



Unit 1: Identification

Lesson One: Plant Identification

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STUDENT LEARNING OBJECTIVES:

After completing these activities students will...

1. Identify the trees, shrubs and flowers commonly used within landscape designs.
2. Describe the distinguishing characteristics of each plant.

TIME REQUIRED: 60 minutes

RESOURCES:

1. Nursery/Landscape CDE Handbook, <https://ffa.box.com/s/vajzverkrievuvw9d9n16neh6v0a93fe>

EQUIPMENT AND SUPPLIES NEEDED:

1. Copies of the "Plant ID Cards" Worksheet
2. Internet access for each student
3. "Item ID List": Cut up the list, and put slips into a hat/bag.
4. Quizlet, <https://quizlet.com/211132060/nurserylandscape-plant-id-flash-cards/>

THESE ACTIVITIES ARE ALIGNED TO THE FOLLOWING STANDARDS:

AFNR Performance Element

- PS.02. Apply principles of classification, plant anatomy and plant physiology to plant production and management.

FFA Precept

- FFA.PL-A.Action: Assume responsibility and take the necessary steps to achieve the desired results, no matter what the goal or task at hand.
- FFA.PL-C.Vision: Visualize the future and how to get there.
- FFA.CS-M.Communication: Effectively interact with others in personal and professional settings

Common Career Technical Core

- AG-NR2 Analyze the interrelationships between natural resources and humans.
- AG-PL2 Apply the principles of classification, plant anatomy and plant physiology to plant production and management.

NASDCTec

- AGPB01.02 Examine and explain basic plant anatomy and physiology using taxonomic and other classifications to build a working understanding of functional differences among plant structures.

Common Core - Speaking and Listening

- CCSS.ELA-Literacy.SL.9-10.1.A Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.

Common Core - Science & Technical Subjects

- CCSS.ELA-Literacy.RST.9-10.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9-10 texts and topics.
- CCSS.ELA-Literacy.RST.9-10.9 Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.

AFNR Career Ready Practices

- CRP.02. Apply appropriate academic and technical skills. Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive.
- CRP.04. Communicate clearly, effectively, and with reason. Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods.

Partnership for 21st Century Skills

- Information Literacy
- Think Creatively
- Work Creatively with Others

LESSON PLAN:

1. *Introduction*

Using the "Item ID List" included on the following page, have the class play charades.

At the conclusion of the game, ask the class the following questions:

- Was it easy or hard to guess the item correctly? Why or why not?
- What strategy did you use to determine what clues you would give about each item?

We described these items by using their physical descriptions. While some of them were more difficult than others, we were able to identify all the items. Today, we are going to identify various plants used in the nursery/landscape industry by looking at their physical features.

2. *Activity*

Break the class into groups. Each group will be assigned approximately 25 to 30 plants from the list provided in the lesson plan. Each group should fill out a plant ID card for every plant on the group's list.

If using the printed copies of the "Plant ID Cards"

Print off enough "Plant ID Card" worksheets for each group to have their designated number of cards for the plants they are assigned. Give students time to research their assigned plants. Once completed, have students cut out the cards and fold them in half to create a notecard to use when studying. **There should be one copy of the cards per 10 students, so there may be a need for some of the groups to cover the same plants and/or create more cards than the initial directions.**

This will give you one complete class set of Plant ID cards. If you have a larger class and want more than one set of cards, you can do this by rearranging how you divide the plants among the groups. For example, if you have four groups and want two complete class sets of Plant ID cards, you could assign half the list to groups 1 and 3 and the other half of the list to groups 2 and 4. The number of complete sets you want will determine the amount of ID cards that need to be printed.

If using the digital copies of the "Plant ID Cards"

Send students a copy of the "Plant ID Cards." Within their groups, have them research their assigned plants. Once completed, have the group members upload their Plant ID Cards to a public folder or area that all students can access. This will allow access for all students in the class when they need to review or practice identifying plants.

3. *Reflection*

If using the printed copies of the "Plant ID Cards"

To practice with the cards, have the class split into two teams. With the stack of cards on the table or desk, have the students face off and describe the plant's physical characteristics by only looking at the name side of the card. The first student to answer correctly wins a point.

If using the digital copies of the "Plant ID Cards"

To practice with the cards, have everyone find a partner. While sharing a device, have the student look only at the name of the plant. The first one to give a correct physical description wins a point. After each pair has gone through 20 plants, have the students find a new partner and go through the next 20. Repeat until all the plants are reviewed.

4. *Leveling Up*

There is a Quizlet available at the link below. Students can use this to study by using pictures to identify the name or to learn the common and scientific names of the plants.

Split the class into two groups. Have one representative come up at a time. With the Quizlet on the screen, go through the plants with the flash card option. The first person to answer correctly wins a point for their team. Have a new representative come to the front of the classroom after each plant is correctly identified.

<https://quizlet.com/211132060/nurserylandscape-plant-id-flash-cards/>

Item ID List

DIRECTIONS

Use the list below for the introduction activity. Cut out each item and put them in a hat or bag for the speaker to pull out.

Hotdog	Keyboard	Hat	Pencil
Grass	Cow	Mountain	Car
President	Basement	Ice Cream	Axe
Phone	Email	Clock	Pig
Fire	Paper	Movie	Brother
Teddy Bear	Canada	Skateboard	Heart
Sand	Football	Popcorn	Toothpaste
Window	Balloon	Shirt	Beef
Picture	Tire	Speaker	Sticky Note
Broccoli	Flag	Rubber Duck	Slippers
Deodorant	Rain	Video Game	Ring
Milk	Phone Charger	Keys	Dog

Toilet	Wallet	Lipstick	Sailboat
Compass	Couch	Dishwasher	Money
Fork	Lake	Shovel	Newspaper
Piano	Water Bottle	Shampoo	Volleyball
TV Remote	Curtains	Bicycle	Spaghetti
Batman	Hamburger	Battery	Tuba
Pickle	Dentist	Zombie	Rocket Ship
Credit Card	Eraser	Sandals	Jacket
Stop Sign	Shovel	Book	Headphones
Garbage	Baseball	Gum	Europe
Sunset	Ocean	Carrot	Penguin
Iceberg	Cruise Ship	Shopping Mall	Jetpack
Computer	Marker	Seat Belt	Banana

Nursery/Landscape Plant ID List

No.	Botanical Name	Common Name
101	<i>Abelia x grandiflora</i>	Glossy Abelia
102	<i>Abies concolor</i>	White Fir
103	<i>Acer palmatum</i> cv.	Japanese Maple
104	<i>Acer platanoides</i> cv.	Norway Maple
105	<i>Acer rubrum</i> cv.	Red Maple
106	<i>Acer saccharum</i> cv.	Sugar Maple
107	<i>Ajuga reptans</i> cv.	Carpet Bugle
108	<i>Antirrhinum majus</i> cv.	Snapdragon
109	<i>Aquilegia x hybrida</i> cv.	Columbine
110	<i>Amelanchier arborea</i>	Downy Serviceberry
111	<i>Astilbe hybrid</i> cv.	Astilbe
112	<i>Begonia semperflorens-cultorum</i>	Wax Begonia
113	<i>Berberis x mentorensis</i>	Mentor Barberry
114	<i>Betula nigra</i>	River Birch
115	<i>Brassaia actinophylla</i>	Schefflera, Octopus Tree
116	<i>Buxus microphylla</i> cv.	Littleleaf Boxwood
117	<i>Camellia japonica</i> cv.	Common Camellia
118	<i>Cedrus atlantica</i> 'Glauca'	Blue Atlas Cedar
119	<i>Cercis canadensis</i>	Redbud
120	<i>Chaenomeles speciosa</i> cv.	Japanese (Flowering) Quince
121	<i>Clematis hybrid</i>	<i>Clematis</i>
122	<i>Cornus florida</i> cv.	Flowering Dogwood
123	<i>Cotoneaster dammeri</i>	Bearberry Cotoneaster
124	<i>Cotoneaster divaricatus</i>	Spreading Cotoneaster
125	<i>Crataegus phaenopyrum</i>	Washington Hawthorn
126	<i>Cynodon dactylon</i> cv.	Bermudagrass
127	<i>Dieffenbachia maculata</i> cv.	Spotted Dumb Cane
128	<i>Dracaena deremensis</i> 'Warneckii'	Striped Dracaena
129	<i>Dracaena fragens</i> 'Massangeana'	Corn Plant
130	<i>Echinaceae purpurea</i>	Purple Coneflower
131	<i>Epipremnum spp.</i>	Pothos
132	<i>Euonymus alatus</i>	Winged Euonymus
133	<i>Euonymus fortunei</i> cv.	Wintercreeper
134	<i>Fagus sylvatica</i> cv.	European Beech
135	<i>Festuca spp.</i> and cv.	Fescue
136	<i>Ficus benjamina</i>	Benjamin Fig
137	<i>Ficus elastica</i> 'Decora'	Decora Rubber Plant
138	<i>Forsythia x intermedia</i> cv.	Border Forsythia
139	<i>Fraxinus americana</i> cv.	White Ash
140	<i>Gaillardia aristata</i> cv.	Common Blanketflower

No.	Botanical Name	Common Name
141	<i>Gardenia jasminoides</i> 'Fortuniana'	Common Gardenia
142	<i>Ginkgo biloba</i>	Ginkgo, Maidenhair Tree
143	<i>Gleditsia triacanthos inermis</i> cv.	Thornless Honeylocust
144	<i>Hedera helix</i> cv.	English Ivy
145	<i>Hermerocallis</i> spp. and cv.	Day lily
146	<i>Hosta x hybrida</i> cv.	Plaintain Lily
147	<i>Hydrangea quercifolia</i>	Oakleaf Hydrangea
148	<i>Hydrangea macrophylla</i>	Bigleaf Hydrangea
149	<i>Ilex cornuta</i> cv.	Chinese Holly
150	<i>Ilex crenata</i> cv.	Japanese Holly
151	<i>Ilex x meserveae</i> cv.	Meserve Holly
152	<i>Impatiens hybrid</i> cv.	Impatiens
153	<i>Iris x germanica florentina</i> cv.	Bearded Iris
154	<i>Juniperus chinensis</i> cv.	Chinese Juniper
155	<i>Juniperus horizontalis</i> cv.	Creeping Juniper
156	<i>Lagerstroemia indica</i> cv.	Crape Myrtle
157	<i>Leucanthemum x superbum</i> cv.	Shasta Daisy
158	<i>Liquidambar styraciflua</i>	Sweet Gum
159	<i>Liriodendron tulipifera</i>	Tuliptree
160	<i>Liriope spp.</i> cv.	Lilyturf
161	<i>Lonicera japonica</i> 'Halliana'	Hall's Japanese Honeysuckle
162	<i>Magnolia grandiflora</i> cv.	Southern Magnolia
163	<i>Magnolia x soulangiana</i> cv.	Chinese (Saucer) Magnolia
164	<i>Mahonia aquifolia</i> cv.	Oregon Grape
165	<i>Malus spp.</i> and cv.	Flowering Crabapple
166	<i>Myrica pensylvanica</i>	Bayberry
167	<i>Nandina domestica</i>	Heavenly Bamboo
168	<i>Narcissus pseudonarcissus</i> cv.	Daffodil
169	<i>Nyssa sylvatica</i>	Sour (Black) Gum
170	<i>Pachysandra terminalis</i>	Japanese Spurge
171	<i>Paeonia hybrid</i> cv.	Peony
172	<i>Parthenocissus tricuspidata</i>	Boston Ivy
173	<i>Pelargonium x hortorum</i> cv.	Zonal Geranium
174	<i>Pennisetum ruppelia</i>	Fountain Grass
175	<i>Petunia x hybrida</i> cv.	Petunia
176	<i>Philodendron scandens oxycardium</i>	Heartleaf Philodendron

No.	Botanical Name	Common Name
177	<i>Picea abies</i>	Norway Spruce
178	<i>Picea pungens</i> cv.	Colorado (Blue) Spruce
179	<i>Pieris japonica</i>	Lily-of-the-Valley Bush
180	<i>Pinus mugo</i>	Mugo Pine
181	<i>Pinus strobus</i>	Eastern White Pine
182	<i>Pinus sylvestris</i>	Scotch Pine
183	<i>Pinus thunbergiana</i>	Japanese Black Pine
184	<i>Platanus x acerifolia</i>	London Planetree
185	<i>Poa pratensis</i> cv.	Kentucky Bluegrass
186	<i>Podocarpus macrophyllus</i>	Southern Yew
187	<i>Potentilla fruticosa</i> cv.	Shrubby Cinquefoil
188	<i>Prunus laurocerasus</i> cv.	Cherry Laurel
189	<i>Prunus serrulata</i> 'Kwanzan'	Kwanzan Japanese Flowering Cherry
190	<i>Pyracantha coccinea</i> cv.	Firethorn
191	<i>Quercus alba</i>	White Oak
192	<i>Quercus palustris</i>	Pin Oak
193	<i>Quercus rubra</i>	Red Oak
194	<i>Rhododendron x catawbiense</i>	Catawba Hybrid Rhododendron
195	<i>Rhododendron Hybrid</i>	Exbury Hybrid Azalea
196	<i>Rosa</i> spp.	Landscape/Shrub Rose cv.
197	<i>Salvia nemorosa</i> cv.	Meadow Sage
198	<i>Sedum</i> spp.	Sedum
199	<i>Solenostemon scutellarioides</i>	Coleus
200	<i>Sorbus aucuparia</i>	European Mountain Ash
201	<i>Spiraea x bumalda</i>	Bumalda Spirea
202	<i>Syringa vulgaris</i> cv.	Common Lilac
203	<i>Tagetes</i> spp. cv.	Marigold
204	<i>Taxodium distichum</i>	Bald Cypress
205	<i>Taxus</i> spp. and cv.	Yew
206	<i>Thuja occidentalis</i> cv.	American Arborvitae
207	<i>Tilia cordata</i>	Littleleaf Linden
208	<i>Tsuga canadensis</i>	Canadian Hemlock
209	<i>Tulipa</i> spp. cv.	Tulip
210	<i>Verbena x hybrida</i> cv.	Garden Verbena
211	<i>Viburnum x burkwoodii</i>	Burkwood Viburnum
212	<i>Viburnum trilobum</i>	American Cranberrybush Viburnum
213	<i>Vinca minor</i> cv.	Periwinkle
214	<i>Viola x wittrockiana</i> cv.	Pansy
215	<i>Wisteria sinensis</i> cv.	Chinese Wisteria
216	<i>Yucca filamentosa</i>	Adam's Needle

Plant Identification Cards

DIRECTIONS

Use the plant identification cards below to record all the material necessary for your assigned plants. Once completed, cut out the cards, fold them in half and tape them together to use for studying later.

Plant Identification	Plant Identification
Scientific Name	Circle the correct characteristic:
	<i>Annual/Perennial/Biennial</i>
	<i>Tree/Shrub/Flower</i>
Common Name	Distinguishing Physical Characteristics

Plant Identification	Plant Identification
Scientific Name	Circle the correct characteristic:
	<i>Annual/Perennial/Biennial</i>
	<i>Tree/Shrub/Flower</i>
Common Name	Distinguishing Physical Characteristics