

Metals Power Standards

Basic metals safety

Student will learn the basic safety ideas and practices needed in a metals shop.

Student will see a demonstration showing proper machine/tool use.

Student will demonstrate proper machine/tool use.

Student will pass all safety tests with 100% accuracy.

Metals Careers

Students will examine the employment opportunities in the metalworking industry.

Students will hear from actual metalworking professionals.

Classifying Metals

Students will learn the basic metals and their properties.

Students will be able to create a working drawing for metal work.

Measurement

Students will be able to measure with ruler.

Students will be able to measure with inside micrometer.

Students will be able to measure with outside micrometer.

Students will be able to measure with calipers.

Students will be able to measure with vernier gage.

Sheet Metal

Students will learn the basic tools for sheet metal work.

Students will learn the basic layout procedure for sheet metal work.

Students will learn the process and machines used to build a sheet metal project..

Welding

Students will learn about and demonstrate proper technique with arc welder.

Students will learn about and demonstrate proper technique with the MIG welder.

Students will learn about and demonstrate proper technique with the oxyacetylene welder.

Students will learn about and demonstrate proper technique with the TIG welder.

Sand Casting

Students will learn about the sand casting tools.

Students will create a project using the sand casting tools and processes.

Metal Lathe

Students will learn about the metal lathe machine and safety precautions.

Students will create a project using the metal lathe tools and processes.

Forging

Students will learn about the forge furnace and forging tools.

Students will create a project using the forge, forge tools and forging process.

Project Work Time

Student will design a metalworking project.

Student will draw and design a metalworking project.

Student will successfully build the project in the metal shop.

