

**CAREER
PATHS**

Plant PRODUCTION

Clare Reynolds - Jenny Dooley



Express Publishing

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Book

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Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	Types of Plants	Email	annual, biennial, edible, flowering, herbaceous, non-flowering, ornamental, perennial, plant, woody	Getting someone's attention
2	Basic Botany	Textbook chapter	carbon dioxide, chemical energy, chlorophyll, convert, electromagnetic energy, oxygen, photosynthesis, reaction, sugar, water	Making a correction
3	Parts of a Plant	Poster	bud, bulb, flower, fruit, leaf, node, petal, pod, root, seed, stem	Clarifying a detail
4	Parts of a Flower	Lecture notes	anther, filament, inflorescence, ovary, pistil, pollen, sepal, stamen, stigma, style	Giving a hint
5	Names of Plants	Encyclopedia article	category, common name, cultivar, genus, hybrid, offspring, scientific name, species, variety, x	Expressing confusion
6	Flowers	Catalog	carnation, chrysanthemum, daffodil, dahlia, daisy, floral, hydrangea, lily, orchid, rose, sunflower, tulip	Offering assistance
7	Herbs	Webpage	aromatic, basil, chamomile, culinary, garlic, herb, lavender, medicinal, mint, rosemary, sage	Making an assumption
8	Grasses and Grains	Email	broomcorn, cereal grain, foxtail millet, grass, head, ornamental grass, pearl millet, pendulous, plume, shed	Expressing dismay
9	Woodies and Succulents	Advice column	aloe, berry, branch, cactus, deciduous, evergreen, forsythia, lilac, shrub, spine, succulent	Making a suggestion
10	Trees	Email	cone, conifer, cypress, elm, laurel, maple, oak, pine, tree, yucca	Expressing annoyance
11	Vegetables, Fruits, and Legumes	Memo	apple, bean, cherry, companion plant, corn, legume, lettuce, melon, nut, onion, pepper, potato, pumpkin, strawberry, tomato	Asking for clarification
12	Measurements	Chart	acre, Celsius, centimeter, degree, Fahrenheit, foot, gallon, hectare, inch, liter, meter, square foot, square meter	Confirming information
13	Tools 1	Book chapter	bed, saucer, hand cultivator, hand weeder, hoe, lopper, planter, pot, pruning shears, rake, shovel, trowel	Expressing intention
14	Tools 2	Advertisement	aerator, bucket, handheld, hilling attachment, hose, lawnmower, mechanical cultivator, plow, riding, sprayer, tiller, tractor, transplanter, wheel hoe, wheelbarrow	Talking about experience
15	Basic Actions	Employee handbook	broadcast, cut, dig, fertilize, harvest, mow, plant, plow, prune, transplant, water, weed	Describing necessity

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Get ready!

1 Before you read the passage, talk about these questions.

- 1 What are some uses for different types of plants?
- 2 What are the different life cycles of plants?



ornamental

non-flowering

flowering

Reading

2 Read the email. Then, choose the correct answers.

- 1 What is the purpose of the email?
 - A to order some plants
 - B to organize a plant sale
 - C to identify unhealthy plants
 - D to suggest which plants to grow
- 2 Which of the following is NOT specified in the email?
 - A what will replace the herbaceous flowers
 - B where to plant the non-flowering trees
 - C which plants are selling well
 - D when to replace the biennials
- 2 According to the email, what did a lot of customers ask for?
 - A edible plants
 - B herbaceous annual plants
 - C flowering woody plants
 - D ornamental plants

Hi Lou,

It's time to decide on next year's **plants**. This year, we grew too many **herbaceous** flowers. Luckily, many are **annuals**.

They won't return next year.

Instead, let's use those beds for **flowering**, **woody** plants, like lilacs. Lots of customers asked for those. Customers also requested maples and other **non-flowering** trees. Finding space for those will be tricky, but let's try.

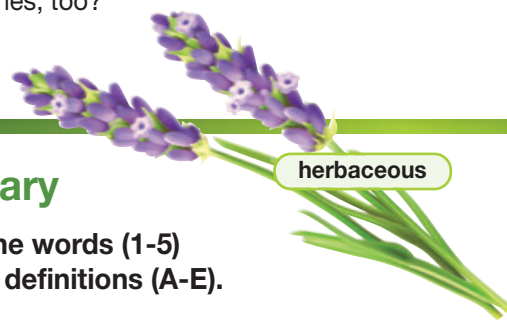
Fortunately, many **perennials**, like chrysanthemums, are still selling well. And those will return on their own. Some of the **biennials** didn't sell as well. Fortunately, they'll die anyway after their second season. Let's replace them, then.

Also, how do you feel about a small vegetable farm? We already offer many **ornamental** products.

Why not **edible** ones, too?

Let's talk soon.

Kim



herbaceous

Vocabulary

3 Match the words (1-5) with the definitions (A-E).

- | | |
|------------------|---------------------|
| 1 ___ plant | 4 ___ herbaceous |
| 2 ___ flowering | 5 ___ non-flowering |
| 3 ___ ornamental | |

- A not having a hard, woody stem
- B producing some type of flower
- C grown and used as decoration
- D a living organism that creates nutrients from sunlight
- E not producing flowers

4 Fill in the blanks with the correct words:

edible, perennial, woody, annual, biennial.

- 1 If a plant is a(n) _____, it will only live for one year.
- 2 Many berries are _____, so they return season after season.
- 3 Since trees have bark and hard stems, they are _____.
- 4 If a flower is a(n) _____, it usually lives for two years.
- 5 Poisonous plants sometimes resemble _____ ones, so look carefully before eating them.

5 Listen and read the email again. When do perennials return?

Listening

6 Listen to a conversation between a customer and a nursery employee. Mark the following statements as true (T) or false (F).

- 1 ___ The man's geraniums lasted for only one season.
- 2 ___ According to the woman, herbaceous plants cannot grow in the local region.
- 3 ___ The woman recommends planting in pots.

7 Listen again and complete the conversation.

Customer: Excuse me. I 1 _____ about geraniums.

Employee: Sure. How can 2 _____?

Customer: I had beautiful geraniums last season. But they didn't 3 _____ this year. Why is that?

Employee: Ah, geraniums grow as 4 _____ here.

Customer: Oh, really? Do you know why?

Employee: It's the cold winters. A lot of 5 _____ can't withstand them.

Customer: Oh, no wonder. When I lived down south, my geraniums always came back.

Employee: Yeah, that's just how our 6 _____ is!

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

Excuse me ...
Wait a moment.
How can I help?

Student A: You are a customer. Talk to Student B about:

- your plants
- a problem with the plants
- something that surprised you

Student B: You are an employee. Talk to Student A about his or her plants.

Writing

9 Use the email to complete the guide.



Plant Guide

Plants fall into a few major categories

Life Cycles — Some plants are annuals. As a result, _____.

Other plants are _____.

That means _____.

_____ — Some plants are _____. As a result, _____.

Other plants are _____.

That means _____.

See next page for more categories.

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Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	Growing Environments 1	Book chapter	fertile, field, furrow, grass path, irrigation, organic matter, pH, raised bed, row, soil survey, soil test, wind, windbreak	Delivering bad news
2	Growing Environments 2	Advice column	artificial, evaporative cooler, fan, furnace, greenhouse, hoophouse, natural, row cover, season extension, shop light, tunnel, vent, hydroponics	Asking for an opinion
3	Soil Preparation	Memo	C:N ratio, carbon, compost, cover crop, decompose, erosion, fix, green manure, hay, nitrogen, nutrient, smother, straw, tith, waste	Showing understanding
4	Mulch	Online forum	alfalfa, biodegradable, clippings, expensive, landscape fabric, mold spore, mulch, paper mulch, plastic mulch, recycle, residue, shells, shredded, tear, wood chips	Making an assumption
5	Starting Plants	Employee handbook	bottom heat, brush, cell, cell pack, channel tray, germinate, hardy, insert, nurture, plug, potting mix, seedling tray, transplant shock, tray cover	Offering assistance
6	Transplanting	Memo	air circulation, direct seeding, dry out, frost, frost-free date, gently, harden off, mechanical transplanting, plant out, press, root-ball, spacing	Drawing a conclusion
7	Watering	Email	dehydrated, drainage, drip irrigation, evaporate, irrigate, moisture, nozzle, overhead irrigation, rainfall, root zone, sprinkler, wand, wind drift	Making a suggestion
8	Soil Amendments	Book chapter	concentrate, emulsion, fertigation, fertilizer, foliar feeding, granular, manure, peat, perlite, phosphorous, potassium, ready-made, soil amendment, vermiculite, worm castings	Making a realization
9	Plant Maintenance	Flyer	cage, deadhead, hard pinch, moisture sensor, overwater, pinching, prolong, soft pinch, stake, support, tie, twine, weeding	Listing tasks
10	Breeding	Textbook chapter	appearance, artificial selection, backcrossing, breed, desirable, genetic engineering, interbreeding, manipulate, pollinate, progeny, resistance, scent, taste, trait, yield	Asking for details
11	Types of Diseases	Webpage	bacteria, blight, canker, curl, damping-off, disease, fungus, mildew, mold, rot, rust, scab, spot, virus, wilt	Describing possibilities
12	Types of Pests	Blog	antlion, bee, beetle, beneficial, caterpillar, deer, infestation, insect, invasive species, pest, rodent, spider	Correcting someone
13	Disease and Pest Management 1	Webpage	barrier, biological control, chemical control, habitat, herbicide, insecticidal soap, pesticide, physical control, predator, spray, sticky trap	Requesting additional information
14	Disease and Pest Management 2	Article	certified, crop rotation, environment, holistic, integrated pest management, nonsynthetic, nutrient management, organic, pest-repelling plant, pollution, preventive, sanitation, selection, sustainable	Introducing a hypothetical situation
15	Seasons	Email	arid, autumn, climate, fall, freeze, humidity, precipitation, season, spring, summer, sunlight, temperate, winter	Showing agreement

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Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	Harvesting Flowers 1	Guide	bloom, bud stage, floriculture, fresh, full bloom, harvest, in the vase, pencil stage, prime, senesce, tight bud, timeliness, turgid, unfurl	Showing understanding
2	Harvesting Flowers 2	Employee handbook	bare hands, bunch, condition, contamination, cooler, cut, field heat, foliage, glove, runner, solution, strip, uptake	Expressing surprise
3	Drying Flowers	Advice column	absorb, air-dry, bright, brittle, dehumidifier, dries, fade, floral dye, fragile, freeze-dry, glycerin, lifelike, polyurethane coating, silica, tissue damage, upside down	Adding information
4	Preserving Flowers	Employee handbook	acidifier, biocide, bleach, ethylene, floral preservative, fluoride, hard water, holding solution, MSDS, pulsing, salinity, silver thiosulphate, sugar, tap water, vase life	Making a recommendation
5	Harvesting Fruits and Vegetables	Brochure	bolt, crisp, crop, determinate, flavor, indeterminate, loosen, mature, on the vine, produce, ripen, standard, tender, tough	Showing gratitude
6	Transportation	Email	air-conditioned, camper shell, cargo van, foam, grid, open bed, pickup, safety hazard, separate, tip over, transport, upright	Making an apology
7	Nurseries	Webpage	B&B, bare-root, big box, DIY, fashion, fold-back roof, home improvement, independent, manual, nursery, peat pot, retail, seasonal, wholesale	Making a comparison
8	Florists	Email	compete, deliver, emergency, exotic, florist, fragrance, high-end, import, local, preorder, standing order, wire service	Expressing doubt
9	Sales 1	Article	break into, buyer, client base, consumer, dependable, direct sale, event, exposure, gift, market, niche, personal use, vendor	Giving a reminder
10	Sales 2	Email	bouquet maker, community-supported agriculture, consumer-ready, display, farmers' market, liability coverage, on consignment, outright, pick-your-own, roadside, subscription, supermarket, up front	Conceding a point
11	Pricing	Guide	budget, cost-of-production pricing, farm-supply expense, hourly, insurance, labor cost, market pricing, overhead, price index, profit, tax, vary, wage, year-round	Asking for more information
12	Shipping Plants	Advertisement	branch, carrier, cleat, gel ice pack, grower, national, outlet, packaging, plastic sleeve, regional, reliable, ship, warehouse	Posing an indirect question
13	Arranging Flowers	Employee handbook	accent, accessory, arrange, container, disinfect, floral foam, flow, glue, liner, marble, netting, pin frog, placement, shears, texture, wire	Asking for clarification
14	Services	Webpage	balloon, basket, bouquet, boutonniere, bridal bouquet, casket spray, centerpiece, chocolate, decoration, garland, upgrade, vase, wreath	Offering options
15	Occasions	Memo	anniversary, congratulations, funeral, get well, holiday, hospital, hospitality, party, real estate agency, romantic, sympathy, wedding	Expressing concern

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Glossary

- absorb** [V-T-U3] To **absorb** a substance is to soak it in.
- accent** [V-T-U13] To **accent** something is to place special emphasis on it and make it more noticeable.
- accessory** [N-COUNT-U13] An **accessory** is an extra item that is not necessary, but which makes something more useful or attractive.
- acidifier** [N-COUNT-U4] An **acidifier** is a substance that helps to reduce the pH level in water and prevents flowers from wilting and drooping.
- air-conditioned** [ADJ-U6] If something is **air-conditioned**, it contains a system that reduces the temperature of the air.
- air-dry** [V-T-U3] To **air-dry** flowers is to hang bunches of them in a low-humidity environment in order to remove the water from inside them.
- anniversary** [N-COUNT-U15] An **anniversary** is a date when someone celebrates something special or important that occurred on the same day in a previous year. Married couples often celebrate their wedding anniversary.
- arrange** [V-T-U13] To **arrange** flowers is to group them in a particular way, usually to make them look attractive.
- B&B** [ABBREV-U7] If a tree or other plant is **B&B** (ball and burlap), someone digs it out of the ground and wraps the roots in burlap until it is ready for transplanting.
- balloon** [N-COUNT-U14] A **balloon** is a colored bag, made of thin rubber, that is filled with air and then used as a toy or for decoration.
- bare hands** [PHRASE-U2] To do something with your **bare hands** means to do it without covering your hands with gloves or without a tool.
- bare-root** [ADJ-U7] If a plant is **bare-root**, it is sold in a dormant state with visible roots.
- basket** [N-COUNT-U14] A **basket** is a type of container that consists of pieces of woven plastic, wire, or wood.
- big box** [N-COUNT-U7] A **big box** is a very large store that sells goods at low prices.
- biocide** [N-COUNT-U4] A **biocide** is an ingredient in floral preservatives that kills the bacteria in water, which would otherwise cause floral decay. Bleach is a common biocide.
- bleach** [N-UNCOUNT-U4] **Bleach** is a strong chemical that is able to kill dangerous or unwanted bacteria.
- bloom** [V-I-U1] To **bloom** is to produce flowers that are open.
- bolt** [V-I-U5] To **bolt** is to grow a flower stalk.
- bouquet** [N-COUNT-U14] A **bouquet** is a group of flowers that are cut and tied together in an attractive manner.
- bouquet maker** [N-COUNT-U10] A **bouquet maker** is a person whose job is to arrange and tie together flowers in an appealing way.
- boutonniere** [N-COUNT-U14] A **boutonniere** is a flower that someone, traditionally a man, attaches to a jacket as an accessory on a special occasion.
- branch** [N-COUNT-U12] A **branch** is a business or store in a specific area that is one of multiple stores owned by a particular company.
- break into** [PHRASAL V-U9] To **break into** a career field is to begin to experience success in that field.
- bridal bouquet** [N-COUNT-U14] A **bridal bouquet** is an arrangement of flowers that a woman traditionally carries on her wedding day.
- bright** [ADJ-U3] If a place is **bright**, it is full of light.
- brittle** [ADJ-U3] If something is **brittle**, it is hard but also likely to break easily.
- bud stage** [PHRASE-U1] The **bud stage** is the time in a plant's life when buds have developed, but the plant has not yet flowered.
- budget** [N-COUNT-U11] A **budget** is the quantity of money that is available to spend on something, or a plan for how the money will be spent.
- bunch** [N-COUNT-U2] A **bunch** is several cut flowers, tied or held together in a group.
- buyer** [N-COUNT-U9] A **buyer** is a person whose job is to select the goods available in a store.
- camper shell** [N-COUNT-U6] A **camper shell** is a hard, raised cover that attaches to the bed of a pickup truck.



Plant PRODUCTION

Career Paths: Plant Production is a new educational resource for plant production industry professionals who want to improve their English communication in a work environment. Incorporating career-specific vocabulary and contexts, each unit offers step-by-step instruction that immerses students in the four key language components: reading, listening, speaking, and writing. *Career Paths: Plant Production* addresses topics including common plants, growing methods, pest control, harvesting methods, and floral arranging.

The series is organized into three levels of difficulty and offers over 400 vocabulary terms and phrases. Every unit includes a test of reading comprehension, vocabulary, and listening skills, and leads students through written and oral production.

Included Features:

- A variety of realistic reading passages
- Career-specific dialogues
- 45 reading and listening comprehension checks
- Over 400 vocabulary terms and phrases
- Guided speaking and writing exercises
- Complete glossary of terms and phrases

The **Teacher's Guide** contains detailed lesson plans, a full answer key and audio scripts.

The **audio CDs** contain all recorded material.



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