



## Plant Life Cycle

### Lesson

#### Goals

Students will learn about plants' growing cycle.

#### Objectives

Students will put together a mini-book on how plants grow to learn the growing cycle.

#### Standards

Science: Life Sciences 2<sup>nd</sup> – Plants, 3<sup>rd</sup> – Life Cycles

Reading and Writing: Grades 2 & 3 standards 2 & 3

**Total Time** – 60 minutes

#### Materials

- Copies of How Plants Grow Mini-Book (end of lesson)
- Scissors
- Stapler
- Pencils
- Colored pencils or markers
- Recipe ingredients and copies

#### Did you know?

Plants watered with warm water grow larger than those watered with cold water.

#### Method

##### Introduction (10 minutes)

1. Discuss: *Understanding the growing and life cycle of a plant can lead to a better success growing them. Plants have several parts: the roots, stem, leaves, flowers, fruits and seeds (draw a plant with all parts on the board). The roots anchor the plant in the soil and absorb water and nutrients from the soil. The roots help these nutrients get to the stem of the plant. The leaves contain veins, which the plant uses to move the nutrients from the stem to the leaves. The leaves also absorb energy from the sun. The flowers grow from the nutrients and are necessary so that fruit, vegetables or seeds can be formed. The seeds that are formed then go back into the ground to grow more plants.*
2. *Today we will learn more about plants' growing cycle to help us be successful with the plants we are going to grow.*

##### Activity (20 minutes)

1. Explain to the class that they will each get to make their own Plant Life Mini-Book. Pass out the copies of the Mini-Books and go over what is happening in each drawing.
  - a. *Seeds are plant embryos, usually with stored food in a covering called a seed coat.*
  - b. *When seeds germinate, they absorb water and begin converting food into energy.*
  - c. *Roots develop to continue to bring water and nutrients to the leaves as the plant grows.*
  - d. *Flowers emerge and when pollinated, they turn into fruit with seeds inside.*

- e. *Seeds are dispersed and grow into a new plant.*
2. Have the students put the book together and write the story of what is happening under the pictures. Have them color in the images.
3. Staple the books together.

**Snack Preparation** (20 minutes)

Help the kids prepare the Carrot Salad and Almond Dressing at the end of the lesson.

**Conclusion** (10 minutes)

Draw (or have the class draw in their journals) the life cycle and name each step.

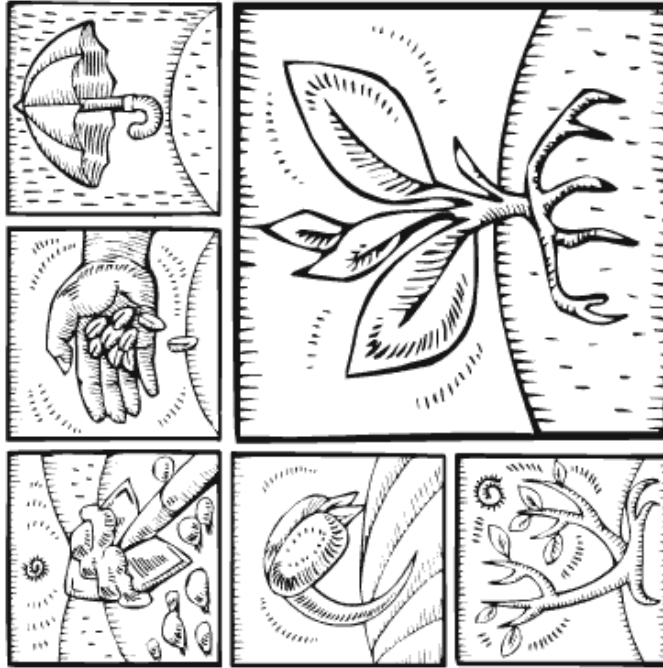
**Evaluation**

- Participation
- Mini-book writing

**Possible Modifications and Extensions**

- This is a great lesson to do before starting seeds indoors (instead of the snack preparation).

# HOW DO PLANTS GROW?



# A BOOK BY

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# Seeds



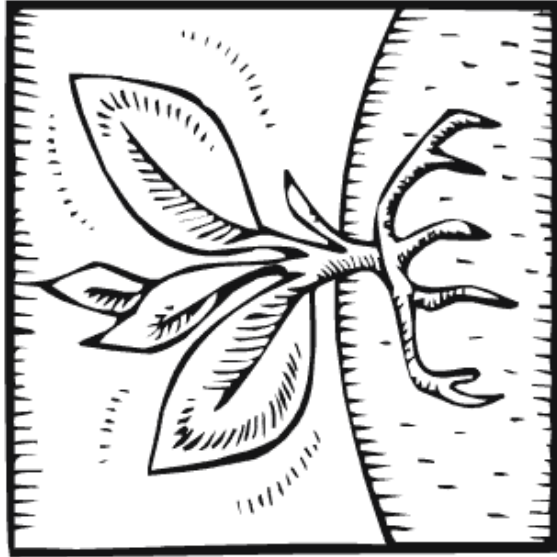
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Plant



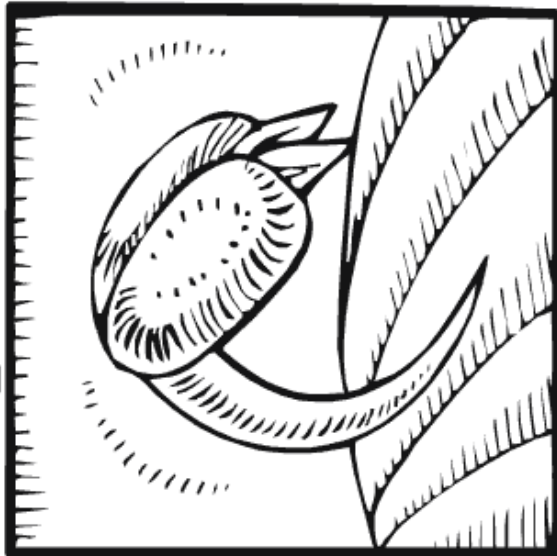
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Sprout



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# Seed Dispersal



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# Flower



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### **Carrot Salad with Almond Butter Dressing**

Enjoy the vibrant, sweet flavor of this inventive take on the common version of carrot and raisin salad. This recipe goes great with this lesson, because it includes roots (carrots), fruit (raisins), seeds (almonds) and leaves (cilantro). Serves 4. Serving size ½ cup.

- 2 large carrots
- ¼ cup minced fresh cilantro
- ½ cup raisins
- ¼ cup creamy almond butter
- 1 tablespoon fresh lime juice
- 1 ½ tablespoons reduced-sodium tamari or soy sauce
- 1 teaspoon honey
- Pinch of red pepper flakes (optional)

Preparation (15 minutes): Shred the carrots. Combine the carrots, cilantro and raisins. Whisk together the almond butter, lime juice, tamari (soy sauce), honey and pepper flakes. Pour dressing over carrot mixture and mix thoroughly. Marinate for up to four hours. Serve chilled or at room temperature.

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**Sources**

[www.craftjr.com/plant-life](http://www.craftjr.com/plant-life) (*How Plants Grow Mini-Book*)

[www.wholefoodsmarket.com/recipes/543](http://www.wholefoodsmarket.com/recipes/543) (*Carrot Salad and Almond Butter Dressing*)

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