

WSD Middle School Industrial Arts: Engine Tech Curriculum Map 2017

Timeframe	Activity	Assessment	Materials	Power Standards
<u>First 9 weeks</u>				
	What is a Carburetor?	Teacher Observation	Sample Carburetors	Carburetor Fundamentals
	How does a Carburetor work?	Written Test	PPT presentation of Carburetors	Carburetor Fundamentals
	What are the major parts of a Carburetor?	Written Test	Industry Manuals	Carburetor Fundamentals
	What are different Types of Carburetors?	Written Test	Industry Manuals	Carburetor Fundamentals
	What is a Four Stroke Engine?	Teacher Observation	Sample Engine Parts	Four Stroke Engine Fundamentals
	How does a Four Stroke Engine work?	Written Test	PPT presentation of Four Stroke Engines	Four Stroke Engine Fundamentals
	What are the major parts of a Four Stroke Engine?	Written Test	Industry Manuals	Four Stroke Engine Fundamentals
	What is a Two Stroke Engine?	Teacher Observation	Sample Engine Parts	Two Stroke Fundamentals
	How does a Two Stroke Engine work?	Written Test	PPT presentation of Four Stroke Engines	Two Stroke Fundamentals
	What are the major parts of a Two Stroke Engine?	Written Test	Industry Manuals	Two Stroke Fundamentals
	Cleaning and Rebuilding a Carburetor	Teacher Observation Written Test	Dirty Carburetors	Application of Carb. Fundamentals
	How to remove and reinstall a Carburetor	Teacher Observation	Small Engine	Application of Carb. Fundamentals
	What are the basic hand tools and how they work	Written test Teacher Observation	Tools and Toolboxes	Basic Hand Tools
	What is Mig welding?	Teacher Observation	Mig Welder	Welding Fundamentals
	How do I use a Mig welder?	Written Test	Mig Clothing	Welding Fundamentals
	What is Gas welding?	Written Test	Oxygen/Acetylene setup	Welding Fundamentals
	How do I use Gas welding Equipment?	Teacher Observation	Gas Welding clothes	Welding Fundamentals
	Welding Safety	Teacher Observation/Written Test	Welding Safety equipment	Welding Fundamentals
	Brake Systems	Written test	Sample Disc brake parts/ Video	Brake Systems
<u>2nd 9 weeks</u>	How to Rebuild a Two Stoke Top End	Teacher Observation	Motorcycle or Quad	Application of Two Stroke Fundamentals
	How to Rebuild a Four Stroke Top End	Teacher Observation	Motorcycle or Quad	Application of Four Stroke Fundamentals
	How to Rebuild a Clutch	Teacher Observation	Sample Clutch	Drivetrain Fundamentals

		Written Test	Motorcycle or Quad	
	How to use Calipers	Teacher Observation	Calipers/various parts	Advanced Tool usage
	How to use Micrometers	Teacher Observation	Micrometers/various parts	Advanced Tool usage
	How to use Torque Wrenches	Teacher Observation	Torque Wrench/Fasteners	Advanced Tool usage
	How to use Specialty Tools	Teacher Observation	Specialty tools	Advanced Tool usage
	How to identify Bolts and Nuts	Written Test	Tap/Die set Various bolts	Fasteners
	How to use torque charts	Teacher Observation	Industry Manuals	Manual Usage
	How to convert fraction to decimals	Teacher Observation	Decimal equivalent chart	Measurement
	How to convert standard measurement to metric	Teacher Observation	Decimal equivalent chart/calculator	Measurement
Optional Activities	How to diagnose, and troubleshoot engine problems	Teacher Observation/Written Test	Industry Manuals	Basic Diagnostics
	How to maintain and care for shop	Teacher Observation		Shop maintenance
	How to maintain and care for engines	Teacher Observation	Industry Manuals	Routine maintenance
	How to do complete rebuild, overhaul, and installation	Teacher Observation/Written Test	DVD/Industry Manuals	Engine Overhaul