



A Plant is a Living Thing

K to 1st Grade Garden Lesson

UCCE Master Gardener Program of Riverside County

Master Gardeners

The University of California Cooperative Extension (UCCE) Master Gardener Program (MGP) is an educational program designed to teach and effectively extend information to address home gardening and non-commercial horticulture needs in California.

UCCE is the outreach arm of UC's division of Agriculture and Natural Resources (ANR). Master Gardener volunteers (MG volunteers) promote the application of basic environmentally appropriate horticultural practices through UCCE-organized educational programs that transfer research-based knowledge and information.



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Learning Goals

- Learn that a plant is a living thing.
- Learn how a plant is different from other living things.
- Learn that plants and animals need nutrition and water to grow.



What is an Organism?

- An **organism** is a living thing
- Plants are living organisms
 - So are:
 - People
 - Cats and Dogs
 - Fish and frogs
 - Worms and bugs



What Do Living Things Have in Common?

All Living Things

- Grow
- Breathe
- Reproduce
- Vary in shapes and colors
- Need nutrients
- Need water



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Living Things Grow

- Plants grow larger and set fruit and flowers.

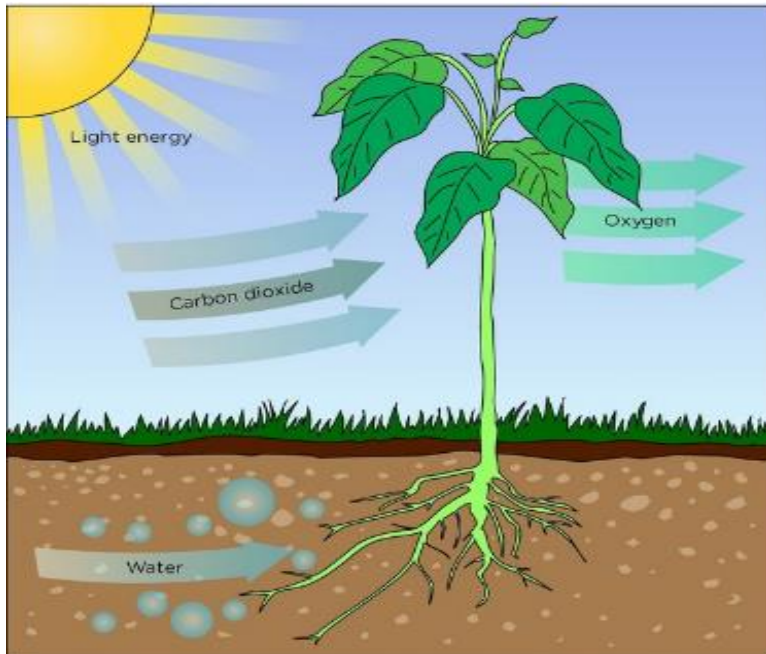
- People and animals grow from babies to adults.



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Living Things Breathe

- Plants Breathe Air



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Release **Oxygen**

- People and Animals Breathe



Take in a deep breathe and blow it out.

Living Things Reproduce

- Plants grow new plants with seeds.



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- People and animals have babies.



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Living Things Vary in Shape and Color

- Plants



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- People and Animals



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Living Things Need Nutrients

- Plants get nutrients from soil.
- People and animals eat food.

Soil with
nutrients



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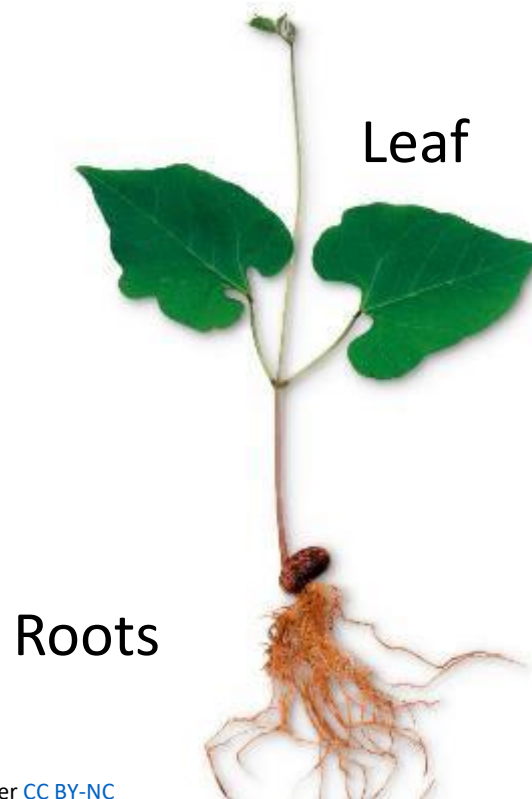
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Living Things Need Water

- Plants get water from soil.

- People and animals drink water.

Plants take up water and nutrients through the roots planted in soil.



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How Are Plants Different from Other Living Things?



Plants Have Different Parts

- What part is the stem?
- What part is the leaf?
- Where are the roots?

Plants Cannot Move

- Plants stays in one place.



- People and animals move.



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Plants Make Sugar

- Sugar comes from sugar cane and other plants.
 - Sugar gives plants energy.
 - People like to eat sugar. 😊



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Leaves

Stem

Plants

- Cannot move
- Have leaves, stems and roots
- Need air and light
- Need nutrition and water
- Breathe
- Start as seeds
- Make sugar

Video – Living Things

[Living Things Song](#)



Garden Science Vocabulary



Nutrition



Organism



Oxygen



Reproduce

Nutrition

Nutrition is something used by an organism to grow and survive.



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Organism

An organism is a living thing.



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Oxygen

Oxygen is something in
the air that supports
life.



Reproduce

Reproduce: Have a baby or offspring.



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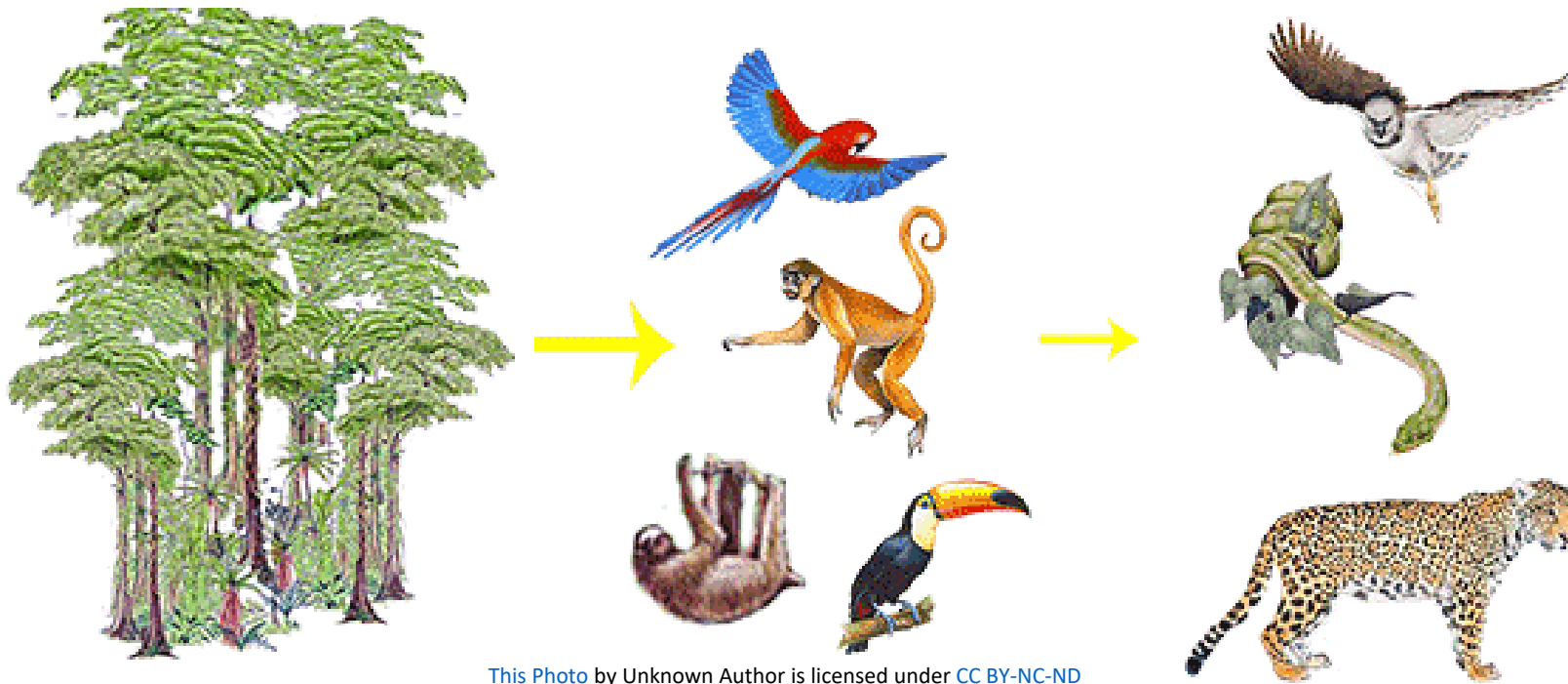


Review

- Is a plant living?
- What are two other living things?
- Do all living things need water?
- Can plants move around?
- Can animals move around?
- Do plants and animals breathe?

Application

Describe the Plant in the Picture



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Application

- Walk through a garden
 - Find a plant and draw a picture.
- Do you see any animals?
 - What are they?
 - Draw a picture.

Extension

See a Seed Grow

- Materials
 - Clear bag
 - Dry bean (navy, pinto, other)
 - Paper towel (folded)
 - Water
- Moisten paper towel.
- Place towel in the bag.
- Place one or more dry beans on the towel and close bag.
- Place near a sunny window.
- Observe and draw what happens over 5 days.





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Will the Bean Grow?

- What do you think you will see in 5 days?

Next Generation Science Standards – Kindergarten

- Kindergarten

LS1.C: Organization for Matter and Energy Flow in Organisms

▪All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1)

ESS2.E: Biogeology

Plants and animals can change their environment. (KESS2-2)

ESS3.A: Natural Resources

Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)

Next Generation Science Standards – 1st Grade

- **1st Grade**

LS1.A: Structure and Function

All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1)

LS1.B: Growth and Development of Organisms

Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive. (1-LS1-2)

Resources

- Master Gardener Handbook, 2nd Edition 2015
- University of California Agriculture and Natural Resources <https://ucanr.edu>
- Agriculture for Life <https://www.agricultureforlife.ca/>
- Video: Elementary Life Science <https://www.youtube.com/watch?v=tzN299RpJHA>
- Images: Creative Commons, www.kiddle.co, kids.kiddle.co
- Image: Science Kiddo
- Images: www.dkfindout.com, www.duckster.com

Gardening Questions?

- Email or Call the UCCE Master Gardeners of Riverside County
- Email Helpline
 - anrmgriverside@ucanr.edu
- [Riverside Master Gardeners Website](#)



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