## **Anoka-Hennepin Secondary Curriculum Unit Plan**

Department:	Technology Education Course:	Carpentry for the Future Homeowner	Unit Title:	Math Principles: Math Principles	Grade Level(s):	9-12
Assessed Trimester:	Pacing:	2 Days	Date Created:		Last Revision Date:	11/2014

Course Understandings: Students will understand that:
How math principles work in relationship to the residential home.

## DESIRED RESULTS (Stage 1) - WHAT WE WANT STUDENT TO KNOW AND BE ABLE TO DO?

Established Goals						
Minnesota State/Local/Technology Standard(s) addressed:  • Standards for Technological Literacy Chapter 3, 6, and 7						
Tandardo for recimologicar Energoy Chapter 6, 6, and 7						
	Transfer					
Students will be able to independently use their learning to: (product, high order reas	soning)					
	Meaning					
Unit Understanding(s):	Essential Question(s):					
Students will understand:	Students will keep considering:					
How to calculate board feet	How much roofing materials are needed to complete a job?					
How to calculate area and volume	What are the measurements of a room?					
	How much concrete is needed?					
	Acquisition					
Knowledge - Students will:	Skills - Students will:					
<ul> <li>Know how to calculate area of a square/rectangle, triangle and circle</li> </ul>	Determine the square feet of a given room					
Know how to use the Pythagorean Theorem	Determine if a wall or floor is square					
Know how to calculate volume	Layout a wall including stud spacing and window/door openings					
Reasoning - Students will:  •	Correctly estimate the materials needed for a wall with one window and one door in it					
Common Misunderstandings	Essential new vocabulary					
A person doesn't need math to repair "stuff"	• Area					
	Perimeter					
	Volume					