

Masonry Basics

Unit Outline

1. Project Team Members: Greg Gilson, Wade Fyock
2. Title of Course: Building Trades
3. Title of Unit or Project: Masonry Basics
4. Approximate length of Unit or Project: 3-4 Weeks
5. Brief description of the Unit or Project with an expected final outcome.

Students will work individually and in small groups to complete a masonry project.

6. Major Goals of Unit:

After completing this unit the students will be able to:

1. Follow proper procedures to complete multiple masonry projects.
2. Understand written and verbal instructions.
3. Apply proper masonry techniques.
4. Correctly calculate materials needed.

7. Sequence of balanced and integrated activities for students:

Students will complete the following activities:

1. **Planning project-** The students will work in small groups to plan a masonry project. The planning will require the students to identify key components required to complete masonry project. An outline of implementation plan will be submitted prior to start of project. (Use **Rubric #1**)
 - 2.
 3. **Calculations-** The students will complete calculations that correspond to each aspect of the building process. (Use **Project Worksheet**)
 - 4.
 5. **Building Project-** The students will apply learned skills to successfully complete project. The culmination of the project will require the students to complete four separate projects (Use **Rubric #2**)
8. Checklist or rubric of assessment components for students: 2 Rubrics and a Worksheet are attached to this document.

9. Specific Standards addressed in this Unit or Project:

<u>Ref. #</u>	<u>Name of Standard</u>	<u>Title of Individual Standard</u>
<u>Goal 1:</u>		
1.1.11A,E,H	PA RWSL	Learning to Read Independently
1.2.11A	PA RWSL	Reading Critically in Content Areas
1.4.11B	PA RWSL	Types of Writing
1.5.11ABC	PA RWSL	Quality of Writing
1.6.11ABDE	PA RWSL	Speaking and Listening
<u>Goal 2:</u>		
2.2.11ABDE	PA Math	Computation and Estimation
2.2.11ABC	PA Math	Measurement and Estimation
2.5.11ACD	PA Math	Mathematical Problem Solving and Estimation
<u>Goal 3:</u>		
2.2.11ABC	PA Math	Measurement and Estimation
2.5.11ACD	PA Math	Mathematical Problem Solving and Estimation

Planning Project (Rubric #1)

Preparation	Possible Points	Points Awarded
Verbal explanation of pre-reading activity.	10	
Evidence of understanding.	10	
Estimation of materials.	10	
Materials needed.	10	
Calculations	10	

Project Worksheet

Project # _____

Description _____

Data Record: Record all measured numbers with correct units.

A. Length _____

B. Area _____

C. Volume _____

D. Diagonal _____

E. Calculations (use space provided)

F. Transit

Implementation Plan (Rubric#2)

Project#1 (Footer Form) _____

Project#2 (Straight Wall) _____

Project#3 (Corner Wall) _____

Project#4 (“T “ Wall) _____

	Possible Points	Points Awarded
Procedure	10	
Safety procedures observed	10	
Technique	10	
Efficiency	10	
Teamwork	10	
Project Quality	50	

Time Started: _____

Time Completed: _____