Carbon Footprint @ Home

Summary

Since 2009, Encinitas Union School District has made many changes to improve sustainability at every school, including:

- Using clean energy through solar and daylighting (solar tubes)
- Reducing paper towel waste with the use of hand dryers in the restrooms
- Diverting up to 80% of lunchtime waste by recycling and composting
- Reducing toxic chemical cleaners with the use of chemical-free cleaning
- Reducing plastic water bottle use by using hydration stations
- Reducing air pollution by promoting walking/biking to school and creating idle-free zones in the school driveways
- Reducing stormwater runoff and conserving water through rainwater collection
- Promoting nutrition and an appreciation for nature and life science through outdoor education in the school gardens

We do a lot of things at school to help improve the environment. What environmentally friendly things do we do at home? The activity below will help you understand that different activities impact the environment in different ways by measuring the size of your carbon footprint (explained below).

What is a carbon footprint and why do we measure it?

Your carbon footprint is the amount of carbon dioxide released into the atmosphere as a result of your daily actions. These actions include, among others, the food you eat, the clothes you wear, how you travel, and how much electricity you use. Over time, human activities have resulted in an increase of carbon dioxide in the atmosphere, which traps heat from the sun and is the lead cause of global warming.

However, by making thoughtful choices, you can lower the amount of carbon dioxide released into the air and reduce your carbon footprint.

Activity

1. Print out the Carbon Footprint Sheet on the following page.

2. Look around your house for a big jar of coins with nickels, dimes, and quarters (you can use pennies too if you don't have enough of the other coins). You will use the coins to make a "green" pile for all of your eco-friendly actions, and a "black" pile for your carbon-emitting actions.

3. Read each action and if you do the action, put the corresponding coin value in either the green pile or the black pile. For example, if you compost food scraps, put a dime in the green pile. If you don't, no coins are added to either pile.

4. Add up the total value for each pile.

5. Which pile is higher? What things could you do to make your green pile bigger than your black pile? How small can you make your black pile?

6. On the back of the paper list other actions that most people do and try to assign a point total. Do you think the action is worth 20 points? Or just 5?

Still Curious?

- Do a lab that demonstrates how greenhouse gases warm the atmosphere. Greenhouse gas lab video: https://www.youtube.com/watch?v=kwtt51gvaJQ

What's Your Carbon Footprint?

Green Actions (Pollution Offsets)	Points	Black Actions (Emit Carbon)	Points
I compost my food scraps.	10	I pack my lunch using ziplock baggies.	15
We bring reusable bags to the store	10	I leave the lights on when I exit a room	10
I turn off the water when I brush my teeth	10	I throw away ALL my lunch waste in the trash	10
I use a refillable water bottle	25	We use paper towels	10
I do not use a straw at the restaurant	10	I get a ride to school	25
I use a reusable container for my lunch	10	We eat meat	15
I keep the lights off during the day	10	We take an airplane on vacations	25
I recycle my lunch waste in the SCRAP cart at school	10	We use plastic bags at the grocery store	20
We collect water after it rains and use it in our garden	5	I let the water run when I brush my teeth	10
We use cloth napkins	10	I always use a plastic straw	10
We grow vegetables in our garden	10	We buy water in plastic bottles	20
Total		Total	