

Math-in-CTE Lesson Plan Template

Lesson Title: RPM Grinding Stones		Lesson # 8
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Lesson Objective:	<p>The student will be able to identify the different tool speeds for different sized grinding stones based on the given max rated RPM and the diameter of each stone.</p> <p>The student will leave the activity with a greater appreciation for the importance of using the tools correctly and valuing the personal safety of themselves and others around them.</p>	
Supplies Needed:	Different sized grinding stones, hand grinder, safety equipment, worksheets as provided by teacher, calculator, samples of different stock.	
THE "7 ELEMENTS"		TEACHER NOTES (AND ANSWER KEY)
<p>1. Introduce the CTE lesson.</p> <p>Before installing a grinding stone or cut off wheel to a hand held tool make sure it is first not connected or plugged into an electrical outlet or the compressed air fitting is not connected to an air supply unit (air compressor).</p> <p>Next we need to visible inspect the stone or wheel for any damage, such as cracks in the stone or a defect with the arbor. If no defect is visible, proceed with the installation.</p> <p>We need to identify the rpm that the hand tool will be spinning the grinding stone or cut off wheel. We must make sure that the stone</p>		<p>RPM: This stands for "revolutions per minute" which is the number of times that something spins in one minute.</p> <p>Pneumatic: This means that the tool is air driven by compressed air.</p> <p>Arbor size or shank: Inner Diameter of a grinding stone. The size refers to the shank that it will attach to.</p> <p>Cut off wheel: A thin grinding disc commonly used to cut sheet metal</p>