

Unit 1 Drawing and Measurement

Content Area: **21st Century Life & Careers**
Course(s): **Woodworking 1**
Time Period: **Marking Period 1**
Length: **1-2 Weeks**
Status: **Published**

Unit Introduction

Standards

9.3.12.AC.1	Use vocabulary, symbols and formulas common to architecture and construction.
9.3.12.AC.6	Read, interpret and use technical drawings, documents and specifications to plan a project.
9.3.12.AC-DES.2	Use effective communication skills and strategies (listening, speaking, reading, writing and graphic communications) to work with clients and colleagues.
9.3.12.AC-DES.6	Apply the techniques and skills of modern drafting, design, engineering and construction to projects.
STEM.9-12.9.4.12.O.(1).1	Apply the concepts, processes, guiding principles, and standards of school mathematics to solve science, technology, engineering, and mathematics problems.
STEM.9-12.9.4.12.O.(1).3	Demonstrate the ability to select, apply, and convert systems of measurement to solve problems.
STEM.9-12.9.4.12.O.(1).7	Use mathematics, science, and technology concepts and processes to solve problems in projects involving design and/or production (e.g., medical, agricultural, biotechnological, energy and power, information and communication, transportation, manufacturing, and construction).
STEM.9-12.9.4.12.O.(1).12	Model technical competence by developing and applying processes and concepts in the design process.
STEM.9-12.9.4.12.O.(2).2	Apply science and mathematics when developing plans, processes, and projects to find solutions to real world problems.
STEM.9-12.9.4.12.O.(2).4	Use scientific and mathematical problem-solving skills and abilities to develop realistic solutions to assigned projects, and illustrate how science and mathematics impact problem-solving in modern society.
STEM.9-12.9.4.12.O.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
TECH.8.2.12.C.5	Create scaled engineering drawings of products both manually and digitally with materials and measurements labeled.

Essential Questions

How do you communicate a product idea through drawings?

Why is it important to be able to read a ruler?

Why is accuracy important in both planning and construction?

Content / Skills

Reading a ruler.

Understanding measurement down to the 1/16th inch.

Creating a top front and side view of a product.

Dimensioning engineering drawings.

Creating a cut list.