# **Unit 4 - Design Thinking & Creating**

Content Area: Arts

Course(s): Wood Arts Tec 1
Time Period: Semester 2
Length: 3 Weeks
Status: Published

### **Standards**

VA.K-2.1.5.2.Cr1b	Engage in individual and collaborative art making through observation and investigation of the world, and in response to personal interests and curiosity.
VA.K-2.1.5.2.Cr2a	Through experimentation, build skills and knowledge of materials and tools through various approaches to art making.
VA.K-2.1.5.2.Cr2b	Demonstrate safe procedures for using and cleaning art tools, equipment and studio spaces.
CS.K-2.8.2.2.ED.1	Communicate the function of a product or device.
CS.K-2.8.2.2.ED.3	Select and use appropriate tools and materials to build a product using the design process.
CS.K-2.8.2.2.ITH.3	Identify how technology impacts or improves life.
TECH.9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).
TECH.9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).

## **Essential Questions**

- 1. What tools or machines can be used to accomplish the same goal?
- 2. What product could you create the solves a problem in your life?
- 3. What are safe practices in the shop?

# **Enduring Understandings**

- 1. A product should be designed to solve a problem that improves life and minimizes negative impacts on society.
- 2. The creation process requires experimentation and practice while demonstrating safety and etiquette for the workspace and others.
- 3. Woodworking is an Art where personal interest and curiosity can lead to endless possibilities.

## **Knowledge & Skills**

Design Thinking & Creating Students will be able to:

- Choose and design a product that they will create using digital tools.
- Experiment with tools and machines to make design choices.
- Safety use tools and machines.
- Design and create a product with a specific purpose in their life.
- Evaluate the impact of the product on our world.
- Identify multiple tools to accomplish the same process.

#### Machines and Tools:

- Jointer
- Table Saw
- Scroll Saw
- Hand-held Router
- Lathe
- CNC Machine

#### Resources

#### Resources:

- Lumber
- Hand Tools
- Machines
- Sandpaper
- Finish
- Hardware

#### **Transfer Goals**

- 1. Students will be able to explain how multiple machines can accomplish the same goal when creating.
- 2. Students will be able to create a product that has minimal negative impacts on society and is designed for a specific purpose to improve the quality of life.

#### **Modifications**

# **Assessments**

Assessments