

Galena Creek Visitor Center  
At-Home Learning Activity Lesson

## Regrow Food Waste



## **Summary of Activity (Lesson bio)**

Did you know you can regrow vegetables, fruits and herbs from their scraps! This is an easy fun at home project to reduce food waste and grow your own veggies, fruits, or herbs. Some can regrow inside and others require being potted or planted in a garden. It's fun to do as a group or individually (with some adult or young adults guidance).

This is specifically designed for K-2nd graders but fun for all ages (I even do this at my own home!)

### **Objective:**

Did you know you can regrow vegetables, fruits and herbs from their scraps! This is an easy fun at home project to reduce food scraps waste and grow your own food. Some can regrow inside and others require being potted and places outside or planted in a garden.

Why would we want to do this? It helps reduce food waste! If you don't have compost food waste goes straight into the landfill. This may not seem like a big deal but if millions of people are doing this it adds up fast. According to the USDA, "In the United States, food waste is estimated at between 30-40 percent of the food supply. This estimate, based on estimates from USDA's Economic Research Service of 31 percent food loss at the retail and consumer levels, corresponded to approximately 133 billion pounds and \$161 billion worth of food in 2010."

Not only does it reduce food waste but it's amazing to watch how our food grows! Another activity we can do is save all our seeds and then use them for planting season. All we have to do is clean the seeds, dry them, and put them in a container until we can plant them.

### **Discipline or Subject Covered:**

This activity reflects plant biology and agriculture.

### **Grade Level:**

Education level K-2nd grade. Fun for all ages; young children - all adults

### **Materials:**

- A few Examples: Veggie, Fruit & Herbs Scraps
  - Potatoes & Sweet Potatoes - ½ of potato with at least 2-3 eyes
  - Avocado - pit
  - Onions - rooted bottom
  - Garlic Greens - clove or bulb
  - Green Onions, Leeks, Shallots - rooted ends
  - Carrot & Beet Greens - tops where the leaves and stems are
  - Lettuce, Celery, Bok Choy, & other Leafy Greens - rooting base
  - Basil, Mint, Cilantro, & other herbs - ~4inch stem
  - Peppers - Seeds
  - Tomato - Seeds
- Notebook and Pencils (for making observations)
- Clear water containers; ex mason jars or glass cups
- Shallow clear bowl
- Soil
- Pots for planting
- Toothpicks

### **Procedure:**

**With your pen and notebook make observations about the growth of your plants! Some examples are root length, how much sun some like, best soil types, and how often to water.**

**Avocado** [ try this with more than one pit not all will sprout ]

Materials: Avocado pits, 4 toothpick per pit, one jar per pit, water, 10 inch deep pot with a hole for drainage, soil

1. Start by cleaning off the pit, removing any remains by rinsing it under cold water and then pat dry with a towel
2. Push four toothpicks into the pit, evenly spaced apart
3. Use the toothpicks to balance the pit over the top of a glass jar making sure the pit is pointy side up root down
4. Fill the jar with water to submerged about ½ of the pit

5. Place the jar in a sunlit area like a windowsill and change the water every day
6. After approximately three to six weeks, the top of the pit will begin to split open; several weeks after that, a stem, leaves, and roots will begin to grow; a few weeks after this growth occurs, you should see leaves
7. In approximately three months, when your tree is around 7 to 8 inches tall, plant it in a 10-inch pot with adequate drainage; Fill the pot with soil, and press your avocado sapling into it, root-side down with the top half of pit outside of the soil
8. Keep the sapling in a sunny area and water it regularly

### **Potatoes & Sweet Potatoes**

Materials: ½ Potato, soil, water, pot or garden space

1. Cut into two pieces; each half should have 2-3 eyes at a minimum
2. Let the pieces sit at room temperature until they're dry to the touch
3. Plant them about one foot apart in 8 inches of soil; water as needed
4. Harvest when fully grown; potatoes can be harvested for a few months even after the plants die!

### **Onions**

Materials: Pot or garden space, soil, water

1. Place the rooted bottom of an onion in soil; it will regrow roots
2. When the roots appear, remove the old onion bottom and compost; let roots grow; water as needed
3. Harvest onions when they are fully grown

### **Garlic Greens**

Materials: Garlic clove or bulb, small glass jar/bowl/cup, water

1. Place a budding clove or a whole bulb in a small cup, bowl, or jar
2. Add water until it covers the bottom of the container and just touches the bottom of the cloves. Be careful not to submerge the entire clove so they don't rot

3. Change the water every other day and place garlic in a sunny area like a windowsill
4. The clove or bulb will start to produce roots after a few days and grow sprouts/greens; they can grow up to 10 inches long
5. Harvest garlic sprouts/greens by cutting of wanted amount; don't remove more than one-third of each sprout at one time and wait till they are about 3 inches long to harvest

### **Green Onions, Leeks, & Shallots**

Materials: Rooted ends of veggie, glass Jar, water

1. Place rooted ends in a container of water with roots on the bottom of the jar; don't fully submerge and change water daily
2. In 3-5 days they will begin to grow
3. Harvest when fully grown and repeat the process

### **Carrots & Beets Greens**

Materials: Carrot or Beet tops, dish, pot, soil, water

1. Place a carrot or beets top in a bowl
2. Fill the bowl with about an inch of water so the top is halfway covered
3. Place the dish in a sunny windowsill and change the water every day
4. The tops will sprout shoots, plant the tops in soil, careful not to cover the shoots
5. Harvest the greens when you like the taste

### **Lettuce, Bok Choy, Celery & other Leafy Greens**

Materials: Rooted bottom, dish, water, pot, soil

1. In a dish submerge the rooted bottom about 1/4 inch; leave the top unsubmerged
2. Replace water daily and leave in a sunny spot (like a windowsill)
3. Plant in a pot with soil once new growth starts to appear in about a week; cover everything in the soil except the new growth
4. Harvest when fully grown and repeat the process

## **Basil, Mint, Cilantro, & other herbs**

Materials:

1. Cut herb to have about 4 inches of stem
2. Place stems in a bowl of water, leave leafed parts out of water
3. Place the bowl in a sunny area but not too hot area, and change the water every other day
4. Once the stems sprout plenty of roots about 2 inches long, plant them in a pot of soil
5. New shoots tend to come up in a few weeks
6. In a few months, you'll have a fully grown plant!
7. Harvest leaves as needed, but be sure not to strip a stem of all its leaves at one time

## **Peppers**

Materials: Seeds, pot, soil, water

1. Gather seeds from pepper of your choice
2. Plant seeds in a pot with soil and place in a sunny area
3. Water every few days
4. Harvest when pepper is fully grown and repeat the process

## **Tomatoes**

Materials: Seeds, pot, soil, water

1. Gather seeds from tomato
2. Rinse off any tomato and dry completely
3. Plant seeds in a pot of soil inside in a sunny spot like a windowsill and water a few times a week
4. When sprouts are a few inches tall plant them outside in a sunny area water a few times a week
5. Harvest when tomatoes are fully grown and repeat the process

## **Discussion:**

Why is reducing our food waste important? What other fruits and veggies can we regrow?

**Other Resources/Further Information:**

<http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/help-for-the-home-gardener/advice-tips-resources/visual-guides/plants-from-kitchen-scrap.aspx>

[ Some ideas found on pintrest. Most I know from doing it myself ]