



Theme: Sustainability (Grades 6 to 8)

Post Activity 2

Become an Environmental Steward

Overview:

Since you have visited the Springs Preserve, you have gained a better understanding about the importance of living sustainably. While on your visit, you learned about alternative energy sources such as solar power and wind power. You discussed the importance of recycling many materials that you hear about every day such as paper, plastic, and aluminum. However, you were also introduced to the concept of recycling building materials and water! You even learned why it is important to buy fruits and vegetables that are locally grown. Now you will have the opportunity to research a sustainable practice that you would like to learn more about and could possibly incorporate into your lifestyle or your family's.

Activity:

Below is list of sustainable practice ideas organized by category. Under each category, there are several suggestions for what you can do to be an environmental steward. Choose one of the following categories below. Under each category, pick one sustainable practice that you would like to do. By using the internet, complete the following tasks about the sustainable practice that you have chosen: (1) Answer all of the following questions by typing them out on paper; (2) Design a 10-15 slide PowerPoint presentation including the project plan and what you have researched.

Sustainable Practices to Choose From:

1. Use cleaner transport

- Walk, bike, or take public transit whenever possible.
- Avoid allowing your car to idle. If you'll be waiting for more than 30 seconds, turn off the engine (except in traffic). And don't take the drive-through—park the car and walk inside instead.
- Have your vehicle serviced regularly to keep the emission control systems operating at peak efficiency. Check your car's air filter monthly, and keep the tires adequately inflated to maximize gas mileage.
- Avoid short airplane trips—take a bus or train instead.

2. Add energy-saving features to your home

- Install compact fluorescent bulbs in all your home light fixtures—but remember, compact fluorescents contain mercury, so look for low-mercury models and be sure to dispose of old bulbs safely through your local hazardous waste program.
- Weatherproof your home. Make sure your walls and ceilings are insulated, and consider double-pane windows. Eliminate drafts with caulking, weather strips, and storm windows and doors.
- Insulate your water heater. Even better, switch to a tankless water heater, so your water will be heated only as you use it.
- Choose energy efficient appliances.

3. Adopt energy-saving habits

- Keep the thermostat relatively low in winter and ease up on the air conditioning in summer. Clean or replace dirty air conditioner filters as recommended to keep the A/C operating at peak efficiency.
- Unplug your electronics when not in use. To make it easier, use a power strip. Even when turned off, items like your television, computer, and cell phone charger still sip power.
- Dry your clothes outside whenever possible.
- Make minimal use of power equipment when landscaping.
- Defrost your refrigerator and freezer regularly.
- Choose green electricity. Many utilities give you the option to purchase electricity generated by wind and solar power for a small rate surcharge.
- Purchase carbon offsets to make up for the energy use you can't eliminate.

4. Reduce your Food Footprint

- Eat more local, organic, in-season foods.
- Plant a garden—it doesn't get more local than that.
- Shop at your local farmer's market or natural foods store. Look for local, in-season foods that haven't traveled long distances to reach you.
- Choose foods with less packaging to reduce waste.
- Eat lower on the food chain—going meatless for just one meal a week can make a difference. Globally, it has been estimated that 18% of all greenhouse gas emissions are associated with meat consumption.

5. Reduce your Housing Footprint

- Choose sustainable building materials, furnishings, and cleaning products.
- Explore green design features for your building, like passive solar heating, a rainwater catchment or grey water recycling system, and recycled building materials.
- Choose efficient appliances, including low flow shower heads, faucets, and toilets.

- Choose furnishings that are second-hand, recycled, or sustainably produced.
- Plant drought-tolerant plants in your garden and yard.
- Use biodegradable, non-toxic cleaning products.

6. Adopt water-saving habits

- Take shorter, less frequent showers—this saves not only water, but the energy necessary to heat it.
- Don't use the garbage disposal; compost instead.
- Run the dishwasher and the laundry machine only when full.
- Wash cars rarely, or better yet, take them to a carwash. Commercial carwashes use less water per wash than home washers. They are also required to drain used water into the sewage system rather than storm drains, which protects aquatic life.
- Avoid hosing down or power-washing your deck, walkways, or driveway.
- Regularly look for and fix leaks.

7. Reduce your Goods and Services Footprint

- Buy less! Replace items only when you really need to.
- Recycle all your paper, glass, aluminum, and plastic. Don't forget electronics!
- Compost food waste for the garden. Garbage that is not contaminated with degradable (biological) waste can be more easily recycled and sorted, and doesn't produce methane gases (a significant greenhouse gas contributor) when stored in a landfill.
- Buy recycled products, particularly those labeled "post-consumer waste."

1. Is the sustainable practice that you have chosen currently being used by people in Las Vegas?

2. Give an example of a person, company or group of people who use this practice.

3. Explain how the practice is being used and how it helps the environment.

4. Write out an action plan of how you are going to begin using the sustainable practice discussing who, what, where, when, why and how.

What: What sustainable practice have you chosen? Do you think you will have a large impact on the environment with your choice? For example, if you ride your bike 5 miles a week instead of having your parents drive you (to the local store in your community etc.) what type of impact do you think you will contribute?

Why: Why have you chosen this sustainable practice? Is it important to you and why? Did you already have the supplies that you needed and so it was cheaper to start by doing this? Did you think it was easy considering the amount of time that you have to do a project of this sort?

Who: Who will be doing the sustainable practice? Will it be you individually or will it include your family members as well? For example, are you going to bike to the park or store on Saturday instead of having your parents drive you? Alternatively, is your entire family going to bike to a location together instead of driving the car?

Where: Where are you going to do this? For example, if you are going to bike instead of riding in a car, where are you going to bike?

When: When are you going to begin incorporating this practice? Are you going to try to do it for a few months or implement it permanently? How often are you going to do this? For example, once a week, twice a week, or once a month?

How: How are you going to do the project? For example, if you are going to ride your bike, what is your route? Do you have all of the supplies that you need to be a safe biker?

5. What are the challenges involved with starting this project?

6. What are the benefits of doing this sustainable practice?