

Gardening for Beginners Week 1: Basic Plant Needs

Recommended Zoom settings:

- Microphone muted
- Video off
- Speaker view
- Use chat window for questions



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Agriculture and Natural Resources | Master Gardener Program

Who are we?



University of California, Division of Agriculture and Natural Resources

UC Master Gardeners, Santa Clara County, CA

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See our [events calendar](#) for many free online events.

- Home
- Contact Us
- Events Calendar
- Garden Help
- Demonstration Gardens
- Community Programs
- Who We Are
- UCCE Main Page**

Advice to Grow By ... Ask Us!

Have Questions?

UC Master Gardeners are here to help. There are many ways to find answers to your gardening questions.



- Contact our [Help Desk](#)
- Come to our [Plant Clinic Online](#)
- Attend one of our [classes or events](#)
- Watch some of our [video tips and talks](#)
- Visit one of [our gardens](#)
- Browse our [Garden Help](#) pages

Vegetable Gardening

Want to grow your own vegetables? See our [vegetable gardening pages](#) for how to get started and advice on specific vegetables. Our [vegetable planting chart](#) shows you the best times to plant vegetables in Santa Clara County.





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Gardening for Beginners

4 week course

- **Week 1: Basic plant needs**
 - Climate, Sun, Soil, Space & Water
 - Draw a site plan
- **Week 2: How does your garden grow?**
 - Plant parts, Plant types
 - Make a plant list
- **Week 3: Choosing plants & keeping them safe**
 - How to choose plants; pests and diseases
 - Scavenger hunt on UC IPM
- **Week 4: Working in the garden**
 - Soil prep, planting, maintenance



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Gardening in the Pandemic

“Americans soon discovered a green new world in the backyard. Creating gardens gave stir-crazy individuals a fresh perspective and a break from stress and close quarters. In the garden they felt a sense of belonging and a measure of control.”

“Gardening’s appeal crosses political lines.”

“The gardening revolution has allowed tens of millions of people to agree on at least one thing: that food for the body and beauty for the soul are within the grasp of a seed or a plant, and only a few steps from our door.”

“Covid Isolation Sows a Gardening Boom” George Ball (Chairman Burpee Co., and former President of American Horticultural Society. WSJ Article Jan 3, 2022



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Zucchini Hunt



Potato Dig



Poll

Denise

Where will you be gardening?

What kinds of plants are you interested in?



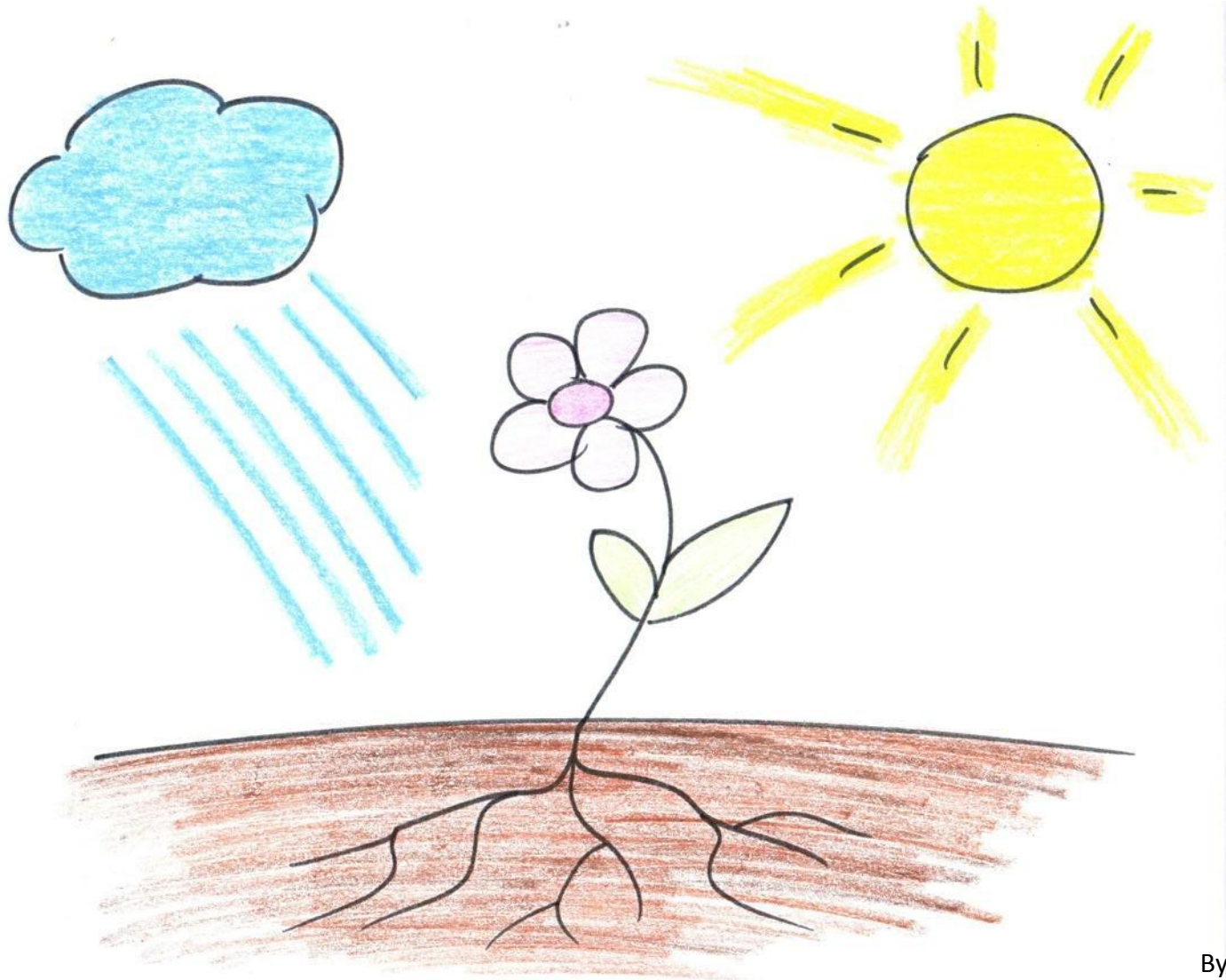
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Intro to Class #1

Denise

Class 1



Right plant, right place



lemon tree: moderate water + sun + native soil with some amendment

azalea: lots of water + shade + well amended soil

oak tree: no summer water + full sun + native soil

rosemary: little to no summer water + full sun + native soil

tomato: lots of water + lots of sun + loose well amended soil



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photo by jpm.ucdavis.edu



photo by Karen Schaffer

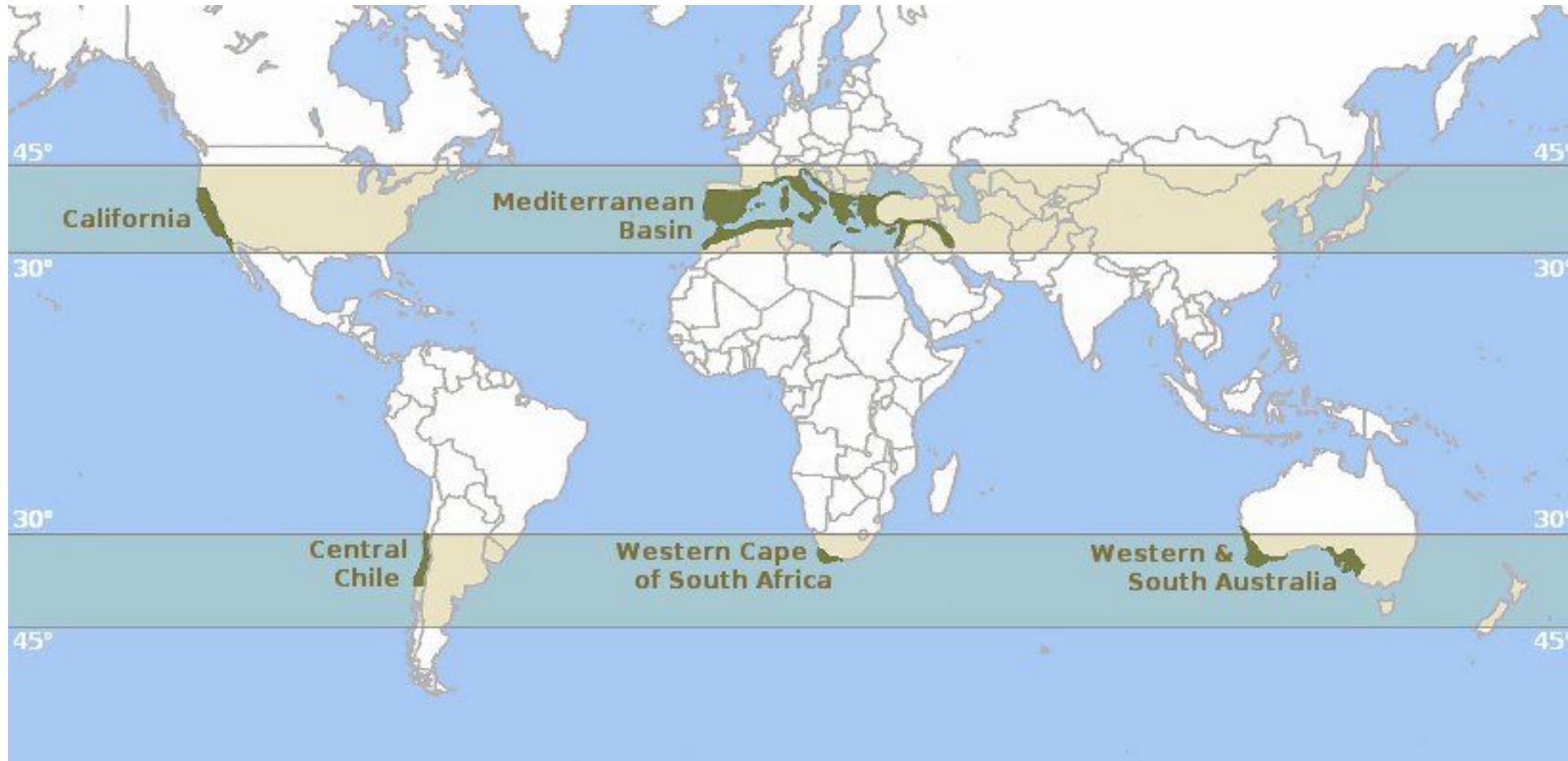


Photo by Isabelle Chudde

Climate

Bob

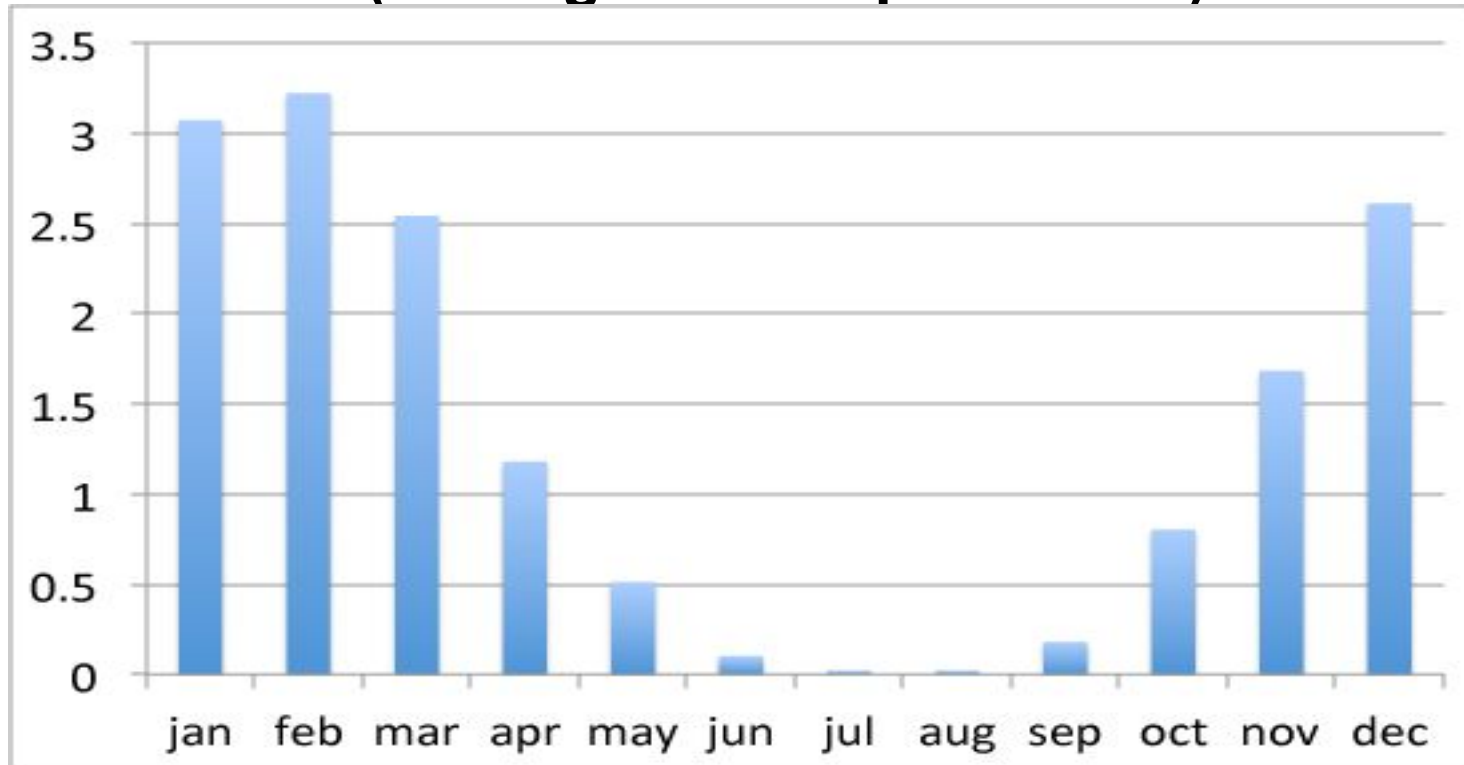
Mediterranean climate



Map used with permission from gimcw.org, copyright Seán O'Hara

Sunnyvale rainfall

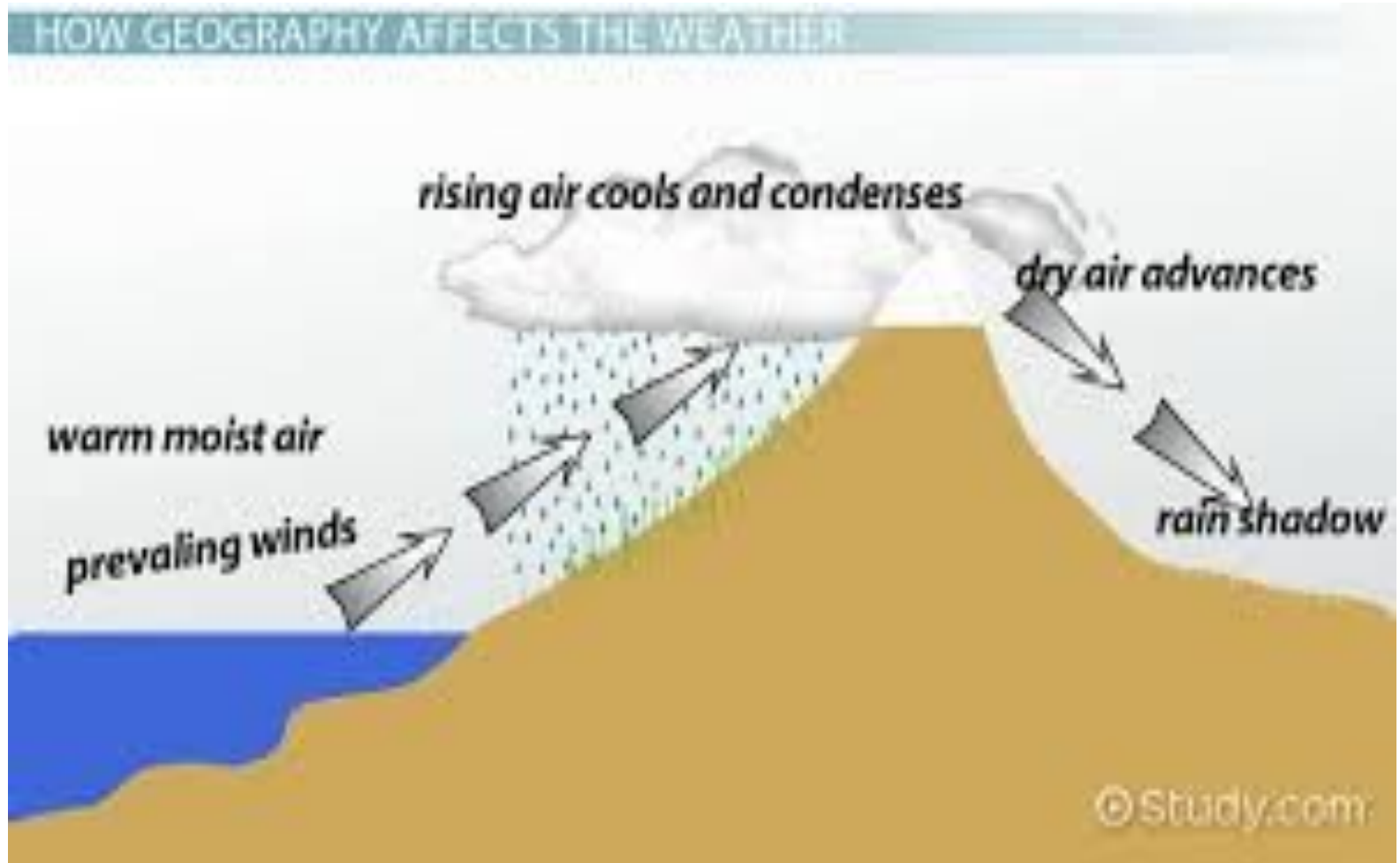
(Average inches per month)



Sunnyvale: 15" Rain per year, 63 Rainy days and 260 Sunny days

Ben Lomand: 50" Rain per year, 68 Rainy days and 263 Sunny days

Rain Shadow



Sunnyvale rainfall plus average highs

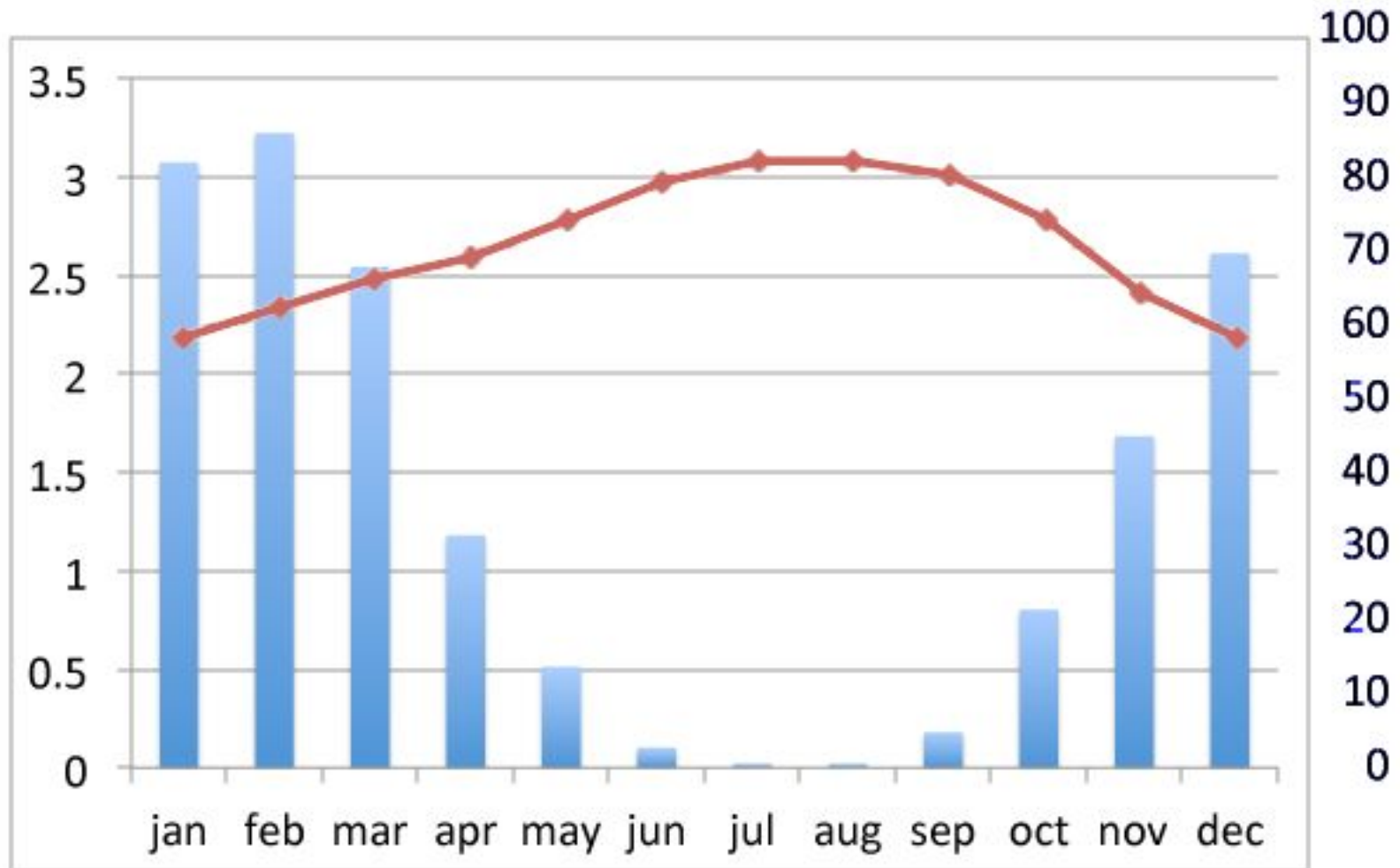
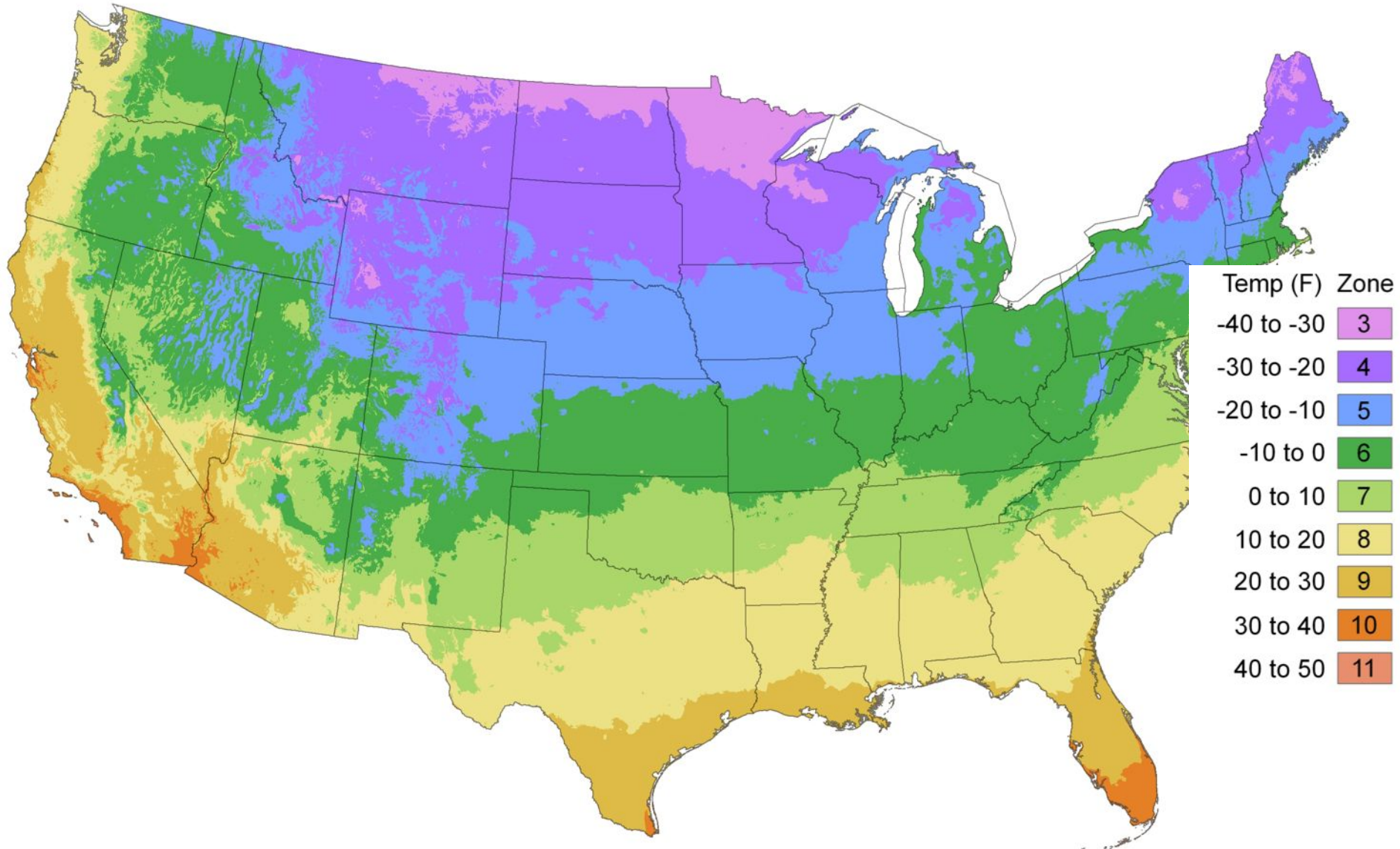


Diagram by Louise Christy & Karen Schaffer

USDA hardiness zones



From planthardiness.ars.usda.gov

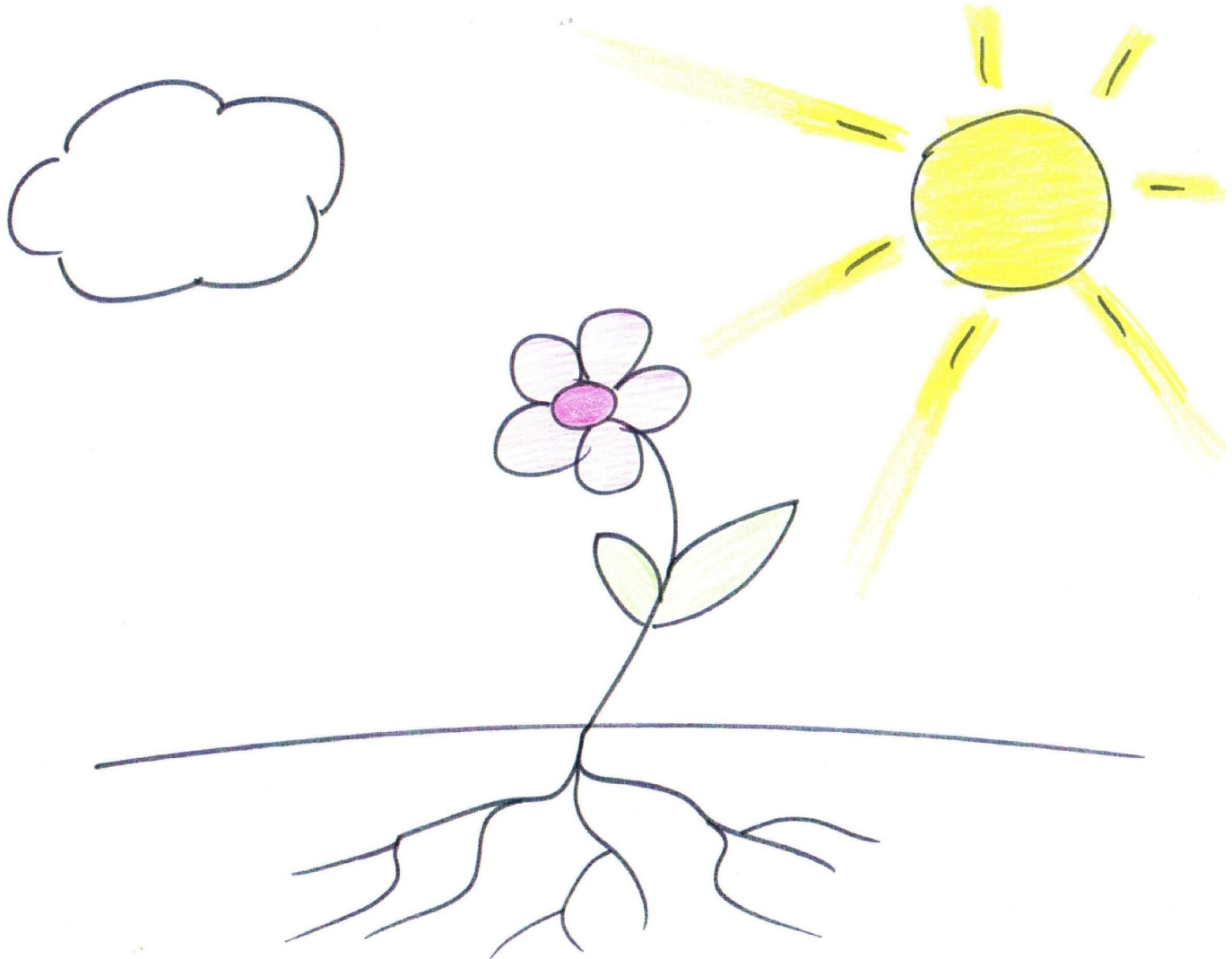
Sunset climate zones



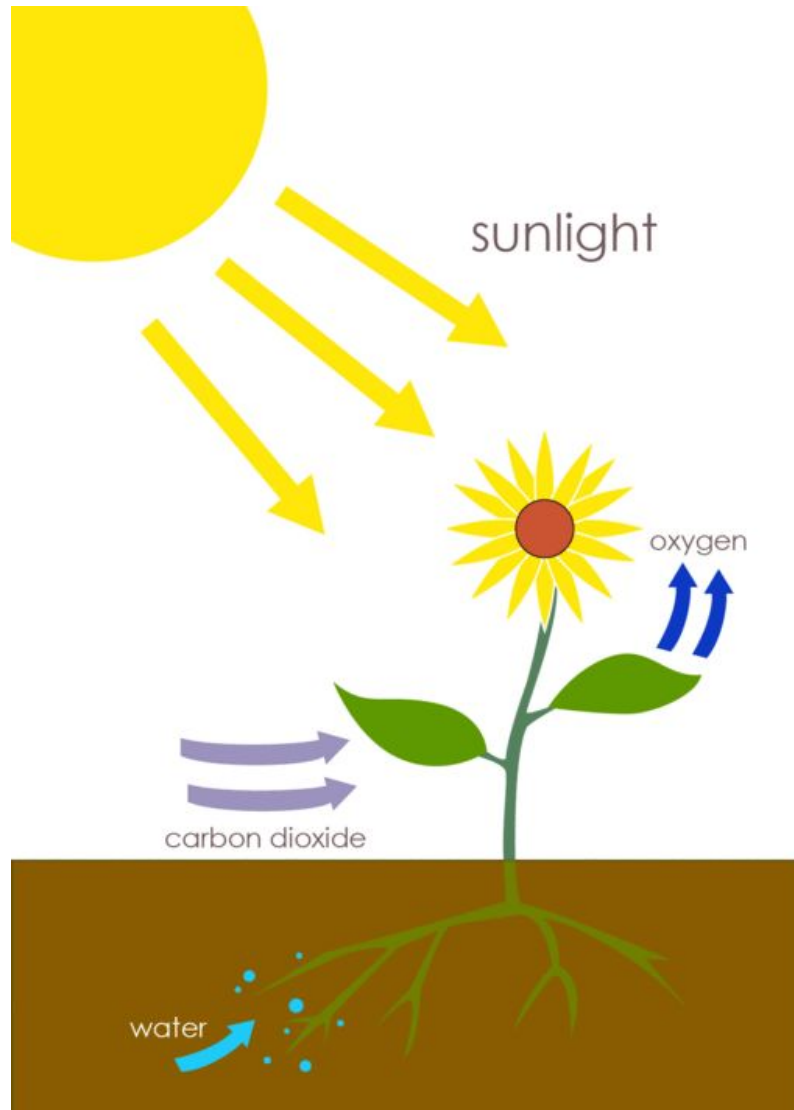
Sun

Susan

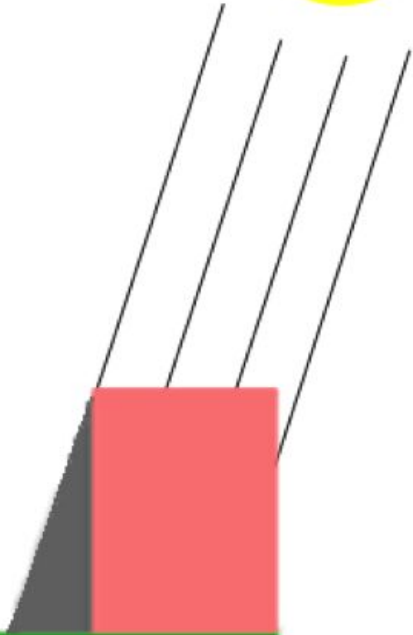
Sun



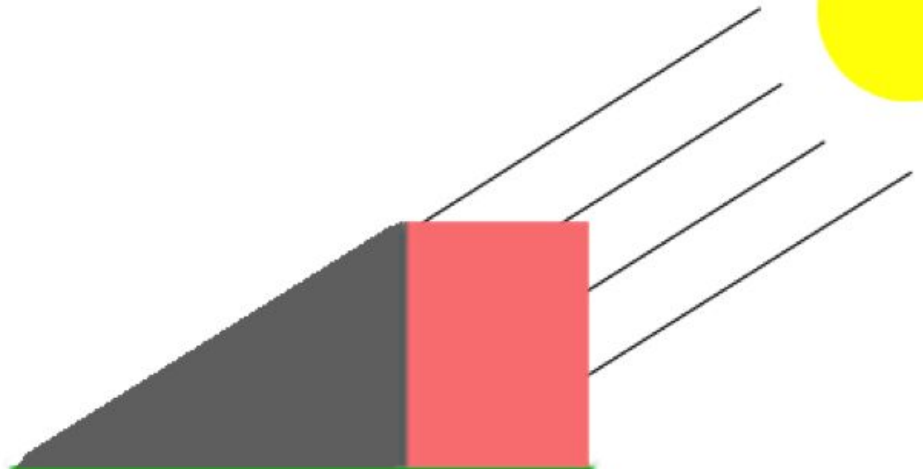
Photosynthesis



Know where your sun is



SUMMER



WINTER

Good sun exposure



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Sun patterns matter



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Track the patterns of sun and shadow



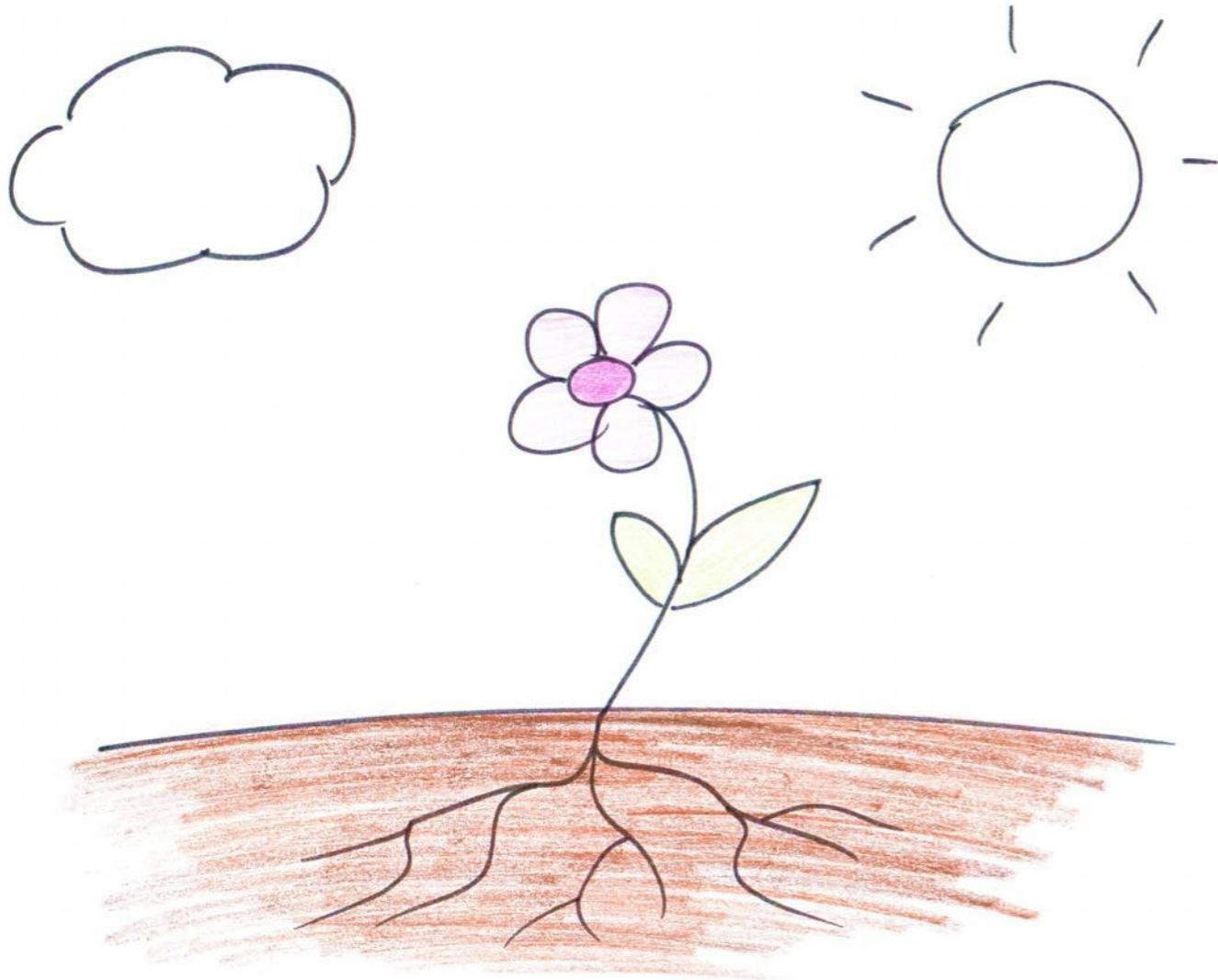
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Soil

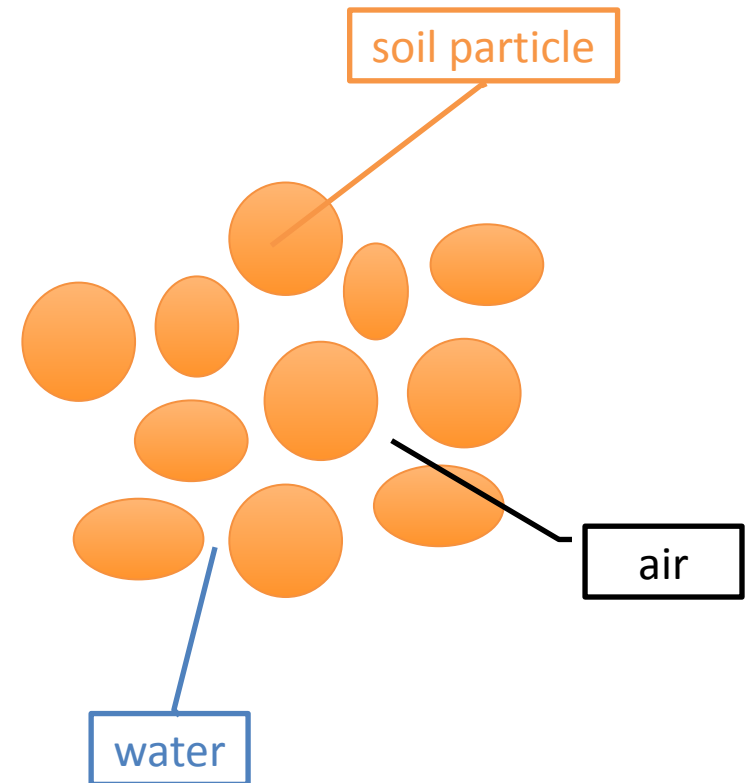
Paul

Soil



Soil composition

- 50% solid
 - 45% minerals
 - 5% organic matter
- 50% space
 - 25% air
 - 25% water



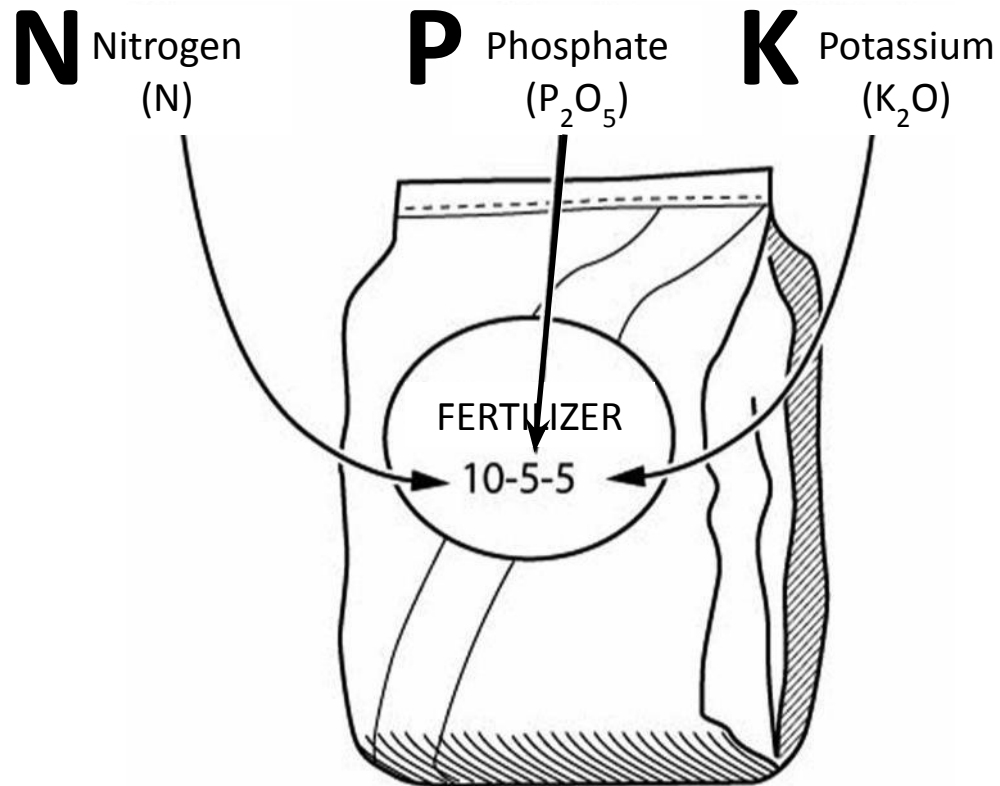
Compost



Mulch



Soil Nutrients that Plants Need



California Master Gardener Handbook



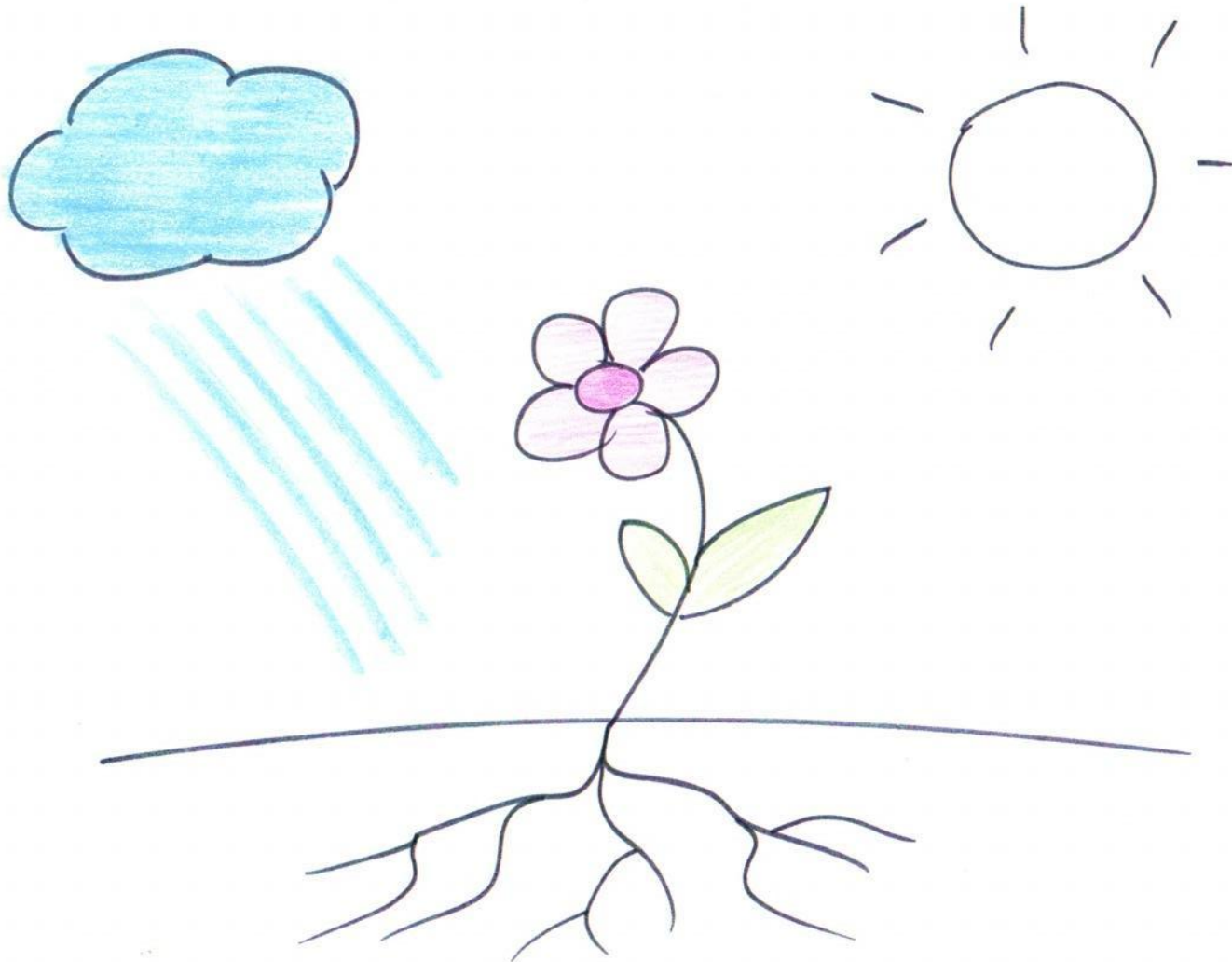
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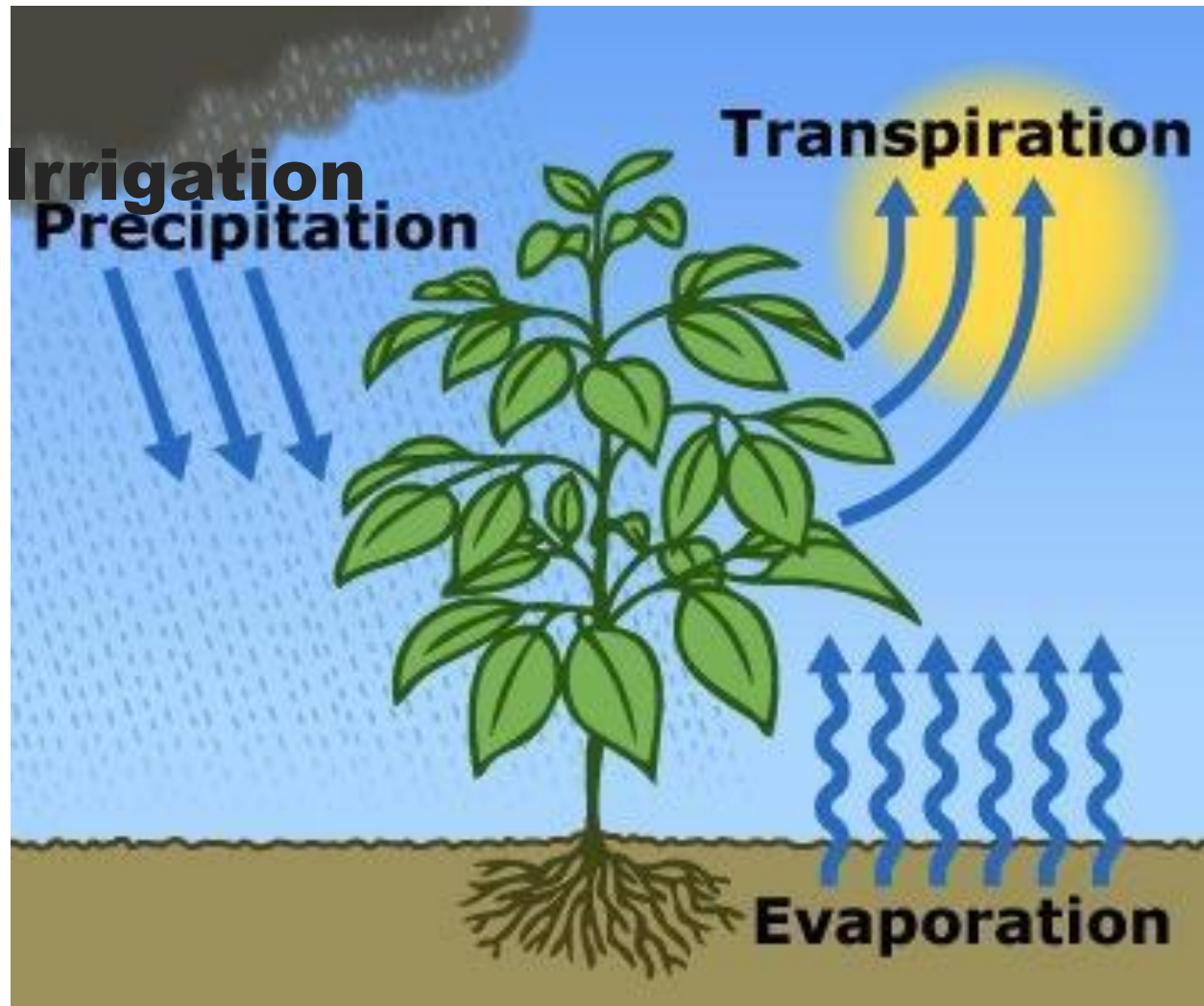
Water

Louise

Water



Water cycle



Right amount of water



Photo by Laurence R. Costello, UCCE



Photo by Laurence R. Costello, UCCE

Space - Another Fundamental Need of Plants

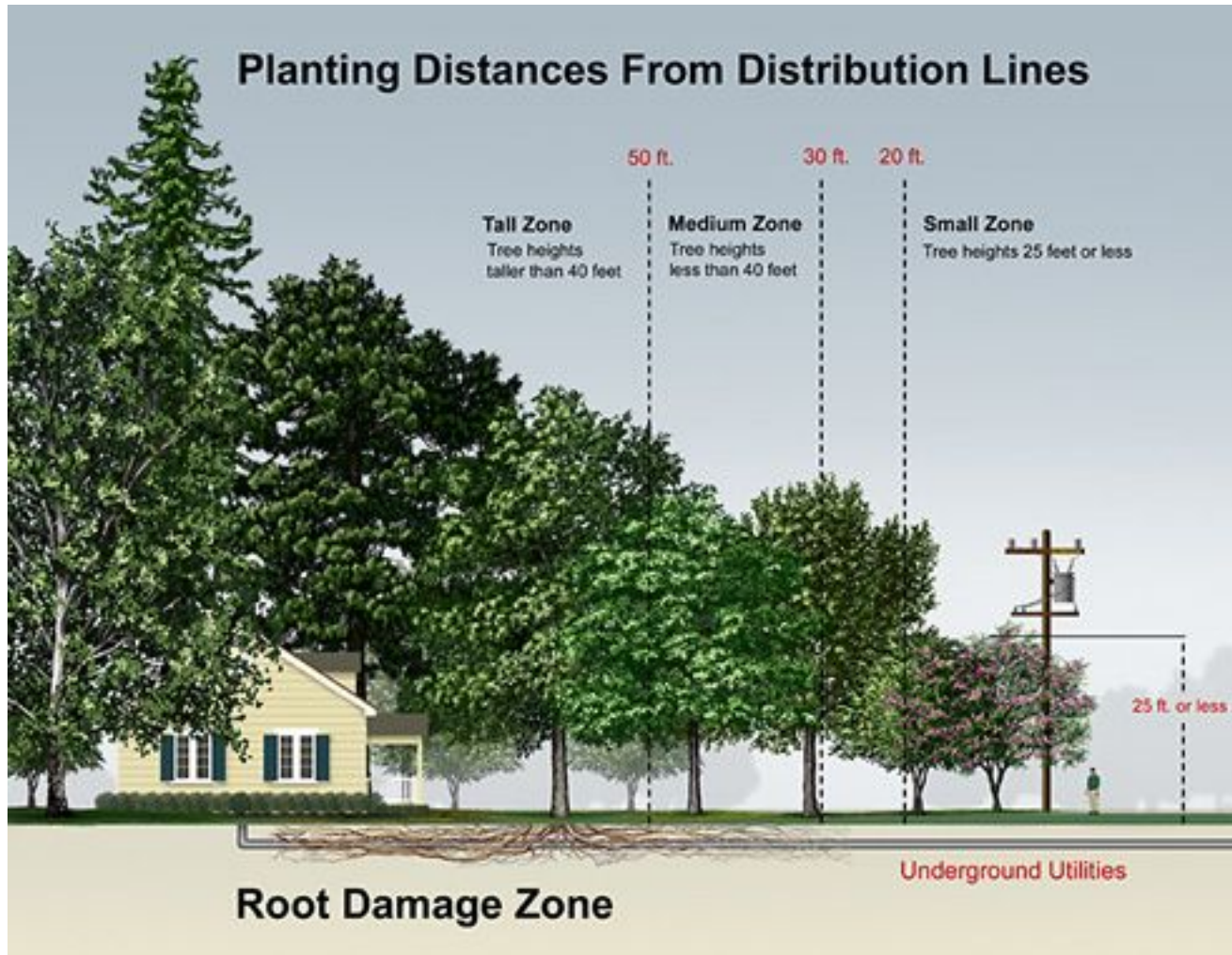
Denise



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Spacing: Height, width, roots



From PG&E

Too close!



Photo © Monica Hemingway



Photo © Monica Hemingway



Photo by Kourtney Cribbs

Garden | Planting



March

Garden | Planting



AUGUST

March

August

Photos by Sunset Magazine

Analyze your garden

Louise

How will **YOUR** garden provide for plants' needs?

Sun

Soil

Water

Space

Climate



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Example map



For next week: analyze your garden area

- Sketch a map of your space
- Include objects like fences, sidewalks, patios
- Sketch in existing trees, shrubs, and hedges
- Mark where water faucets are
- Observe the sun and shade patterns and mark sunny and shady areas on your sketch.
- Mark which way is North.
- (optional) email it to christyldc@aol.com



Demonstration

Susan

What questions do you have?



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Thank you for coming



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