

Become a Climate Controller!

BROUGHT TO YOU BY SOLV ENERGY & FEEDING SAN DIEGO



THE GOAL

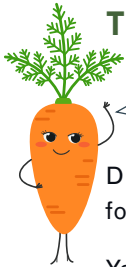
After successfully completing activities associated with learning about food rescue Girl Scouts will be able to:

- Know the benefits of food rescue
- Know the benefits of composting and what can be composted
- Become smart grocery shoppers
- Be a Climate Controller

BACKGROUND INFORMATION: For more information on how you can help end hunger through food rescue, visit feedingsandiego.org.

AGE LEVEL: This patch is intended for Daisies-Ambassadors.

THE FACTS



If you carrot at all
stop food waste!

Did you know that 38% of all food produced goes unsold or uneaten in the U.S. each year—almost 145 billion meals worth of food—while nearly 300,000 people face hunger in San Diego County alone, including 80,000 children?

You have a “foodprint,” just like you have a footprint. A foodprint measures the environmental impacts caused by growing, producing, transporting and storing food before it gets to your plate. And if you don’t eat the food you buy, the choices you make regarding how you dispose of that food impact your foodprint, too.

Each year in the United States, 155.2 billion pounds of food is wasted. For comparison, that amount is equal to the weight of nearly 13 million elephants that weigh 12,000 pounds! Further, the food waste is valued at more than \$428 billion.!

Did you know that food decaying in landfills creates gases that harm our environment? By reducing food waste, you can help our climate! Can you guess how long it takes for a banana peel to decompose if thrown into the trash? Up to two years! But if you put it into a compost pile, it takes only four months.

Why? It can be explained by science. Landfill gas is made up of roughly 50% carbon dioxide (CO₂) and 50% methane (CH₄). Methane is a bad greenhouse gas that traps heat in the atmosphere 28 to 36 times more than CO₂ over a 100-year period. That creates too much warm air, which it isn’t good for the earth. The methane develops because oxygen can’t penetrate into the trash in a landfill. But because oxygen can reach food waste in a compost pile, when a banana peel decomposes there, mainly CO₂ is produced, which is safer for the earth.

WHAT IS FOOD WASTE? Food waste is good-quality food that is not consumed. This most often happens once food has reached grocery stores or homes, but food waste also takes place at farms, in the food service industry, during manufacturing, and at retail. The biggest type of food waste is produce.

WHY DOES IT MATTER? The United Nations Food and Agriculture Organization estimates that food loss and waste account for 8.2 percent of global greenhouse gas emissions that impact climate change. As you’ve learned, when we throw still-edible food into the garbage, it ends up in landfills, where it generates methane. According to the U.S. Environmental Protection Agency (EPA), food waste is the single most common material in landfills (24%). The EPA created a model called the “Food Recovery Hierarchy” to help us prioritize the actions we should take to prevent and divert wasted food. The top levels of the hierarchy are the best because they create the most benefits for the environment, society, and the economy, and “feeding hungry people” is the second best strategy listed. [See the EPA Food Recovery Hierarchy on page 6.](#)

WHAT IS COMPOSTING? Composting is the sixth best way to reduce your foodprint and greenhouse gas emissions according to the EPA Food Recovery Hierarchy (and composting isn’t as hard or as smelly as you may have heard!). Compost is simply decayed organic matter. A twig can be organic matter, but so can a banana peel. When you mix a bunch of these items together in a compost pile, it breaks them down naturally into a nutrient-rich fertilizer helping gardens grow.

BECOME A CLIMATE CONTROLLER!

Almost anything that comes from the ground can be composted: apple cores, carrot peels, grapefruit rinds, avocado pits — any vegetable or fruit scrap will do. Grains also sprout from soil, which means you can throw cereal, pasta and stale bread in your compost heap, too.

What else can go into the pile? Eggshells, coffee grounds, coffee filters (they're paper, which is made from trees), tea leaves, nuts, cut flowers and plant trimmings are all acceptable, too.

YOU TO THE RESCUE!

You can become a Climate Controller by conserving food, disposing of it properly and becoming a part of a solution for a healthier planet.

HOW CAN I DO THAT?



- Become a Climate Controller by creating a **NO FOOD WASTE PLEDGE!** Ask yourself, “What are the ways I can promise to reduce food waste in school and at home?” You could even share this idea at your school and challenge everyone to take a No Food Waste Pledge, too. Becoming a Climate Controller will inspire you to make a lifelong commitment to reducing food waste.
- Be sure to tell your family and friends why they should be aware of how they grocery shop, and how to “shop smart,” by bringing a list to the store so they buy only what they need.
- You can do a food audit at home. If you have fruit that is about to spoil, you can freeze it and use it to make smoothies, ice cream or muffins!
- You can eat all the food on your own plate so that the excess doesn't end up in the garbage.
- Volunteer at Feeding San Diego!

LESSON IDEAS

1. VOLUNTEER AT FEEDING SAN DIEGO!

Volunteer at Feeding San Diego to help end hunger through food rescue! Each year, Feeding San Diego provides more than 35 million meals every year to children, families, seniors, college students and veterans in partnership with a network of nearly 350 local charities, colleges, faith communities, healthcare providers, and meal sites. Last year, nearly 80 percent of the food provided to the community was rescued from local and national food donors. By diverting more than 31 million pounds of high-quality food from the landfill each year, Feeding San Diego keeps more than 27,000 metric tons of CO₂ equivalent from going into the atmosphere (that's like taking 5,300 cars off the road for one year!). Feeding San Diego protects people and the planet.

Some of the food rescued comes to Feeding San Diego's distribution center and needs to be sorted and packed. That's where you come in! Opportunities are available for individuals and groups to help with a variety of projects to help get the food ready to be sent out into the community. To learn how you can volunteer, please call Feeding San Diego at 858-452-3663 or visit <https://feedingsandiego.org/get-involved/volunteer>



DID YOU KNOW?

Feeding San Diego donates any food it receives that is not fit for human consumption (for example, produce that is overly ripe) to three local pig farmers in Alpine, Escondido, Anza Borrego so they can use it to feed their livestock! Feeding animals is the third most important strategy to reduce food waste.



BECOME A CLIMATE CONTROLLER!

2. INNER BEAUTY TASTE TEST

We all know that beauty is on the inside and we should celebrate our individuality, too! Well, it's no different with fruits and veggies! Just because they look different, doesn't mean they taste bad. They may actually taste better, especially tomatoes! Sometimes older fruits are even sweeter, because they have more natural sugars.

Did you know that most baby carrots come from odd-shaped carrots that have been whittled down by a machine? The baby carrot is actually the core of the carrot. Whittling carrots actually creates food waste. By using misshapen carrots, we can help prevent throwing away their good parts.

Food For Thought:

- What parts of the fruit or vegetable are edible?
- What parts of carrots or broccoli do we usually throw away?
- Can you suggest some ways we might make use of those parts?

Check this out:

Carrot greens can be eaten several ways, as a topping for a salad, sautéed with oil and garlic, or made into a pesto. And they make a great treat for pet rabbits and guinea pigs! The peels can be used in soup or stock. Often, carrots just need a good washing before eating, without peeling. The same goes for potatoes and sweet potatoes. (Did you know the most nutritious part of the potato is the skin?) Broccoli stalks are also good to eat when used in stir fries, soups, stock, and slaws. You may or may not like beets or radishes, but their green leaves (the part that grows above the ground) are delicious, either sautéed or raw in a salad.

Find an odd-shaped or blemished carrot and cut it open to reveal a "normal" looking interior. Do a taste test, comparing "ugly" produce to traditional-looking items. You can even try this while blindfolded. Taste a difference? Take a vote on which tastes better. You can try other fruits and veggies, too, such as bananas, apples, peaches, potatoes, and peppers.

Activity:

Do a taste test comparing peeled and unpeeled carrots. Try some broccoli stalks or beet greens (cooked or uncooked) or the peel of a kiwi fruit. How do they taste and feel? Take notes on your thoughts!

Find a blemished fruit or vegetable (pears, apples, bananas all work well). Cut it in half to reveal that the bruise or blemish doesn't go all the way through. Try the remaining part to see if it tastes different. Notice how one blemish or bruise doesn't ruin the entire fruit or veggie.

3. DO THE RIPE THING!

Food For Thought:

Think about the multiple uses of our foods and how planning can reduce waste. For example, you can turn leftover bread into crunchy croutons for your salad the next day, or into bread crumbs. As you've learned, produce does not have to look perfect. Overripe fruit may not look as appealing as we'd like, but it's often much sweeter and delicious when juiced or mixed into a smoothie or bread, muffins, or other baked goods. Plus, you're cutting down on food waste!

Activity:

What are some of your favorite smoothie and muffin recipes? Choose a recipe to make and enjoy, using bruised or blemished fruits or veggies. (Tip: brown bananas are a great choice for smoothies and muffins!)

4. FOOD WASTE AUDIT

Do you know what a habit is? Did you know that habits are formed early in our life? We might have a habit of throwing away part of our lunch at school or not eating all of our dinner at home. We can all be picky eaters sometimes, but with one billion people who are hungry on our planet (including in our communities) we can do better!

One idea for learning to prevent food waste is to do an "audit" (report), studying how your school and family use food.



BECOME A CLIMATE CONTROLLER!

School Food Waste Audit

Think about the lunch you bring to school or purchase at the cafeteria. Do you or others ever throw it away?

- Where do you think the wasted food goes? Why is that harmful?
- What can you do better by not wasting food?
- What are some of the reasons you throw away your lunch?
- Can you think of a specific food you threw away, and why you did?
- What are some ways you can think of to reduce the amount of food we waste at school?
- If you bring your lunch, could you help your parent or caregiver pack it?



Activity:

You can do a Food Waste Audit at your school. Ask to work with the cafeteria to see where leftover food goes at the end of each lunch period. Create a list of what kinds of food are being wasted. At the end of one or two weeks, document your findings in a report, and include ideas for reducing food waste. You can also contact Feeding San Diego about using "MealConnect," their new app for "food rescue."

Home Food Waste Audit

The average four-person household throws away more than \$1,500 worth of food every year. And we don't eat about 25% of the food we bring home. Families can dramatically minimize this waste just by becoming more aware of what they're tossing in the garbage.

What are some of the ways we all waste food at home? Maybe we're not finishing food on our plates or not using edible waste created during food preparation, or forgetting about food until it expires and must be thrown away.

Activity:

Write down all of the food wasted (either thrown away, put down the disposal or composted) in your home for one week. Then do a one-week challenge: Reduce food waste for seven days and list how you did it.

FOOD PLEDGE

YOU TO THE RESCUE - NO MORE FOOD WASTE



I BELIEVE FOOD IS TOO GOOD TO WASTE AND I PLEDGE TO:

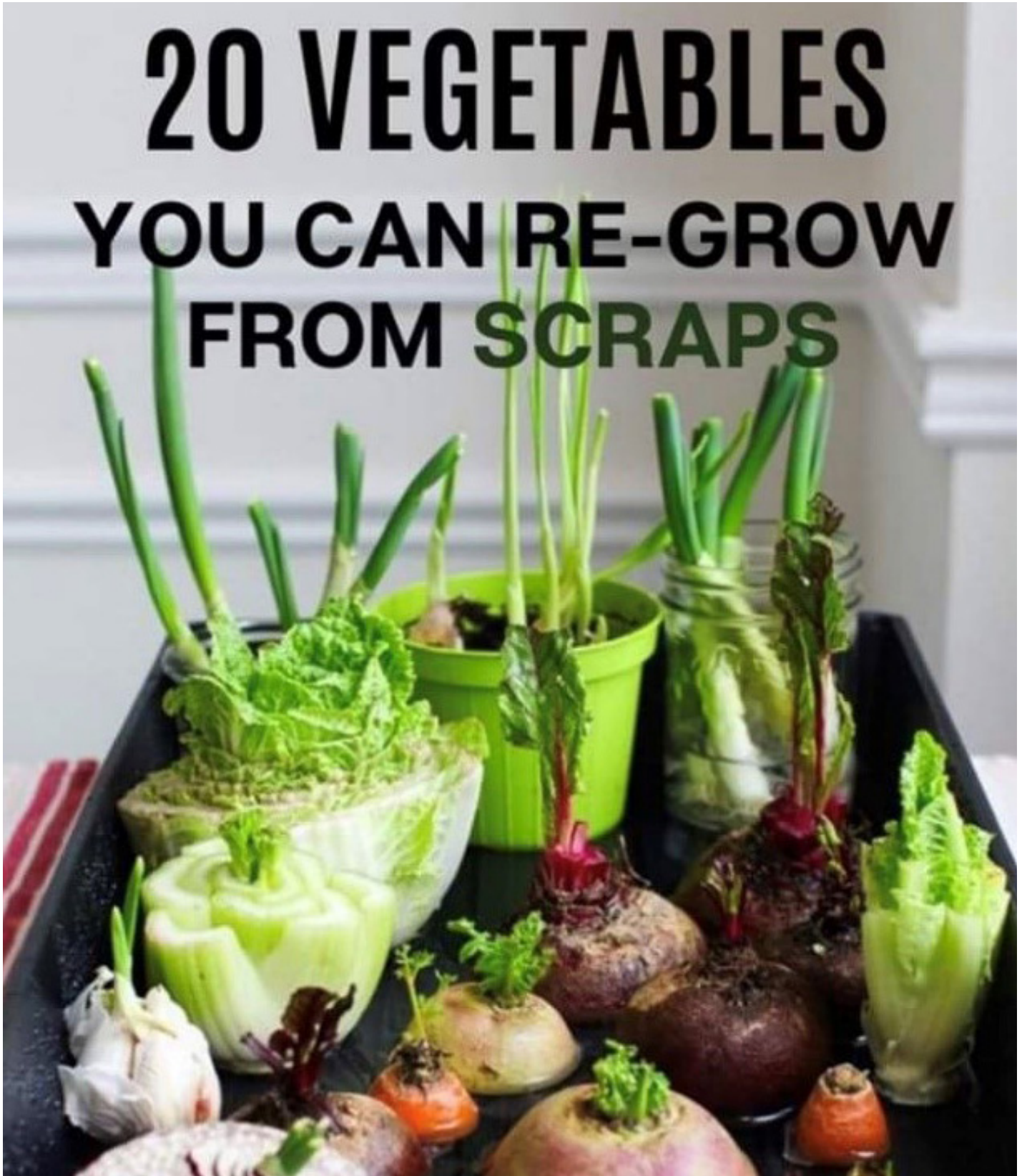
-  Only take food that I will eat
-  Finish the food I take
-  Tell my family what food I like in my lunch
-  Teach my friends and family about the importance of not wasting food

Sign: _____

FOOD IDENTIFICATION ACTIVITY

Can you identify all the vegetables in this picture that you can re-plant?

20 VEGETABLES YOU CAN RE-GROW FROM SCRAPS



EPA FOOD RECOVERY HIERARCHY



FOOD RECOVERY HIERARCHY

Most Preferred

Source Reduction

Reduce the volume of surplus food generated

Feed Hungry People

Donate extra food to food banks, soup kitchen and shelters

Feed Animal

Divert food scraps to animal food

Industrial Uses

Provide waste oils for rendering and fuel conversion and food scraps for digestion to recover energy

Composting

Create a nutrient-rich soil amendment

Incineration/ Landfill

Last resort to disposal

Least Preferred