BASIC SKILLS IN PAINTING AND FINISHING
For
EXPLORATORY VOCATIONAL AGRICULTURE
in
ARKANSAS

UNIT OBJECTIVE

After completion of this unit, the student should be able to paint a wood or metal surface, and know the categories of paint, methods of applying paint, and sizes and parts of brushes. This knowledge will be evidenced by demonstration and by scoring 85% on the unit test.

SPECIFIC OBJECTIVES

After completion of this unit, the student should be able to:

1. Name broad categories of paint.
2. Name common methods of applying paint.
3. Identify brush sizes.
4. Identify main parts of a paint brush.
5. Demonstrate the ability to:
   a. Open and close a paint can properly
   b. Distinguish between oil and water base paint
   c. Sand and paint a piece of wood and clean up and store materials properly
   d. Sand, prime, and paint a piece of metal, and clean up materials properly
EXPLORATORY AGRICULTURE PAINTING AND FINISHING

INFORMATION SHEET

I. Broad categories of paint:
   A. Water base paint
   B. Oil base paint

   (NOTE: Water base paint uses water as its vehicle and can be cleaned with soap and water. Oil base paint uses oily materials as its vehicle and must be cleaned with thinner or other solvents compatible with the vehicle.)

II. Common methods of applying paint:
   A. Brushing
   B. Spraying
   C. Rolling

   (NOTE: Brushing is most commonly used on wood surfaces; spraying is most commonly used on metal surfaces; rolling is usually used on large paintable areas. However, all methods can be used on all types of paintable surfaces, depending on what is available and the kind of finish desired.)

III. Identifying brush sizes:
   A. Check at the base of the bristles on the binding of the brush for the stamped brush size.
   B. Measure the width of the brush in inches to determine the size.

IV. The main parts of the paint brush are: (figure 1)
   A. Handle
   B. Binding
   C. Bristles

   FIGURE 1
EXPLORATORY AGRICULTURE PAINTING AND FINISHING

JOB #1--OPEN AND CLOSE A PAINT CAN PROPERLY

I. Consumable supplies needed
   A. Paint can

II. Procedure
   A. Insert can opening tool between the lid and lip of the can
   B. Pry the lid up at 1" intervals around the edge of the can until lid is loose and can be lifted off
   C. Pierce holes in the valley of the lip of the paint can at regular intervals using a small nail and hammer
      (NOTE: If there are already holes in the lip, clean them out with the nail. The holes allow excess paint to run back into the can.)
   D. Place lid back on top of the lip of the can
   E. Secure the lid in the groove by tapping lightly with a hammer around the edge of the lid
      (CAUTION: Tap lightly so as not to bend the lid or the can. Also, be careful not to splash the paint that may be in the groove onto yourself.)
   F. Have instructor give credit for procedure

JOB #2--DISTINGUISH BETWEEN OIL AND WATER BASE PAINT BY TEST

I. Consumable supplies needed
   A. Water base paint
   B. Oil base paint
   C. Water
   D. Paint thinner
EXPLORATORY AGRICULTURE PAINTING AND FINISHING

JOB #2

II. Procedure
   A. Repeat procedure in Job #1 for opening cans of paint
   B. Dip dowel pin into one of the cans of paint
      (NOTE: This should be about 1".)
   C. Dip dowel pin in water and see if paint is washed off easily
   D. If paint does not wash off in water, continue cleaning by dipping pin in paint thinner to determine its effectiveness in cleaning
   E. Repeat steps B, C, and D with other can of paint
   F. Wash paint off dowel pin thoroughly with proper cleaning agent
   G. Wipe dowel pin and clean thoroughly with cleaning rag
   H. Close paint cans using procedure in Job #1
   I. Have instructor give credit on test results

JOB #3--SANDB AND PAINT A PIECE OF WOOD

I. Consumable supplies needed
   A. Piece of wood 1" x 4" x 6"
   B. Sandpaper (medium, coarse, and fine)
   C. One quart water base paint
   D. Soap
   E. Wrapping paper for storing paint brush (paper towel may be used)

II. Procedure
   A. Sand board with coarse sandpaper with the grain
EXPLORATORY AGRICULTURE PAINTING AND FINISHING

JOB #3

B. Sand board with medium sandpaper with the grain
C. Sand board with fine sandpaper with the grain
D. Wipe dust from board with damp cloth
E. Open paint as in Job #1
F. Stir paint with paint paddle
G. Dip brush about 1/3 of the length of the bristles in the paint and wipe excess paint off
H. Brush paint toward edges and downward by starting at the top and the center of the board
I. Paint with the grain, using long, even strokes
J. Check for runs in the paint
K. Wait 5 minutes and check again for runs
L. Seal paint can as in Job #1
M. Wash brush in soap and water. Agitate brush in water until all paint is removed from the bristles
   (NOTE: It may be necessary to use the wire brush to clean the pigment out of the bristles, then repeat cleaning in water.)
N. Dry brush thoroughly with cleaning cloth
O. Wrap brush in paper and store on shelf
P. Hand in completed board to instructor for credit

JOB #4--SAND, PRIME, AND PAINT A 3" x 6" PIECE OF METAL

I. Consumable supplies needed
   A. Piece of metal 3" x 6"
   B. Sandpaper (coarse and fine)
   C. Can of spray primer
EXPLORATORY AGRICULTURE PAINTING AND FINISHING

JOB #4

D. Can of spray paint
E. Cleaning compound

II. Procedure

A. Sand metal with coarse sandpaper until all rust and foreign material is removed
B. Dampen rag with thinner and wipe metal thoroughly
C. Read and follow directions on label of primer
D. Prime metal
   (NOTE: You must spray lightly using short bursts of spray and keep the can moving. Do not overspray. You will have to make several passes. Check for runs. Allow to dry.)
E. Lightly sand primed metal using fine sandpaper
F. Paint metal using same procedure as in step D
G. Hand in completed job to instructor for credit
EXPLORATORY AGRICULTURE PAINTING AND FINISHING

TEST

NAME___________________________________________SCORE__________

1. Name two broad categories of paint.
   a. _______________________________________________
   b. _______________________________________________

2. Name three common methods of applying paint.
   a. _______________________________________________
   b. _______________________________________________
   c. _______________________________________________

3. Identify the following brush sizes:

   a. _____  b. _____  c. _____

4. Identify the three main parts of a paint brush.
   1. _______________________________________________
   2. _______________________________________________
   3. _______________________________________________
EXPLORATORY AGRICULTURE PAINTING AND FINISHING

ANSWERS TO TEST

1. a. Water base
   b. Oil base

2. a. Brushing
   b. Spraying
   c. Rolling

3. a. 1 inch
   b. 2 1/2 inch
   c. 4 inch

4. 1. Handle
   2. Binding
   3. Bristles
## Progress Chart
Agricultural Mechanics

### Painting and Finishing

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<thead>
<tr>
<th>Names</th>
<th>Open and Close Paint Can</th>
<th>Test Paint</th>
<th>Sand, Prime a Piece of Wood</th>
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