Subject : Precision Machine

## HAZLETON AREA SCHOOL DISTRICT



## DISTRICT UNIT/LESSON PLAN

Unit Title: an educational unit title summarizes content across several lessons that establishes and reinforces certain skills and essential knowledge for grade levels and content areas.

## **500 OPERATE DRILL PRESSES.** 501 Demonstrate safety

	500 OI ERATE DRIEL I RESSES				
	<ul> <li>501 Demonstrate safety</li> <li>precautions when using the drill</li> <li>press.</li> <li>502 Select and demonstrate</li> <li>proper use of drill work holding</li> <li>devices.</li> <li>503 Calculate speeds and feeds.</li> <li>504 Demonstrate the use of center</li> <li>drill.</li> <li>505 Select correct drill sizes for</li> <li>various applications.</li> <li>506 Pre-drill and ream various</li> <li>size holes.</li> <li>507 Demonstrate counter boring,</li> <li>spot facing and countersinking.</li> <li>508 Pre-drill and tap holes.</li> <li>509 Grind and use flat bottom</li> <li>drill.</li> </ul>	CAREER CLUSTER Manufacturing Career Cluster (Choose Standards) 1-2-3-4-5-6-7 CAREER PATHWAYS INCLUDE: Maintenance, Installation and Repair Career Pathway (Choose Standards) 1-2-3-4-5-6 NOTE: Refer to the Common Career Technical Core Standards booklet if you	KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc. CRAFT & STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D Determine the meaning of	TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A Write arguments focused on discipline specific content. Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B Write informative or explanatory texts, including the narration of technical processes, etc. PRODUCTION & DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C	NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6
	um.		Determine the meaning of		
1					

**Examples** - Building Complete Sentences

Essential Questions: Essential questions are concept in the form of questions. Questions suggest inquiry. Essential questions are organizers and set the focus for the lesson or unit. Essential questions are initiators of creative and critical thinking. Essential questions are conceptual commitments focusing on key concepts implicit in the curriculum

> Examples - What must a scientist do in order to research something? What is the role of geometry in advertising, architecture, or fabric design? Do stories need a beginning, middle, and end? Why? How do people express themselves through art today?

Standards: PA Core Standards, PA Academic Standards/Anchors (based on subject)

			Unit	Plan				
Perf	orm Bench work for NIMS certi	ficatio	ons	X Student Self-AssessmentXPerformance Assessment XOther (explain) Each student must complete the NIMS Layout project as per print				
DAILY PLAN								
Day DT	Objective (s)	DOK Level	Activities / Teaching Strategies		Grouping	Materials / Resources	Assessment of Objective (s)	
M 1	Tasks: 501,502,503,504,506,507,508		NIMS Job Duty 2.8 Manual Operation, Drill press project. Perform speed and feed calculations for this project. Determine proper hole locations on the X and Y axis.			NIms Drill Press Print	Formative- Summative-	
							Student Self – Assessment-	
Т 2	Students will use an edge finder for locating for this project.Tasks:Students will learn the proper procedures for drilling and spot drilling.501,502,503,504,505,506,507,508Students will calculate drill tip length by using			<sup>-</sup> center		NIMS Drill press Print Drill press identification Milling Machine identification Drill identification Tap types	Formative- Summative-	
			proper formula for a 118 degree drill bit.			Files Layout dye Hand tools	Student Self - Assessment-	
W 3	Winter Break						Formative-	
							Student Self - Assessment-	
T H							Formative-	

Teacher Name : Joseph Chicalese Building:HACC		Subject :Precision Machine	Start Date(s): 12/22-26	Grade Level (s): 2
4	Winter Break			Summative-
				Student Self - Assessment-
F	Winter Break		Nims drill press print Rpm formula Cutting speed formula	Formative- Summative-
5			Counter boring tools	Student Self - Assessment-