Frameworks: 2.D, 2.G, 2.H, 4.B

Unit: Book 2 ProjectsTitle: Playhouse

Skill(s) and Knowledge: Students will be able to: identify the tools and materials and processes needed to complete the playhouse project, while maintaining a safe working environment.

Tasks: Fabricate the parts for each framing system and assemble a playhouse.

Performance objective: Create a cut list, identify materials and fasteners, follow directions, read working drawings, use and maintain the following tools: tape measure, pencil, combination square, framing square, circular saw, hand saw, drill, hammer, clamps.

Tools, supplies and reference materials:

Career Connection Book 2 Chapter 7 pages: 325-357.

Methods of instruction: Demonstrate how to frame each system, i.e. floor, wall, roof. Students can work in small groups to complete a portion of the playhouse and then assemble all the parts together, using the Career Connections Book 2 Chapter 7 and following the instructions.

Estimated time: 8-10hrs. **Number of students:** 10-15

Task analysis or activities: Students will work in small groups to complete each of the framing activities needed to fabricate the playhouse. Students will practice working together to complete all activities and helping each other as they progress toward completion of the playhouse.

Evaluation: Students will be graded on their use of time, safety methods, quality of work, cleaning and organization of their work area, interaction with other students, and vocational employability skills grading rubric. Playhouse project evaluation on page 358-359.

Performance Notes:

Frameworks: 2.D, 2.G, 2.H, 4.B

Vocational Frameworks References

- 2.E.01.01 Demonstrate use and maintenance of layout, marking and measuring tools
- 2.E.01.02 Demonstrate use and maintenance of fastening, clamping and dismantling tools.
- 2.F.01.01 Demonstrate use and maintenance of portable circular saw.
- 2.G.01.03 Demonstrate the use and maintenance of step ladders.
- 4.B.01 Demonstrate appropriate oral and written communication skills in the workplace.

English/Strand 3 Frameworks References:

RST Grades 9-10 #4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases in a technical context.

Frameworks References: Math

N-Q3 Identify significant figures in recorded measures and computed values based on the context given and the precision of the tools used.

Common Core References:

Read and listen critically for information understanding and enjoyment Set goals and achieve them by organizing time, workspace, and resources effectively Work both independently and in groups

SCANS references:

Foundation Skills:

- 1. Basic skills—reading, writing, mathematics, speaking, and listening.
- 2. Thinking Skills-- thinking creatively, making decisions, solving problems, visualizing, knowing how to learn, and reasoning
- 3. Personal qualities--individual responsibility, self-esteem, sociability, self-management, and integrity

Work Place Competencies

- 1. Resources--allocating time, money, material, space, and staff.
- 2. Interpersonal skills--working in teams, teaching others, serving customers, leading negotiating, and working well with culturally diverse populations.
- 3. Information--acquiring and evaluating data, organizing and maintaining files, interpreting & communicating, and using computer to process information
- 4. Systems--understanding social, organizational, and technological systems, monitoring and correcting performance, and designing or improving systems.
- 5. Technology--selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies

Frameworks: 2.D, 2.G, 2.H, 4.B

CAREER CONNECTIONS: PROJECT BOOK 2

Lesson Plan: Chapter 7, Playhouse

Time Required: 56–66 class periods (66 periods are outlined below)

- Allow time to check out students on safety and operation of tools to be used in the project if they have not already demonstrated safety and operation competency.
- Allow time for students to make up the cut list (1-2 hours).
- Allow time before the shop period ends for cleaning up the shop.

Goal:

Practice and challenge existing carpentry skills by building a miniature house – a playhouse.

Objectives:

At the end of this chapter, students should be able to:

- Demonstrate the skills necessary to build a house
- Use such house essentials as post base and post cap to build and install a post and beam porch with a railing
- Use new materials for roofing such as fascia, shingles, and drip edge

Cooperative Learning:

Students should work in pairs or in teams. In this case, both students in the pair or all members of the team will receive the same grade in evaluations. Working in pairs or in teams will shorten the time required to complete the projects if time in the shop is an issue. This method of building projects will also cut down on the amount of material used.

Procedures:

The following provides a summary of instructional and assessment procedures.

Teach

Hours	Activity	
Class Period 1		
1 hour	Chapter 7 Introduction	
	Review the lesson goal and objectives with students. Discuss expectations and how the project will be evaluated.	
	Review with students the illustrations shown. Have students prepare the cut list.	
Class Period 2		
1 hour	Have students complete the cut list and then begin building the floor frame.	
Class Periods 3–6		
4 hour	Guide students as they complete the floor frame.	
Class Periods 7–22		
16 hours	Have students work on building the walls.	

Carpentry Frameworks Based Lesson Plan

Frameworks: 2.D, 2.G, 2.H, 4.B

Class Periods 23–25		
3 hours	Show students how to install the porch post and beam.	
Class Periods 26–41		
16 hours	Guide students as they frame the roof.	
Class Periods 42–47		
6 hours	Show students how to build the gable overhangs.	
Class Periods 48–52		
5 hours	Guide students as they install the fascia and sheathing.	
Class Periods 53–66		
14 hours	Guide students through completion of the playhouse as they apply the roofing materials.	

Assess

A .	
Assessment	Assessment Method and Criteria
Activity	
Playhouse	See rubrics and evaluation sheets. Additionally, a skills matrix will be provided.