Pieces:** Large scale art projects for public spaces, emphasizing collaboration and community engagement.
- **Technical Drawing and Model Making:** Combining precise technical drawing with model making, enhancing understanding of engineering principles.
- **Capstone Projects:** Year-long projects that reflect students' interests and skills, incorporating design, execution, and presentation.
- **Furniture Design Series:** A series of furniture pieces that explore different design theories and materials.
- **Community Engagement Projects:** Collaborative projects with local organizations, applying woodworking skills to meet community needs.
- **Innovative Material Use:** Exploring unconventional materials in woodworking projects, pushing the boundaries of traditional craftsmanship.
- **Entrepreneurial Venture:** Designing, creating, and marketing a product line, culminating in a real-world business experience.