

***Unit 2: Prototyping Safety**

Content Area: **Technology**
Course(s): **Engineering Design 2**
Time Period: **October**
Length: **5 blocks**
Status: **Published**

Enduring Understandings

Learning how a piece of equipment works is an important aspect of its safe use.

Each piece of equipment is unique and has its own set of rules and guidelines to follow for safe use.

Safety in the lab focuses on taking preventative steps to avoid injuries.

Planning physical movements prior to use helps in the safe operation of a piece of equipment.

Essential Questions

What value does understanding how a piece of equipment works add to its safe operation?

Why does each piece of equipment have its own set of rules?

What preventative steps can be taken to ensure safety?

How does choreographing physical movements aid in safety?

Content

Vocabulary:

Drill press, Scroll saw, Band saw, Disc sander, Spindle sander, Dust collection, Vertical mill, Safety glasses, Relief cut, Feed rate, Cutting plane

Skills

Understand and communicate how each piece of equipment works.

Describe the safety rules and safe operation of each piece of equipment.

Interpret a situation to determine how to safely execute a particular operation.

Demonstrate the safe use of each piece of equipment.

Resources

Prototyping tools and equipment

Prototyping materials

Standards

9.3.12.AC.3	Comply with regulations and applicable codes to establish and manage a legal and safe workplace.
9.3.12.AC-CST.9	Safely use and maintain appropriate tools, machinery, equipment and resources to accomplish construction project goals.