



GEORGIA

PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

ACCT—ARCHITECTURAL DRAWING

PATHWAY: Architectural Drawing and Design

COURSE: Architectural Drawing and Design II

UNIT: 2-Residential Sections and Details



INTRODUCTION

Annotation:

This unit includes lessons on sections and details. Students will learn the purpose of including sections and details in a set of drawings.

Grade(s):

	9 th
X	10 th
X	11 th
X	12 th

Time: 5 hours

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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 (to be done in units 3, 4, & 5).

- a. Explain the purpose of sections and details.

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:

Sections and details are one of the most important components in a set of plans. Without the sections and details, the structure would not be built correctly. Contractors and builders depend on the section and detail drawings to be able to construct the building in accordance with the plans and codes.

Essential Questions:

- Why is it important to know what materials are used in a structure?
- Why are details needed with a set of drawings?
- Why do dimensions have to be included on all drawings?

Knowledge from this Unit:

- Students will learn the vocabulary associated with sections and details.
- Students will understand the purpose of preparing sections and details on a set of working drawings.

Skills from this Unit:

- Students will be able to read residential sections and details on a blueprint.



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: Sections and Details

Assessment(s) Description/Directions:

Students will complete the unit test on sections and details, using the instructions provided on the test.

Attachments for Assessment(s):

Unit Test: Sections and Details



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 sections and details.

2. Review Essential Questions.

- Why is it important to know what materials are used in a structure?
- Why are details needed with a set of drawings?
- Why do dimensions have to be included on all drawings?

3. Identify and review the unit vocabulary.

Annotation	Architectural Details	Cornice Details
Detail Drawing	Footing	Footing Detail
Section	Section Detailing	Sill Detail

3. Explain the purpose of sections and details.

4. Identify the different types of sections and details.

5. Unit test on sections and details

6. Interest approach – Mental set

Ask students the importance of sections and details in custom casework.

Ask students what special elements in a house would cause one to need extra sections and details.

Lesson 1: SECTION AND DETAILS

Discussion

1. Identify the standards.
2. Go over essential questions: Why is it important to know what materials are used in a structure?
Why are details needed with a set of drawings?
Why do dimensions have to be included on all drawings?
3. Identify and review the unit vocabulary.
4. Explain the purpose of sections and details. Why are they important?
5. Identify the different types of sections and details.

6. Locate residential sections and details on a set of blueprints. Discuss why each is necessary on a set of plans.
7. Write a paper on what you learned from this unit. Include the essential questions.
8. Unit test on sections and details

Attachments for Learning Experiences:

- Vocabulary and Basic Information on Sections and Details
- Unit Test: Sections and Details & Key

Notes & Reflections:

Check for understanding frequently. Review vocabulary and basic information, as needed.
Information may be added that the teacher deems necessary.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Unit Test: Sections and Details

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Students will reveal their knowledge of sections and details by completing a test over the information covered in class.

Attachments for Culminating Performance Task:

Unit Test: Sections and Details



UNIT RESOURCES

Web Resources:

Attachment(s):

Materials & Equipment:

What 21st Century Technology was used in this unit:

<input type="checkbox"/>	Slide Show Software	<input type="checkbox"/>	Graphing Software	<input type="checkbox"/>	Audio File(s)
X	Interactive Whiteboard	<input type="checkbox"/>	Calculator	<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Student Response System	<input type="checkbox"/>	Desktop Publishing	<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Web Design Software	<input type="checkbox"/>	Blog	<input type="checkbox"/>	Video
<input type="checkbox"/>	Animation Software	<input type="checkbox"/>	Wiki	<input type="checkbox"/>	Electronic Game or Puzzle Maker
<input type="checkbox"/>	Email	<input type="checkbox"/>	Website	X	CAD Software