

FFA Agriculture Field Day

October 13, 2016 – Registration 8:00a.m. Contest start 9:00 am

Shasta College Farm



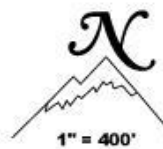
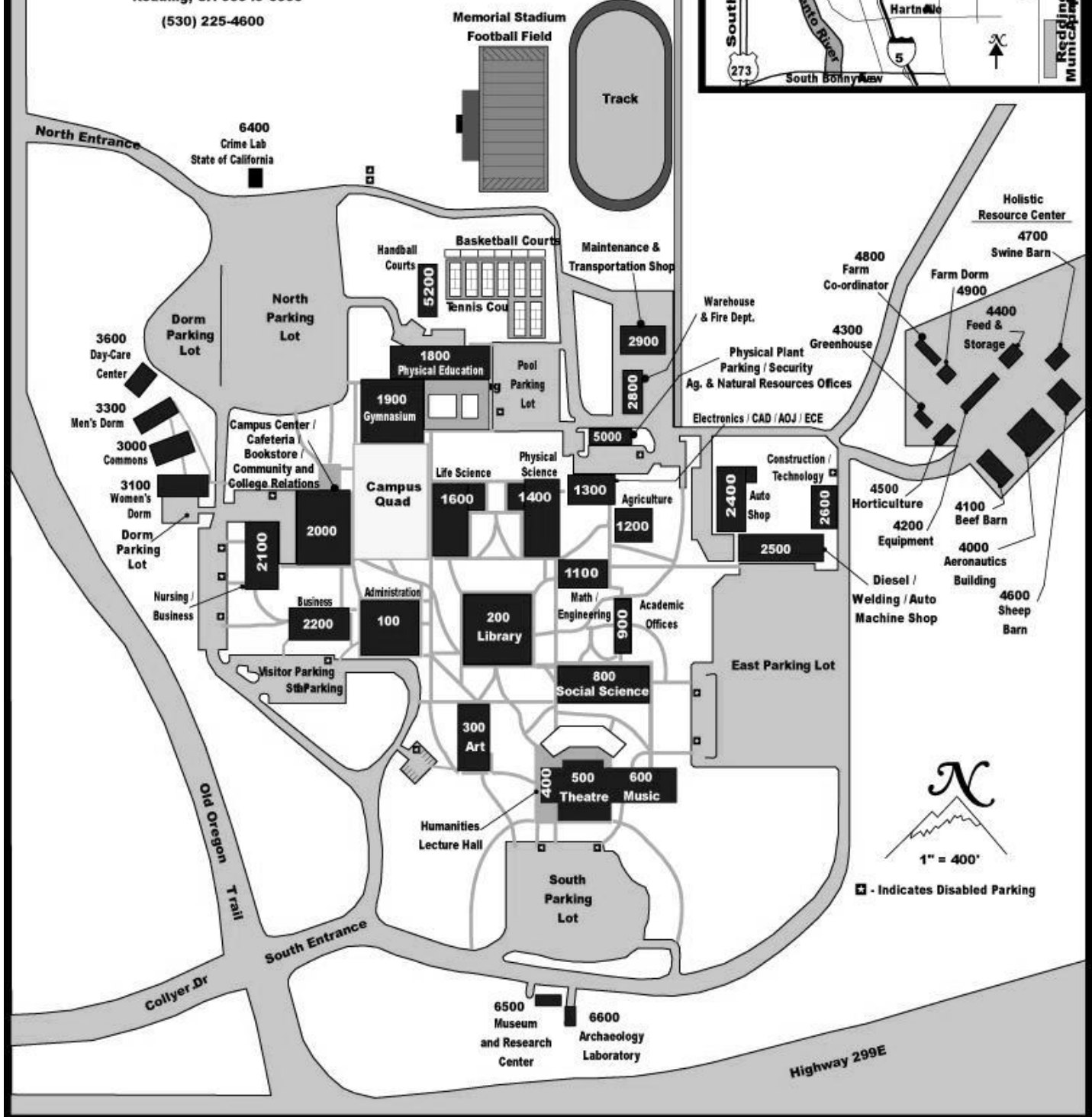
Contact List

CONTEST	CONTEST COORDINATOR(S)	LOCATION
Novice Ag Mechanics	John Livingston (530) 242-2203 Chris Pope - (530) 242-2204	1207 - Farm Shop
Ag Sales	Trena Kimler-Richards (530) 242-2209	4000 bldg
B.I.G.	Trena Kimler-Richards (530) 242-2209	2500 Complex
Carpentry	Rick Osbrink	2600 Complex
Diesel Technology	Ray Nicholas - (530) 242-2213	2500 - Diesel Shop
Farm Power/ Machinery	John Livingston - (530) 242-2203 Mark Eidman	Equipment Yard at Farm
Farm Records	Larry Forero (530) 242-7560	1200 Bldg. Room 1213
Floriculture	Leimone Waite – (530) 242-2210	4500 - Horticulture Bldg.
Forestry	Trena Kimler-Richards (530) 242-2209	1201
Adv. & Nov. Horse Judging	Stephanie Boyes	Offsite
Adv. & Nov. Horticulture	Leimone Waite - (530) 242-2210 Molly Greenwood	4500 - Horticulture Bldg.
Land/Soils	Leimone Waite - (530)242-2210	TBD
Livestock Judging (Advanced)	BJ Macfarlane - (530) 242-7564 Trena Kimler-Richards (530) 242-2209	Goat/Sheep Barn
Livestock Judging (Novice)	BJ Macfarlane - (530) 242-7564 Trena Kimler-Richards (530) 242-2209	Goat/Sheep Barn
Log Bucking and other Activities	John Livingston (530) 242-2203	Farm Parking Lot
Small Engines	Cindy Rohde (530)300-1700	2400 – Automotive Building
Advanced Ag Welding	Mark Smith (530) 242-2214	2500-Welding Building
Vet Tech/ Specialty Animal	Trena Kimler-Richards (530) 242-2209	Pavilion
Vegetable Crops	Leimone Waite (530) 242-2210	4500- Horticulture Area



Shasta College

1 1555 Old Oregon T rail
P .O. Box 496006
Redding, CA 96049-6006
(530) 225-4600



■ - Indicates Disabled Parking

Shasta College, Division of Business, Agriculture, Industry and Technology
11555 Old Oregon Trail, P.O. Box 496006, Redding, CA 96049-6006
530-242-7560

2016 CONTEST INFORMATION

NOVICE AGRICULTURE MECHANICS

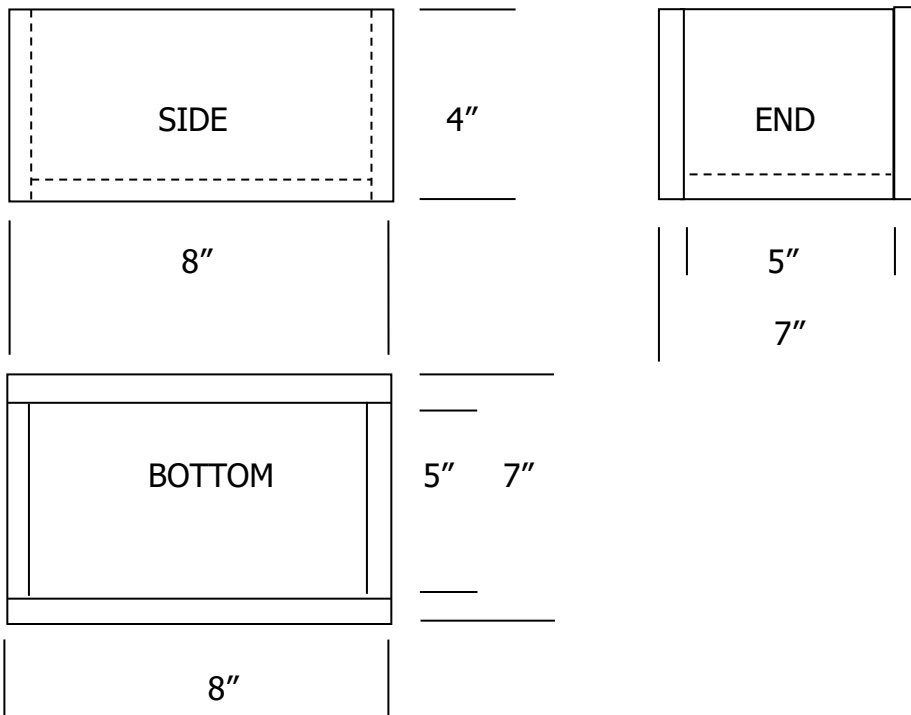
Please only enter novice students.

Advisors: Each contestant will be required to complete the wood project and the arc welding butt joint project this year. The contestants must bring tools. Cordless tools recommended, as our number of outlets are limited. Plans are being provided so you can practice the projects before the contest. Don't bring partly done project materials with you. Mark all of your tools with your school name.

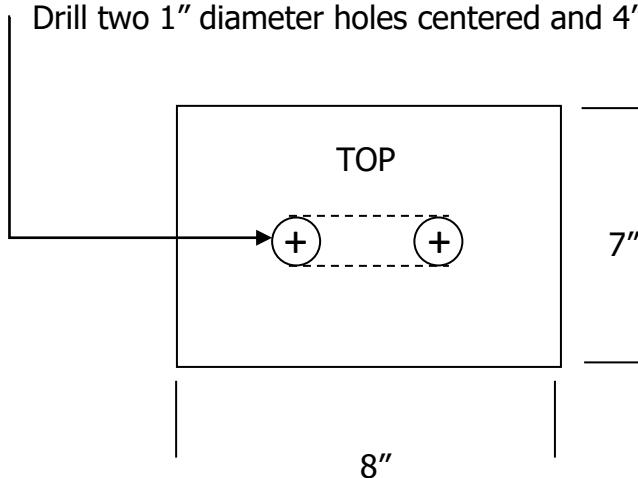
There will also be a written safety/general knowledge test.

Beginning Ag Mechanics: Wood Box Project

Name _____ School _____ Contestant No. _____



Drill two 1" diameter holes centered and 4" apart. Saw two cuts between holes.



Construction Note: All lumber is 1" thick Ponderosa Pine. Use the provided nails and #8 – 1½" flathead wood screws to fasten the box together.

Suggested Tool List: Wood Project

No 120V power tools will be allowed. Cordless power tools and hand tools only.

- Cordless Drill
- Cordless Skill saw
- Jigsaw
- Twist Drill bit set plus a 1" spade bit or hole saw bit
- Driver set
- Finishing Hammer
- Combination square
- Pencils
- Tape Measure
- Wood Clamp

What will be provided:

- One 1" x 8" 40" long Ponderosa Pine Board
- Four #8 x 1 1/2" Flathead Wood Screws
- Twelve #24 Nails
- 100 grit sandpaper

Novice AG Mechanics

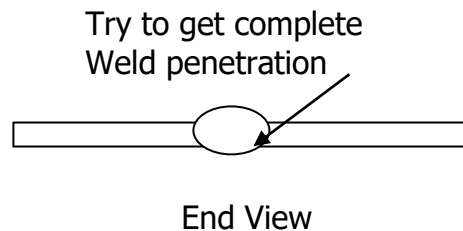
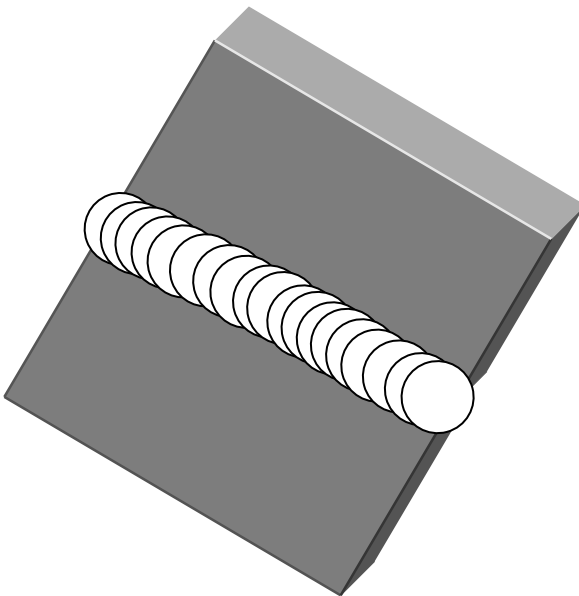
Name: _____

Arc Welding

School: _____

No. _____

Do your own work. Use only the weld coupons provided. You have 5 minutes To complete the pad.



Butt weld two pieces of 1/8" plate using 1/8", 6013 welding rod. (Steel and welding rod provided)

FFA Field Day 2016

Weld height 20 pts/_____

Weld width 20 pts/_____

Conformation 20 pts/_____

Penetration 20 pts/_____

Overall appearance 20 pts/_____

Total Weld Score: 100/ _____

Overtime: _____

AGRICULTURE SALES

The contest will consist of the test and Team sales portion of the contest only.

PRACTICUM WILL BE COMPANY REPRESENTATIVE SCENARIO at a local company, “*Rumiano Cheese Company*”

<http://www.rumianocheese.com/> You and your teammates are sales representatives for “*Rumiano Cheese Company*”. Your company sells a variety of cheeses. Your team will be presenting to a group of wholesale buyers at the Fancy Food Show in San Francisco. The goal is to land a contract with a large natural food store, such as Whole Foods.

Rumiano Cheese Company is California's oldest family-owned cheese company, dedicated to the manufacture and distribution of the highest quality cheese.

The time limit is changed to 15 minutes.

BEST INFORMED GREENHAND

See Curricular Code for contest Rules and Regulations.

CARPENTRY

MATERIALS	Will be provided.
HARD HATS	Will be required (bring your own).
SAFETY GLASSES	Will be required (bring your own).
TAPE MEASURE	Will be provided.
HAMMER	Will be provided.
PENCIL	Will be required (bring your own).
SPEED AND FRAMING SQUARE	Will be provided.
LEVEL	Will be provided.

THE PROJECT WILL USE SOME OR ALL OF THE FOLLOWING SKILLS:

BE ABLE TO:

1. Skill 1: Hammer / Hand saw
2. Level / find an angle

FFA Field Day 2016

3. Read Plans / Measure / Layout
4. Identifying materials

SCORING WILL BE BASED ON:

1. Safety procedures.
2. Craftsmanship.
4. Elapsed time.
5. Accuracy, speed and skills will be scored.
6. Written test.

DIESEL TECHNOLOGY

Skill Test Content:

TOOL IDENTIFICATION - (see VEP Cal Poly, Tool I.D. Manual)

MICROMETER USAGE

DIAL INDICATOR USAGE

BASIC ENGINE COMPONENT IDENTIFICATION

Written Test Content:

BASIC ENGINE REPAIR PROCEDURES

BASIC FLUID POWER THEORY

BASIC ELECTRICAL THEORY

General Information

The contest will begin at 10:00 a.m. in the 2500 building, heavy duty mechanics shop in room. 2512. Students should bring a pen or pencil. Students will be judged on the number of correct answers for a total point score.

Student rank will be dictated by the student's total point score. There will be three individual awards and at least one team award.

FARM POWER AND MACHINERY

***Contestants must sign in prior to 9:00 a.m. to participate in this event.**

(All students must have prior tractor safety training and operation experience to participate in this event.)

1. Team can be made up of five members; top three make up team.
2. Each member will compete in all events.
3. Contest will be made up of the following areas:

I. Parts Identification

A. Tractor Parts ID

Crawler type or wheel type may be used

B. Machinery and Hydraulics ID

Disc, Planter/Drill, Baler, Combine or Swather may be used.

II. Tractor Driving - Wheel tractors will be used.

A. Backing with a trailer around cones.

- B. Precision (written or oral)
- III. Troubleshooting of Tractors and Machinery
 - A. Tractor-common visible faults will be used.
 - B. Implements-common visible faults will be used.
- IV. General Information and Safety – Written Test

FARM RECORDS

NOTE: The Farm Records contest will not include a problem from the Income Summary page or a problem from the Depreciable Property Inventory page (#4 & 5 of the CATA Curricular Activities Code) because of time constraints and will not necessarily follow the CATA Curricular Activities Code. This contest will not follow the new ADT book.

FLORICULTURE

The Floriculture contest will consist of the following classes: (400 total points possible)

1. Floral Design Arrangement - 30 Minutes (100 points possible)

A flower arrangement will be constructed by each team member. Each student will construct a one-sided vertical line design. Appropriate lines, mass, filler flowers, and foliage will be provided.

2. Tool/Materials Identification/ Flower Identification - 15 Minutes

50 items will be chosen from the CATA Curricular Activities Code list. (100 points possible)

3. Wristlet Construction - 30 Minutes

Students' corsages will be judged on design, construction and wear-ability. (100 points possible)

4. Judge 1 class of Flowers and 1 Class of Plants. (100 points possible)-15 minutes

Team can be made up of four (4) members per school. Top three (3) scores will make up a team score.

Required Tools: Floral knife or floral scissors (no fabric shears or kitchen knives)

Wire cutters or shears

NOTE: STUDENTS MUST PROVIDE REQUIRED TOOLS FOR CONTEST.

FORESTRY

Division I - Identification

AREA 1 Plant Identification (Appendix A)

1. Thirty specimens from the Plants Identification list in Appendix A will be displayed.
2. Fresh foliage is preferred and if fruit, flowers or cones are available they will be part of the identification specimen. Otherwise cones, fruit or flower, and stems shall be used with a pressed specimen (no more than five pressed items are allowed).
3. The list in Appendix A and the score card shall list plants by scientific name, in alphabetical order, with common names listed on the right.

4. Fruit and/or cones can be displayed by themselves if they are underlined in the plant list (not to exceed five fruits and/or cones on the contest).
5. Scoring Information
 - a) Time allowed: 30 minutes.
 - b) Total points for this event: 30.
6. Scoring: 1 point for each correctly identified plant species.

AREA 2 Identification of Forestry Equipment (Appendix B)

1. Forestry Equipment Identification
 - a) 25 tools or forestry equipment items from the Forestry Equipment Identification list in Appendix B will be displayed.
 - b) All items will be clearly marked with a reference number for identification.
 - c) Items must be good specimens of the equipment.
2. Scoring Information
 - a) Time allowed: 30 minutes.
 - b) Total points for this event: 25.
 - c) Scoring: One (1) point for each correctly identified forestry equipment item.

II. Division II - Land Measurement

A. AREA 3 Acreage

1. A three-to-four sided polygon with straight sides shall be measured for area in acres.
- 2.

B. AREA 4 Compass and Map Reading

1. Compass Reading
 - a) The contestant will be provided with a bearing hand compass that has been set at a magnetic declination of zero, and checked for accuracy prior to each contest.

Division III- Forestry Knowledge and Graph Interpretation

AREA 5 Forestry Knowledge:

1. 25 questions from the Forestry Knowledge list in Appendix C will be selected.
2. Scoring Information
 - a) Time allowed: 30 minutes.
 - b) Total points for this event: 50.
 - c) Scoring: A total of 25 questions will be selected. Each question is worth two points each.

AREA 6 Graph and Table Interpretation: 50 points total.

1. Site Index
 - a) A site index graph will be selected from those presented in Appendix D.
 - b) Three sets of tree heights and tree ages will be given.
 - c) The average tree height and age will be calculated by the contestant.
 - d) The site index will be calculated by the contestant from their calculated averages and the graph provided.
 - e) Scoring Information
 - (1) Time allowed: 30 minutes total for both (a) site index, and, (b) board foot volume.
 - (2) Total points for site index: 20.
 - (3) Scoring: Ten points will be given for the correct Site Index rating, five points will be given for the correct average height, and five points will be given for the correct average age.
2. Board foot volume
 - a) The dbh and height for three trees will be given.

- b) Board foot volume will be determined using a volume table in units of Scribner's Decimal C.
- c) Scoring Information
 - (1) Time allowed: 30 minutes total for both (a) site index, and, (b) board foot volume.
 - (2) Total points for this event: 30.
 - (3) Scoring: Ten points will be awarded for each correct total volume (one point deducted for each ten board feet off).

Division IV - Timber Measurements

AREA 7 Timber Measurement

1. Tree Height
 - a) Contestants will measure tree heights on two trees.
2. The clinometer will be used on one tree for height, and either a logger's tape or a one hundred (100) foot tape will be used for measuring distance from the tree.
3. The Merritt Hypsometer will be used on one tree for height, and either a logger's tape or a one hundred (100) foot tape will be used for measuring distance from the tree.
4. Scoring Information
 - a) Time allowed: 10 minutes.
 - b) Total points for this event: 30.
 - c) Scoring: 15 points per tree possible. One (1) point will be deducted for every foot of error using a Clinometer. Three (3) points will be deducted for every 1/2 log (8 feet) of error using a Merritt Hypsometer.
5. Tree Diameter
 - a) Contestants will measure four (4) trees for diameters. Diameter will be determined at dbh (4.5 ft.).
 - b) Trees A & B will be measured with a Biltmore Stick
 - c) Trees C & D will be measured with a diameter tape to the nearest 0.1 in.
 - d) Scoring Information
 - (1) Time allowed: 10 minutes.
 - (2) Total points for this event: 40.
 - (3) Scoring: Ten points will be scored for each diameter. One point will be deducted for each two (2) inches of error for trees measured with a Biltmore Stick. One point will be deducted for each 0.1 inch of error for the trees measured with a diameter tape.

Appendix A -- Plant Identification List

See CATA Curricular Code Plant List

Appendix B -- Forestry Equipment Identification List

Abney Level	Engineer's Tape
Altimeter	Fire Rake
Anemometer	Fire Swatter
Axe - Cruiser's	Fixed Radius Plot Tape
Axe - Double Bit	Flagging Tape
Axe - Hand	Forester's Hand Compass
Axe - Single Bit	Fusee
Bark Gauge	Hazel Tool
Back Pump	Hoedad
Brand Hammer	Hookeroon
Brush Hook	Increment Borer

FFA Field Day 2016

Chain	Jacob's Staff
Chain Saw File	Leveling Rod
Chain Saw Parts Identification:	Logger's Tape
Guide Bar	McLeod
Oil Filler Cap	Peavy
Starter Grip	Planimeter
Ignition Switch	Plumb Bob
Spark Plug	Pulaski
Throttle Lever Lock	Relaskop
Spark Plug Wire	Safety Hard Hat
Air Filter	Scaling Stick
Brake Lever	Shovel
Fuel Filler Cap	Sledge (or Single Jack)
Choker Lever	Sling Psychrometer
Throttle Trigger	Soil Tube
Chaps	Splitting Maul
Choker	Staff Compass
Christmas Tree Pruning Knife	Stereoscope
Clinometer	Surveying Pins
Cross Cut Saw	Talley Sheet
Cruiser's Stick	Tree Caliper
Data Recorder	Tree Injector
Diameter Tape	Tree Marking Gun
Dot Grid	Tree Planting Bag
Drip Torch	Tree or Pole Climbers
Dibble Bar	Wedge Prism
Dixie Pike Pole	Wedge - Falling
Dumpy Level	Wedge - Splitting
Ear Protectors	Western Planting Tool

Appendix C -- Forestry Knowledge List

Forestry knowledge questions will be derived from this list.

No.	Term	Description
1	Acre	Ten square chains, or 208.7 ft. by 208.7 ft. square, or 43,560 square ft.
2	Afforestation	Establishment of a forest or stand in an area not previously forested.
3	Age-Class	Classification of a stand of trees based on when regeneration started and the size classes represented.
4	Rotation-Age	Age at which a tree is ready to harvest.
5	Annual Ring	A summer and spring ring representing one growth year.
6	All-aged	A stand of timber where all size classes are represented.
7	Aspect	Direction the slope faces.
8	Azimuth	Three hundred sixty (360) degrees on compass.
9	Back-fire	Fire set along a control line which burns back into the fire.
10	Inner Bark	Area between the cambium and periderm.

No. Term	Description
11 Outer Bark	Layer of tissue outside of the last periderm layer.
12 Bearing Compass	A compass set up with four (4) 90 degree quadrants.
13 Tree Biomass	Weight of complete trees (living material).
14 Board Foot	The volume equivalent to a board one inch thick x twelve inches wide x one foot long.
15 Bole	Trunk or stem of a tree.
16 Breast Height	A point on a tree 4.5 ft. above the ground on the uphill side of a tree.
17 Controlled Burning	A deliberately started fire to accomplish a particular management purpose.
18 Burning Prescription	Describes the conditions and results to be garnered from a control burn.
19 Buck	To cut logs into specific lengths.
20 Butt Log	The first log above the stump.
21 Cambium	Growing tissue, produces xylem and phloem, that is part of the inner bark.
22 Chain	66 ft. measurement unit, or four (4) rods long.
23 Chaparral	A thicket of low, evergreen oaks or dense tangled brushwood.
24 Season Check	Lengthwise separation of wood which goes or extends across the rings of annual growth and is caused by stress during seasoning.
25 Clearcutting	Area in which the entire timber stand has been cut.
26 Codominant	Trees which are the average level of the canopy and receive light on the top but not necessarily on all sides of the crown.
27 Conifer	Cone bearing trees, usually evergreen.
28 Cord	Unit of measurement for stocked wood, four ft. by four ft. by 8 ft. (4' x 4' x 8') or 128 cubic feet.
29 Crown	The part of a tree or woody plant bearing live branches and foliage.
30 Crown Fire	Fire which has moved into the tops of the trees.
31 Cruise	Survey of forest lands to locate and estimate volume and grades of standing timber.
32 Cubic foot	A unit of true volume that measures 1 x 1 x 1 ft or the equivalent of 12 board feet.
33 Cunit	A unit of volume, usually pulpwood, that measures 100 ft ³ .
34 Cull	Any item of production, e.g., trees, logs, lumber, or seedlings, rejected because it does not meet certain specifications of usability or grade.
35 Deciduous	Trees which usually drop all of their leaves more or less at one time, usually in the fall.
36 Log Deck	Platform where logs are held in the sawmill prior to sawing. Also called the Mill Deck.

No. Term	Description
37 Log Defect	Any irregularity or imperfection in a log or lumber product which reduces the volume of sound wood or lowers the durability, strength or utility value.
38 Dendrology	Identification or systematic classification of trees.
39 Crown Density	The compactness of foliage of the crowns of trees and shrubs.
40 Dioecious	Male and female flowers produced on separate plants.
41 Dominant	Trees whose crowns extend above the average level of the forest canopy. They receive direct sunlight from above and some from the sides.
42 Duff	Organic debris in various stages of decomposition on top of the mineral soil.
43 Ecology	The study of the interrelationships between living organisms and the environment.
44 Even-aged Management	Applied to a stand where relatively small age differences exist between individual trees. The maximum age difference is usually 10 to 20 years.
45 Tree Farm	Area usually privately owned which is dedicated to the production of trees.
46 Surface Fire	A fire which burns over the forest floor and burns only the surface litter, loose debris and small vegetation.
47 Exploitation	Use of natural resources with economic greed as the primary motivation and the manipulation of the environment with no consideration for sustained yield.
48 Firebreak	A barrier existing or constructed before a fire to serve as a line from which work can be facilitated. Inflammable materials have been removed from the area and it is designed to stop creeping or running fires.
49 Multiple Use of the Forest	Management of the forest with concern for all natural resources including timber, wildlife, recreation, mining, watershed, and range. All of the uses are used without the harming or detrimental affects on the other uses.
50 Gall	A pronounced localized swelling of modified structure which occurs on plants usually as the result of the irritation or stimulus by another organism.
51 Girdle	To completely encircle the bole of a tree with cuts that completely sever the cambium layer eventually killing the tree.
52 Ground Fire	A fire which burns in the organic matter and down into the soil and roots.
53 Habitat	The site or area in which the plants or animals live. The unit area of the environment synonymous with site.
54 Hardwood	Wood produced by broadleaf trees; same as porous wood.
55 Heartwood	The inner core of the woody stem or bole wholly composed of nonliving cells and usually has a darker color.
56 Hectare	A unit of land measure of about 2.471 acres.
57 Heeling in	Placing small bundles of bare-root seedlings in a shallow trench or hole and covering the roots.

No. Term	Description
58 Herbicide	A chemical used for killing or controlling the growth of plants.
59 Humus	Plant and animal residues of the duff which is in varying stages of decomposition.
60 Hypsometer	Instrument used to measure tree height using geometric or trigonometric principles.
61 Intermediate Cuts	Harvest of trees made before a final harvest.
62 Intolerance	Inability of a tree to develop and grow in shade or in competition with other trees.
63 Kerf	Saw width of cut made by the saw. Basically sawdust residue.
64 Litter	Organic materials on upper layer of the duff.
65 Log	a) To cut and deliver logs. b) Tree segments, usually eight to twelve feet in length and suitable for cutting into lumber. Typically a merchantable log is sixteen feet.
66 Lookout	A station used for detection of fires. Usually a tower at a high point so a good view of the forest is available.
67 Lop	To cut limbs from trees, whether standing, felled, or fallen.
68 Maturity	Age beyond which growth stops or declines in a given species.
69 Mensuration	Science of measurement of volume and growth and development of individual trees and stands and of the products they produce.
70 Merchantable log	Size of a log, usually 16 ft., which is marketable.
71 Mixed Stand	Less than 75% of the crowns in the stand are of the same species.
72 Monoecious	Having male and female flowers on the same plant.
73 Overrun	Excess amount of lumber actually sawed from the logs compared to the estimated volume from scaling.
74 Overstory	Upper crown cover.
75 Pathology	Study of the science of diseases of forest trees or stands, and the deterioration of the products by the organisms.
76 Phloem	Inner bark, just outward of the cambium, that translocates food made in the leaves down to the branches, twigs and roots.
77 Photosynthesis	Process by which plants manufacture food and oxygen.
78 Pole (size class)	Name for trees less than 12 inch dbh. Young: dbh of 4 inches. Small: 4 to 8 inch dbh. Large: 8 to 12 inch dbh.
79 Pruning	The removal of live or dead stems from dead or living trees.
80 Pulpwood	Wood cut or prepared primarily to be used in wood pulp manufacture for paper products, etc.
81 Reforestation	The natural or artificial restocking of an area with forest trees.

No. Term	Description
82 Rot	Wood in a state of decay.
83 Rotation	The period of years required to establish and grow a timber crop to a specified condition of maturity.
84 Sapling (size class)	A tree usually 3-10 ft. in height with a 2-4 inch dbh. Not over 4 inch dbh.
85 Sapwood	The light colored wood which conducts water and nutrients to the crown of the tree.
86 Saw Timber	Trees that yield logs of suitable size and quality to be made into lumber.
87 Scale	Measuring to determine the sound volume or contents of a log or group of logs.
88 Seasoning	The process of reducing the moisture content of wood or lumber by exposing it to air or using a kiln.
89 Section	An area of land one mile square containing 640 acres.
90 Seeding	Planting of seed by man or by natural process.
91 Seedling (size class)	A tree usually grown by natural process from seed that is less than three ft. tall and smaller than a sapling.
92 Seed Tree	A mature tree left for natural seed regeneration or for seed collection.
93 Shake	A lengthwise separation of the wood usually between the annual growth rings.
94 Shelterwood	The establishment of natural reproduction with a partial shade left to protect the young seedlings. Removal of the mature timber in a series of cuttings, cuts not more than 25% or less than 1/10th of the stand.
95 Shrub	A woody perennial with a multiple branching stem.
96 Silviculture	The growing or the art and science of tending the forest.
97 Site	An area considered as to its environmental or ecological factors.
98 Site Index	A species-specific measure of actual or potential forest productivity expressed in terms of the average height of trees at a specified index or base age.
99 Slash	The debris and materials (limbs, etc.) left over from logging.
100 Snag	A standing dead tree usually over 20 ft. in height. Under 20 ft. is termed a stub.
101 Softwood	Wood produced by coniferous trees; same as nonporous wood.
102 Springwood	Wood formed of less dense, larger, cells.
103 Pure Stand	A stand in which 75% or more of the species are of the same species of trees in the canopy.
104 Stumpage	The value of timber as it stands in the woods.
105 Sustained Yield	Continuous yield of forest products from a specific area, year after year.
106 Taper	The difference in diameter between any two points along the tree stem.

No. Term	Description
107 Thinning	Cutting in an immature stand to increase its rate of growth to foster quality growth, improve composition and to promote a healthy stand.
108 Shade Tolerance	The ability of a tree to withstand shade.
109 Township	36 sections; a six mile by six mile parcel of land.
110 Transpiration	The process by which water vapor passes from the foliage or other parts of a living plant to the atmosphere.
111 Tree	A woody plant which has a bole or trunk of at least 8 ft. which is well defined.
112 Wolf Tree	A tree taking up space which has no value itself but competes with wanted trees. Usually stubby, short boled trees with many limbs.
113 Undercut	A cut in felling trees which is what creates a notch determining which way the tree is to fall.
114 Understory	The forest growth below the overstory, or taller plants in the canopy.
115 Uneven-Aged Management	Management of a stand where different age classes are maintained.
116 Wildfire	Natural occurring fires or man induced fires which no matter how they were started are burning out of control.
117 Windfall	A tree uprooted by wind or broken off by wind.
118 Xylem	The principal water-conducting tissue and the chief supporting system of higher plants, composed of tracheids, fibers, and parenchyma.

APPENDIX D -- Table Interpretation: Site Index

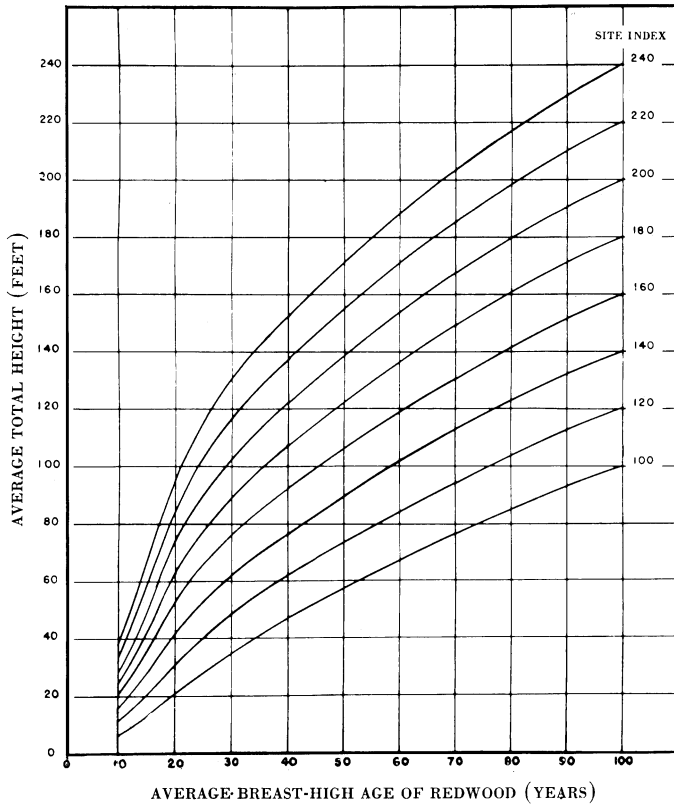


Figure A-1. Site index values of dominant redwood by height and breast-high age classes.

U.C., Lindquist and Palley, 1963

Graph

HORSE

ADVANCED TEAM Consists of **5 designated members** from each school with the top 3 individuals being the official team. Oral reasons on two classes.

NOVICE TEAM Consists of **10 designated members** from each school with the top 3 individuals being the official team. No Reasons

*Oral reasons will be given at the appropriate barns after the contest is over for **ADVANCED TEAM** members only.

Advanced HORTICULTURE

Novice HORTICULTURE

Plant ID – refer to Curricular code for list of possible plants.

There will be 25 plants chosen from the Curricular Code list. Students must ID plants from multiple choice test. Maximum points: 25

I. Seed Flat Preparation (one per student)

Maximum Points: 40

Time: 9

min.

<u>A. Layout</u> (Selection of materials, equipment, etc.)	<u>POINTS</u>
1. Assemble materials and arrange for efficiency	
a. Clean flat	1
b. Check moisture of soil mix	1
c. Newspapers	1
d. Seed selection	2
e. Screen	1
f. Screed	1
g. Label and pencil	1
h. Sand	1
i. Float (pressboard)	1
j. Watering can or hose with nozzle	1
<u>B. Preparation of Flat</u>	
1. Paper in bottom -- single sheet only if needed for type of flat	2
2. Fill flat by pushing into soil and scrape soil by hand into flat	2
3. Level with screed and use float or pressboard or firm with finger tips and level with screed	3
<u>C. Seeding</u>	
1. Sow seed in crisscross pattern	4
2. Check for even seeding	3
3. Amount of seed	3
4. Cover seeds (check for depth and uniformity)	4
<u>D. Watering</u> - No water to be used - contestant to explain his method	
1. Method of watering	3
<u>E. Finish</u>	
1. Label - name, variety, and color of plant; date, student's name	2
2. Clean up and replace equipment	3
TOTAL	40

II. Potting (Three per student) transfer plants from flats to pots.

Maximum Points: 25

Time: 7 min.

<u>A. Layout</u> (Selection of equipment, materials, etc.)	<u>POINTS</u>
1. Assemble materials and arrange for maximum efficiency	
a. Select pots	1
b. Soil mix - check for moisture	1
c. Label and pencil	1
d. Watering can or hose with nozzle	1

B. Handling Plants (Techniques)

FFA Field Day 2016

- | | |
|--|---|
| 1. Select and loosen soil and lift out plants | 3 |
| 2. Center plant upright | 3 |
| 3. Place plant at correct level | 3 |
| 4. Fill pot and firm soil | 3 |
| 5. Tap pot lightly to level and loosen surface | 2 |

C. Finish

- | | |
|--|----------|
| 1. Prepare label - name of plant, date, student's name | 2 |
| 2. Explain method of watering - do not dislodge soil | 2 |
| 3. Return equipment and unused materials to proper place, proper place, sweep bench and floor, and dispose of refuse | <u>3</u> |

TOTAL 25

III. Cuttings (Three per student) Cuttings to be placed in pots.

Maximum Points: 32
Time: 9 min.

A. Selection of Materials (including equipment) and arrange for maximum efficiency

POINTS

- | | |
|---|---|
| 1. Plant Material | |
| a. Clean, vigorous plant | 1 |
| b. Semi-hardwood, hardwood, heel
(Student to explain type of cutting he intends to make) | 2 |
| 2. Cutting media - clean washed sand, Perlite, or peat moss | 1 |
| 3. Clean washed pot | 1 |
| 4. Other items: | |
| a. Label and pencil | 1 |
| b. Cover for drain hole | 1 |
| c. Knife or pruners to trim leaves and make cuttings - snap cuts are not acceptable | 1 |
| d. Water can or hose spray | 1 |

B. Technique of Making Cuttings

- | | |
|---------------------------------------|---|
| 1. Position of cut (relation to node) | 2 |
| 2. Proper length | 2 |
| 3. Proper cut | 2 |
| 4. Removal of leaves | 2 |

C. Planting of Cuttings

- | | |
|---|---|
| 1. Cover drain hole | 1 |
| 2. Open furrow with label or other method | 1 |
| 3. Arrange cuttings in pot | 1 |
| 4. Firm media | 1 |
| 5. Level of media | 1 |
| 6. Depth of placing cuttings | 1 |

D. Finish

- | | |
|--|---|
| 1. Label - name, variety, and color if necessary: date, student's name | 2 |
|--|---|

FFA Field Day 2016

2. Explain watering method	2
3. Clean up	
a. Replace all equipment and unused materials	1
b. Clean bench and floor	1
c. Dispose of refuse	1
E. <u>Safe Usage of Tools</u>	<u>2</u>
TOTAL	32

IV. Fertilizers and Soil Amendments

Maximum Points: 10
(1 point for I.D.)
Time: 12 min.

Contestant is to know its use and be able to identify ten of the following fifteen common fertilizers and soil amendments.

	<u>POINTS</u>
1. Liquid Acidifier - to lower ph of soil, used mostly for plants which need acid soils	1
2. Ammonium Sulphate - High inorganic nitrogen fertilizer for rapid growth	1
3. Blood Meal - Food source of organic nitrogen fertilizer for rapid growth	1
4. Bone Meal - Long lasting phosphorus fertilizer often used for bulbs	1
5. Commercial (complete) fertilizer - General fertilizer for all-purpose use	1
6. Cottonseed Meal - Slow acting organic fertilizer for acid loving plants	1
7. Gypsum - Slightly acid soil amendment for improving soil structure	1
8. Liquid Fertilizer - For rapid growth, ease of application	1
9. Manure - Organic mulch with low food value	1
10. Composted bark –used in potting mixes to increase nutrient and water holding ability.	1
11. Peat Moss - Acid soil amendment with high water retention	1
12. Perlite (sponge-rok) - Aluminum silicate used for rooting media and to open soil	1
13. Redwood Shavings - Planting mixture or mulch	1
14. Sulphur - Acid soil amendment to correct soil alkalinity	1
15. Superphosphate - Medium phosphorus fertilizer for general use	1

V. Planting From One-Gallon Can

Maximum points: 30

	<u>POINTS</u>
A. <u>Layout</u> (Selection of material, equipment, etc.)	
1. Select plant and give reasons (If plant found to be rootbound or has other undesirable traits after removal from container, student is to explain condition to judge)	2
2. Shovel or spade	1
3. Loppers	2
4. Soil amendments (desirable for fertility and structure)	2
a. Peat moss	
b. Leaf mold	
c. Complete fertilizer	
d. Manure	
e. Redwood shavings	
5. Watering device	2
B. <u>Preparation of Hole</u>	5
1. Hole twice the size of plant ball	
2. Add soil amendment	
C. <u>Planting</u>	
1. Reasons for selecting plant	2
2. Removal of plant from can	2
3. Placing of plant (correct depth)	2
4. Back-fill hole and firm	2
5. Basin	2
D. <u>Finish</u>	
1. Explain watering method	2
2. Clean up	2
E. <u>Safe Usage of Tools</u>	<u>2</u>
TOTAL	30

VI. Canning (Three per student) Shifting from pots to one-gallon can Maximum Points: 25
Time: 10 min.

	<u>POINTS</u>
A. <u>Assemble Materials and Arrange for Maximum Efficiency</u>	
1. Select plants to be shifted	2
2. Select gallon cans	1
3. Soil mix - check moisture content	1
4. Label and pencil	1
5. Watering can or hose	1
B. <u>Techniques of Handling Plants</u>	
1. Removal and handling of plant and removal of weeds	2
2. Center plant at correct level and rake can full of soil with free hand or	

FFA Field Day 2016

use bottle or pot method for making depression in soil to receive plant	2
3. Firm soil	2
4. Tap lightly to loosen or level surface soil	2
5. Correct soil level at finish	2
C. <u>Finish</u>	
1. Label - name of plant, date, student's name	2
2. Explain method of watering	2
3. Clean up all equipment and unused materials, sweep bench and floor, and dispose of refuse	3
D. <u>Safe Usage of Tools</u>	<u>2</u>
TOTAL	25

LAND/SOILS JUDGING

Follow Curricular Code. There will be three (3) soil sites. Please encourage your students to get into the pit, know the texture and soil color, I.D. the profile, and get down the definitions.

Student should know how to read and fill out score card.

CLIPBOARD AND PENCIL FOR EACH CONTESTANT IS REQUIRED.

Contest may be modified because of weather.

LIVESTOCK JUDGING

The Livestock Judging contest will strongly adhere to scoring only those judging cards that are completely filled out. Cards missing any information will not be scored.

Advanced and Novice scored teams will register in the **Sheep/Goat barn** and instructors will pick up non-scored cards. Only those judging cards that are completely filled out will be scored. Cards missing any information will not be scored. **The contest starts at 9:00 a.m., promptly!** Please make your students aware of what contest they are in and make sure they bring a pencil!

Agriculture instructors will be allowed to critique all livestock classes with their students at 12:00 p.m. **NO EARLIER!**

BEEF Two classes: Oral reasons, one class -- Advanced Team Only

GOAT: Two classes: Oral reasons, one class -- Advanced Team Only

SWINE Two classes: Oral reasons, one class -- Advanced Team Only

ADVANCED TEAM Consists of FIVE designated members from each school. The top THREE individuals will be the official team.

NOVICE TEAM Consists of FIVE designated members from each school. **ONLY THE TOP FIVE** individuals will be the official team.

NON-SCORED Five (5) entries from any school. These (green cards) cards will not be collected or scored.

NOTE: Oral reasons will be given immediately following the judging in the **Sheep/Goat barn** reason locations.

Agriculture instructors will be allowed to critique all livestock classes with their students at 12:00 p.m. (NO EARLIER). **Official placing will be given at critique.**

SMALL ENGINES

A team will be made up of three members. Each member will compete in all events. Alternates are welcome but will not compete in the troubleshooting event. **Contestants must supply their own pencils and tools to trouble shoot. COACHES NEED TO HELP JUDGE TROUBLESHOOTING!**

The contest is made up of the following areas:

- 1) Identification
- 2) Theory Test
- 3) Problem Solving
- 4) Troubleshooting (**Each Troubleshooting team must supply their own tools!**)

Advanced Ag WELDNG

This is an advanced contest, students will be required to Weld with MIG, TIG, ARC, OXY/ACT, in various positions. SMAW welding, oxy cutting, written test.

Each team must provide the following materials:

- | | |
|-------------------|--------------------|
| 1. Welding helmet | 4. Chipping hammer |
| 2. Gloves | 5. Wire brush |
| 3. Coveralls | 6. Safety glasses |

Welding rod will be provided.

Vegetable Crops Competition

Purpose and Standards

The purpose of the Vegetable Crop Judging Contest is to create interest and promote understanding in the vegetable crop industry by providing opportunities for recognition through the demonstration of skills and proficiencies. It is the intention of the contest to provide a venue for students to explore career opportunities, skills and proficiencies in the vegetable crop industry. The emphasis of this contest is to promote critical thinking, evaluation, oral and identification skills.

Classes

Class	Individual Points	Team Points
Judging Class 1	50	150
Judging Class 2	50	150
Identification	400	1200
TOTAL	500	1500

- I. The Vegetable Crop Judging Contest will consist of the following:
 - A. Judging vegetables
 - B. Identification of edible portions of vegetables, vegetable seeds, common weeds, common insects and pests and vegetable plants intended for transplanting.
 - C. Identification of market defects, evidence of diseases and insect or pest damage.
 - D. There are 500 points possible for each contestant.
- II. General Rules
 - A. The individual(s) responsible for the contest has the authority to determine whether an answer given by a student is correct or not, using the current CATA Curricular Code.
 - B. Contestants and coaches are invited to ask questions of judges and inspect the judging samples after the close of the contest.
 - C. The judges will explain the placings at a set time after the close of the contest.
- III. Judging
 - A. Two classes of vegetables will be judged; each class will consist of two plates with each plate containing vegetables according to the following:

2 Specimens

- | | |
|----------------------|-------------|
| Celery | Cauliflower |
| Cabbage | Lettuce |
| Broccoli (2 bunches) | |

4 Specimens

- | | |
|------------|------------------------|
| Artichokes | Sweet Potatoes or Yams |
| Dry Onions | Irish Potatoes |
| Tomatoes | Peppers |

10 Specimens

Carrot

6 Specimens

- Squash
Table Beets

- IV. **IDENTIFICATION** (Five points each)
 - A. Eighty (80) specimens will be selected from the identification list. Specimens will be either vegetable (edible portion), vegetable seeds, weeds common to vegetable crop fields, insects and pests common to vegetable crops, market defects, evidences of diseases and insect or pest damage and vegetable plants intended for transplanting.

B. Instructions to Contestants

1. Contestants are not allowed to carry into the contest notes or any materials which may aid in taking the contest. No identification answer sheets or material indicating answers may leave the identification room. Contestants found in violation of this rule will be immediately disqualified.
2. Contestants are not to take portions of the identification samples nor are they allowed to touch the samples in any way. Contestants found in violation of this rule will be immediately disqualified.
3. Common names as given on the attached list will be used in identifying specimens.
4. Five (5) points will be allowed for each specimen properly identified with a possible total of 400 points for each contestant.

Only the entire name of the specimen, as listed in the Curricular Code, will be scored as correct. Ditto marks shall not be used.

Veterinary Science /Small Animal Competition

This contest is designed to assess student knowledge, application, analytical and evaluation abilities, in the area of small and large animal care and veterinary skills. Three students per team will be allowed to compete in the contest. Each member of the team will complete the contest individually.

A. Written Test (75 pts.)

Fifty five multiple choice questions worth 1 point per question.

Topics included:

- Anatomy and Physiology • Nutrition • Diseases and Parasites; immunizations, medical procedures
- Breeding and Genetics; litter size, gestation periods • Breeds and Grooming • Housing and Management

B. Breed Identification Each student will complete a breed identification practicum. Students will view slides; pictures to identify breeds. See Curricular Code for possible breeds.

Breeds of the following may be used:

- Canine, Feline, Equine, Bovine, Swine, Ovine, Caprine, Poultry, Rabbits

C. Equipment Practicum Equipment and Materials Identification will be included in the competition. Students will view (tools/equipment) for identification. See Curricular code for equipment list.

D. Parasite Identification Each student will identify parasites for various species. See curricular code list.

E. Laboratory Practicums 2

LOG BUCKING *(Fun Activity Only, Held during Lunch)*

A log and a two-person saw will be provided for this competition. Each team will be timed to determine how long it will take to cut a round off the end of the log.

Team categories will consist of two males, two females, or “Jack & Jill” mixed teams.

The log and saw will be provided by the college. It will be necessary for contestants to provide their own gloves. Leather is recommended to minimize the possibility of hands slipping off the saw handle.

OTHER FUN EVENTS AT LUNCH!

- Dummy roping
- T post driving while texting (2 per team)

FFA Field Day 2016

- Siphon pipe dunking/starting