

Exercise 1: IDENTIFYING MATERIALS AND EQUIPMENT

Answers to Lab Manual

MATERIALS LIST

Drawing board (minimum size 17" × 12")
T-square
Triangles (45°-45°-90° and 30°-60°-90°)
Adjustable triangle
2H drawing pencil
Lead holder
Lead pointer or pencil sharpener
Vinyl eraser
Eraser shield
Engineer's scale (triangular)
Architect's scale (triangular)
French curves
Compass
Protractor
Circle template (1/16" to 1" circles, minimum)
Drafting paper (plain or gridded)

FILL IN THE BLANKS

1. A 45-degree line can be drawn quickly with the aid of a _____.
triangle
2. _____, _____, and _____ are useful in drawing lines
parallel to the edge of the drawing board.
Parallel bar, adjustable triangle, T-square
3. A(n) _____ or a(n) _____ is useful in drawing nonstandard angles
such as 37 degrees.
adjustable triangle, protractor
4. A _____ allows rapid drawing of circles to indicate trees and shrubs.
circle template
5. An H rating indicates that a pencil has _____ lead.
hard

6. Do not use leads with a _____ rating when drafting.

B

7. _____ give a smooth, professional look to curving lines.

French curves

8. The best drafting erasers are made of _____.

vinyl

9. Very large circles may be drawn with a _____.

compass

10. _____ allow one to erase a line without erasing adjacent or adjoining lines.

Eraser shields

11. An _____ scale contains scales that are multiples of 10.

engineer's

12. A 1:20 scale means that one inch equals _____.

20 feet

IDENTIFICATION

1. Item A

Lead pointer

2. Item B

Engineer's scale

3. Item C

Protractor

4. Item D

Compass

5. Item E

French curve

6. Item F

T-square

7. Item G

Adjustable triangle

8. Item H

Lettering guide

Exercise 2: USING EQUIPMENT AND WORKING WITH SCALE

Answers to Lab Manual

MATERIALS LIST

Drawing board
T-square
Triangles
Drawing pencil (HB, F, H, or 2H)
Vinyl eraser
Eraser shield
Engineer's scale or architect's scale
French curves
Compass
Protractor
Drafting paper (with or without grids)
Drafting tape (not masking tape!)

ASSIGNMENT

1. Use the drawings that follow to complete this exercise. Once completed and evaluated, these drawings will continue to be used as we develop a complete a landscape plan.

- A. Students will draw on a 1:10, including a scale indicator bar. They are graded accordingly.
- B. Students will draw on a 1:8, including a scale indicator bar. They are graded accordingly.

NOTE: Students should be reminded to keep their drawing for the following exercise.

Exercise 3: DEVELOPING LETTERING SKILLS

Answers to Lab Manual

MATERIALS LIST

Drawing board and T-square
Engineer's scale or architect's scale
Eraser and shield
Drawing pencil (HB, F, H, or 2H)
One 8 1/2" × 11" sheet drawing paper
Drafting tape
House plan drawn in Exercise 2

ASSIGNMENT

- 1. Tape an 8 1/2" × 11" sheet of vellum to your drawing surface and align the bottom or top edge using your T-square. Complete the following assignment.**

Students are to draw several guidelines for different size letters, two alphabets—straight and slanted—using 2/10" letters for the engineer's scale or 3/16" for the architect's scale. They are to draw two alphabets of any style for 1/10" letters or 1/8" letters, write their own name, a specified sentence—and using their house plan from Exercise 2—label the rooms and areas.

NOTE: Students should still retain their house plan.

Exercise 4: USING SYMBOLS IN DRAWING THE RESIDENCE

Answers to Lab Manual

MATERIALS LIST

House plan assignment sheet from Exercise 3

Drawing board and T-square

Engineer's scale or architect's scale

Eraser and shield

Drawing pencil (HB, F, H, or 2H)

ASSIGNMENT

1. Use the house plan drawn in Exercise 2 and lettered in Exercise 3 for this activity.

Using their house plan, students should draw windows in the locations indicated, erase part of the wall connected to the patio to mark a sliding door, draft it, darken the wall spaces between windows, and, using appropriate symbols, indicate the desired material for the front walk and patio. Scale can be 1:10.

Exercise 5: USING SYMBOLS IN DRAWING TREES

Answers to Lab Manual

MATERIALS LIST

Drawing board and T-square
Drawing pencil (HB, F, H, or 2H)
Eraser and shield
Engineer's scale or architect's scale
Circle template (1/16" to 2 1/4")
One 8-1/2" × 11" sheet of drafting paper
Drafting tape

ASSIGNMENT

- 1. Draw the following in 1:10 or 1:8 scale. Be neat and strive for smooth, even lines. Please review the Activity Rubric before beginning.**

Students are to draw two deciduous trees and one evergreen tree for each size group (total of nine trees), then design their own symbols and draw one large, medium, and small tree (three more trees). The scale can be either 1:10 or 1:8.

Exercise 6: USING SYMBOLS IN DRAWING SHRUBS

Answers to Lab Manual

MATERIALS LIST

Drawing board and T-square
Drawing pencil (HB, F, H, or 2H)
Eraser and shield
Engineer's scale or architect's scale
Circle template (1/16" to 2 1/4")
One 8-1/2" × 11" sheet of drafting paper
Drafting tape

ASSIGNMENT

- 1. Tape a sheet of 8 1/2" × 11" drafting paper to your drawing surface. Use the 1:10 scale to complete the following activity.**

Students are to draw three shrubs for each size group (total of nine shrubs), then design their own symbols and draw one dwarf, medium, and large shrub (three more shrubs). Then they should draw a grouping of five shrubs for each size group. The scale should be 1:10.

Exercise 7: USING SYMBOLS IN DRAWING GROUND COVERS, VINES, AND FLOWER BEDS

Answers to Lab Manual

MATERIALS LIST

Drawing board and T-square
Drawing pencil (HB, F, H, or 2H)
Eraser and shield
Engineer's scale or architect's scale
French curve
45°-45°-90° triangle
Drafting tape

ASSIGNMENT

- 1. Follow directions, and complete the Exercise 7 Activity Sheet. Draw directly on the sheet provided. Use a 1:10 or a 1:8 scale.**

Students are to complete the Exercise 7 assignment sheet. The scale can be either 1:10 or 1:8.

Exercise 8: DRAWING SYMBOLS FOR NONPLANT FEATURES

Answers to Lab Manual

MATERIALS LIST

Drawing board and T-square
Drawing pencil (HB, F, H, or 2H)
Eraser and shield
Engineer's scale or architect's scale
French curves
One 8-1/2" × 11" sheet of drafting paper
Drafting tape

ASSIGNMENT

- 1. Secure a sheet of vellum, 8 1/2" × 11", and tape it to your drawing board. Use either a 1:8 or 1:10 scale.**

Students are to draw a 16' × 24' flower bed; enclose it with crossties; draw three rocks; draw a 10' wide gazebo; draw a 20' × 20' play area containing a swing set, slide, and sandbox; and include five more features of their choice. They can use with 1:10 or 1:8 scale.

Exercise 9: UNDERSTANDING FOUNDATION PLANTINGS

Answers to Lab Manual

MATERIALS LIST

Figure 9–1
Pen or pencil

FILL IN THE BLANKS

1. Foundation plants serve as a transition between the residence and the _____.
outer environment
2. Foundation plants may extend several feet from the residence if they are a part of the foundation _____.
bed area
3. Modern landscapes should be designed so that they are _____, _____, and _____.
attractive, functional, low maintenance
4. In the _____ effect, foundation plants are trimmed into a continuous box shape.
hedge
5. A landscape appears tilted in the _____ effect.
unbalanced
6. When plantings are _____, the plants lose their individual identity.
crowded
7. Selection of plants with no attention to mature size can result in the _____ effect.
overgrown
8. The hedge effect gives no relief from the _____ lines of the residence.
horizontal
9. The clipped effect can destroy the unique _____ habit of individual plants.
growth

10. Using one species of plant, spaced evenly, with gaps between, is called the _____ effect.

toy soldier

11. Plants are given a regular, smooth “haircut” in the _____ effect.

clipped

12. _____ are the first plants considered in a landscape.

Foundation plants

Exercise 10: RECOGNIZING FAULTY FOUNDATION DESIGN

Answers to Lab Manual

MATERIALS LIST

All sheets from Exercises 9 and 10
Pen or pencil

ASSIGNMENT

1. Examine Figure 10–2 and try to identify as many faults as possible.

Students are to find as many faults as they can in Assignment Sheet 10, assuming a one-story home with windows 3 feet off the ground.

Exercise 11: DESIGNING A FOUNDATION PLANTING

Answers to Lab Manual

MATERIALS LIST

Drawing board and T-square
Drawing pencil (HB, F, H, or 2H)
Engineer's scale or architect's scale
Eraser and shield
Circle template
French curves
Figures 9–1 and 10–1

ASSIGNMENT

1. Make both plan view and evaluation drawings. Use Activity I if you are using a 1:10 scale or use Activity II if you are using a 1:8 Scale.

Students are to design their own foundation planting on Assignment Sheet 11. Sheet I is for a 1:10 scale, and Sheet II is for a 1:8 scale.

Exercise 12: ORGANIZING SPACE IN THE LANDSCAPE

Answers to Lab Manual

MATERIALS LIST

Figure 12–1
Pen or pencil

FILL IN THE BLANKS

1. The three primary areas of a landscape are _____, _____, and _____ areas.
public, private, utility
2. A _____ area is needed for families with small children.
play
3. Dividing the yard into areas encourages the planned organization of _____.
space
4. A landscape should be both _____ and _____.
useful, attractive
5. The front yard is almost always the _____ area.
public
6. The public area should be _____ rather than complicated.
simple
7. The private area is sometimes called the _____ area.
living
8. The private area fulfills people's need for both _____ and _____.
privacy, security
9. _____, _____, and _____ are three features found in a private area.
Any three of the following are acceptable:
patio, open lawn, plants, swimming pool, barbecue or picnic facility, gazebo, reflection pool

- 10. The utility area is sometimes called the _____ area or _____ unit.**
service, work
- 11. When planning for utility, one should use the _____ amount of space.**
minimum
- 12. _____ and _____ are two features that could be found in a utility area of a residence.**
Any two of the following are acceptable:
vegetable garden, utility building, workshop, pet facility, clothesline, garbage containers, compost bins, firewood, fuel tanks
- 13. A swimming pool should be located in the _____ area.**
private
- 14. The utility area should be located on the _____ side of the yard.**
driveway
- 15. A relaxation bench should be located in the _____ area.**
private
- 16. A small vineyard should be located in the _____ area of the landscape.**
utility

Exercise 13: MAKING THUMBNAIL SKETCHES

Answers to Lab Manual

MATERIALS LIST

Exercise 12 sheets
Exercise 13 sheets
Drawing pencil (HB, F, H, or 2H)
Eraser

ASSIGNMENT

1. Complete a thumbnail sketch for the house and property.

Students are to complete a thumbnail sketch of the house and property on Assignment Sheet 13, assuming it has garbage cans, a workshop/boat shed, a swimming pool, a vegetable garden, a play area, a firewood stack, and neighbors on both sides. The scale is 1:20.

Exercise 14: DESIGNING WALKS AND DRIVES

Answers to Lab Manual

MATERIALS LIST

Drawing board and T-square
Drawing pencil (HB, F, H, or 2H)
Engineer's scale or architect's scale
Eraser and shield
French curve
Sample sheets from Exercise 4

ASSIGNMENT

1. Draw (design) a drive for the residence in the Activity.

Students are to design a drive for the residence on Assignment Sheet 14 and an entry walk from the drive to the front door, indicating the surface of both. Assignment Sheet I is for a 1:10 scale, and Sheet II is for a 1:8 scale.

Exercise 15: DRAFTING GUEST PARKING AND TURNAROUNDS

Answers to Lab Manual

MATERIALS LIST

Drawing board and T-square
Drawing pencil (HB, F, H, or 2H)
Eraser and shield
Engineer's scale or architect's scale
45° triangle or adjustable triangle
French curve
Compass

ASSIGNMENT

- 1. For the following activity if you are using an engineer's scale, use Activity I and a 1:20 scale. If you are using an architect's scale, use Activity II and a 1:16 scale.**

Students are to draw guest parking or a turnaround on Assignment Sheet 15, connecting it to the front door by a 4' wide walk, and connecting the drive to the street. They should label all areas. Assignment Sheet I requires an engineer's scale using a 1:20 scale; Sheet II requires an architect's scale using a 1:16 scale.

Exercise 16: DESIGNING PATIOS

Answers to Lab Manual

MATERIALS LIST

Drawing board and T-square
Drawing pencil (HB, F, H, or 2H)
Eraser and shield
Engineer's scale or architect's scale
Figures 4–1 and 4–2
Triangle
French curve(s)
Compass
Exercise 4 sample sheet

ASSIGNMENT

1. For the following activity, design a patio for a residence.

Students are to design a patio on Assignment Sheet 16, indicating permanent structures and indicating the surfacing using Figures 4–1 and 4–2 as a reference. Assignment Sheet I is for a 1:10 scale, and Sheet II is for a 1:8 scale