



NATIONAL
FFA ORGANIZATION

Idaho Floriculture Handbook 2017-2021

Purpose

To stimulate the study of and interest in production and retailing of flowers, plants and foliage through the agricultural education curriculum.

Objectives

- To identify floriculture and bedding plant materials.
- To understand the biological and scientific principles and develop the skills underlying propagation, growth requirements, growing techniques, harvesting, marketing and maintenance of established floriculture plants.
- To understand principles and develop skills of floral design.
- To identify and select appropriate supplies and equipment for the flower shop and greenhouse.
- To understand and demonstrate interpersonal skills needed to attain successful employment in the floriculture industry.
- To develop those interpersonal skills prerequisite to effective participation in the floriculture industry.
- To identify the common tools and equipment used in the floriculture industry.

General Rules

1. A team will consist of four FFA members, with the top three individual scores counting toward team placing. No alternates will be allowed.
2. This State CDE will be held during the FFA State Leadership Conference.
3. Entry fees to cover the cost of hosting the event will be assessed.
4. Participants in need of special accommodations (disability or other health issues) must submit the Idaho State FFA Career Development Events Request for Special Accommodation Application found at the end of the General Rules and Regulations at least one month prior to the event.

Format and Scoring

ROTATIONS

General knowledge – 30 minutes	Arrangement – 25 minutes
Problem Solving – 25 minutes	Corsage - 25 minutes
Plant ID and Tool ID – 25 minutes	Practicum 1 – 10 minutes
Practicum 2 – 10 minutes	

Material students need to provide

- Clean clipboard, free of notes
- Two sharpened No. 2 pencils
- Floral cutters/clippers
- Ribbon shears
- Wire cutters
- Floral knife
- Floral Adhesive, Glue Dots, Floral Tape
- Participants may also bring an apron, and/or a tool belt and towels.
- Calculator- Battery operated, non-programmable and non-scientific (basic five function only). No other calculators are allowed to be used during the event.

GENERAL KNOWLEDGE EXAMINATION – 250 POINTS

Fifty objective-type multiple-choice questions will be written that cover the areas of the floriculture industry reflected in the event objectives. This phase of the event will test participants' knowledge and understanding of basic biological and scientific principles of producing and marketing flowers, plants and foliage. Each participant will be allowed 30 minutes to complete this phase of the event. Each answer has a value of five points. The contents of the exam will come from the previous five (5) years of General Knowledge Exams from the National FFA Floriculture Career Development Event.

PROBLEM-SOLVING/DECISION-MAKING –50 POINTS

Each participant will solve five problems related to the various aspects of the floriculture industry identified in the event objectives. A problem-solving activity is defined as:

“A mental or physical activity involving the gathering or searching of information and the use of a logical solution process using commonly accepted standards and available information to solve a problem specific to a particular area of floriculture production or retailing.”

Each question will describe the situation associated with or creating a problem and list four possible solutions. The participant must decide on the best possible solution to the question. All materials and information necessary to solve the question will be available to the participant as he or she solves the problem. Each participant will be allowed 25 minutes to complete this phase of the event. Each correct solution has a value of 10 points.

Sample Problem

Situation: You are the owner of the “Flower City” florist shop. You received an order for a floral arrangement to be delivered to one of your regular customers. You give the order to one of your employees and ask that it be ready by delivery time. When the employee brings the finished arrangement to you for packing and delivery, you notice a problem with the arrangement. The arrangement set before you is the arrangement made by the employee. You realize that the problem must be corrected before the arrangement can be delivered. What would you tell your employee to do to the arrangement to correct the problem?

Possible Solutions:

- Move smaller flowers to the top of the arrangement and larger flowers to the bottom of the arrangement.
- Add a focal point to the arrangement.
- Use some different plant materials to add texture to the arrangement.
- Change the color of the flowers to make the colors compatible.

IDENTIFICATION OF PLANT MATERIALS – 200 POINTS

Forty specimens from the Floriculture Plant Identification List (included with the scorecard) will be displayed for participants to identify by technical and common names. Each specimen will be designated by a number. Five points will be awarded for each specimen that is correctly identified. Each participant will be allowed 25 minutes to complete this phase of the event. Plant material identification will be in the same 25 minute rotation with tool identification.

IDENTIFICATION OF EQUIPMENT – 50 POINTS

Ten equipment samples from the modified national equipment identification list will be displayed for participants to identify. A number will designate each sample. Five points will be awarded for each specimen that is correctly identified. Each participant will be allowed 25 minutes to complete the identification part of the event. Tool Identification will be in the same 25 minute rotation with plant material identification.

FLORAL ARRANGEMENT – 100 POINTS

Make a \$35 flower arrangement. The type of arrangement will be selected from the following list:

- Round Centerpiece
- Triangle (non-centerpiece)
- Horizontal

Each will be made using a 1/3 brick container.

Use the materials provided. Participants will be allowed 25 minutes to complete their arrangements (85 points) and itemized bills (15 points).

Participants will be provided the retail price of the flowers and foliage they will use in their arrangements by the event assistant at the beginning of the practicum. The markup will be built into the retail price of the flowers and foliage used in the arrangement. When the participant has determined the total arrangement cost, he or she has included the markup. Retail cost of flowers and foliage given to the participant will be determined after polling florists to determine their current retail prices on the flowers and foliage used in the event.

Explanation of Floral Arrangement Terms

- **Category Interpretation (Design):** Design follows objective scenario given
- **Balance:** Physical and Visual
- **Creativity:** Artistic inventiveness
- **Depth:** Placement of materials at different levels throughout the arrangement
- **Focal Emphasis:** Design has one area of design that attracts the eye to it
- **Line:** Movement
- **Mechanics:** Professional techniques and application
- **Scale:** Proportion
- **Unity:** Cohesiveness of design

MAKE AND PACKAGE A CORSAGE – 75 POINTS

Make and package a \$15 corsage. The type of corsage and information about the corsage will be announced by the event assistant in charge at the beginning of the practicum. All plant and non-plant materials needed to construct and package the corsage will be provided. Participants should be knowledgeable and possess skills in the use of glue when making a corsage. Each participant will be allowed 25 minutes to complete the construction of the corsage and complete an itemized bill. This practicum will be a part of the event every year.

PRACTICUMS – 150 POINTS

Each participant will complete the Floral Arrangement practicum, the Make and Package a Corsage practicum, Potting Plant Cuttings, and Asexual Propagation. Each participant will provide his or her own florist shears, knife, and pencils for this phase of the event.

The following information describes each practicum.

1. Potting Plant Cuttings (75 pts.)

Plant five rooted cuttings in the pot provided. (Each participant will be given 10 cuttings from which to select five; a 3-to-6-inch pot; a 1:1 soil mixture at the correct moisture level; and a marking pencil.) Ten minutes will be allowed for completion of this practicum, including the judging of the potted plant cuttings.

2. Asexual Propagation of Plants (75 pts.)

Each participant will be provided the parent plant materials and all other materials needed to propagate plants asexually. Using the available materials, participants will take five cuttings from the plant before them and place them in rooting media. Ten minutes will be allowed for completion of this practicum including the judging of the participant's performance.

Floriculture Plant Identification List

101	Aechmea fasciata cv.	Silver Vase Bromeliad
102	Ageratum houstonianum	Ageratum
103	Alstroemeria hybrid cv.	Peruvian Lily
104	Anemone coronaria	Anemone
105	Anethum graveolens cv.	Dill
106	Angelonia hybrid cv.	Angelonia
107	Anthurium x andraeanum cv.	Flamingo Plant
108	Antirrhinum majus cv.	Snapdragon
109	Aphelandra squarrosa cv.	Zebra Plant
110	Araucaria heterophylla	Norfolk Island Pine
111	Asparagus densiflorus	Sprengeri Fern
112	Aster pringlei	Monte Cassino Aster
113	Astilbe hybrid cv.	Astilbe
114	Begonia x semperflorens –cultorum	Wax Begonia
115	Begonia x tuberhybrida cv.	Tuberous Begonia
116	Caladium x hortulanum cv.	Caladium
117	Calibrachoa hybrid cv.	Million Bells
118	Callistephus chinensis cv.	China Aster
119	Campanula hybrid cv.	Campanula
120	Canna x generalis cv.	Garden Canna
121	Capsicum annum	Ornamental Pepper Plant
122	Catharanthus roseus	Vinca
123	Celosia argentea cv.	Cockscomb
124	Chamaedorea elegans	Parlor Palm
125	Chamelaucium uncinatum	Waxflower
126	Cholorophytum comosum cv.	Spider Plant
127	Chrysanthemum x morifolium	Florist's Chrysanthemum
128	Clematis hybrid cv.	Clematis
129	Codiaeum variegatum pictum	Croton
130	Crassula argentea	Jade Plant
131	Cycas revoluta cv.	Sago Palm
132	Cyclamen x persicum cv.	Florist's Cyclamen
133	Cymbidium cv.	Cymbidium Orchid
134	Cymbopogon cv.	Lemongrass (herb)
135	Dahlia hybrid cv.	Dahlia
136	Delphinium consolida cv.	Larkspur
137	Dendrobium cv.	Dendrobium Orchid
138	Dianthus caryophyllus cv.	Carnation
139	Dracaena cincta	Red Edge Dracaena
140	Echinocactus cv.	Barrel Cactus
141	Epipremnum aureum cv.	Golden Pothos

142	Erica carnea cv.	Spring Heather
143	Eucalyptus polyanthemus	Silver Dollar Eucalyptus
144	Euphorbia pulcherrima cv.	Poinsettia
145	Eustoma grandiflorum	Lisianthus
146	Exacum affine	Persian Violet
147	Ficus benjamina cv	Benjamin Fig
148	Ficus elastica cv	Rubber Plant
149	Fragaria x ananassa cv.	Strawberry Plant
150	Freesia x hybrida	Freesia
151	Gardenia jasminoides	Gardenia
152	Gerbera jamesonii	Gerbera Daisy
153	Gladiolus x hortulanus cv.	Garden Gladiolus
154	Gomphrena hybrid cv.	Globe Amaranths
155	Gypsophila elegans cv.	Baby's Breath
156	Hedera helix cv.	English Ivy
157	Helianthus annuus	Sunflower
158	Hemerocallis cv.	Daylily
159	Hippeastrum hybrid cv.	Amaryllis
160	Hosta cv.	Hosta
161	Hoya carnosa	Wax Plant
162	Hyacinthus orientalis cv.	Hyacinth
163	Hydrangea macrophylla	Big Leaf Hydrangea
164	Impatiens hybrid cv.	Impatiens
165	Impomoea batatas cv.	Ornamental Sweet Potato
166	Iris x xiphium cv.	Dutch Iris
167	Senecio cineraria	Dusty Miller
168	Justica brandegeana	Shrimp Plant
169	Kalanchoe x blossfeldiana cv.	Kalanchoe
170	Leucanthemum x superbum	Shasta Daisy
171	Leucospermum hybrid cv.	Pin Cushion Protea
172	Liatris spicata	Liatris
173	Lilium hybrid cv.	Asiatic or Oriental Lily
174	Limonium sinuatum	Statice
175	Lobularia maritima	Alyssum
176	Maranta leuconeura	Prayer Plant
177	Matthiola incana cv.	Stock
178	Monstera deliciosa	Split Leaf Philodendron
179	Narcissus hybrid cv.	Daffodil or Narcissus
180	Nephrolepis exaltata cv.	Boston Fern
181	Ocimum basilicum cv.	Basil
182	Opuntia cv.	Cactus
183	Paeonia cv.	Peony

184	Paphiopedilum hybrid cv.	<i>Ladyslipper Orchid</i>
185	Pelargonium x hortorum cv.	<i>Zonal Geranium</i>
186	Pelargonium peltatum cv.	<i>Ivy Geranium</i>
187	Pentas hybrid cv.	<i>Pentas</i>
188	Petroselinum crispum cv.	<i>Parsley</i>
189	Petunia x hybrida cv.	<i>Petunia</i>
190	Phalaenopsis cv.	<i>Moth Orchid</i>
191	Philodendron scandens oxycardium	<i>Heartleaf Philodendron</i>
192	Pilea cadierei	<i>Aluminum Plant</i>
193	Portulaca oleracea cv.	<i>Portulaca</i>
194	Primula malacoides cv.	<i>Primrose</i>
195	Ranunculus hybrid cv.	<i>Ranunculus</i>
196	Rhododendron simsii cv.	<i>Florist Azalea</i>
197	Rosa hybrid cv	<i>Hybrid Tea Rose</i>
198	Rumohra adiantiformis	<i>Leatherleaf Fern</i>
199	Saintpaulia ionantha cv.	<i>African Violet</i>
200	Salvia splendens cv.	<i>Salvia</i>
201	Sansevieria trifasciata cv.	<i>Snake Plant</i>
202	Schefflera arboricola	<i>Dwarf Schefflera</i>

203	Schlumbergera bridgesii	<i>Christmas Cactus</i>
204	Sempervivum hybrid cv.	<i>Hens and Chicks</i>
205	Senecio x hybridus cv.	<i>Cineraria</i>
206	Sinningia speciosa Fyfiana Group cv.	<i>Florist Gloxinia</i>
207	Solidago hybrid cv	<i>Solidago</i>
208	Solenostemon scutellarioides	<i>Coleus</i>
209	Spathiphyllum	<i>Peace Lily</i>
210	Stephanotis floribunda	<i>Stephanotis</i>
211	Strelitzia reginae	<i>Bird of Paradise</i>
212	Syngonium podophyllum	<i>Nepthytis</i>
213	Tagetes species cv.	<i>Marigold</i>
214	Tradescantia zebrine	<i>Wandering Jew</i>
215	Tulipa cv.	<i>Tulip</i>
216	Verbena hybrid cv.	<i>Verbena</i>
217	Viola x wittrockiana cv.	<i>Pansy</i>
218	Zantedeschia hybrid cv.	<i>Calla Lily</i>
219	Zinnia cv.	<i>Zinnia</i>

Floriculture Equipment and Supply Identification List

301	#100 Ribbon (satin, sheer, wired)
302	#3 Ribbon (satin, sheer, wired)
303	#40 Ribbon (satin, sheer, wired)
304	#9 Ribbon (satin, sheer, wired)
305	18 Gauge floral wire
306	28 Gauge floral wire
307	Anvil-and-blade pruner
309	Bouquet sleeve
311	Cardette
315	Chenille stem
318	Corsage box
319	Corsage pin
320	Corsage snips
322	Dry foam

326	Enclosure card
327	Fern greening pins
329	Floral adhesive
330	Floral foam
331	Floral knife
332	Floral preservative
333	Floral stem tape
336	Glass vase
337	Glue gun
338	Glue pan
339	Glue sticks
345	Hook-and-blade pruners (bypass pruners)
355	Nosegay holder
364	Pot covers

371	Ribbon shears
374	Rose and stem flower stripper
380	Sheet moss
385	Spanish moss
386	Sphagnum moss
389	Styrofoam
390	Sure stik
391	Tulle
394	Water picks
396	Water tubes
397	Waterproof container tape
398	Wire cutter
399	Wooden pick
400	Wrist corsage holder

Floral Arrangement Practicum Rubric

100 points

NAME		MEMBER NUMBER		
CHAPTER		STATE		TEAM NUMBER
POSSIBLE SCORE	Excellent	Good	Needs Improvement	Member Score
Arrangement		85		
Category Interpretation (Design)	7-15 points	6-10 points	0-5 points	
Balance	7-10 points	4-6 points	0-3 points	
Creativity	7-10 points	4-6 points	0-3 points	
Depth	7-10 points	4-6 points	0-3 points	
Focal Emphasis.	7-10 points	4-6 points	0-3 points	
Line	7-10 points	4-6 points	0-3 points	
Mechanics	7-10 points	4-6 points	0-3 points	
Scale	4-5 points	2-3 points	0-1 points	
Unity	4-5 points	2-3 points	0-1 points	
Itemized List of Costs		15		
Price Range	4-5 points	2-3 points	0-1 points	
Identification and Accuracy	7-10 points	4-6 points	0-3 points	
Total Possible:				100

EXPLANATION OF FLORAL ARRANGEMENT TERMS

Category Interpretation: Design follows objective scenario given

Balance: Physical and Visual

Creativity: Artistic inventiveness

Depth: Placement of materials at different levels throughout the arrangement

Focal Emphasis: Design has one area of design that attracts the eye to it

Line: Movement

Mechanics: Professional techniques and application

Scale: Proportion

Unity: Cohesiveness of design

JUDGE'S NAME

JUDGE'S SIGNATURE

DATE

Floral Arrangement Itemized List of Costs

NAME		MEMBER NUMBER	
CHAPTER	STATE	TEAM NUMBER	

Quantity	FLOWERS USED	Unit Cost	Total
Quantity	FOLIAGE USED	Unit Cost	Total
TOTAL FLOWER COST			
TOTAL FOLIAGE COST			

Total Flower Cost	
Total Foliage Cost	
Hydro-foam	
Container Cost	
TOTAL ARRANGEMENT COST*	

JUDGE'S NAME		JUDGE'S SIGNATURE		DATE
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Floriculture Making and Packing a Corsage Rubric

75 points

NAME		MEMBER NUMBER	
CHAPTER	STATE	TEAM NUMBER	

	Excellent	Good	Needs Improvement	Member Score
Wiring, taping, gluing	9-12 points	4-8 points	0-3 points	
Use of ribbon	11-15 points	6-10 points	0-3 points	
Design	11-14 points	6-10 points	0-3 points	
Wear-ability	7-10 points	4-6 points	0-3 points	
Packaging	5-7 points	2-4 points	0-1 points	
Pricing	9--12 points	5-8 points	0-4 points	
TOTAL SCORE: 75				

JUDGE'S NAME	JUDGE'S SIGNATURE	DATE
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Corsage Itemized List of Costs

NAME		MEMBER NUMBER	
CHAPTER	STATE	TEAM NUMBER	

Quantity	FLOWER/FOLIAGE	Unit Cost	Total
TOTAL FLOWER/FOLIAGE MATERIAL COST			

Quantity	MATERIAL USED	Unit Cost	Total
TOTAL HARD GOODS COST			

Total Plant Material Cost	
Total Hard Goods Cost	
Container Cost	
Sub Total	
TOTAL ARRANGEMENT COST*	

Participants will be provided the retail price of flowers and foliage that they will use in their arrangement by the event official at the beginning of the practicum. The markup is built into the retail price of the flowers and the foliage used in the arrangement.

Asexual Plant Propagation Rubric

75 points

NAME		MEMBER NUMBER	
CHAPTER	STATE	TEAM NUMBER	

	Excellent	Good	Needs Improvement	Member Score
Selection of cuttings	9-12 points	4-8 points	0-3 points	
Making cuttings	11-15 points	6-10 points	0-3 points	
Preparation of cuttings for sticking in growing media	7-10 points	4-6 points	0-3 points	
Use of rooting hormone	5-6 points	2-4 points	0-1 points	
Selection of growing media	9-12 points	4-8 points	0-3 points	
Sticking of cuttings in growing media	6-8 points	3-5 points	0-2 points	
Response to questions	9-12 points	4-8 points	0-3 points	
TOTAL SCORE: 75				

JUDGE'S NAME	JUDGE'S SIGNATURE	DATE
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Potting of Young Plants Practicum Rubric

75 points

NAME		MEMBER NUMBER	
CHAPTER	STATE	TEAM NUMBER	

	Excellent	Good	Needs Improvement	Member Score
Potting Process (52 points)				
Selection of Cuttings	7-10 points	4-6 points	0-3 points	
Filling Pot with Soil	4 points	2-3 points	0-1 points	
Placing of Cuttings	5-6 points	3-4 points	0-2 points	
Covering Cutting Rooted Ends	13-18 points	7-12points	0-6 points	
Labeling of plant/pot	7-9 points	4-6 points	0-3 points	
Watering of Potted Plant	4-5 points	2-3 points	0-1 points	
Potting Product (23 points)				
Depth of Planting	4-5 points	2-3 points	0-1 points	
Correct Soil Level in Pot	4-5 points	2-3 points	0-1 points	
Cutting Arrangement and Angle	4-5 points	2-3 points	0-1 points	
Firmness of Growing Medium	4 points	2-3 points	0-1 points	
General Appearance (free from handling damage)	4 points	2-3 points	0-1 points	
TOTAL POSSIBLE:				50

JUDGE'S NAME	JUDGE'S SIGNATURE	DATE
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Floriculture CDE Plant Identification and Equipment Scorecards

200 points

Directions: Identify plant specimens by matching the correct plant number from list provided to the sample spaces below. Bubble the correct sample identification number next to the correct number on the official scorecard.

1.	21.	
2.	22.	
3.	23.	
4.	24.	
5.	25.	
6.	26.	
7.	27.	
8.	28.	
9.	29.	
10.	30.	
11.	31.	
12.	32.	
13.	33.	
14.	34.	
15.	35.	
16.	36.	
17.	37.	
18.	38.	
19.	39.	
20.	40.	

Equipment Identification (50 points)

Place the correct equipment material number from the provided list next to the sample number below.

1.	2.	3.
4.	5.	6.
7.	8.	9.