



GEORGIA

PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

ACCT—ARCHITECTURAL DRAWING

PATHWAY: Architectural Drawing and Design

COURSE: Architectural Drawing and Design II

UNIT: 5-Millwork Details: Cabinetry



INTRODUCTION

Annotation:

This unit includes lessons on preparing sections and details. Students will learn the proper way to prepare millwork details and cabinet sections.

Grade(s):

<input type="checkbox"/>	9 th
<input checked="" type="checkbox"/>	10 th
<input checked="" type="checkbox"/>	11 th
<input checked="" type="checkbox"/>	12 th

Time: 20 hours

Author: Carole Ray

Additional Author(s):

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



FOCUS STANDARDS

GPS Focus Standards:

ACT-ADDII-2: Students will prepare sections and details.

- a. Explain the purpose of millwork details.
- b. Draw a cabinet section.

GPS Academic Standards:

MM1P4: Students will make connections among mathematical ideas and to other disciplines.

ELA9RL5: The student understands and acquires new vocabulary and uses it correctly in reading and writing.

SCSh4: Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

National / Local Standards / Industry / ISTE:

ADDA: Advanced CADD Skills



UNDERSTANDINGS & GOALS

Enduring Understandings:

Even though builders use standard construction practices, there are instances where special or custom work has to be done. This is when you would use sections and details from millwork.

Essential Questions:

- Why is it important to understand millwork details?
- Why is it important to be able to draw a cabinet section?

Knowledge from this Unit:

- Clarify the purpose of millwork details.
- Identify the symbols used in millwork sections and details.

Skills from this Unit:

- Read residential millwork details.
- Draw a cabinet section correctly.



ASSESSMENT(S)

Assessment Method Type: Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

- ☐ Pre-test
- ☒ Objective assessment - multiple-choice, true- false, etc.
 - ☐ Quizzes/Tests
 - ☒ Unit test
- ☐ Group project
- ☒ Individual project
- ☒ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
 - ☒ Self-check rubrics
 - ☐ Self-check during writing/planning process
 - ☐ Journal reflections on concepts, personal experiences and impact on one's life
 - ☐ Reflect on evaluations of work from teachers, business partners, and competition judges
 - ☐ Academic prompts
 - ☐ Practice quizzes/tests
- ☐ Subjective assessment/Informal observations
 - ☐ Essay tests
 - ☐ Observe students working with partners
 - ☐ Observe students role playing
- ☒ Peer-assessment
 - ☐ Peer editing & commentary of products/projects/presentations using rubrics
 - ☒ Peer editing and/or critiquing
- ☒ Dialogue and Discussion
 - ☐ Student/teacher conferences
 - ☐ Partner and small group discussions
 - ☒ Whole group discussions
 - ☐ Interaction with/feedback from community members/speakers and business partners
- ☐ Constructed Responses
 - ☐ Chart good reading/writing/listening/speaking habits
 - ☐ Application of skills to real-life situations/scenarios
- ☐ Post-test

Assessment(s) Title:

Unit Test: Millwork Details

Individual Project: Draw a Cabinet Section

Assessment(s) Description/Directions:

Unit Test: See instructions attached to test.

Individual Project: See instruction sheet provided by instructor for cabinet section drawing.

Attachments for Assessment(s):

Rubric: Typical Cabinet Section



LEARNING EXPERIENCES

Instructional planning: Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

Sequence of Instruction

1. Identify the Standards. Standards should be posted in the classroom for each lesson.

ACT-ADDII-2: Students will prepare sections and details.

- a. Explain the purpose of millwork details.
- b. Draw a cabinet section.

2. Review Essential Questions.

- Why is it important to understand millwork details?
- Why is it important to be able to draw a cabinet section?

3. Explain the purpose of millwork details.

4. Discuss sizes and symbols used in millwork.

5. Explain the purpose of cabinet sections and details.

6. Draw a cabinet section to scale.

7. Interest approach – Mental set

Ask students for examples of millwork in their houses or other residences that might have needed extra sections to be built.

LESSON 1: Millwork Details

1. Identify the standards.
2. Go over essential questions: Why is it important to understand millwork details? Why is it important to be able to draw a cabinet section?
3. Explain the purpose of millwork details.
4. Discuss sizes and symbols used on millwork drawings.
5. Explain the purpose of cabinet sections and details.
6. Show millwork details on a set of blueprints. Discuss what dimensions need to be included and why.
7. Give students a set of blueprints (millwork details) with errors. Students should work with a partner to find and correct the errors on the blueprints. (This will help them to avoid such errors on their own drawings.)
8. Give unit test on millwork details.
9. Draw a cabinet section to scale.

Attachments for Learning Experiences:

- Basic Cabinet Information
- Unit Test: Millwork Details & Key
- Typical Cabinet Section Drawing (AutoCAD)
- Typical Cabinet Section Drawing (Word document)
- Rubric: Typical Cabinet Section

Notes & Reflections:

Check for understanding frequently. Review basic information as needed.

Other millwork details should be covered, as time permits. These should include both kitchen and bath sections and details. These should also be included on the unit test.

Students will critique each others' drawings to make sure that all components are included and drawn correctly.

Students can be given a copy of the cabinet section rubric, so that they will know how they are to be graded.

The amount of time needed for activities is determined by whether the students are doing traditional (board) drafting or using a CAD system. The instructor should choose the appropriate instruction to support either board or CAD drafting.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Cabinet Section Drawing

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Students will draw a typical cabinet section, using directions provided by the instructor.

Attachments for Culminating Performance Task:

Rubric: Typical Cabinet Section



UNIT RESOURCES

Web Resources:

Attachment(s):

Materials & Equipment:

Depending on the medium used, you may need the following:

- Basic drafting tools
- CAD software

What 21st Century Technology was used in this unit:

<input type="checkbox"/>	Slide Show Software
<input checked="" type="checkbox"/>	Interactive Whiteboard
<input type="checkbox"/>	Student Response System
<input type="checkbox"/>	Web Design Software
<input type="checkbox"/>	Animation Software
<input type="checkbox"/>	Email

<input type="checkbox"/>	Graphing Software
<input checked="" type="checkbox"/>	Calculator
<input type="checkbox"/>	Desktop Publishing
<input type="checkbox"/>	Blog
<input type="checkbox"/>	Wiki
<input type="checkbox"/>	Website

<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Video
<input type="checkbox"/>	Electronic Game or Puzzle Maker
<input checked="" type="checkbox"/>	CAD Software